CALL Scotland

Communication, Access, Literacy and Learning

ANNUAL REPORT

1 August 2023 – 31 July 2024

CALL Scotland

Moray House School of Education and Sport
The University of Edinburgh

National Support for Learning
through
Assistive Technology (AT)
and
Augmentative and Alternative
Communication (AAC)

2023 - 2024

THE UNIVERSITY *of* EDINBURGH

CALL Scotland's Vision

Every child/young person in Scotland with a disability or additional support needs has the curriculum materials, the Assistive Technologies and/or Augmentative and Alternative Communication tools they may need - and the support to use them effectively – to participate effectively and fulfil their potential through learning and achievement.
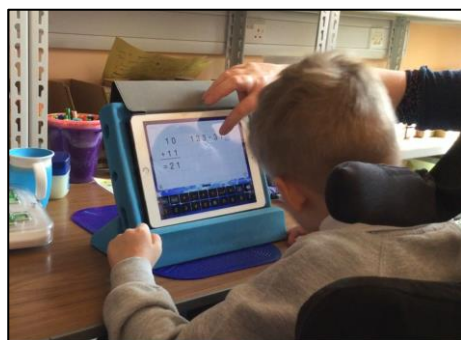
CALL Scotland's Mission

To help children and young people to overcome disability and barriers to learning created by their environment, and to fulfil their potential, CALL Scotland provides pupils and families, local authorities and professionals with -

- Free Assistive Technology resources.
- Assistive Technology Assessment and Support.
- Professional Learning and Training.
- Information and advice.
- Equipment Loans and Technical Services.
- Strategic Leadership.
- Knowledge Transfer, research and development.

National Outcomes

CALL Scotland's services and products contribute to delivery of the National Outcomes and to improve outcomes for children and young people:

- Children and Young People: we grow up loved, safe and respected so that we realise our full potential.
- Education: we are well educated, skilled and able to contribute to society.
- Health; we are healthy and active.
- Human Rights: we respect, protect and fulfil human rights and live free from discrimination.

CONTENTS

Summary

Introduction

This report covers the period from 1 August 2023 to 31 July 2024. It's purpose is to:

- report to Scottish Government, which provides around 2/3 of CALL's annual funding;
- report on CALL's activities to the CALL Scotland Steering Group and the Moray House School of Education and Sport;
- provide an opportunity for the CALL team to reflect and plan;
- reflect and add to the body of knowledge regarding assistive technology and AAC;
- provide an overview of CALL's activities to our stakeholders and collaborators.

The CALL Annual Reports always contain a lot of words and a fair level of detail and so this year we tried to reduce the word count (and the time it takes to prepare) and to make it more accessible by increasing the font size. However, we clearly failed as the report is now over 100 pages, so we'll consider a different approach next year!

Funding

Around 65% of CALL's annual income is provided through an annual core grant (£367,177) from the Scottish Government Learning Directorate. SQA funds our partnership and development work around use of technology in examinations and assessments. We do not receive direct funding from the University of Edinburgh but the University does provide considerable support in terms of accommodation and professional services.

We currently generate the remainder of our funding through partnership agreements with local authorities and schools, and through delivery of professional learning from CALL and on site in schools and now online. Income from these other sources in 2023-2024 was approximately £180,000. The core grant has remained static since 2011-12, while inflation has added 43.7% to costs according to the Bank of England calculator.

CALL's funding arrangement has been in transition since the Doran Review was published in 2012, and we are told that the current grant mechanism will cease in 2028-2029, by which time we hope to have secured continued core funding through the Doran National Commissioning Framework.

CALL has been fairly successfully at generating income through provision of services and professional learning but the Scottish Government core grant is the glue that underpins the unit. Without the core grant we doubt that we would be able to provide free information and advice, the web sites and resources, the loan bank, strategic advice to Scottish government and other stakeholders, or to licence and

distribute the free Scottish computer voices, the Books for All Database or Doorway Online.

There is undoubtedly scope for us to devise and apply for funding from other sources to undertake targeted research and project work and as a first step we asked Dyslexia Scotland if one of their staff would join our Steering Group because Dyslexia Scotland have recently been successful in creating and implementing some exciting projects.

Staffing

Shirley Lawson, our Assistive Technology and Additional Support Needs Teacher and professional learning coordinator retired at the end of 2023 and her role has been taken on by Kirsteen Steven who joined the team in August 2023.

Sarah Marjoribanks, CALL Office Manager for 25 years, also retired at the end of 2023 and the 'new Sarah' is Paula Twigg, who also joined in August 2023.

Gillian McNeill, Specialist Speech and Language Therapist, retired at the end of August 2023 and we are pleased that Ceanna MacGregor joined in April 2024 as our new AAC Specialist Teacher.

1: Kirsteen, Paula and Ceanna have joined the CALL team

Kirsteen, Paula and Ceanna all left permanent posts in education to come and work with us, despite the uncertainty over funding. We appreciate their confidence and will try to ensure that their faith will be rewarded.

Paul Nisbet reduced his working week from five to 3 days/week in September 2024 and plans to retire in September 2025. We do not yet know if funding will be available to recruit a new member of the team to replace him.

National Inclusive Digital Learning Resources

The Books for All website which provides accessible digital textbooks and Bookbug picture books continues to be a well used resource. Our strategy for the service is to focus on specialist accessible formats rather than the more common formats that are available through RNIB Bookshare.

The partnership with Scottish Book Trust to create and distribute accessible versions of Bookbug books continued and Claire, Joanna and Kirsteen developed learning resources in Grid and Clicker digital formats for learners with more complex additional support needs. The Symbols for All website and resources have been updated and the Symbols for All AAC Core Word Toolkit has been popular with practitioners: the Kits are now 'booked up' to June 2025. Claire has developed the Kits and support for using them over recent years and we are reflecting on whether this 'formula' of providing resources and support free of charge (funded through the Scottish Government core grant) could be applied to other areas of assistive technology.

The Scottish Computer Voices for Scottish schools and public sector and free text readers continue to be downloaded and made available as school computers running the Windows OS are refreshed.

The Scottish and Gaelic voices are now available for iPads and Chromebooks and we have worked with CereProc, the creators to the voices, to devise a way to distribute the voices free of charge so that every pupil in Scotland could have use of the voices regardless of which device they use in class. We hope that this work will be funded through the Doran National Strategic Commissioning process.

CALL now runs the Doorway Online interactive and accessible online learning activities and Robert has created a new web site to host the activities. In 2023-2024 the resource had 950,787 page views.

National Information and Advice

We again responded to a wide range of calls and emails and communications from hundreds of staff, parents and disabled people and examples are given in Requests for assistance. Access to free, open and independent advice can be extremely valuable for many people who are trying to find out about or make best use of assistive technology.

There were 896,335 page views on CALL web sites and another 950,787 views to Doorway Online. 92,902 resources were downloaded. Our reach on Facebook and Twitter (now 'X') continues to grow. More blog posts were published and new posters and videos created.

Professional Learning

The Professional Learning programme has again been extremely successful. A record 2,521 people participated in CALL courses, Insets, webinars, lectures and the ASL Technology conference.

We were particularly pleased to contribute to four Moray House courses in response to actions detailed in the ASL Action Plan.

The 10 week Technology to Support ASN in Education was attended by 27 participants while Craig's 5 week Technology to Support Dyslexia in Education had 28 attendees. Claire developed a 5 week course on Technology to Support Literacy for Learners with Complex Needs which attracted 25 participants in October 2023 and she developed it into an 8 week course that ran for 20 participants in April 2024.

We are very pleased that Claire's work has been recognised beyond Scotland and she has been awarded a prestigious AT Scholar award to represent the UK at the Assistive Technology Industry Association (ATIA) Conference, the world's largest assistive technology event, in Orlando in January 2025.

The popularity and success of these Short Study courses caused the team to reflect on our portfolio and we have decided to stop offering single one-off online courses from 2024-2025 and to concentrate on the longer, more in-depth Short Study courses instead. We plan to develop courses around AAC and also Digital Assessment Arrangements for 2024-2025.

Craig's four online Learning Modules have now been monetised at a reasonable price of £20 per module. We now have an excellent range of professional learning offers across different topics, learning styles, depth and cost that is unique in Scotland.

Assistive Technology Loans and Support

Evaluation of technology is a vital part of the assessment and support process and the number of loans made have now returned to (more than) pre-Covid levels. Purchasing some of the more specialised assistive technology is a challenge due to limited funding but on occasion some suppliers have provided us with equipment on loan for assessments.

Strategic Relationships and Collaboration

We continued to work with colleagues in Scottish Government, Education Scotland, SQA, local authorities and third sector agencies such as Dyslexia Scotland, independent special schools and Enquire.

Doran Review

There has been little progress towards National Strategic Commissioning under Doran Review and National Commissioning. This is disappointing for children and young people with complex additional support needs, their parents/carers and educators, given that in 2012 Peter Doran[1] recommended that:

> *The Scottish Government should lead COSLA and health boards in the development of a strategic planning and commissioning process to deliver, within a 5 year period, the national services and provision required to ensure that the complex additional support needs of children and young people across Scotland can be met.*

We hope that there will be more progress with national commissioning because the transition process is scheduled to end in 2028-2029.

ASL Action Plan

Last year we raised concerns[2] that digital learning and assistive technology are not addressed within the updated ASL Action Plan, which does not align with reality or core Scottish Government educational policy[3]:

> *"Digital learning must be at the core of Scottish education so that all learners in Scotland have choice, opportunity, and security in their lives, both now and in the future."*

Pam Duncan-Glancy MSP, Labour Party Spokesperson on Education, visited CALL on 6th June 2024 and raised a question on this topic in Parliament[4]. We hoped that the latest update to the ASL Action Plan would include meaningful actions around

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[1] Scottish Government (2012) The Right Help at the right time in the right place: Strategic Review of Learning Provision for Children and Young People with Complex Additional Support Needs.
[2] Nisbet, P. (2023) Why is digital learning not considered in the ASL action plan?
[3] Scottish Government (2023) All Learners in Scotland Matter - national discussion on education: final report.
[4] Scottish Parliament (2024) Meeting of the Parliament Thursday, June 6th, 2024.

assistive technology and digital learning but the updated Plan published on 5 November 2024 does not mention the topics at all[5].

AAC legislation and implementation

Gillian and Joanna have contributed to the AAC Advisory Group and working groups, to take forward the 2016 AAC legislation that places a duty on Scottish Ministers to:

> *"meet all reasonable requirements, provide or secure the provision of*
>
> *a) communication equipment, and*
> *b) support in using that equipment,*
>
> *to any person who has lost their voice or has difficulty speaking."*[6]

This work is now judged to be complete now that:

> *"AAC is routinely part of your standard working practices, fully embedded nationally and largely led by Speech and Language Therapists."*

SQA digital assessment arrangements

Following work over several years with teachers and technical colleagues in schools and centres, and with suppliers, SQA has changed the policy[7] around devices that pupils use in examinations

> *"to allow Apple and Chromebook devices to be used in external exams, provided that the restricted internet connection is only used to enable the operation of the device.*

This change in policy should permit iPads, Chromebooks and Windows devices to be used by students in SQA examinations more easily, because modern digital devices are designed to be configured and managed using internet tools. Many pupils with ASN are now using online accessibility tools such as speech-to-text dictation, and the new policy should also allow pupils to use these tools in examinations.

Assessment and Support

Assessment and support are essential components of CALL's work. Working directly with learners and practitioners underpins much of our research, development, knowledge exchange and professional learning: by endeavouring to "**Get It Right For One Child**" we identify and develop generalised solutions and products which can be distributed to help educators to "**Get It Right For Every Child**".

Information, reflection and examples of this work are given in [Assistive Technology Assessment and Support](#).

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[5] Nisbet, P. (2024) [Why is digital learning STILL not considered in the latest ASL Action Plan](#)?
[6] Scottish Parliament (2016) Health (Tobacco, Nicotine Etc. And Care) (Scotland) Act: [Provision of Communication Equipment](#)
[7] Nisbet, P. (2024) [Internet-enabled technology can be used in SQA exams in 2025!](#)

Moray House School of Education and Sport, the University of Edinburgh

We are grateful for provision of accommodation, technical infrastructure, and professional, financial, human resources and administrative janitorial and cleaning support from our colleagues in Moray House and the University.

Development Priorities 2024-25

Our priorities for 2024-2025 are to:

- Liaise with colleagues in Scottish Government and the University of Edinburgh to sustain the unique impact that CALL has had in Scottish education, and beyond, over the past 41 years.
- Continue to support local authorities, practitioners, parents and learners through assessment, support, information, advice, provision of free resources, loans of equipment and professional learning.
- Work with Scottish Government and colleagues in local authorities and schools to:
  - o progress National Strategic Commissioning following the Doran Review and 10 year Strategy;
  - o take forward updated actions from the ASL Review;
  - o ensure that personal digital technologies provided through 1:1 programmes are accessible for learners with ASN;
  - o optimise access to the new National Standardised Assessments for learners with ASN;
  - o work with SQA to ensure that SQA digital question papers and digital assessment arrangements are accessible for learners with ASN regardless of which devices are used.
- Align CALL's strategic aims, objectives, structures and processes in response to Scottish education policies and priorities, including the ASL action plan; emerging models and procedures for Commissioning of National Services; and legislation on provision of Communication Equipment.
- Create a business plan for 2025-2026 and beyond to plan for a transition from CALL's current grant funding to National Commissioning by 2028-2029.

Paul Nisbet, Director.

CALL Staff Team 2023 - 2024

Ceanna MacGregor (0.8 FTE from April 2024)	AAC Specialist Teacher
Claire Harrison (1.0 FTE)	Assistive Technology and Complex Additional Support Needs Teacher
Craig Mill (1.0 FTE)	Assistive Technology Advisor
Gillian McNeill (0.8 FTE, retired 31 August 2023)	Specialist Speech and Language Therapist
Joanna Courtney (0.8 FTE)	Specialist Speech and Language Therapist
Kirsteen Steven (0.8 FTE from 1 August 2023)	Assistive Technology and Additional Support Needs Teacher
Paul Nisbet (1.0 FTE)	Director, Engineer and Educational Technologist
Paula Twigg (1.0 FTE from 28 August 2023)	Office Manager
Robert Stewart (0.9 FTE)	Technology Resources, Web Designer & Manager
Sarah Marjoribanks (0.8 FTE, retired 31 December 2023)	Office Manager
Shirley Lawson (0.8 FTE, retired 31 December 2023)	Assistive Technology and Additional Support Needs Teacher

CALL Steering Group 2023 - 2024

Dr Mike Gibson, Chair of the Steering Group, who has been and continues to be a great friend and supporter, retired as Chair in October 2023, after chairing the group for nine years. We are extremely fortunate that Cheryl Burnett of NPFS has agreed to take over the Chair.

Dr Mike Gibson	Chair of Steering Group (to October 2023)
Cheryl Burnett	Chair of Steering Group (from October 2023)
Robert Eckhart	Senior Policy Officer, Supporting Learners Team, Support and Wellbeing Unit, Learning Directorate, Scottish Government
Lucinda Fass	Policy Officer, Supporting Learners Team, Support and Wellbeing Unit, Learning Directorate, Scottish Government
David Wells	Quality Improvement Officer, Glasgow City Council (ASLO representative, from October 2024)
Dr Rachel O'Neill	Senior Lecturer in Deaf Education, Moray House School of Education, University of Edinburgh
Fiona Buttle	Head Teacher, Langlee Special Nursery, Scottish Borders Council
Fran Foreman	Senior Education Officer, Inclusion, Education Scotland
Heather Palmer	AAC Policy Manager, Assisted Communication Team, The Scottish Government
Katie Radke	Parent
Lena Gillies	Dyslexia Scotland
Professor Sheila Riddell	Moray House School of Education, University of Edinburgh

Section 1. Outcomes funded through Scottish Government Core Funding

National Provision of Inclusive Digital Learning Resources

Objective

To provide free Inclusive Digital Technologies and resources to help local authorities and schools meet obligations under Accessibility, Equality and Children's Rights legislation and to support Universal Design for Learning (UDL).

Expected outcomes

Include provision of:

- accessible curriculum resources for learners (Books for All);
- free Scottish computer voices and readers;
- free symbol resources (Symbols for All);
- greater awareness and expertise in schools;
- schools and local authorities report that they are better able to meet Accessibility and Equality Act obligations.

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Books for All

Funded by: Scottish Government Learning Directorate Core Grant

Books for All website

The Books for All website with our database of downloadable accessible textbooks received 140,274 page views in 2023-24 compared to 117,231 the previous year. 1,241 new accounts were created on the web site and 7,160 books were downloaded. The number of downloads had fallen since 2019-20, when many schools were closed and teachers took advantage of the web site to provide learners with textbooks at home. However, this year we've had a 30% increase in downloads. Some of the PDFs of secondary textbooks are now out of date because of changes in the curriculum, but we feel that there is little value for us to approach publishers for files given that almost all modern textbooks are now available from RNIB Bookshare. However, discussion with stakeholders indicates that there is still a need for Books for All as a platform for distributing books in alternative formats such as Large Print, and particularly resources in specialised accessible formats, such as Grid 3.

Table 1: Books for All web site

New Books for All web site	2019-2020	2020-2021	2021-2022	2022-2023	2023-2024
Number of page views	190,977	153,197	116,492	117,231	**140,274**
Number of user accounts	3,535	5,507	6,888	8,158	**9,399**
Number of books downloaded	11,144	7,380	5,728	5,515	**7,160**

Scottish Book Trust Accessible Books and resources

We again worked with the Scottish Book Trust, publishers and authors to create accessible versions of the Bookbug P1 Family Bag books. Learners with a Print Disability can read the books and so take part along with their peers in the classroom. Bookbug books are provided free to every P1 learner in Scotland each year by the Scottish Book Trust. As well as accessible digital versions of the P1 Bookbug Family Bag books, CALL Scotland create a range of symbolised communication resources to accompany the books.

In 2023-2024 the accessible digital Bookbug books were made available in:

- PowerPoint recorded narration and switch prompt versions;
- Keynote format for the iPad;
- Grid 3 files, designed particularly for learners who use eye-gaze technology;
- Grid for iPad files, for learners who use iPads.

Joanna, Claire and Kirsteen created symbolised resources for each of the Bookbug books. These enable children to participate when reading the books and to talk and vote for their favourite.

The resources consist of:

- overlays that can be used with the *GoTalk 9+* communication aid, or as low-tech symbol boards;
- switch tops for *Big Mack* and *Step by Step* communication aids;
- digital app boards for the free *Sounding Board* communication app for iPad;
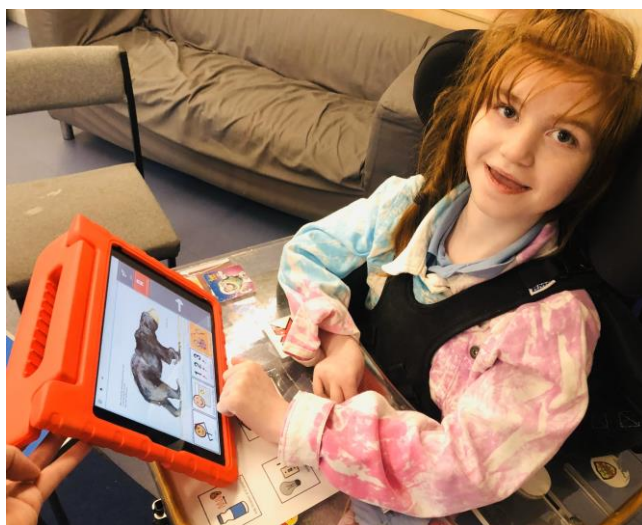
- overlays for teaching activities related to the books;
- accessible digital versions of the books and communication resources, together with teaching activities in Grid 3 format for use on Windows and iPad devices.
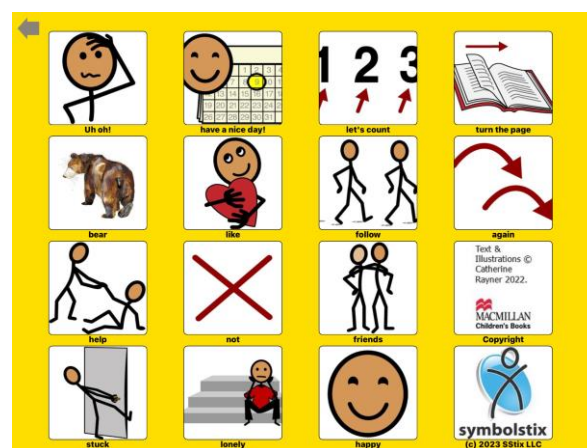
Figure 2: Sounding Board digital communication board

Since 2020-21, we have developed literacy activities for learners to communicate and write about the books in both Clicker and Grid formats and following positive feedback we repeated the exercise for the 2023 Bookbug books.

The Clicker resources can be used on Windows, iPad and Chromebook while the Grid resources are for Windows and iPads. The resources provide children with a means of writing about the story using vocabulary from the communication resources and reviewing the book content. Clicker and the ClickerWriter app are very effective tools for supporting children's early literacy providing accessibility features such as text-to-speech and large keyboards for learners with physical access needs.
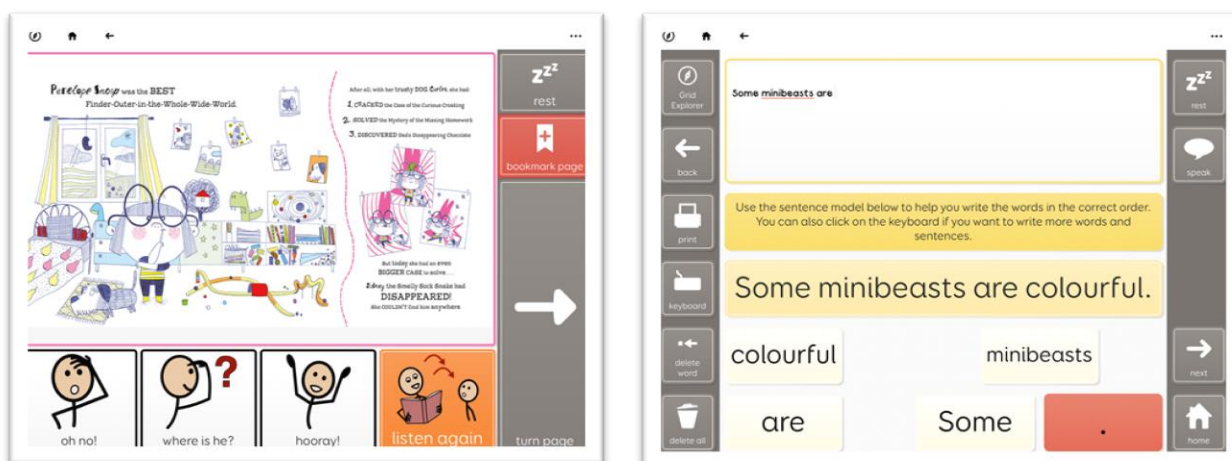
Grid 3 is a communication, computer control and curriculum access environment and is particularly suitable for students with complex access needs who use eye-gaze or switches.
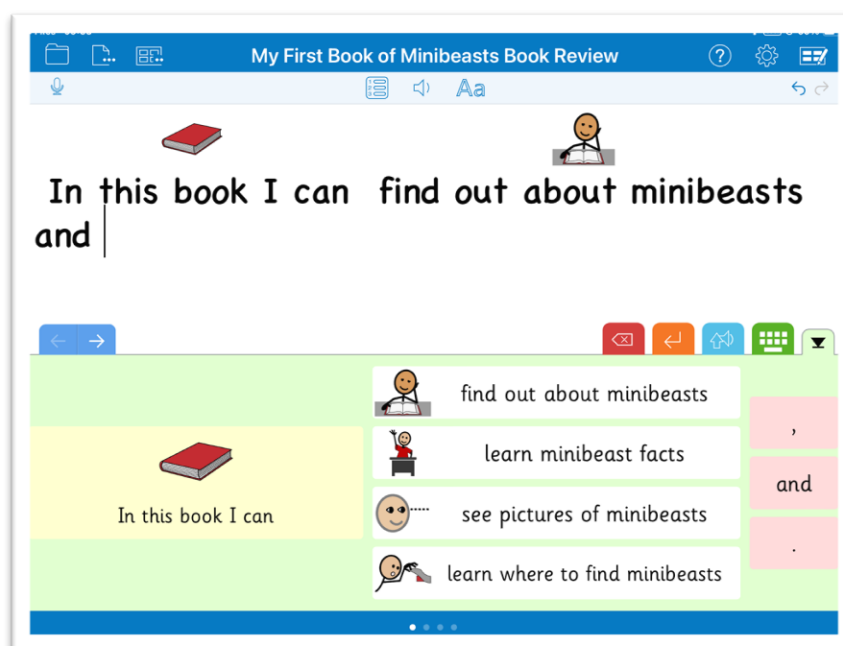
The resources provide a complete toolkit for teachers to include young children so that they can access the books, participate in learning, and join in with voting. 273 digital books were downloaded this year, as well as 2,722 Bookbug P1 files and 1,599 Bookbug Explorer files from Symbols for All and Scottish Book Trust's website.

2023-2024 symbolised Bookbug Picture Book Prize resources, as well as our range of Explorer Bag symbolised resources for nursery age children, are all available on the Symbols for All website at www.symbolsforall.org.uk/bookbug.

A pilot BSL Translated version of *Gorilla Loves Vanilla*, which we created with the University of Edinburgh's BSL Team in 2021, is being trialled with deaf children in Scotland and we look forward to receiving feedback and being involved in the development of future videos, dependent on funding for the translations. BSL Pilot Video

Table 2: Bookbug books and resources downloaded

Bookbug books and resources	2019-20	2020-21	2021-22	2022-23	2023-24
Number of books downloaded	399	249	217	222	**273**
Number of symbol resources downloaded	3,310	3,313	3,029	3,690	**4,321**

Feedback

" Thank you so much for the wonderful overview of the plethora of accessible resources today!"

(Education Officer)

"David is very excited to get this year's accessible books to read out loud to us"
(Parent)

"As SLTs working with AAC users, we must ensure access to literacy is a core part of our therapy planning. CALL's Bookbug resources provide me with a time efficient, effective way of achieving this; I love that I can download the resources quickly and use them straight away. As they link with books that are freely available to children in Scotland, they are also very accessible for families to use."

(SLT)

"The resources have given us confidence in supporting our current learners with using technology and watching the confidence and increased use of the technology in our children.."

(Teacher in ASN Base)

Symbols for All

The Symbols for All website provides free symbolised curricular resources organised around the eight Curriculum for Excellence areas and includes materials for use in symbolising the environment and for engineering communication activities across the curriculum.

Research[8] and practice demonstrates that symbols and symbolised resources can support learners through:

- improving engagement, motivation & behaviour;
- accessing the curriculum;
- understanding new vocabulary and concepts across the curriculum;
- communication and inclusion;
- sharing their understanding of a concept or idea.
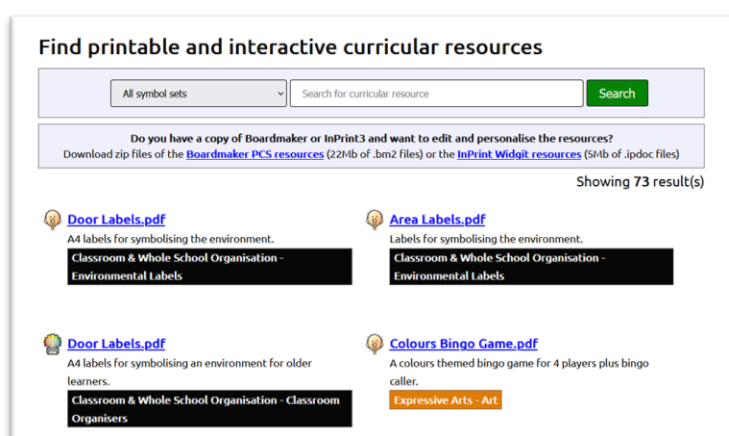
The site provides resources for primary learners created with Boardmaker Picture Communication Symbols (PCS) and secondary resources made with Widgit symbols.
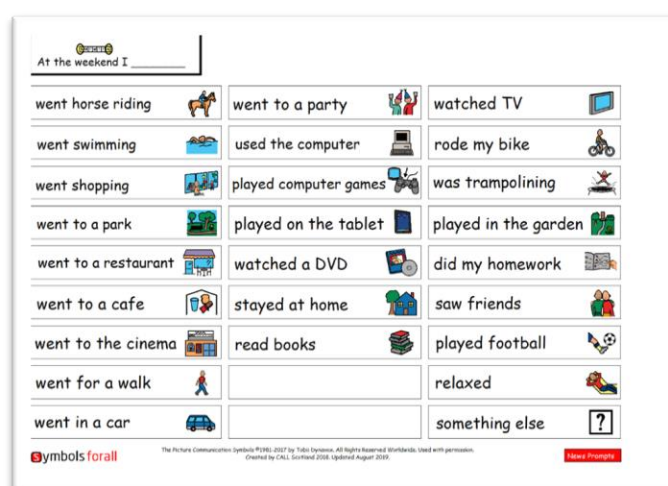
Figure 3: News Prompts communication board with Boardmaker PCS

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[8] Symbols in Education - https://www.widgit.com/about-symbols/booklets/Symbols-in-Education.pdf

Limited access to symbol software is one of the barriers that prevents practitioners from making symbol resources and Symbols for All provides a core starter set of materials, plus ideas for how they can be used, that will enable educators everywhere to get going. The site also provides the original Boardmaker and Widgit files so that practitioners with access to symbol software can edit and adapt them to personalise for their own schools and learners.

The number of visits to the site and the number of resources downloaded decreased this year. Given that the resources have been available in their current form for five years, we plan review and update the Symbols for All offering in Summer/Autumn 2023.

Table 3: Symbols for All page views and downloads

Symbols for all Website	2019-20	2020-21	2021-22	2022-23	2023-24
Symbols for All web site page views	42,596	40,695	62,548	46,028	53,550
Symbols for All downloads	16,802	16,190	27,869	17,636	17,238

Symbol resources for learners who use eye gaze and special access

In addition to the symbol materials for printing there are twelve resource sets for children and young people who use the Grid 3 communication and access environment. This year these resources were updated and rearranged to make them easier to find on the SmartBox Online Grids site. (SmartBox are a UK assistive technology firm that integrated the Scottish computer voices into their products, and we are pleased to extend our partnership through creating these resources.)

The resources can be used to model sentence building, model 'core' communication words, communicate requests and create communication opportunities around various curricular activities from baking to reading and more. PCS, SymbolStix and Widgit grid sets are available.

The grid sets are primarily designed for eye gaze access but can also be accessed by touch, using switches, or with a pointing device such as a joystick.
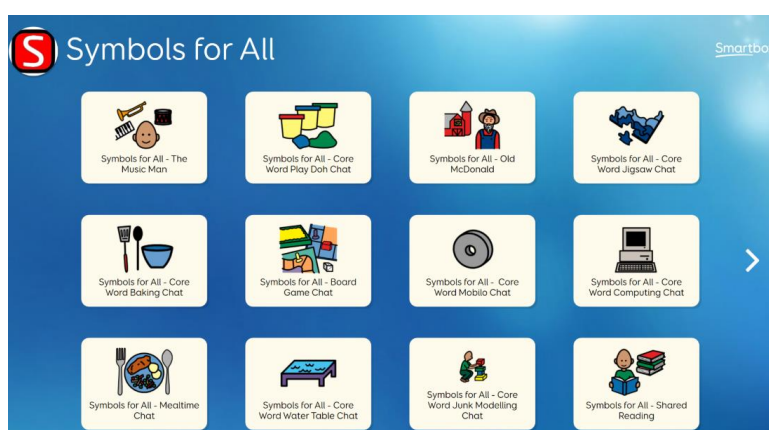

Figure 4: Updated Grid 3 Symbols for All resources

Symbols for All AAC Core Word Toolkit

Scottish Government Section 10 funded our development of the Symbols for All Core Word Toolkit and one outcome from the project was a physical Kit to help school staff get started with and develop their use of symbols across the curriculum by creating communication opportunities based on the principles of Core Words.

The kit is available for schools (in Scotland) to borrow from our CALL Scotland loan bank for staff to learn the principles of teaching with Core Words and embed communication across the school day. The kit has everything a teacher will need, from simple communication devices (and batteries!), printed symbol boards in various formats, to digital resources and more.

Demand for the kit has continued to increase, and we now have several versions available for schools to borrow. There is now a waiting list, with all the resources booked up until June 2025.

We think that a key element of the success of the Kits is the personal support and training that Claire provides when she delivers the kit to school, and during the period of the loan. Also that there is no cost for the loan and support as it is funded through our Scottish Government core grant.

This model of working is clearly having an impact and is one that we think could be applied to other areas of assistive technology on a school-wide basis.

Table 4: Uptake of Core Word toolkit and support

	Schools that have used the Core Word Toolkit and support
2022-2023	West Mains Primary, South Lanarkshire Craigmarloch School, Inverclyde Greenburn School, South Ayrshire Carrongrange School, Falkirk Elgin High School
2023-2024	Southcraig School, South Ayrshire Drummond School, Highland Bothwell Park School, North Lanarkshire Langlands Primary School, Glasgow Croftcroighn School, Glasgow Clydeview School, North Lanarkshire St Paul's Primary, Renfrewshire
2024-2025	St John's Primary School, South Lanarkshire Glenable Primary, Midlothian Aviemore Primary, Highland Glaitness Primary, Orkney St Martin's Primary, Glasgow Leader Valley Enhancced Provision, Scottish Borders Tulloch ISP, Perth & Kinross

	Drummore Primary, Glasgow
	Sanquhar Primary School, Dumfries & Galloway
	Mayfield Primary, North Ayrshire

In addition to creating different versions of the kit, this year we developed the support resources for school staff. Each piece of Assistive Technology equipment now has a sticker with a QR code that links to a Quick Guide Video and demonstration of how to use the equipment.

We also updated and wrote new Quick Guides for the Assistive Technology items.

Schools are reporting that they find the combination of ready-made printed resources, lessons and lesson plans along with pieces of AAC and assistive technology extremely beneficial:

"I liked the repetition of the learning activities. I think this is a great foundation for pupils. As the weeks went on, I could see that they were anticipating what was coming next. Because everything had been thought of and was prepared and in good condition ready to use was great. It's easy for things to get broken or misplaced during the school day and perhaps because I was using resources that weren't mine I was a bit more careful, so I will be carrying that forward!"

"Yes - I'm using switches with more confidence and exploring new ways of using tech to support learning. I have used the repetitive element for the lessons for quite some time as my previous school taught that way, but it isn't as well used in my current school. Seeing this format from call Scotland has given me confidence to encourage other teachers to use this metho.."

The Core Word Kit is a fantastic and incredibly useful resource. The staff who didn't engage as much as they would have liked, all reported that they wished they had made more time to try the kit out.

The kit is incredible. What an excellent resource to share across schools and for free! Thank you to Claire and the team for their on going professional dialogue and support this session.

It was a super resource. Claire was so helpful and generous with her time. The kit was really helpful and let me try things that I didn't know existed! It had opened my eyes to what is available and I can't thank Call Scotland, and Claire in particular, for sharing time and resources.

Core Word Kit Loan Feedback 2023-24

Scottish Computer Voices for Scottish schools and public sector

Windows OS

Table 5: Scottish Voice page views and downloads gives the number of visits and downloads of the Scottish computer voices for Windows OS. In schools the voices are usually downloaded once by the local authority technical team and then packaged and made available on all the computers across the entire authority, so the number of actual users is far greater than the number of downloads.

Table 5: Scottish Voice page views and downloads

The Scottish Voice	2019-20	2020-21	2021-22	2022-2023	2023-2024
Scottish Voice page views	43,484	52,424	64,941	42,654	30,357
Heather downloads	534	704	709	539	451
Stuart downloads	479	596	618	458	384
Ceitidh downloads	124	147	144	155	197
Isla downloads	161	162	142	141	172
Callum downloads	165	155	123	131	155
Andrew downloads	128	111	95	108	139
Mairi downloads	129	107	76	108	145

Scottish and Gaelic Voices on iPads

CereProc, the Edinburgh company that creates the voices, released their CerePlay app in 2024. CerePlay adds the Scottish and Gaelic voices to the iPad so that almost any app can use them. Previously, the voices had to be integrated into every app separately.

This is a very exciting development because it means that:

- children, young people and adults can use a Scottish accent to speak with most AAC apps;
- learners can read documents, web sites and assessments using a familiar, high quality Scottish accent;
- learners in Gaelic Medium Education can read learning resources with a Gaelic voice on their iPads.

The voices cost 99p each but it is not yet possible to buy and install them on pupils' iPads that are managed by the school or local authority because 'in-app purchases' are not enabled. This means that pupils in Glasgow, Edinburgh, Scottish Borders and Falkirk where learners have been provided with a personal iPad cannot use the voices.

We have discussed ways forward and CereProc have provided a very reasonable costing for providing the Scottish and Gaelic voices **free of charge** with the app. This would enable students to have access to the voices.

Scottish and Gaelic Voices on Chromebooks

Some local authorities such as Highland, Aberdeen City, Midlothian, Stirling and West Dunbartonshire are providing personal Chromebooks to learners.

The CereProc Scottish and Gaelic voices can be installed on Chromebooks at a cost of 59p per voice but there are technical challenges with purchasing and installing across all the devices in an authority.

We have worked with CereProc and TextHelp during 2023-2024 and Read&Write for Chrome and OrbitNote now offer the Scottish Andrew, Heather and Stuart voices as well as the Gaelic Ceitidh voice.

CereProc have also given us a quotation that will enable us to distribute the app and voices free of charge to the Scottish public sector. We would provide the Android APK as a download from our existing Scottish Voice web site, and technical colleagues in schools and local authorities would then be able to install and distribute the voices to learners' Chromebooks. The process is similar to that used for distributing voices on Windows devices.

Scottish and Gaelic voices for all learners

We therefore have an opportunity to provide **all** learners in Scotland with the Scottish accent and Scottish Gaelic voices, regardless of which device they have been given in school. This would significantly improve equity and accessibility to digital learning across the country.

The original Scottish and Gaelic voices for Windows and MacOS were created, licenced and distributed with funding from Scottish government and we have suggested to Scottish Government that extending this provision for pupils who have Chromebooks and iPads would be a suitable project under the National Strategic Commissioning Framework.

Free Text Reader Technologies

WordTalk

WordTalk was one of the earliest text readers distributed by CALL. It was created by Rod Macauley in 2005 and remarkably, it still works with some combinations of Word and Windows, but there are many PCs where it does not.

Microsoft's built-in Speak button, Read Aloud and Immersive Reader now meet the support needs of many Word users and so the number of WordTalk downloads has decreased in recent years. We will monitor the use of the website but moving forward it's likely that it will very soon reach its end of support.
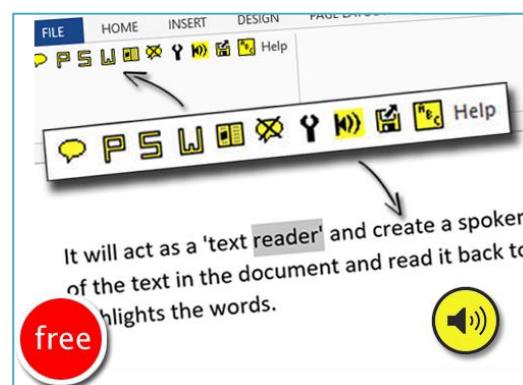
Table 6: WordTalk page views and downloads

WordTalk website	2019-20	2020-21	2021-22	2022-23	2023-24
WordTalk page views	116,686	124,769	79,507	**68,354**	**40,836**
WordTalk (downloads)	7,471	10,506	9,735	**9,120**	**7,367**

Universal text readers

Learners require a general-purpose text reader for accessing the internet, emails and PDF files – for example textbooks or SQA Digital Question Papers. The CALL website provides information and links to free tools for Windows devices including for example ATbar and Natural Reader.

MyStudyBar 4

Craig Mill's MyStudyBar 4 was downloaded 3,927 times in 2023-2024. MyStudyBar is a collection of free tools for Windows that can support learners with literacy difficulties, particularly in a secondary school or FE / HE setting, in a package that can be used on individual computers, or from a USB memory stick. While there is greater awareness and use of tools such as Immersive Reader in Office 365, there is still a need for a stand-alone option like MyStudyBar. One advantage of MyStudyBar is that the tools do not need to be installed on a school computer; a second is that the text-to-speech tools provided (ATbar & Balabolka) can use the Scottish and Gaelic voices.
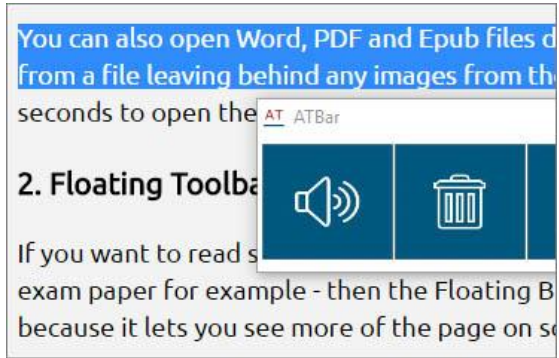
Table 7: MyStudyBar downloads

MyStudyBar 4.1	2019-20	2020-21	2021-22	2022-23	2023-24
MyStudyBar 4.1 downloads	5,483	6,379	4,623	4,213	**3,927**

Doorway Online Interactive and Accessible Learning

Doorway Online is an excellent collection of free and highly accessible online educational activities covering literacy, numeracy, time and money, memory and matching, and typing skills. The activities were originally created by Philip Whittaker, Andrew Burt and Roger Spooner with funding from Scottish Borders Council and the web site was managed by the Doorway Accessible Software Trust, a Scottish charity.

The Doorway activities are particularly useful because they are free, very well designed (by teachers), and have excellent accessibility options. They are used by children all over Scotland and the world and it is important that children - both with and without additional support needs - continue to have access to these excellent learning resources. In 2023-2024 the resource had 950,787 page views.

Last year the Trustees approached CALL to discuss whether we could take over management of Doorway Online and the transfer eventually concluded in March 2024. Robert created a new web site to host Doorway which was launched in August 2024.

Figure 5: Doorway is now a CALL Scotland resource

Table 8: Doorway page views

Doorway website	2023-24
Doorway page views	950,787

Recently, the Welsh government funded development work to adapt the Typing tutorial into the Teipio Testun Welsh language version.
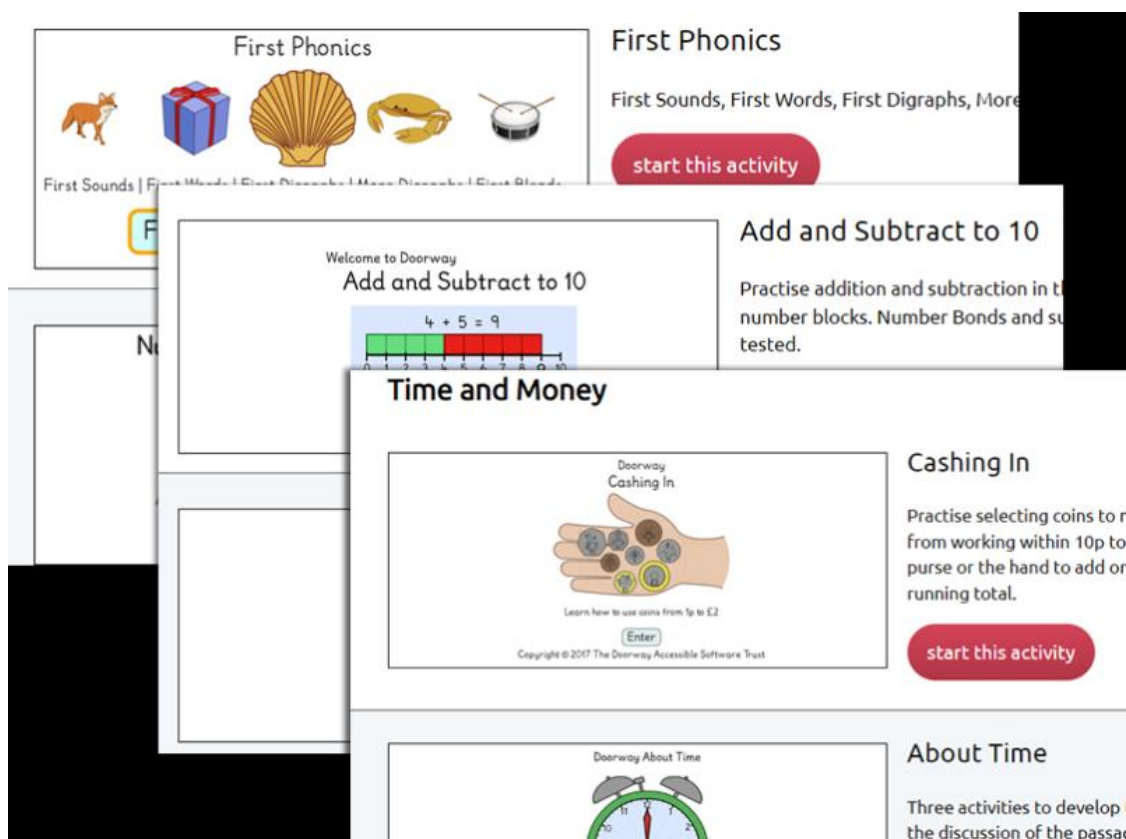
Figure 6: Doorway activities

To complement the Doorway Typing resource we have created a **Text Type 3 Practice Workbook** with daily and weekly activities to help learners track and record their progress. On completion, learners can print a Certificate of Completion as a reward for their work.
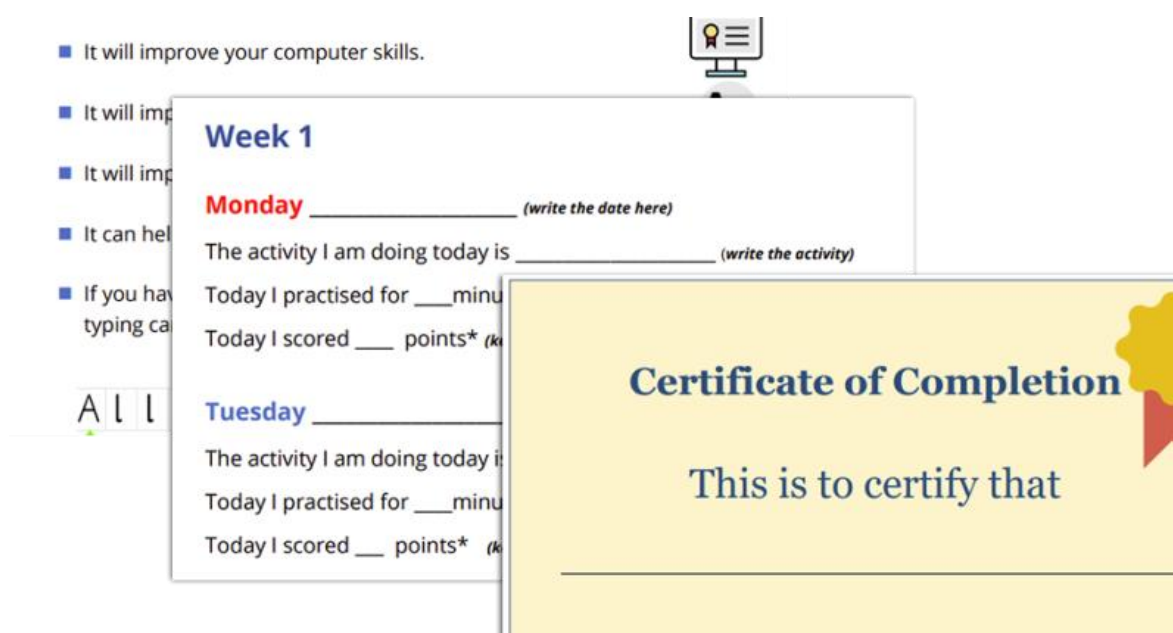
Figure 7: Doorway typing workbook

CALL Scotland

National Information and Advice

Objective

To provide an expert Scottish national information and advice service to all those involved in meeting the IDT and AAC support needs of pupils with complex additional support needs and make information accessible in a variety of forms.

Expected outcomes

All those involved in meeting the IDT and AAC support needs of pupils with complex additional support needs will be able to access the information they need to be successful in their role.

THE UNIVERSITY *of* EDINBURGH

OUTCOMES

Summary

- **351** significant requests for assistance were received and responded to between 1/8/23 and 31/7/24, compared with 438 for the same period the previous year.

- The **10** websites maintained by CALL received **1,847,122** page views compared to 950,067 from the 9 websites in 2022-2023. **92,902** resources were downloaded compared to 97,223 in the previous year. There was a new website (Doorway Online) transferred over to CALL in March 2023 which received **950,787** page views.

- There were **56** blog posts compared to 59 in 2022-2023.

- The CALL Twitter account has **5,545 followers** and **418,300 tweet impressions** while the CALL's Facebook has **10,297 followers** and a 'reach' of 184,100.

- The CALL YouTube channel has **984** subscribers with **72,234** views in 2023-2024.

- The CALL email Newsletter has **4,050** subscribers.

Requests for assistance

CALL provides a free open access advice and information service through telephone, email and social media for anyone in Scotland who wishes to ask about communication or assistive technology. There were 351 requests for assistance from 297 individuals. 34% of requests were from teachers or other school staff and 29% from parents or relatives.

Pie chart legend:
- Education - School
- Parent or Relative
- Education - Authority
- SLT
- OT
- Social Work / Care Staff
- Government / Parliament / National Agency
- Health – other staff
- Information Provider
- Student
- Other
- FE / HE Staff
- Manufacturer / Supplier
- Disabled Person
- Researcher
- Unknown
- (blank)

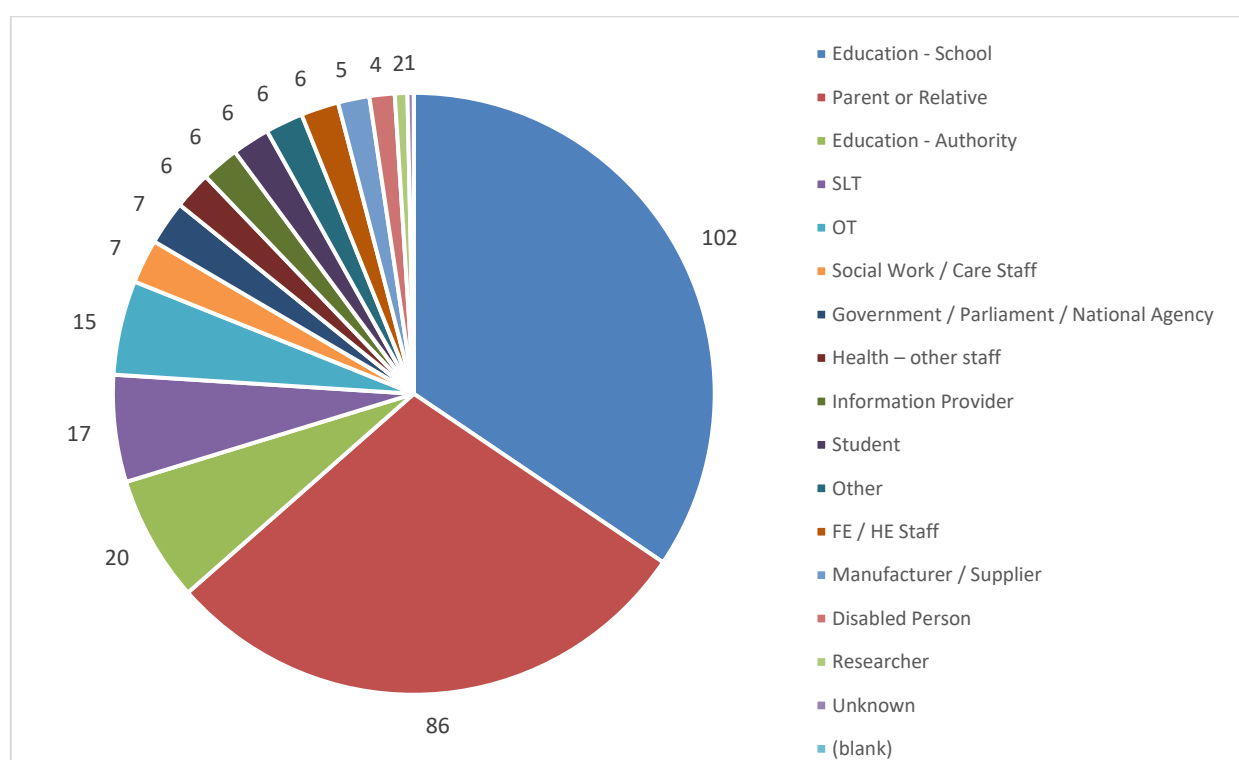Values shown: 102, 86, 20, 17, 15, 7, 7, 6, 6, 6, 6, 5, 4, 21

Figure 8: Background of people contacting CALL 2023-2024

CALL staff spent 126 hours responding to these requests: an average of 21 minutes per request. The longest response involved a meeting about provision of alternative accessible formats with a disability officer from a Scottish University while the shortest activities were email responses to requests.

The nature and subject of requests varies considerably: they include straightforward enquiries about technology or about a CALL Professional Learning course, a call to ask about equipment for loan, or a more detailed discussion about the application of assistive technology in a local authority, school, class or for an individual learner.

Examples from the past year are given below and illustrate the range of additional support needs for which people are looking for assistance.

I am enquiring on behalf of a friend who is an adult with cerebral palsy. His hand function is deteriorating and would like to have help in choosing the most appropriate tablet/computer for him to be able to access. He is not currently receiving any health service support. Is there a facility or service which is available in Scotland to offer support in assessment of the most appropriate equipment. Please advise. Thank you

Friend

Hi, I am the xxxxx Specialist at xxxxxx Housing, and I am contacting you with regard to one of my colleagues, who lives with significant hearing loss and uses hearing aids. This colleague was recently assessed as she thought she may be dyslexic. However the report came back advising she is not dyslexic but her hearing loss has impacted her learning over the years. Recommendations from this report advised we contact CALL Scotland to discuss assistive technology -text to speech, speech to text in particular. I'd like to look into this further please. I am also requesting a OH management referral for this colleague.

colleague

I am hoping that you may be able to support me in advising on relevant academic research or information on symbolic development as it relates to the use of "visual" support for understanding language e.g., working from objects to photos to symbols. I recently had a discussion about this with a teaching colleague who is reluctant to model a symbol based communication book with a student due to the student reportedly not showing an understanding of the objects of reference used in the classroom. I am aware there are no prerequisite skills for introducing and modelling AAC but wondered if anyone could provide some recent references to support this discussion?

Speech and language therapist

I work in a multidisciplinary health team for adults with a learning disability. I use picture based apps to support the communication of service users e.g. Grid 3, Proloquo2go, Pictello etc. I am looking for apps that other members of the health team, particularly nurses might find useful in their contact with service users e.g. apps that give visual information about pain/pain scales, medication, why and how they take blood pressure, mental health etc. The aim would be that the visual information on the app would support what the nurse was saying and may help the service user understand and remember what had been said at the appointment.

Speech and language therapist

I wonder if you would be able to help. I have a 10 year old girl on my caseload who is very bright, she uses eye gaze and is good with using her switch with apps on her school ipad. The apps she is

using for switching are on the younger side and I was wondering if you had a list of different apps which may be more challenging for her?

Specialist Occupational Therapist

1. *My son is not diagnosed dyslexia but college will do assessment soon, pleased advise what if anu help available nb disabled and care experienced. 2. Adult Friend has dyslexia and is home schooling 3 disabled children who are Care Experienced under 16,, what help technology is available to them please.*

parent

I have been in touch before regarding my daughters educational needs, she's now at high school in s3 and is finding some challenges with translating education on Gaelic which was her primary school education, the last time we spoke you had mentioned the dictation facility didn't had a Gaelic option as yet and I just wondered if that had changed ? She has now been asked to write essays in Gaelic and whilst her spoken is confident her writing is not so, I just thought I would touch base to see if there where any facilities from the GME that you had come across for kids with dyslexic problems?

parent

My son Y is 13 and currently in second year. Y is dyslexic. He has required support throughout primary and he also had a dyslexic tutor to help support him. Since moving to academy, we do not feel he is receiving the correct support in order for him to access his work and learn. He has a very supportive support for learning teacher but despite her best attempts to get teachers on board to use the technologies available, he is still not getting the correct support. Y finds reading extremely challenging and therefore needs all work to be on his laptop in a format that can be listen to. This is not happening in the classes and he is therefore not learning or achieving his full potential. Y also uses speech to text at home but find this difficult as the computer does not always pick up his speech correctly and then he is not able to go back and recognise any mistakes. In maths he is unable to remember the terminology and would be if it from a word bank etc. This is just a brief insight into some of the issues we are facing.
I am very keen to find out how I can go about getting Y assessed as to what technologies would work best for him and get them set up to try and help him. His self esteem is getting knocked daily and school is becoming a real battle. Any help would be greatly appreciated. Can I pay for this privately or does he need a referral from school? I am quite sure his SFL teacher would be able to refer him if necessary. I have already discussed this with her and she is in full agreement an assessment would be very beneficial.

parent

My dad has had a stroke and is unable to speak at the moment, I was looking for some advice about how to help him communicate.

daughter

Would you be available to join an online focus group with other professionals, regarding the inclusivity and accessibility of a new survey we are developing on experiences of child abuse in the UK, to help ensure it is suitable for children with special educational needs or disabilities?

University researcher

Hello I am looking for some help, I was recently sent in your direction as you maybe able to help us. My son X will be 4 in November and was born with spina bifida and hydrocephalus. We were advised that you may be able to help us there with an assessment for Jack? I am not sure how it works or what it consists of - but if someone could come back to me with some information that would be amazing and we would be so grateful. Thank you.

parent

My name is Z and I'm a support for learning teacher at XXXX High School. At school all of our young people have 1:1 ipads and we encourage the use of Microsoft Immersive Reader, particularly using Class Notebook. I'm contacting because I'm wondering about the possibility of integrating the Scottish Voice? Has it been looked at before?

teacher

Please can I speak to someone who can help me with using an iPad in Maths. I have an S2 boy with a variety of needs- Sight (CVI), ADHD and Dyslexia. I feel we have not got him working independently in Maths and I think the iPad and digital format should be regular practice for him. Please can I speak to someone for advice.

Teacher

We have a child in the centre who when well can use a pal pad switch, but when less well has very little in the way of active movement. There may be potential to utilise a blink or a face movement, but this is moving into switching territory I am not very familiar with. I wondered if you had any advice on determining what access strategy could be used and any hardware etc that we might consider exploring?

Occupational Therapist

I have a young man, who has a visual impairment, who is having problems accessing a computer program used in his higher maths. I am the teacher for visual impairment and have limited experience in the use of technology. Can you advise me on what I could use and if possible could I borrow it from yourself?

Qualified Teacher of Visual Impairment

Hello, I am contacting you to enquire about a technology for dyslexia assessment and if that is something you could provide for my 10 year old daughter. She is finding reading very difficult and I would really like to explore what could be available for her. I've been in touch with Dyslexia Scotland who have given me some good advice. I just feel I don't have a great understanding of what will suit her best as she is becoming increasingly distressed with books and will not attempt to read anything with me.

parent

I work at XXXX and I have a P6 child who still cannot read or write. Currently we are using talk to text on the chromebook or Ipad notes to aid his writing but he has a speech impediment and this does not always work for him. He also finds it challenging to retain the process to log on & use these independently. Clicker does not work for him as he finds it challenging. For reading Google Lens and Augmentally work quite well for him. He was assessed a few years ago and The Reader2 pen was recommended, however, he does not have a strong enough finger grip so it does not pick up the sentence fully and confuses him. I am looking to help him gain independence in his learning and find something that will help him as he moves forward into high school and support him in his daily living as independently as possible.

Teacher

My daughter is in mainstream S3 at XXXXXX. Her physical disability means that it is hard for her to keep up in class as she struggles to write and type at a speed required in the classroom. She wants to do well but her disability is preventing her from realising her full potential. Although she should have one-to-one support in all classes, in reality there are daily gaps in her care support as classroom assistants are pulled off to other things or are off sick. It's starting to affect her academic ability as she moves into Nat 5 and Higher. I would really appreciate some advice or support about how she can be helped. At the moment, she is left in a classroom with a Chromebook and nothing else. When she doesn't have classroom support then she struggles to type and input information from the teachers into the document. Help

parent

Good morning, I am a Guidance Teacher and have an S5 student who is entirely non verbal at school. Her parents say she is quiet and withdrawn at home but will speak. At school there is

literally no verbal communication with anyone at any time. As a result she is very isolated, does not socialise and her academic progress has stalled. Your organisation was suggested as a starting point for some advice and guidance to help us support her. Her lack of speech has also been a concern with regards to her safety as she cannot travel independently or communicate if she is lost or in danger. She has in the past been seen by Speech and Language colleagues but not recently.

Teacher

Hello, I have been advised by occupational therapy that I contact you for advice. I have a pupil in my primary 5 class with autism, dyslexia, and cerebral palsy. He is struggling to access the curriculum, specifically through writing. he is unable to use the dictation function on his iPad because he has CP related speech difficulties. Do you have any advice on strategies, resources, or software I could use to support him? And do you think he would qualify for an assessment through you? Thank you very much.

teacher

At present I have a young man in my class who is very keen to communicate. He is confident in using PECS and more recently has engaged really well with my own iPad using a range of apps. However, this is my personal iPad and I feel like he would benefit from having one of his own but I am unsure how to arrange for this.

teacher

A school has contacted us looking for advice on alternative mice options for a 7yr old pupil with C.V.I and cerebral palsy posing difficulties with fine motor difficulties , including a hand tremor. While the pupil is working on the desktop computer it is noticeable they are finding it tricky to operate the buttons on the mouse while keeping it still. Do you have any alternative mice you could loan for the pupil to try before we purchased one?

Local authority assistive technology specialist

I am looking for something to support our pupils when they are out in the community and needing some sort of self-regulation. Eg, bus is late, queue at the checkout, stuck in traffic etc. Not sure what it would be but maybe an app that would show the sequence of waiting for a bus or an app where they could click on an image and it would play an identified song. it is really about self-regulation but also to support, for example, an autistic youngster with a sequence of events or a social story type scenario.

teacher

I am writing on behalf of the Adult Speech and Language Therapy department on the Isle of Man. We are hoping to create a bank of voices for use with AAC which are more representative of the Manx population. We are wondering if your organisation would be willing to speak to us or share information regarding the practicalities of creating your selection of voices.

Speech and language therapist

I am looking for an organisation like yourselves that can offer advice for an adult who has suffered a event resulting in him being quadriplegic with a tracheostomy and ventilated. He is my brother and appears to have no cognitive impairment. He has had some use of an eye gaze and initially it worked well but it appears to be not working properly. We would like to purchase a system as it is possible that he may move to a different hospital and if he could use a system and take it with him it would be so beneficial. Could you signpost us to somewhere we can get more information.

sibling

I am wondering whether there might be a possibility of me borrowing am iTalk 2 switch for my students in xxxxx primary school. The area has no specialist provision for ASN, although once at high school age there is small enhanced unit there. This means that our young people with highly complex needs are in mainstream schools and classes without adequate assistive technology and with little or no budget for purchasing equipment. Indeed the council have told schools that any

> *equipment under £400 must be bought by the school. This is just not realistic! Anyway I hope you can perhaps help us by letting us try out this switch and see if it something we should buy. I have about a budget of £150 for some communication device and this has come recommended.*
>
> ***teacher***

> *I would like to know if you have any suggestions on translator devices that an EAL pupil in high school could use in class. I am a support for learning assistant in a high school and I am trying to find a device that maybe a teacher would be wearing that would transmit the voice/lesson and would automatically translate into the pupils earphones. I am aware that there are various translation apps they could use on their iPads but I have found that the pupil is playing catch up all the time since most of their class work are also in their iPads. This then creates a gap in their understanding of the lesson since teachers would have moved on already to the next by the time they translate the work.*
>
> ***Learning support practitioner***

> *I am writing to find out if there are any plans to make PDF versions of Hodder Gibson books available for EAL pupils (I have also contacted HG and Leckie and Leckie directly to enquire about this). It seems incredibly unfair that access to these resources is not available to pupils whose first language is not English, when they can arrive in to secondary with no language of instruction whatsoever. The PDF version could be used with a number of translation tools (on a purchase of e-copy arrangement or alongside the paper copy) and would ensure full inclusion of EAL pupils in class. I wondered if other colleagues had enquired about this, because I feel it is something which will have to be addressed soon if we are to uphold our commitments under the UNCRC.*
>
> ***teacher***

> *I have a young person in XXXXXX on my caseload who is transitioning to college in August. She has complex CP, limited hand function and her speech is difficult to understand. She is frustrated at her lack of independence at managing her phone, lap top etc. Would your service cover this age range and location? If not can you recommend someone who has a remit for this please.*
>
> ***Occupational therapist***

Most enquiries regarding individuals require a personalised response and we usually offer to speak to the parent or practitioner by phone or video call. We generally follow up by sending an email with a summary and signpost to sources of information or offer a loan of technology. If we meet on Teams, we ask if the enquirer is happy for the session to be recorded and we send a link to the recording.

If we feel that we are receiving requests for assistance around a similar topic, we develop posters, blogs or videos that we hope will address the questions that are asked. This both helps parents and practitioners and also helps the CALL team to respond more efficiently to future enquiries.

Feedback

> *"As a long time admirer of the outstanding world leading work of CALL Scotland – this would seriously have to be one of the best jobs in the whole AT and AAC world. If I was a) a Speechie and b) a few years younger, I'd be sending of an application instantly. Lucky person who gets to work there.*
>
> ***Occupational therapist, Australia, commenting on a job opportunity in CALL***

This is fantastic, thanks so much. It has been years since I delved into the world of Apple, but actually it makes sense to try and do that because it is what S uses at school, so probably more congruent for him. I will put together a funding application, the links are very useful too - thank you so much!

Parent

Thanks for that info it was super helpful. I will also share this with the rest of my team if that is Ok with you, as think we get asked this stuff quite often.

Bioengineer, re mounting tablets on wheelchairs

In-person Consultations

29% of requests for assistance are from parents and it is clear from some of the requests (see above) and subsequent conversations that parents and carers can sometimes struggle to find the support that they and their children require. This correlates with findings published in research reports over many years, such as the Doran Review (2012), Doran Needs Analysis (2015), Additional support for learning: experiences of pupils and those that support them (2019), Review of additional support for learning implementation (2020), Pupils with complex additional support needs: research into provision (2023) and the report of the Additional Support for Learning inquiry by the Scottish Parliament Education, Children and young People's Committee (2024).

CALL staff will always signpost parents and carers to local services but sometimes these do not exist, or the enquirer feels that they have already exhausted local support, and in these cases we may offer an in-person consultation in CALL. Assistive technology and AAC is a specialist field and parents need a source of independent, expert advice.

Consultations are informal discussion and provide parents, carers and learners with an opportunity to discuss their needs and to explore and evaluate assistive technology. The consultations are free, funded by our core grant from Scottish Government.

Websites

CALL Scotland hosts ten separate websites: CALL Scotland, AAC Scotland, ASL and Technology, Adapted Digital Assessments, Books for All, Doorway, Personal Communication Passports, Symbols for All, The Scottish Voice and WordTalk. Robert Stewart creates and maintains the sites with some content being written and updated by the rest of the CALL team.

Robert created a more up-to-date design for the main CALL site which launched in December 2022. The new site is more accessible, especially for people viewing on mobile phones, course bookings and payments and purchases from the CALL Shop are integrated directly into the University of Edinburgh finance systems.
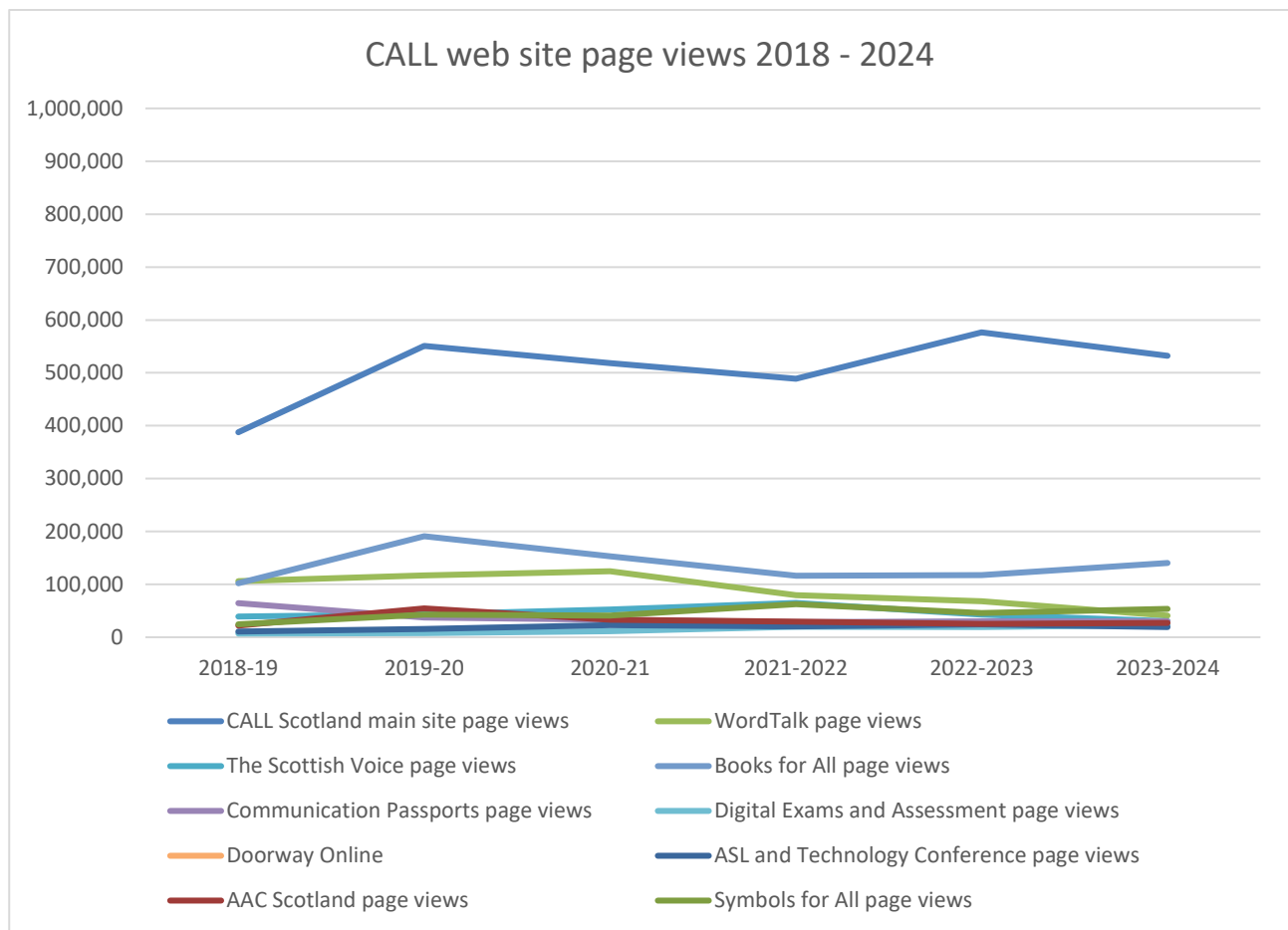
Given the increase in cyber-attacks on other universities and public sector organisations, Robert has been researching and ensuring that the CALL sites are secure.

Table 9: CALL website visits and downloads provides information on the number of page views and downloads from the CALL web sites. We report the number of 'page views' as measured by Google Analytics. The total number of page views of the nine sites increased by 1.6% and the number of resources downloaded by 17.2%.

The main CALL site is most visited followed by Books for All, Symbols for All and WordTalk.

Table 9: CALL website visits and downloads

	2019-20	2020-21	2021-22	2022-23	2023-24
CALL Scotland main site page views	550,987	518,474	488,513	576,507	**531,981**
CALL Scotland (resources downloaded)	55,928	48,874	39,985	63,312	**59,494**
WordTalk page views	116,686	124,769	79,507	68,354	**40,836**
WordTalk (copies downloaded)	7,471	10,506	9,735	9,120	**7,367**
The Scottish Voice page views	43,484	52,424	64,941	42,654	**30,357**
Heather downloads	534	704	709	539	**451**
Stuart downloads	479	596	618	458	**384**
Callum downloads	165	155	123	131	**155**
Isla downloads	161	162	142	141	**172**
Andrew downloads	128	111	95	108	**139**
Mairi downloads	129	107	76	108	**145**
Ceitidh (Gaelic voice) downloads	124	147	144	155	**197**
Books for All page views	190,977	153,197	116,492	117,231	**140,274**
Number of Books for All user accounts	3,535	5,507	6,888	8,158	**9,399**
Books for All downloads	5,528	7,380	5,728	5,515	**7,160**
Communication Passports page views	37,312	33,057	28,565	30,385	**30,201**
Digital Exams and Assessment page views	7,557	11,496	20,055	19,097	**23,052**
Doorway Online					**950,787**
ASL and Technology Conference page views	15,697	22,726	20,545	24,343	**19,167**
AAC Scotland page views	54,504	33,296	29,731	25,468	**26,917**
Symbols for All page views	42,596	40,695	62,548	46,028	**53,550**
Symbols for All (downloads)	16,802	16,190	27,869	17,636	**17,238**
Total page views	**1,059,800**	**990,134**	**910,897**	**950,067**	**1,847,122**
Total downloads	**87,449**	**84,932**	**85,224**	**97,223**	**92,902**

Figure 9: CALL website page views 2019 – 2024

CALL web site page views 2018 - 2024

Legend:
- CALL Scotland main site page views
- WordTalk page views
- The Scottish Voice page views
- Books for All page views
- Communication Passports page views
- Digital Exams and Assessment page views
- Doorway Online
- ASL and Technology Conference page views
- AAC Scotland page views
- Symbols for All page views

Posters

The free downloadable CALL posters provide key information about assistive technology and augmentative and alternative communication and continue to be popular. The posters have helped to raise the profile of CALL Scotland both nationally and internationally and have provided useful information for people with an interest in assistive technology and AAC. A total of **45,595** were downloaded in 2023-2024.

Craig created a new poster suggesting a Technology Checklist to creating a dyslexia-friendly classroom; the interactive Bookbug Digital Bookshelf was updated with the 2024 titles; and the popular 'wheel of apps' for learners with dyslexia and wheel of apps for learners with complex additional support needs were both updated.

'Setting Up Guided Access on an iPad" was updated for iOS17.

Blogs

The CALL Scotland Blogs feature articles by the CALL team, news about events, technology, Government initiatives and other developments. If people ask for information about a particular topic on a regular basis, a blog is often a good way to respond and share information.

The team published 56 blog posts in 2023-2024 (compared to 59 the previous year) covering a wide range of practical and policy-related topics such as:

- Can Artificial Intelligence (A.I.) help learners with dyslexia? (Craig)
- OneNote digital notebooks for dyslexic learners (Shirley)
- Ideas for Creating Art via Eye Gaze (Claire)
- Why is digital learning not considered in the ASL Action Plan? (Paul)
- How can we help you support the implementation of AAC? (Joanna)
- Struggling to include learners and develop AAC in school? (Gillian)

Videos from CALL Scotland

Practitioners, learners and parents often ask for advice on using apps and tools and video tutorials can be helpful. The short video tutorial guides, created by Craig in 2021, on the CALL YouTube channel continue to be very popular. These include 'Using Microsoft Word to Support ASN', 'iPad Short Guides to Support Reading and Writing' and 'Creating Accessible Word Documents and Formats'.

Claire produced four new videos showing how to use Bookbug Symbolised Resources, Accessible Digital Books and the Writing Resources for Grid 3 and Clicker. These are available on the CALL YouTube channel.

The CALL YouTube channel has **984** subscribers and received **72,234** views in **2023-2024**. It has received **361,648** views since the channel started in 2011.
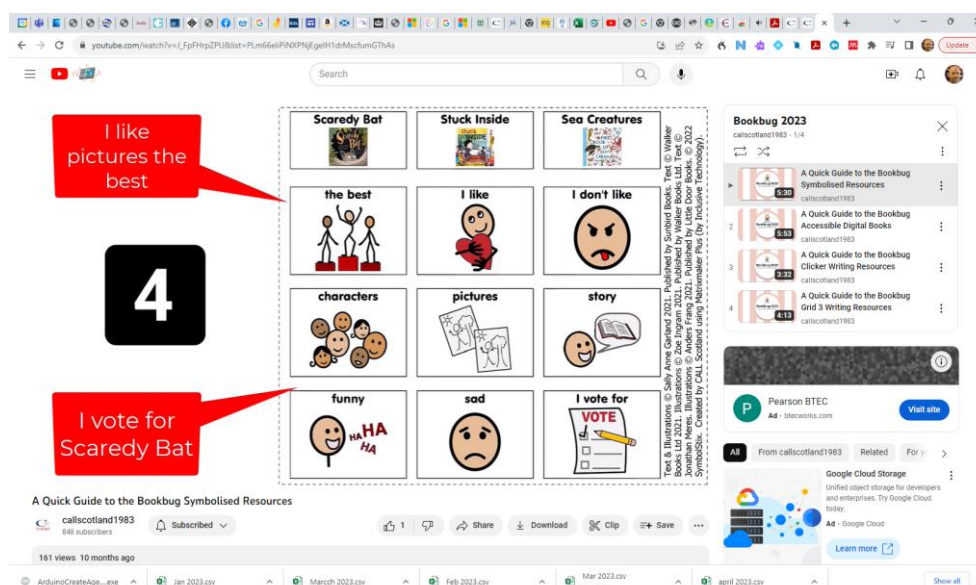
Figure 10: YouTube video *A Quick Guide to the Bookbug Symbolised Resources*

Social Media

The CALL Twitter account now has **5538** followers in 2023-24 compared to 5380 followers in 2022-23.

The CALL Facebook page now has **10,308** followers with a "reach" of 1,627,794 (an increase of 884%). The reach is the number of people who view or have contact with the page. A post about the updated iPad wheel of apps for pupils with dyslexia accounted for a reach of 145,000 and an additional 1,045 followers on 6th February alone.

The CALL Instagram page is in its fairly early stages, having been set up in November 2023. Since then, we have gathered 361 followers.

With Kirsteen, Claire and Ceanna driving a very linked up and targeted approach across our social media this year we are really building a solid presence. It is clear that our demographic following varies on each platform, which is recognised by the team as an important part of our sharing of events and information. Designing CALL

Professional Learning logos has enabled us to categorise different offerings and easily identify posts across the platforms; our blog posts, webinars, short courses or bitesize offerings.

Reports and articles

Nisbet, P. (2024) **SQA DIGITAL ASSESSMENT ARRANGEMENTS: AN INVESTIGATION INTO SECURE ONLINE ASSESSMENT SYSTEMS.** Research Report commissioned and submitted to Scottish Qualifications Authority. May 2024.

Professional Learning

Objectives

To develop and deliver Professional Learning for staff and training for parents on assistive technology and Augmentative and Alternative Communication.

Expected outcomes

Include developing and providing continued Professional Learning that meets the needs of staff and local authorities, linked to implementing the Code of Practice.

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OUTCOMES

- **160** participants attended **17** online courses.
- **994** participants attended **20** insets in schools, local authorities on online.
- **788** participants attended our **22** free webinars.
- **27** practitioners completed the 10 week Technology to support ASN in Education course.
- **28** practitioners completed the 5-week Technology to Support Dyslexia in Education course.
- **45** practitioners completed the new Technology to Reading & Writing for Learners with Complex Needs 8 week course, which was offered twice due to demand.
- We provided input to **4** teacher training courses at Moray House for **170** students
- **309** participants registered with 244 attending online for our virtual 2024 ASL & Technology Conference.
- CALL staff presented at **10** conferences over the session.

Professional Learning at CALL Scotland

The Professional Learning programme is now led by Kirsteen Steven with input from the whole CALL team. Robert Stewart takes the lead for technical aspects, while Paula Twigg manages bookings, invoicing and administration.

Craig Mill is the Lead Tutor of the 10 week *Technology to support ASN in Education* course (formerly known as Inclusive Digital Learning) and the 5 week *Technology to Support Dyslexia* course, while Claire leads *Technology for reading and writing for learners with complex needs* week course.

Table 10: Summary of Professional Learning 2024 summarises the professional learning outcomes over the past 5 years.

The post-covid move to online delivery enabled larger numbers of practitioners to participate in the CALL programme of Professional Learning including 60 minute courses, free webinars and bespoke sessions delivered online after school hours (or on In-Service days) to teaching staff.

However, over the past years we have noted a significant decrease in the number of participants attending our one-off online courses, while participation on the innovative *Technology to Support Dyslexia* and *Technology for reading and writing for learners with complex needs* has increased. For 2024-2025, we have therefore decided to pause the single online courses and to develop multi-week Short Study Courses. Paul has developed our new *Technology to Support SQA digital assessment arrangements* while Joanna and Ceanna have created a new 5-week *Technology to Support Communication* course for 2024-2025.

There has also been an increased level of interest in our self-paced online learning modules which has encouraged us to develop our range of web based Professional Learning.

Table 10: Summary of Professional Learning 2019-2024

Summary of PL Events	2019-20	2020-21	2021-22	2022-23	2023-24
PL delivered online by CALL					
Number of courses	9	14	17	16	**17**
Number of participants	138	231	274	218	**160**
Short Study Courses					
Technology to support Dyslexia in Education 5 week course				23	**28**
Technology to Reading & Writing for Learners with Complex Needs 8 week course	N/A	N/A	N/A	N/A	**45**
Technology to Support ASN in Education 10 week course				32	**27**
PL delivered in schools/authorities					
Number of courses	30	31	43	34	**20**
Number of participants	661	917	1169	1,200	**994**
Webinars delivered					
Number of Webinars delivered	22	21	24	20	**22**
Number of participants registering	1,875	5,766	5,598	1,648	**3,315**
Presentations at conferences	9	12	12	11	**10**
Exhibitions	9	2	2	2	**3**
Talks	8	14	6	0	**3**
Moray House lectures					
Number of lectures/courses			7	4	**4**
Number of students			300	181	**170**

ASL and Technology – number of participants	345	262	195	365	**309**
AAC Introductory Modules – number of completions	6,784	2,910	1,698	1,354	**957**
AAC in Education Modules – number of completions	3,169	536	396	694	**953**
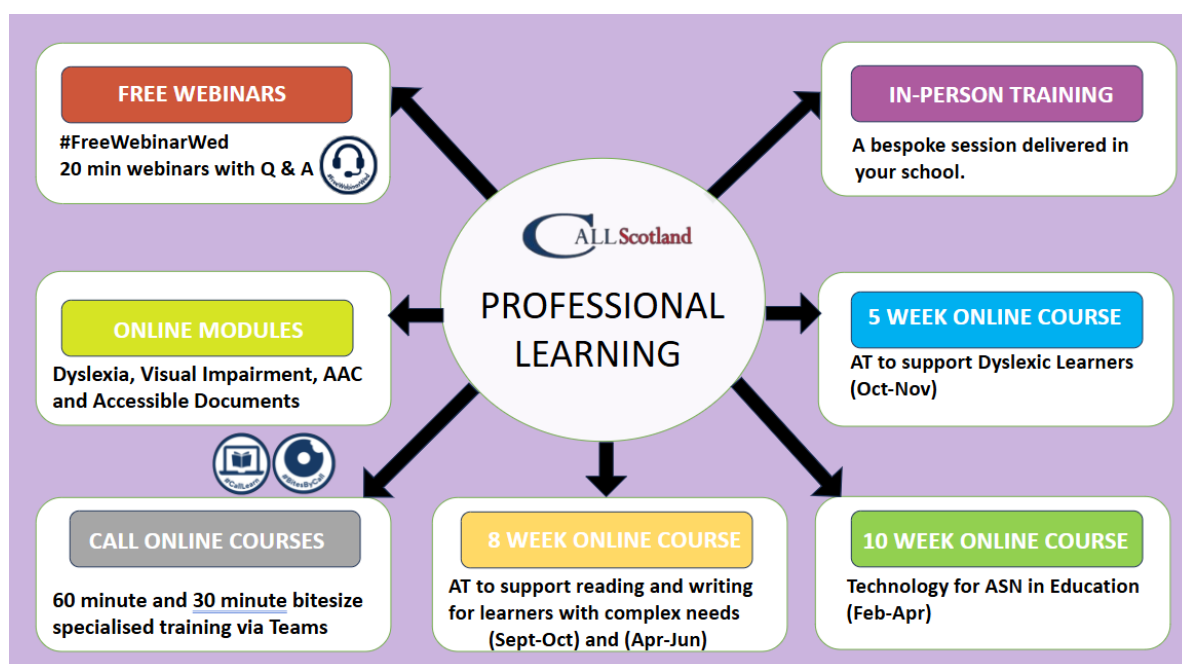
GTCS Standard for Career-Long Professional Learning

CALL Scotland's Professional Learning aligns with the GTCS Professional Standards and endeavours to meet the needs of staff and local authorities, linked to implementing the Code of Practice under the Education (Additional Support for Learning) (Scotland) Act 2004 (as amended 2009).

We deliver relevant and practical training opportunities for teachers who then record this as part of their Professional Update. Our Professional Learning can provide the stimulus for teachers to adopt an enquiring, reflective and critical approach to their professional practice and make changes which can result in improved outcomes for their pupils with Additional Support Needs.

We provide training opportunities primarily but not exclusively for teachers. It is important we include everyone who is supporting learners with ASN and this can include:

- ➢ Pupil Support Assistants
- ➢ Families
- ➢ Occupational Therapists
- ➢ Physical Therapists

➢ Speech and Language Therapists
➢ Social workers and Allied Health Professionals
➢ Staff and support workers in FE and HE establishments
➢ Students (ITE, PG and MSc)
➢ Newly Qualified Teachers and mentors

Professional Learning Delivered Online

For our 60-minute courses (rebranded during the year to #CallLearn) participants were provided with a link to the recording of the course and online course materials and resources. Acknowledging that time is often a commodity that teachers don't have enough of, we decided to trial 30 minute (#CALLBites) online courses. Again, participants were provided with a link to the course recording and online materials. We are noting an overall decline in course participant numbers for online courses and we recognise the current demands on classroom practitioners. We have also considered the time demands that preparation for courses puts on our staff team versus the income that we derive and going forward we have agreed to focus on short-study courses and review this offering in April 2025.

We have continued to make archive sales available for purchase. This began in 2022/23 and over 2023-24 we have sold 24 course recordings at the same price as the original course cost (£30).

Table 11: Number of courses and participants on CALL-courses since 2019

PL courses delivered by CALL	2019-20	2020-21	2021-22	2022-23	2023-24
Number of courses	9	14	**17**	**16**	**17**
Number of participants	138	231	**274**	**218**	**160**
Average number of participants per course	15.3	16.5	**16.1**	**13.6**	**9.4**

Short Study Courses

Technology to Support ASN in Education

Formerly known as the Inclusive Digital Technology (IDT) course, the newly renamed and updated 10-week Technology to Support ASN in Education Professional Learning course is run in collaboration with the Moray House School of Education and Sport Professional Learning program.

This year we revised the course with a more practical focus on tools, strategies and processes to help practitioners make the most of technology, including both free software and tools that are built into the operating system of devices, e.g., Windows, iPads (iOS) and Chromebooks as well as specialised tools to support dyslexia, AAC, complex needs etc.

28 people attended the course from across the UK although the majority of participants were teachers from Scottish schools, including primary, secondary and specialist provision.

Everyone commented that they had enjoyed the course and appreciated the level of support they had received. Similar to previous years, feedback was very positive.

Technology to support Dyslexia in Education

Craig led the development and delivery of a new 5-week online course focusing on Assistive Technology for pupils with dyslexia which ran first in October 2022 when 23 practitioners attended at a cost of £200 per head. The course was repeated again in 24th October 2023 with 28 participants. Although only a small number of participants gave feedback it was overall very positive, e.g.,

"I liked the delivery and demonstrations by all the course deliverers. I left each week with ideas and confidence to support both my learners in my class and colleagues too. I currently have a post grad student who is also benefitting from my new knowledge which has allowed her to differentiate more effectively for the children too. She confessed that she has recently been diagnosed with dyslexia herself so the tools that I am showing her are supporting her own learning too."

"The realisation that there is a huge amount of technology out there to assist learners with Dyslexic needs."

Technology to Reading & Writing for Learners with Complex Needs

Claire has developed a strong international reputation for her work around developing literacy with pupils with more complex learning needs and in 2023 she created a new 5-week course on this topic. The course first ran in Autumn 2023 and the 25 places were over-subscribed; 10 of the participants were sponsored by Teach Us Too, a UK charity that promotes literacy for all children. The course was very well received, and Claire revised and extended it to an 8-session format which she and CALL colleagues delivered in April 2024. The course featured contributions from Chantal Bryan and Sarah Giles from Teach us Too along with Dr Sarah Moseley and attracted 20 participants and is scheduled to run again on 24 April 2025.

Claire has been awarded a prestigious AT Scholar award to represent the UK at the Assistive Technology Industry Association (ATIA) Conference, the world's largest assistive technology event, in Orlando in January 2025.

Technology to Support SQA digital assessment arrangements

In response to ongoing requests for advice and the changing environment around digital assessment arrangements for SQA examinations, Paul developed a four-week online course which ran from 20th August 2024. This was attended by 38 participants and featured contributions from colleagues in SQA and schools.

Technology to Support Communication

Jo and Ceanna have developed a new 5 week course on Technology to Support Communication which commences on 29th October.

INSET Professional Learning

During 2023-24 we provided **20 INSET sessions** of Professional Learning for approximately **994** people (teachers, Support for Learning staff, classroom assistants, education psychologists, Speech and Language Therapists, parents/carers, etc.) across Scotland. The online sessions are often hosted by the school or local authority and from one log-in where there could be multiple viewers so we do not always have accurate figures for the number of participants.

There was a significant decrease in the number of INSET courses delivered in 2023-24, however the total number of attendees only decreased from 1,199 to 994. The majority of these INSET sessions are delivered via MS Teams. An advantage of the online model, compared to face-to-face, are that larger numbers of participants can attend, and the recordings can be made available for staff unable to attend on the day. For some schools, they request an in-person training session so that they can see live demos of equipment and to try it out themselves using their own devices with support from CALL trainers.

Table 12: Number of INSET courses and participants since 2019

PL delivered in schools / authorities	2019-20	2020-21	2021-22	2022-23	2023-24
Number of courses	30	31	42	34	**20**
Number of participants	661	917	1169	1200	**994**
Average number of participants per course	22	29.6	27.8	35.2	**49.7**
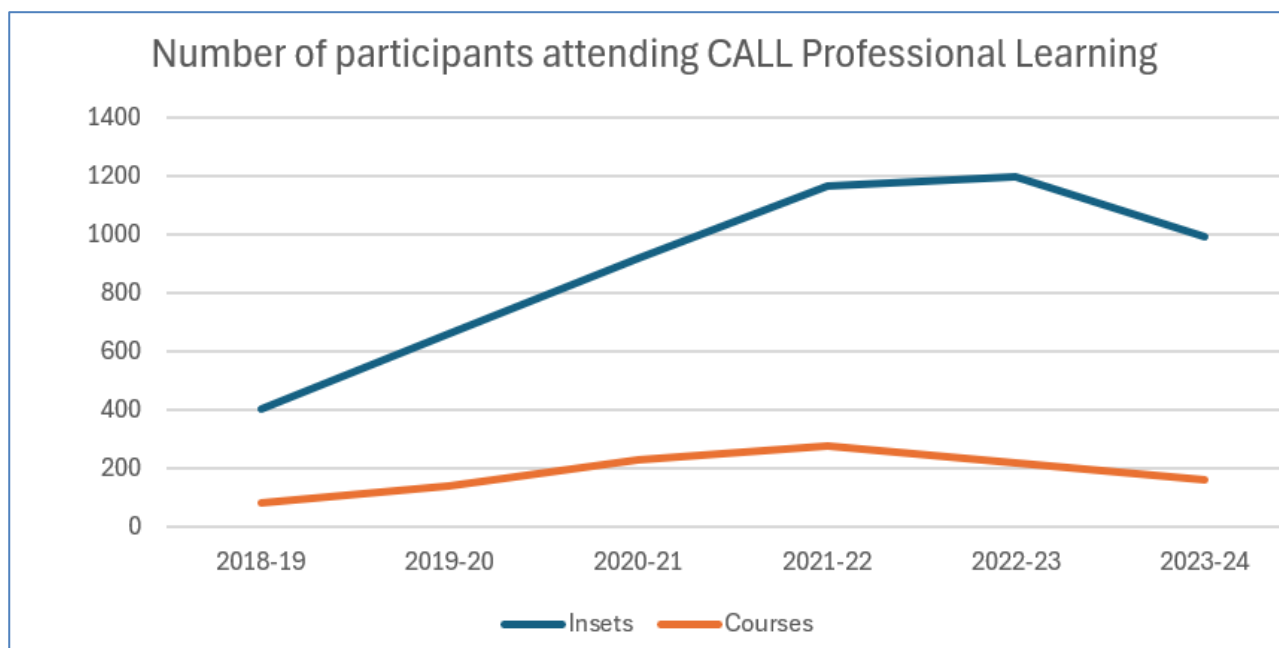
Figure 11: Participants on CALL Professional Learning events 2018-2024

Evaluation and Feedback

All participants in CALL courses are asked to complete an online evaluation from which we hope to gather information to improve our Professional Learning content and delivery. The response rate has declined significantly and this can make it difficult for us to evaluate what we are delivering. However, the evaluation forms are not the only way we gather information. The chat panel in Teams is reviewed after the meeting and comments collated from there. If there is any personal follow up with participants, the Course leader will gather evidence about how the training session met their needs. Course leaders always share their contact details as part of the presentation as well, so attendees can always make contact afterwards if they wish.

For Insets delivered in a school or as part of a Local Authority Service Level Agreement, historically the dissemination of our evaluation form was carried out by the lead person in the school / Local Authority. We previously had no control over when this is sent out and therefore returns could be lower as this can take place long after the event. Additionally, some schools / organisations issue their own evaluation forms and they gather slightly different data. Recently some of the team have added their evaluation forms to their resources shared at the training session. This will be monitored to see if there is any increase in returns of the evaluations.

Table 13: Participants' scores for Professional Learning delivered by CALL

On a scale of 1 to 10 how would you rate this training course?	Average Rating 2019-20	Average Rating 2020-21	Average Rating 2021-22	Average Rating 2022-23	Average Rating 2023-24
Courses as part of the CALL CLPL Programme	9.1 / 10	8.7 / 10	8.7/10	**9.0/10**	**9.0/10**
INSET courses	9.3 / 10	9.1 / 10	8.9/10	**8.6/10**	**8.2/10**

Sample comments from evaluations:

"I'd like to thank you for your contribution to our meeting on Friday. Everyone mentioned in the feedback how valuable your input was and that they'd like to connect with you more. A ringing endorsement if ever there was one."

"I have come away with a lot of free resources that I can use and share with my Primary colleagues."

"Very informative presentation about readily available features of Word"

"Lots of ideas and examples- also very glad to have a follow up email of all the ideas"

"The course was exactly what I expected and great to watch! Full of relevant info and enjoyed examples of using the apps best to support our pupils."

"These sessions have been extremely valuable for our staff team and in turn will benefit our learners greatly."

"The course was excellent - I had heard of book creator but had no idea of its functions and accessibility."

"Gave a wide variety of options for different needs. Practical opportunities."

"Very informative and useful. Lots of great devices and apps"

"the instructor was very friendly and informative."

"The practical nature of it gave our staff confidence as well as great ideas for teaching and learning activities."

"Really excellent course with very approachable and friendly tutors."

CALL Webinars
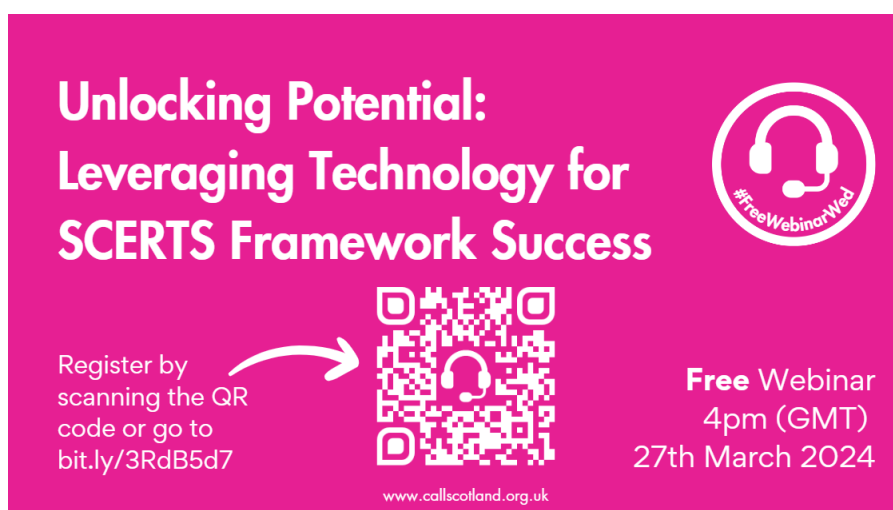
Webinars are live, 20–30 minute presentations delivered via Microsoft Teams. People who sign up are sent a Teams Meetings room link and can log in to watch, engage in discussion and ask questions via the Teams online chat panel.

CALL hosted 22 webinars over the year with **3,315** people registered for the webinars compared with **1,648** in 2022-23: an increase of over 100%.

A recording of each webinar is made available via the CALL website the day after the live broadcast. Links are automatically sent to everybody who signed up for the webinar, but the recordings can be viewed by any interested person. Past webinars are available on the CALL Scotland website and our YouTube Channel in a Webinars Playlist.

Table 14: Numbers of webinars and participants 2019-2024

Webinars	2019-20	2020-21	2021-22	2022-23	2023-24
Number of Webinars delivered	22	21	24	20	**22**
Number of participants registering	1,875	5,766	5,598	1,648	**3,315**
Number of participants attending	379	1,250	1,076	445	**788**

ASL & Technology Conference

Since the pandemic in 2020, CALL Scotland's annual Additional Support for Learning and Technology Conference and Exhibition was moved online and we have continued this format to date.

The online format is very popular, and our 2024 event offered 20 presentations from Assistive technology suppliers, CALL Scotland staff and practitioners.

309 practitioners and parents registered for the event at a cost of £5 which provided access to the live presentations and the archive of all the presentations at the end of the event. This is a decrease of 14.5% from 2023. Some teachers register for the conference knowing that they only have a short break in the day to log in and learn but from feedback we know they were appreciative of having access to the recordings and would be using them as Professional Learning at a later date.

This year we decided to go with a Pathway format to organise our conference and we were able to deliver a Communication pathway, a Dyslexia Pathway and also a Pathway of presentations to support learners with Complex Needs.

The feedback from attendees was that this made it easier to select appropriate presentations and that there were less "clashes" delegates wished to attend live. Another benefit of the online nature of the conference is that with presentations being recorded any clashes are resolved by catching up on demand at a suitable time later.

The workshops were 40 minutes in length and there was the opportunity to ask questions via the Teams chat function and to have a discussion after the presentation.

Participants were asked to rate the event on a scale from 1 to 10 and gave an overall rating of 9.04 out of 10.

In 2025 we hope to run a hybrid event with both in-person and online participation.

Sample comments from evaluations:

"I thought it was very helpful. It was my first conference so wasn't sure what to expect."

"Digital Exams - so chuffed for Paul that he's managed to get this over the line! It was good to hear about the different online platforms that are accessible for all devices albeit still a work in progress. The hardest part has been achieved thanks to Paul's dedication."

"Excellent organisation thanks so much you cater for the wide range of people using technology to support their everyday lives and independence."

"A great day with knowledgeable presenters. So many useful links and further 'reading'. So grateful that the links to the whole days' sessions will be sent out next week, so I can catch up on the other sessions. Thank you to all who help make the conference what it is."

Conference Presentations

We delivered 10 conference presentations in 2023-2024. We do not have access to numbers attending as some of these were options on the day and no attendance was taken, while others were delivered online. We do sometimes have to turn down speaking engagements due to our other work commitments, and some of the organisations who want CALL Scotland input may not be within the Scottish Education sector.

Conference Presentations

Harrison, C. (2023) "CALL Scotland – supporting learners with communication difficulties access the curriculum through AAC", Communication Matters Conference 10-12 September 2023.

Harrison, C. (2023) "CALL Scotland – supporting learners with communication difficulties access the curriculum through AAC" SIG (online), 16 November 2023.

Nisbet, P. (2023) Dyslexia Scotland Education Conference. 28 October 2023.

Nisbet, P. (2024) "Assistive Technology and Digital Exams", ASL & Technology 2024 Online, 13 June 2024.

Courtney, J. (2023) "Steps of progression with AAC: From early introduction to curricular access" Joint Presentation at Cerebral Palsy Scotland Annual Conference, 3 October, 2023.

Courtney, J. (2024) "Bookbug and Beyond: Developing the Use of Universal AAC in the Classroom", ASL and Technology Conference, 13 June 2024

Mill, C. (January 2024) VI Conference, "General Assistive Technology for VI Users", Queen Elizabeth University Hospital 11 January 2024.

Mill, C. (June 2024) VI Conference, "General Assistive Technology for VI Users", Queen Elizabeth University Hospital 3 June 2024.

MacGregor, C. (2024) "Integrating interests into AAC and everyday learning with Ceanna MacGregor, CALL Scotland" ASL & Technology 2024 Online, 13 June 2024.

Steven, K (2024) "Creating a Dyslexia Friendly Classroom", Optimus Conference Online 25 January 2024.

Other contributions at conferences

Craig Mill and Kirsteen Steven attended the West Lothian ASN Conference at Winchburgh Academy on Friday 1st September 2023. They hosted a stall and shared lots of information about CALL and what we do including creating symbolised resources, our loan bank and also having lots of our app wheel and downloads available for delegates to take-away.

Shirley Lawson and Kirsteen Steven attended the Dyslexia Scotland Conference on 28th October 2023 where they hosted a stall and shared lots of our downloadable resources. As always, our App Wheels and Dyslexia friendly classroom checklists proved to be extremely popular. They were also able to provide hands-on demonstrations on devices as well and answering queries and questions on particular software and apps including Scottish voices.

Craig Mill, Paul Nisbet and Paula Twigg attended the Aberdeen Digital Learning Event on 16th November 2023, shared CALL resources and provided hands-on demonstrations of different devices, software and apps.

Under and Post Graduate teaching

We continue to offer support and free delivery of lectures, tutorials and workshops to teaching colleagues in Moray House. We passionately believe that the Undergraduate and Postgraduate courses should prominently feature modules on the use of Assistive Technologies in the classroom and therefore we want to be on hand to raise awareness and to provide essential information. This year we delivered 4 sessions reaching 170 students.

Table 15: Moray House lectures

Title	Moray House Course	Date	Number of students
Inclusive Digital Technology for learners with ASN	PGDE Secondary	14/12/23	100
An overview of Assistive Technology for pupils with ASN	PGDE Primary	18/1/24	40
Assistive Technology to support Autistic Learners	MSc Inclusive Practice – Autism module	20/3/24	20
Assistive Technology to support Dyslexic learners	MSc Inclusive Practice – Dyslexia and literacy difficulties	20/3/24	10
	Total number of students		**170**

Professional Learning Modules

Online AAC modules

The original *Introductory Modules* were made available on the AAC Scotland website in 2014 and were joined by the more comprehensive *AAC in Education* modules in 2018. The *Introductory Modules* are also available on the NHS TURAS learning platform.

The modules are aimed at services, teams or individuals to help them review their current knowledge of Augmentative and Alternative Communication, develop best practice and to ensure positive outcomes for people who use AAC.
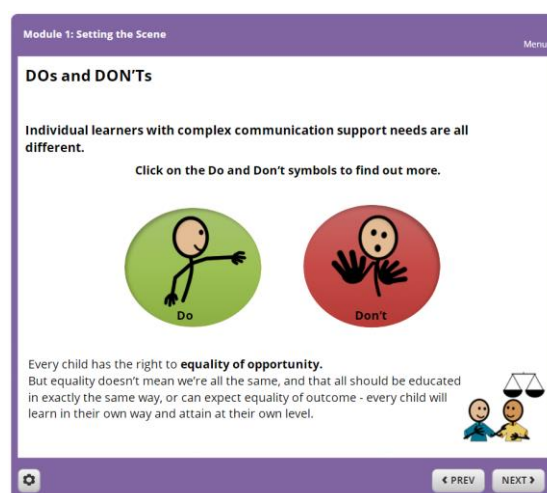
A wide variety of individuals, from different sectors such as education, health, care and the community, use the modules to increase their knowledge and skills. Many are engaging with or supporting individuals with AAC within Scotland, however evidence shows use much further afield and internationally.

People who finish the modules are invited to complete a feedback form and this provides an indication of the number of users who complete the modules and feedback on how they could be improved.

Table 16: *Introductory AAC* Online Modules

Module	2019-20	2020-21	2021-22	2022-23	2023-24
Total completed feedback forms	6,784	2,910	1,698	1,354	**957**

Table 17: *AAC and Education* Online Modules

Module	2019-20	2020-21	2021-22	2022-23	2023-24
Total completed feedback forms	3169	536	396	694	**953**

We do not have data for use or completions of the *Introductory Modules* hosted on the NHS TURAS learning platform.

People who finish the modules are invited to complete a feedback form and this provides an indication of the number of users who complete the modules and feedback on how they could be improved.

In response to the question "On a scale of 1 to 5 how would you rate this training module? (1 low - 5 high)", the average responses to 31/7/23 are given in Table 18.

Table 18: AAC Online Module ratings

AAC Online Module ratings overall	Average rating (scale 1 to 5)
Introduction to AAC	4.67
AAC in Education	4.67

Written feedback is overwhelmingly positive, as demonstrated in the following quotes in response to the question "*What did you like best about the module?*"

'access to resources, learning about sensory stories and how to put into practice.'

'Ways to record and assess learning'

'Individuals telling their story.'

Inclusive Digital Technology Online Modules

There are now 4 online modules; *Technology to Support Dyslexia, Using the iPad to Support Literacy, Technology to Support Visual Impairment* and *Creating Accessible Documents*.

Craig has developed and published the modules to accompany numerous videos that he has created. Originally offered for free (and due to their popularity and positive feedback), we decided to charge £20 for each module as an additional way to generate funding.
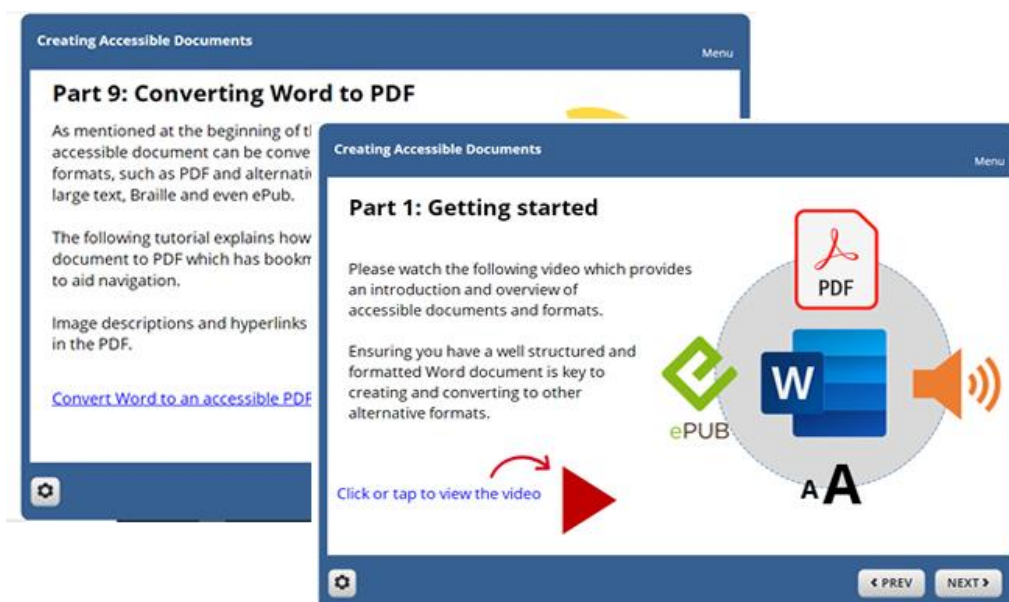
Figure 12: Creating Accessible Documents Learning Module

Table 19: Number of completions of Online Learning Modules

Online Module	Number of completions 2023-2024
Using Technology to Support Dyslexia	242
Using the iPad to Support Literacy	123
Technology to Support VI	35
Creating Accessible Documents	42

Feedback has been extremely positive, for example;

"An excellent module that every teacher should enrol on!"

"Top work, whoever has produced this module - again, really enjoyable and informative"

"An excellent module and well worth doing. I feel better equipped with technology I already use and new types of technology"

"The variety of ways the information was delivered and the videos used to show the different types technology. It was good to see the many different types of technology I use in my own teaching and some that I didn't know a lot about but will be further investigating them"

Assistive Technology Loans and Support

Objectives

To provide a National Assistive and Communication Technology Equipment Bank, with technical services to enable learners with complex additional support needs to evaluate specialist technology across Scotland.

Expected outcomes

Learners with additional support can evaluate equipment before purchase.

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OUTCOMES

- **86** devices and software with a total value of £9,722 were added to the Loan Bank last year.

- **85** of the items at a cost of £9,412 were purchased through core funding from the Scottish Government.

- **18** items were communication devices. The most expensive items purchased were a tablet computer with the latest eye-gaze camera plus software costing £2,839.

- **272** equipment loans with a total value of £29,715 were made to pupils in 22 local authorities. 119 devices were returned from loan.

- 85% of the borrowers were 'Very Satisfied' with the loan service, 10% were satisfied and 4 borrowers did not know.

Investment in the Loan Bank

Assistive technology is constantly developing and so it is essential that we invest in new devices and replace obsolete systems. We do not have a sufficient budget to purchase bespoke high-tech communication aids and so instead we either borrow systems from suppliers or adapt standard laptops or tablets with peripherals for assessment and loan for evaluation. For example, a communication and access system comprising a Surface Pro tablet, eye-gaze camera and Grid 3 software costs around £3,000 compared with £5,000 to £8,000 for a bespoke, dedicated device.

Some suppliers lend us equipment on a long term loan, which is extremely helpful for assessment and evaluation of the more complex and expensive assistive technologies.

Numbers of devices added to Loan Bank 2023-2024

Legend:
- Toy
- Switch
- Interface
- Tablet
- Reading/Writing Aid
- Mounting / stand
- Computer
- Keyboard or alternative
- Mouse or alternative
- Computer accessory
- Tablet Accessory
- Other
- Communication Aid
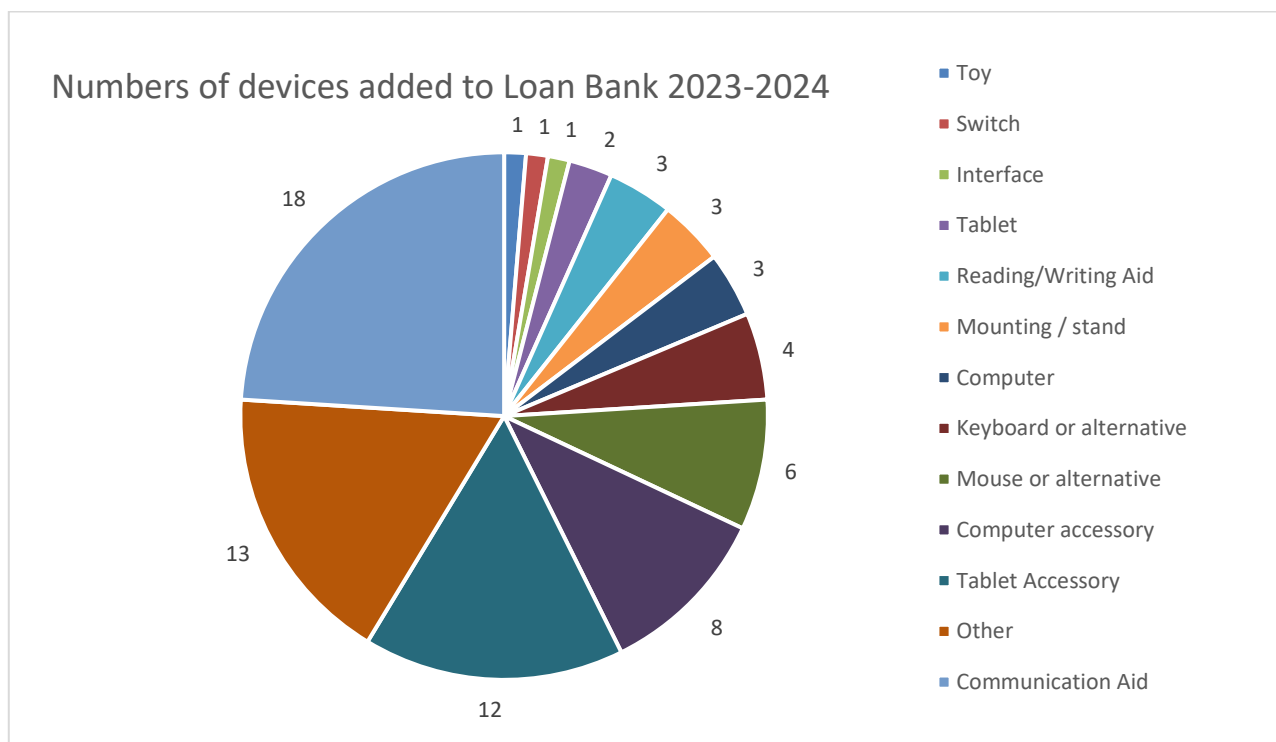
Table 20: Investment in Technology Bank 2019-2024

Investment in Technology Loan Bank	2019-20	2020-21	2021-22	2022-23	2023-24
Scottish Government Learning Directorate	£3,970	£2,211	13,552	£10,832	£9,722
Other income	0	£1,023	£456	£233	£310
Number of items added	68	35	94	68	86
TOTAL	**£7,559**	**£3,234**	**£14,008**	**£11,055**	**£9,722**

Loans 2023-2024

272 items of equipment were loaned in 2023-2024, worth £29,715. 93 items (34%) were loaned to learners referred to CALL for assessment.

Table 21: Summary of Equipment Loans 2019 - 2024

Summary of Loans	2019-20	2020-21	2021-22	2022-23	2023-24
Number of loans	215	144	202	284	272
Value of loans	£40,466	£24,723	£47,345	£50,203	£29,715
Number of Loans to Assessment Clients	134	82	127	149	93
% "Very Satisfied" with CALL Loan Service	93%	95%	77%	89%	85%

The most common category of items loaned were communication devices followed by switches and interfaces. The majority of the 70 communication devices loaned were simple low-tech equipment such as single or sequential message communicators and multiple message systems such as GoTalks. This is perhaps surprising because we might hope and expect that such relatively simple, low-cost devices would be readily available in schools and units, but it does illustrate the need for access to these devices for evaluation.

The number and proportion of laptops loaned for learners has reduced over the past 5 years: in 2019-2020 we loaned 12 laptops (6% of loans), falling to three (1%) in 2023-2024. This probably reflects the increasing number of devices that are available in schools generally, and the increase in the use of iPads and Chromebooks.

Figure 13: Little Mack and GoTalk

Table 22: Categories of Equipment Loaned

Type of devices loaned, 2023-2024

- Communication Aid
- Switch
- Interface
- Other
- Mounting / stand
- Tablet
- Tablet Accessory
- Mouse or alternative
- Reading/Writing Aid
- Keyboard or alternative
- Computer accessory
- Computer
- Adapter
- Computer peripheral

Values shown on pie chart: 70, 40, 25, 24, 22, 20, 17, 17, 9, 8, 4, 3, 1, 1
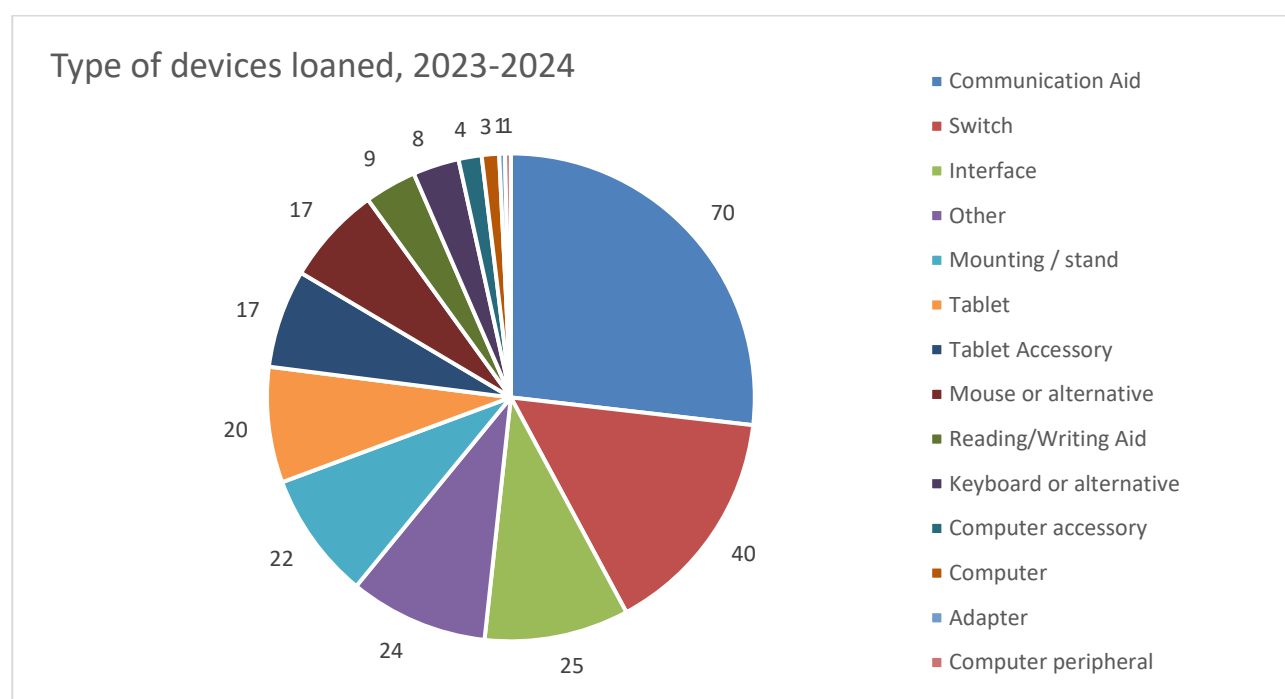
Evaluation and Feedback

Borrowers are asked to complete a feedback form when returning equipment. Feedback was received for 84 of the 119 loans returned in 2023-24 (71%). The proportion of borrowers providing feedback continue to increase, which we think is because of the improved loan reminder and recall system created by Robert.

Table 23: Outcomes of loans

Outcome of loan	Number	%
Equipment met the client's need	67	80%
Did not meet the client's need	12	14%
Inconclusive	5	6%

68 feedback forms gave an indication of future action to be taken. We have concerns that 25% of responses "did not know" what future action would be taken especially since 16 of these loans "met the client's needs" and we will investigate this further.

Table 24: Future action

Future action	Number	%
Buy this system	34	50%
Don't know	17	25%
Borrow/try something else	9	13%
Seek further information	8	12%

Borrowers were asked to provide feedback on the loan service itself and the table below summarises responses. The loan service continues to be highly appreciated by the practitioners, parents and people that make us of the service.

Table 25: Evaluation of the CALL Loan Service

Satisfaction with the loan service	Number	%
Very satisfied	71	85
Satisfied	8	10
Dissatisfied	0	0
Don't know	4	5

iPad was excellent and incredibly helpful. Trial has led to system being purchased for the pupil. Thanks for great service. Pupil's comments " I love my iPad".

Teacher re iPad with apps for pupil with complex physical needs

The equipment was helpful to trial as a direct comparison with the standard go talks, to establish whether the lite touch enable led more efficient activation of the buttons.

Speech and language Therapist re GoTalk Lite Touch

L used the iPad and keyboard for a wide variety of tasks such a story writing, written tasks in Literacy and research work in ICT. It is easy for L to set up independently and he is becoming more confident logging into GLOW independently. The keyboard makes a huge difference for L and his typing is quicker than using a standard keyboard. He enjoys using it in class and it is giving him more independence and success. The visual impartment team were impressed at how useful the iPad and keyboard were for L and that he could tell them how he used it and how it helped him with his work.

Teacher, re iPad with Large Print Bluetooth keyboard.

Really enjoyed using it and parents to purchase one for him.

Teacher, re ReaderPen

Excellent device, the children engaged really well. The support and advice of CALL centre staff was much appreciated and very useful.   The website is also great for practical uses of resources - thanks.

Teacher, re Little Step-by-Step communicator

Client says THANK YOU and is looking forward to having her own one after the summer holidays. 'Thank you for taking the patience and time to support and guide me'.

Teacher, re GlidePoint trackpad for learner with physical challenges

It has worked perfectly for our pupil and XXX from CALL was amazing in training R how to use it.

Teacher on laptop with support software for pupil with dyslexia

iPad was used successfully with the apps suggested. Book creator was excellent.

Teacher, re iPad and apps for learner with physical and learning support needs.

Strategic Relationships and Collaboration

Objectives

To align CALL's strategic aims, objectives, structures and processes in response to Scottish education policies and priorities, including the ASL Action Plan; emerging models and procedures for Commissioning of National Services; wider Scottish Education Reform; and legislation on provision of Communication Equipment and support Scottish Government and Education Scotland in development of policy regarding Inclusive Digital technology and UDL.

Expected outcomes

Strengthened relationships with key stakeholders in respect of CALL Scotland's national impact and role.

IDT and AAC technology will feature appropriately in updated ASL Action Plan and framework for National Strategic Commissioning.

CALL's activities will complement and support the updated ASL Action Plan and framework for National Strategic Commissioning.

Advice to Scottish Government with respect to the new Scottish National Standardised Assessments and 1:1 device programme.

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OUTCOMES

Scottish Government

Doran Review and National Commissioning

CALL's Scottish Government grant is provided from a budget that has been under review since the Doran Review[9] was published in 2012. Two of the report's 21 recommendations that directly impact on CALL's funding are:

> *"The Scottish Government should lead COSLA and health boards in the development of a strategic planning and commissioning process to deliver, within a 5 year period, the national services and provision required to ensure that the complex additional support needs of children and young people across Scotland can be met."*
>
> *"The Scottish Government should provide funding to nationally commissioned services to meet the complex additional support needs of children and young people and ensure that the level of funding is not less than currently provided across the grant aided special schools."*

With respect to technology, the 2012 Doran Report states that

> *"All local authorities in partnership with health boards, university based and voluntary organisations should review their approaches to the provision of aids to mobility and communication, including ICT so as to ensure that what is provided is fit for purpose and that staff and parents, as well as the child or young person have the necessary skills to utilise these resources."*

and that:

> *"the expertise and specialist experience that exists in organisations such as CALL, Scottish Centre of Technology for the Communication Impaired (SCTCI) and Fife Assessment Centre for Communication through Technology (FACCT) could be made more available and accessible to all authorities."*

In 2015, the ODS report *Strategic Commissioning for Services for Children with Complex Additional Support Needs: Qualitative Research*[10] was published which notes that there is a need for:

> *"independent advice for parents; support in the use of technology; and teacher training – similar to the roles Enquire, SSC and CALL provide"* (p.82).

In 2019, the *10 year Strategy for learning provision for children and young people with complex additional support needs* was published[11] which aims to *"improve*

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[9] Scottish Government (2012) The Right Help at the right time in the right place: Strategic Review of Learning Provision for Children and Young People with Complex Additional Support Needs.

[10] Scottish Government (2015) Strategic commissioning for services for children with complex additional support needs: Qualitative research.

[11] Scottish Government (2019) The right help at the right time in the right place: strategy for the learning provision for children and young people with complex additional support needs 2017-2026.

outcomes for children and young people with complex additional support needs through strategic commissioning of services; with a particular focus on the provision of education".

The 10-year strategy describes a national commissioning process whereby "*the current grant aid of approximately £11m/annum that is currently allocated to seven Grant-Aided Special Schools (GASS) and three National Centres is being reviewed*".

The 10 year Strategy timeline has been extended to 2028-2029. The Doran Project Board, which was established to "*support delivery of the Strategic Commissioning Project*"[12] has not been active for many years and we believe it will re-convene in December 2024.

Under the strategy, the National Strategic Commissioning Group (NSCG) [13] has the remit to "*make proposals for commissioned services, including their funding, that are aligned with related policy developments across education health and social care*".

Further research[14] was commissioned by the NSCG to investigate "*ways in which support for pupils with complex additional support needs is provided within Scotland to reach their full potential*" is undertaken and a report was published in September 2023[15]. Paul Nisbet provided a response to the draft report; this is available on the CALL web site[16].

Work to enhance the content around complex additional support needs within Senior Leadership courses was highlighted in the 2017 draft 10-year strategy; content is to be written and pilot placements are planned for 2025.

More research to "*consider the services currently in place in all 32 local authorities, and identify where there is need for additional national services*" is proposed to be commissioned for 2024-2025.

The 10-year strategy envisages commissioning:

- *"direct education, care and health services;*
- *research related to children and young people with complex additional support needs;*
- *sustainable, child and young person focused learning and development for those supporting children and young people with complex additional support needs;*

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[12] Scottish Government (2016) Strategic Commissioning Project Board (SCPB)

[13] Scottish Government (2021) National Commissioning Group (additional support needs).

[14] Scottish Government (2021) Research into provision for pupils with complex additional support needs in Scotland tender notice, 7/10/21.

[15] Scottish Government (2023) Pupils with complex additional support needs: research into provision. 19/9/23.

[16] Nisbet, P. (2023) Research into Provision for Pupils with Complex Additional Support Needs in Scotland draft report. Response from Paul Nisbet, CALL Scotland, 30/5/23.

- *broader services which support the education of children and young people with complex additional support needs."*

However, there has been little practical progress towards national strategic commissioning of services or workforce development over the past 12 years.

The budget available for national commissioning that provides grant funding to the seven Grant Aided Special Schools and three national services – CALL Scotland, the Scottish Sensory Centre, and Enquire has not increased since 2012.

As part of our 2024-2025 work, Scottish Government officials have asked us to *"develop a business plan outlining how it [CALL] will transition from their core· grant by 2028-29 and maximise income streams"* and suggested that we could apply for funding to support the development of a business plan. An application was submitted to Scottish Government Learning Directorate on 12th September 2024 and we have yet to receive a response.

ASL Review

Angela Morgan's *Review of additional support for learning implementation* was published in June 2020[17] followed by a Scottish Government *Action Plan* in October 2020[18], a progress report on the actions in November 2021[19] and a further update in November 2022[20].

Last year we raised concerns that 'technology' is only mentioned once in the Action Plan while 'digital learning' does not feature at all[21], which does not align with other Scottish Government policies such as 2023's All Learners Matter - national discussion on education: final report:

"Digital learning must be at the core of Scottish education so that all learners in Scotland have choice, opportunity, and security in their lives, both now and in the future."

Pam Duncan-Glancy MSP, Labour Party Spokesperson on Education, visited CALL on 6th June 2024 and raised a question on this topic in Parliament[22]:

This morning, I visited CALL Scotland at the University of Edinburgh and had the opportunity to see the fantastic work that it does. A particular concern that it shared was the fact that none of the 76 actions in the ASL action plan is on inclusive digital learning, and it mentions assistive technology only once. The Doran review made recommendations on that 12 years ago. I understand that the Government is focused on the Morgan review, but it would be a lost opportunity if the Doran review

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[17] Scottish Government (2020) Review of additional support for learning implementation: report, 19/6/20.
[18] Scottish Government (2020) Additional support for learning: action plan, 21/10/20.
[19] Scottish Government (2021) Additional support for learning action plan: progress report, 1/11/21.
[20] Scottish Government (2022) Additional support for learning action plan: November 2022 update.
[21] Nisbet, P. (2023) Why is digital learning not considered in the ASL Action Plan?
[22] Scottish Parliament (2024) Meeting of the Parliament Thursday, June 6th, 2024.

were shelved. What is the cabinet secretary doing to ensure that inclusive digital learning can happen in every school where it is needed? What reassurance can she give to CALL Scotland that inclusive digital learning will remain a key part of her response to the intolerable circumstances that pupils with additional support needs face?

In response, the cabinet secretary committed to write to Pam Duncan-Glancy in more detail about digital learning and ASL. Pam Duncan-Glancy has also sponsored an exhibition for CALL where we will provide an exhibition about our work in Parliament from 9th to 11th September 2025.

The latest update to the ASL Action Plan was published on 5 November 2024 and we are disappointed that neither digital learning nor assistive technology are mentioned in the Plan.

1:1 Digital Technology

In March 2021 John Swinney said "*Just as in my day, the teacher handed out a jotter to all, so in this internet age, we will hand each child the device they need to learn and prosper*"[23]. Scottish Government has begun working with local authorities "*to provide every school pupil in Scotland with a laptop or tablet*" and is considering "*how to deliver consistent digital infrastructure across Scotland's 2,500 school buildings*"[24].

Some local authorities already have 1:1 device deployment while others have shared devices. Paul Nisbet's article on Where are we 1:1 digital technology? gives a snapshot of the status in November 2023 while a TES article on 27 September 2024[25] reports that 10 out of 32 authorities have 1:1 device schemes.

1:1 devices and digital learning have huge potential for learners with additional support needs and so we are concerned about this apparently inequitable provision across Scotland and feel that research should be undertaken into access to inclusive digital learning and assistive technology across Scotland.

National Standardised Assessments Scotland

Paul is a member of the ASN User Group and commented on the *NSAS Additional Support Needs and Accessibility Options* document that discusses accessibility provision for learners, in November 2022. Paul felt that the document was poorly organised and did not focus on appropriate assistive technologies and we offered to contribute to a revised version.

[23] SNP (2021) A laptop or tablet for every school child. 28/3/21.
[24] Scottish Government (2021) Devices for 700,000 children. 16/8/21.
[25] Seith, E. (2024) Revealed: where in Scotland do all pupils receive mobile devices? TES Magazine 27/9/24.

As part of this we offered to work with the NSAS team to test assistive technologies with the assessments, and develop guidance, and two of the CALL team attended short hand-on test session at Victoria Quay on 24/9/24.

Education Scotland

- CALL staff were asked to present to HMIs on "*What does Inclusive Digital Learning look like?*" at a meeting on 27 August 2024.
- Kirsteen is a member of the Addressing Dyslexia Toolkit working group funded by Scottish Government and chaired by Fran Foreman, Senior Education Officer, Inclusion, Educational Scotland.
- Fran Foreman represents Education Scotland on the CALL Scotland Steering Group.
- Claire is a member of the Education Scotland National Complex Needs Network.
- Kirsteen is a member of the Education Scotland National SCERTS Network.
- We have regular meetings with Susan Sey, Glow Product Manager and Danny McEleney, Google Technical Product manager and the Glow Connect network.
- The CALL team are in regular contact with the Education Scotland DigiLearn team.

Scottish Qualifications Authority

Paul's report to SQA in January 2023[26] found that:

> *"access to the internet is necessary [during examinations] especially for practical use of Chromebooks and iPads"*

Consequently, SQA asked CALL to:

> *"find ways for candidates using centre-issued devices to use these, including any accessibility tools, that they use during teaching and learning, in secure assessments, including external exams, without compromising the integrity of the assessment."*

Throughout 2023-2024 we established working groups on *iPad in Exams* and *Chromebook in Exams* and worked with colleagues in schools and technology suppliers to explore and trial a range of systems.

A report was submitted to SQA in May 2024 and on 13th June SQA announced that internet-enabled technologies will be allowed for examinations in 2024-2025.

This change of policy should allow staff and pupils to use the devices and accessibility tools with which they are familiar as digital assessment arrangements.

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[26] Nisbet, P. (2023) **SQA Assessment Arrangements and Assistive Technologies in 2022**. Research report commissioned by Scottish Qualifications Authority, January 2023.

There is a great deal of work to do, to support colleagues to identify and implement digital assessment arrangements. More information on this work is in Assistive Technology and National Qualifications.

Association of Support for Learning Officers Scotland (ASLO)

Paul regularly attends monthly ASLO meetings which are extremely valuable for environmental scanning, to gather intelligence across Scotland, and to disseminate information about CALL Scotland activities, services and products. Ceanna has taken on this responsibility for 2024-2025.

Implementation of 2016 AAC Legislation

The Health (Tobacco, Nicotine Etc. And Care) (Scotland) Act: Provision of Communication Equipment was commenced on 19th March 2018. The Act places a duty on Scottish Ministers to:

"meet all reasonable requirements, provide or secure the provision of
   a) communication equipment, and
   b) support in using that equipment,
to any person who has lost their voice or has difficulty speaking."[27]

Scottish Government published Guidance on the Provision of Communication Equipment and Support in using that Equipment[28] to support delivery of the legislative duty in May 2018 followed by *The National Augmentative and Alternative Communication (AAC) Core Pathway*[29] on 30th August 2018.

Implementation of the legislation by health boards and AAC services has developed over the year with guidance from the Scottish Government Augmentative and Alternative Communication and Sensory Loss Team and the National AAC Advisory Group.

Notable developments this year have been an AAC Procurement Pilot; NHS Highland, Ayrshire and Arran and Lothian agreed to participate in this pilot, with advice provided from national procurement. Also, a test of change on Augmentative and Alternative Communication (AAC) Data and Information to address the shortfall in data about the population of people who need and use communication equipment and support.

A Deep Dive on AAC Services found that the top 3 priorities were Resourcing and Resources, Knowledge and Skills and Support. A short life working group was set up

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[27] Scottish Parliament (2016) Health (Tobacco, Nicotine Etc. And Care) (Scotland) Act: Provision of Communication Equipment
[28] Scottish Government (2018) Guidance on the Provision of Communication Equipment and Support in using that Equipment
[29] Scottish Government (2018) The National Augmentative and Alternative Communication (AAC) Core Pathway

to discuss these priorities, which Joanna was asked to join on behalf of CALL Scotland.

An AAC DPIA/GDPR Information was delivered by Scottish Government, Information Assurance Officer, Josh Stokes from the Directorate for Digital Health & Care and Heather Palmer, Health & Social Care, AAC Senior Policy Manager. The session was attended by the Scottish Government, National AAC Advisory Group membership, representatives from the Speech and Language Therapy networks and Information Governance leads from across health boards.

Next steps agreed were for a Short Life Working Group to be developed to look at a 'Once for Scotland' approach to this work and collaboratively drive this work forward.

The online learning module AAC Assessment and a new module on AAC Technology, both available on the NHS learning platform TURAS, can now be accessed via our AAC Scotland website at https://www.aacscotland.org.uk/courses-and-events/.

An Augmentative and Alternative Communication Newsletter was shared by Scottish Government in October 2023 to provide an update on the workstreams the Support for Augmentative and Alternative Communication team have been progressing in recent months.

Scottish Government colleagues wrote to Health Boards and the National AAC Advisory group members on 30th September 2024 advising that:

> *"We understand that AAC is routinely part of your standard working practices, fully embedded nationally and largely led by Speech and Language Therapists. This allows greater alignment with wider health and clinical policies. With this in mind, recognising how the above policy support has made a positive difference, our role has come to a natural conclusion with AAC now being business as usual practice across the country.*

An AAC Resource has been developed to support practitioners.

Augmentative Communication in Practice: Scotland (ACiP:S)

ACiP:S is a national network linking specialist AAC services and professionals; children and adults who use AAC (and their families); statutory services and voluntary agencies; and that provides resources, information and support.

Gillian was Chair of the network from August 2021 until her early retirement on August 23, 2023. Jan McCleary, SLT from the national AAC service in Glasgow, SCTCI has taken over the role of Chair and Joanna is continuing as a committee member.

During 2023 - 2024 the work of ACiP:S focused on facilitating the AAC SLT Leaders Network from across Scotland to meet regularly with the ACiP:S committee to discuss the implementation of the 2016 AAC legislation and share good practice and service procedures for supporting people who use AAC.

There are planned changes to the name and to have wider membership of the group, to be called the 'AAC Scotland Network' and to involve staff from Education and other professionals directly involved in supporting and implementing the use of AAC across Scotland.

Communication Matters

The annual Communication Matters International Conference in September 2023 was an in-person event at the University of Leeds. Speakers were drawn from the UK as well as international contexts, sharing research, professional or personal perspectives on AAC. Claire presented a workshop on *CALL Scotland – supporting learners with communication difficulties access the curriculum through AAC* with approximately 50 delegates in attendance.

Communication Access UK

Communication Access UK is an initiative developed in partnership by charities and organisations that share a vision to improve the lives of people with communication difficulties. The purpose to facilitate organisations and individuals to adopt inclusive communication strategies when communicating with people who use AAC and make this visible to the public through displaying the Communication Access Symbol. The CALL team completed the necessary training and as an organisation, CALL made a set of commitments and received accreditation in May 2022, which was renewed again in May 2024. The actions are to recognise communication support needs, find out what support is required by an individual, provide support in an inclusive and accessible way, and to display the symbol in our office, on our websites and within online communication.

Partnerships with local authorities

By providing services to schools and local authorities, we generate around 30% of annual income. The partnerships are an important part of our work:

- The assessment, support, professional learning and consultancy have direct benefits for the pupils and staff within the school or local authority.
- Direct work in schools with children and young people and practitioners provides valuable experience for the CALL team, enabling us to identify needs and develop solutions with real people: we regard this as 'action research'. These solutions can then be made more widely available through our national services and resources.
- The additional income supports a larger and more diverse CALL Scotland staff team, which has added benefit for the national services and resources that we provide under our Scottish Government core grant.

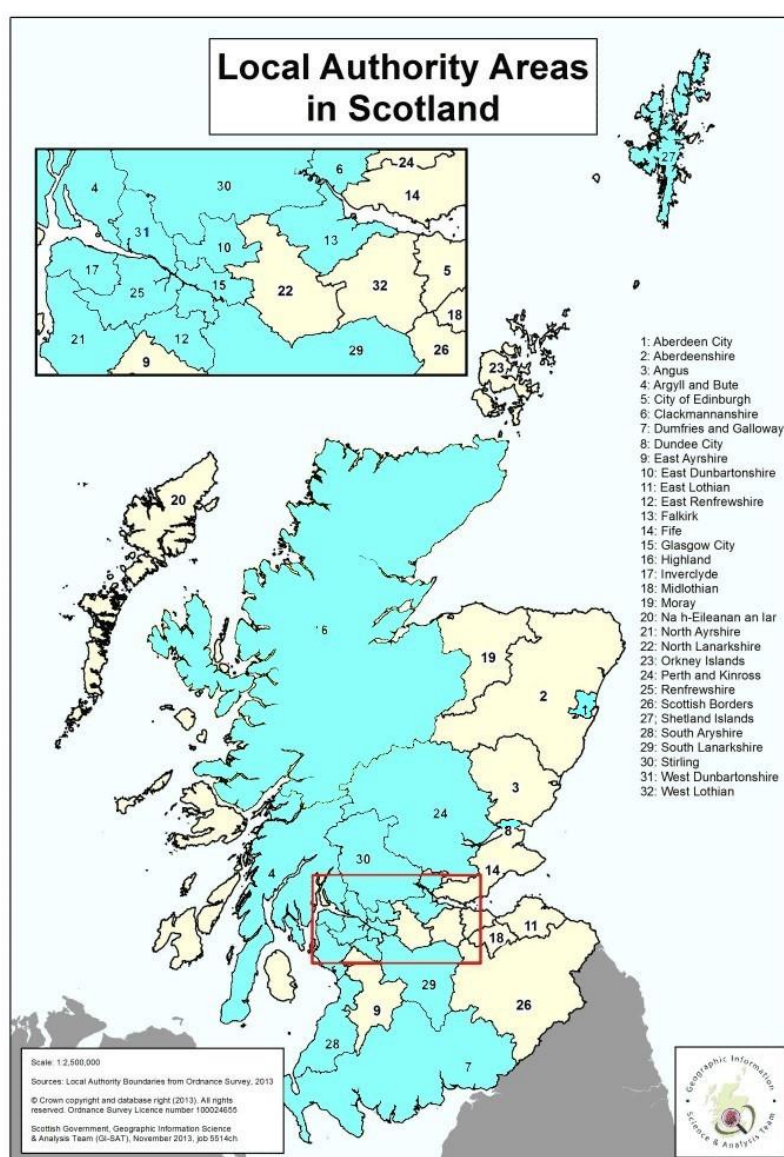CALL had 22 partnerships in 2023-2024, comprising a total of 202.5 days of work.

Figure 14: Local authorities with partnerships with CALL Scotland

Much of the support provided through partnerships is assessment and support for individual pupils referred to CALL and this is discussed further in **Section 2. Outcomes funded through Partnerships.**

Assistive Technology for Learning Across Scotland (ATLAS)

ATLAS is the national group of practitioners working in the field of technology to support children and young people with Additional Support Needs and / or disabilities. The group is convened by Claire Harrison. Group membership increased this year from 24 to 35, representing 23 Local Authorities. Group membership is changing, with newer members tending to have an authority-wide Digital Learning remit, rather than an Additional Support Needs and Assistive Technology remit.

We have been able to recruit new members from Local Authorities not previously represented, but we still have a concern that some local authorities do not have a named contact with specific responsibility for assistive technology for learners with additional support needs. We will continue to proactively lobby and seek out membership from those authorities not currently represented.

Members continue to post questions and advice via the ATLAS Microsoft team. The ATLAS group met by video conference on 27 September 2023 and 28 February 2024. The meetings provide a valuable opportunity to share best practice, engage in Professional Learning and provide feedback via representatives from Assistive Technology companies and discuss a wide range of current issues.

The impact of DPIA on access to apps and software has continued to be a concern and discussion topic throughout the year.

Other Topics included:

- Tools for building capacity and evaluating the impact of Assistive Technologies
- Provision of accessible exam materials to learners who use AAC and have complex physical barriers to learning.
- Development of DPIAs for AAC apps and resources
- Access to Digital Assessments for SQA Examinations

Other collaborations

- Discussions with software and communication aid suppliers making an input to product development.

- Presentations at Dyslexia Scotland online events (Allan, Craig, Shirley).

2023-2024 advisory and working group memberships

- AAC Advisory Group (Joanna).

- AAC Leads for Scottish Health Boards (Joanna).

- Addressing Dyslexia Toolkit Working Group (Paul / Kirsteen).

- Augmentative Communication in Practice: Scotland (Joanna).

- Education Scotland Complex Learning Needs Network (Claire).

- Education Scotland SCERTS Network (Kirsteen).

- Ofqual Access Consultation Forum (Paul).

- Scottish Government ASL Network (Paul).

- Scottish Government ASL Project Board Sub Group 2: Guidance, Training and Resources (Paul).

- Scottish Government National Strategic Commissioning Group (Paul).

- Scottish Government National Standardised Assessments for Scotland ASN User Group (Paul).

- Scottish Qualifications Authority Equality and Inclusion Key Partners' Group (Paul).

- Specific Learning Difficulties Network (Craig).

Section 2. Outcomes funded through Partnerships.

Assistive Technology Assessment and Support

The Scottish Government core grant funds CALL's information and advice service (*see **National Information and Advice***) which provides free telephone, email and online support in respect of individual children and young people.

Some local authorities in Scotland wish more intensive assistive technology assessment and support for individual learners or schools and units and we can provide these under a Partnership Agreement.

Increasingly, we are also being asked to provide support and consultancy to special schools and specialist provisions and we think that demand for this service is likely to grow over the next few years.

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OUTCOMES

Table 26: Assessment and Support 2019-2024 summarises activities to directly support children and young people.

Partnerships with local authorities and schools

22 Partnership Agreements or Service Level Agreements (SLAs) were negotiated with local authorities and schools: Aberdeen; Argyll & Bute, Clackmannanshire, Dumfries & Galloway, East Renfrewshire, Falkirk, Glasgow, Highland, North Ayrshire, Perth & Kinross, Renfrewshire, Shetland, South Ayrshire, South Lanarkshire, Stirling and West Dunbartonshire. We also had agreements with East Dunbartonshire, Inverclyde to provide support for learners as required on a 'pay as you go' basis. School support contracts were arranged with Drumpark School and New Struan School.

202.5 days of assistance was provided and charged for in 2023-24 (238 days in 2022-23).

Table 26: Assessment and Support 2019-2024

Number of …	2019-20	2020-21	2021-22	2022-23	2023-24
Pupils referred for assessment and support	36	40	59	42	**30**
Pupils supported through assessment	45	20	51	39	**39**
Pupils assessed/supported on site	90	11	85	71	**60**
Pupils assessed/supported online	10	41	49	84	**51**
Pupils supported in total	202	209	222	226	**200**
Assessment sessions in person or online	47	31	57	52	**68**
Support visits in person	90	32	83	94	**93**
Support sessions online	17	187	127	167	**92**
SLA/Partnership/consultancy agreements with local authorities and schools	19	16	16	21	**22**
Number of days work	216	204	210	238	**202.5**

Learners referred for assessment and support

- **30** pupils were referred for assessment and support compared to 42 in 2023-2024. One reason for this reduction in referrals is because we have established a new approach in Dumfries & Galloway, where authority staff are supporting learners with less complex needs.
- **39** pupils received a comprehensive assessment for communication and/or assistive technology.

- **60** pupils were supported through personal CALL team visits to school or home visits compared to 85 pupils in 2022-2023.
- **51** pupils were supported through online support sessions (84 pupils in 2022-23).
- **200** pupils in **24** local authorities were supported directly in school or indirectly through telephone, online or email advice (226 pupils / 21 local authorities in 2021-22).

Table 27 gives an indication of the underlying factors giving rise to learners' additional support needs and the areas in which assistance was requested from CALL.

Speech, language or communication needs are the most common factors followed by severe/complex learning difficulty, mild/moderate learning difficulty and then sever/complex learning difficulty. Most pupils have complex support needs arising from more than one condition or circumstance.

Table 27: Pupils Referred to CALL 2020-2024

Factors giving rise to ASN	Number of pupils 2020-21	Number of pupils 2021-22	Number of pupils 2022-23	Number of pupils 2023-24
Speech, Language / communication needs	18	25	22	**18**
Severe / complex physical disability	8	8	7	**11**
Mild / moderate learning difficulty	16	20	14	**9**
Severe / complex learning difficulty	10	17	14	**7**
Autism Spectrum Conditions	8	16	7	**5**
Dyslexia / specific learning difficulty	7	18	7	**4**
Other	6	6	5	**3**
Visual impairment	16	13	3	**2**
Social, Emotional & Behavioural Difficulties	6	13	9	**2**
Family circumstances	2	4	0	**1**
Learning environment	2	4	4	**1**
Hearing Impairment	3	3	0	**1**

Mild / moderate physical disability	12	4	0	**9**
English as an Additional Language	0	2	0	**0**
Total number of pupils referred	**40**	**59**	**42**	**30**

The factors giving rise to referral seems to be changing slightly over time with a greater proportion of learners being referred more more complex needs.
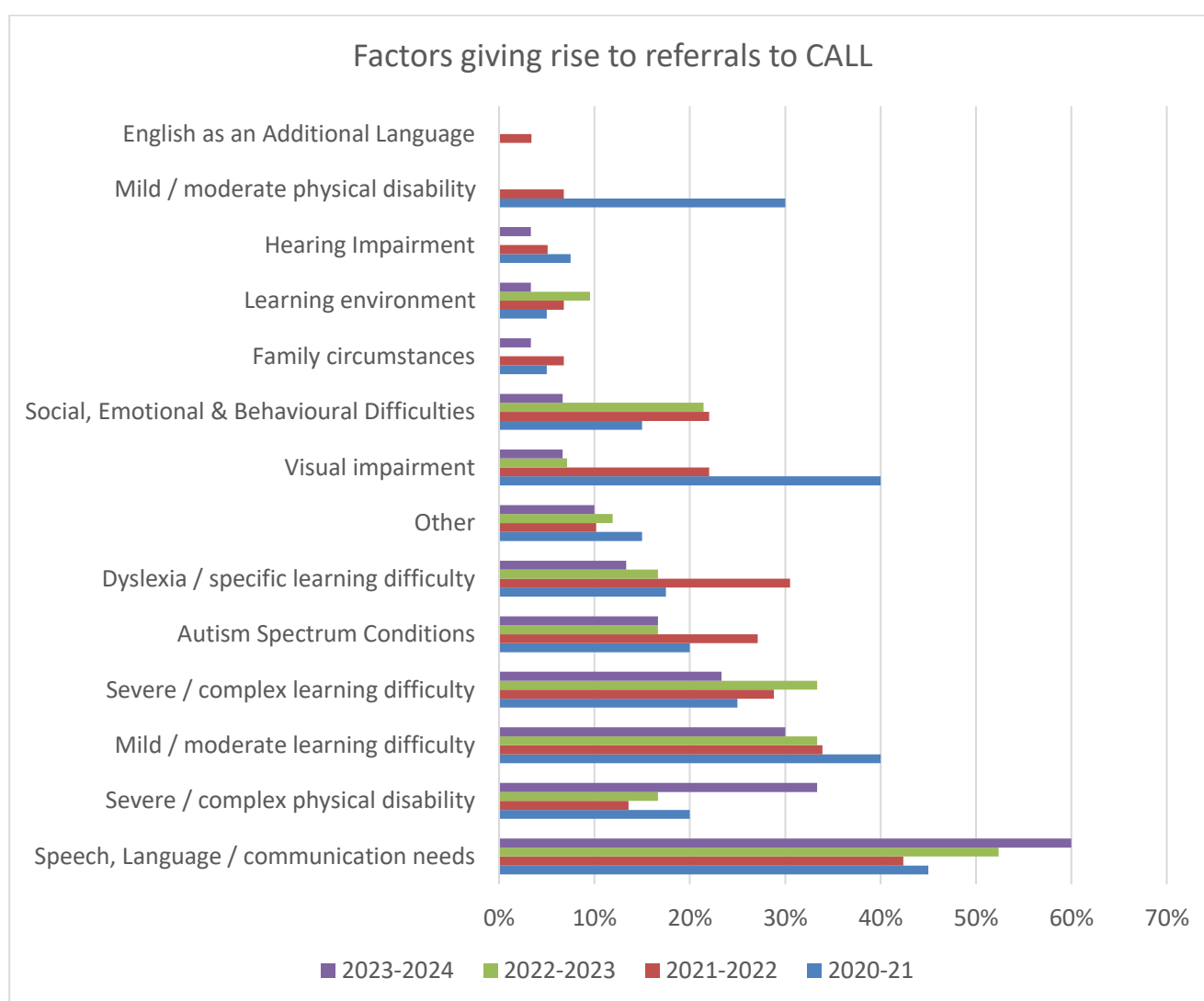

Figure 15: Factors giving rise to referrals 2020-2024

Table 28: Number of learners and the outcomes for which assistance is requested details the outcomes for which referrers hope to receive support. The most common outcome identified was assistive technology for writing or recording, followed by reading and numeracy and then alternative access, teaching and learning strategies and software and apps.

Where assistance was required for Augmentative and Alternative Communication the main focus was on provision of a high-tech communication aid. Most students who were referred for assistance with AAC device also require technology for accessing curriculum materials and for writing and creating.

Table 28: Number of learners and the outcomes for which assistance is requested

Outcomes where assistance is requested	Number of learners 2020-21	Number of learners 2021-22	Number of learners 2022-23	Number of learners 2023-24
Alternative access	12	23	14	**16**
Personalised resources	22	34	20	**13**
Teaching & learning strategies	27	36	29	**16**
Teaching & learning software / apps	30	41	21	**16**
Augmentative and Alternative Communication				
- social communication skills	16	17	18	**6**
- low tech, e.g., printed symbols	3	6	5	**4**
- high tech, i.e., communication aid	11	21	16	**15**
Assistive Technology for:				
- reading	21	24	16	**19**
- writing or recording	34	43	33	**25**
- numeracy	18	18	14	**19**
- participation and control	8	9	10	**9**

School Consultancy

In recent years we have developed a school and unit consultancy service in response to requests from colleagues working in specialist provisions. This typically involves:

- Initial discussion between senior management and CALL team and completion of an audit of assistive technology and/or AAC provision.
- Visits by one or two of the CALL specialist team to meet staff and pupils in class and discuss and evaluate assistive technology and/or AAC tools for and with the learners.
- In-person and/or online professional learning for staff.

The support is tailored to the needs of the school pupils and staff and typically involves 5 or 6 days of CALL staff time. The costs are met by the school or local authority; sometimes the support is included within the scope of the partnership agreement with the local authority.

Table 29: Schools and unit consultancy

Year	Schools & units supported
2021-2022	Orchard Brae School, Aberdeen
2022-2023	Drumpark School, South Lanarkshire Orchard Brae School, Aberdeen Woodlands View School, East Dunbartonshire Craigmarloch School, Inverclyde
2023-2024	Donaldson's School Drumpark School, South Lanarkshire New Struan School, Clackmannanshire
2024-2025 (planned)	New Struan School, Clackmannanshire Drummore Primary School, Glasgow Harmeny School, Edinburgh

Examples of Inclusive Digital Learning and Assistive Technology in practice

Providing assessment and support for pupils with additional support needs is a significant part of CALL's work and underpins much of our research, development, knowledge exchange and professional learning. It is therefore useful to provide some examples of how technology has had an impact on learners.

Addressing dyslexia and self-esteem in the classroom

Pupil C is now in S1 within mainstream provision in a rural Scottish High School. He was initially referred to CALL Scotland in 2020 while in Primary 3, however due to covid restrictions in place, all support at that time was limited to online contact only. He was re-referred to us again in 2023 and is now in P7. His additional support needs arise from "mild/moderate learning difficulty, dyslexia, and visual impairment". The school had concerns that Pupil C, although he presented well verbally, struggled to write/record his ideas. He was in a multi-composite class at the time of re-referral and he was developing an awareness of younger learners being able to read and write independently at a higher level than him.

The gap between Pupil C and his peers was beginning to widen and his teacher and family were already thinking ahead to how he would cope in high school. He was becoming increasingly aware that he was not able to complete many of the assigned curricular tasks independently and his levels of anxiety were becoming more apparent. This manifested in such a way that he would regularly disengage from learning tasks before he even knew what he was going to be asked to do.

Given the remote location of this learner, an initial Teams meeting was set up and the class teacher was guided through how to ensure basic accessibility features of speak selection was turned on. A recommendation was also made to provide an adaptor for school headphones with microphone were able to connect to iPad.

By the time I was able to visit C, it was really apparent that he was not enjoying school and he spoke about how he found things hard all the time. It was therefore crucial that any plans put in place were to try to support his engagement and to motivate him in his learning.

During my assessment we trialled Book Creator online software and C was extremely comfortable with using both speech to text to create his own text and to search for images he wanted to accompany his text and the option to record audio as well. The built-in accessibility features within the online Book Creator app of text to speech will enable C to edit his own work.
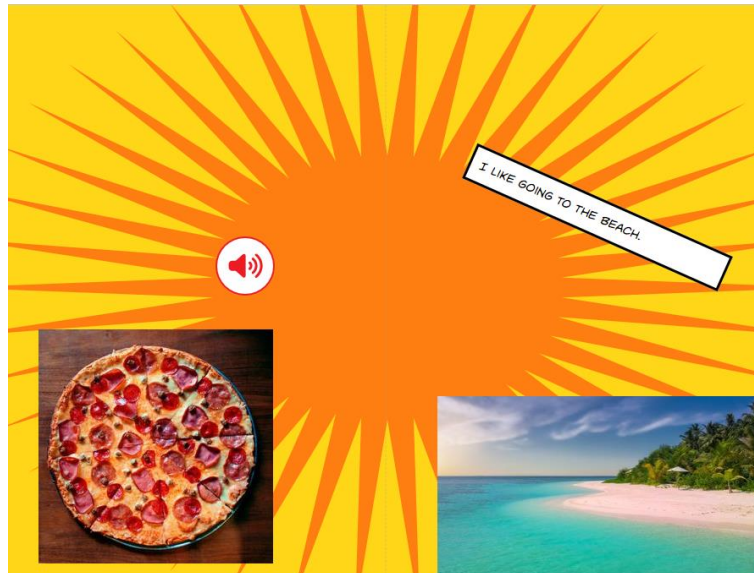
Figure 16: An example of C's Book Creator page including speech to text input and audio recording

He was also able to record audio which meant that he had another option available to him for sharing his knowledge and understanding. I left him with a QR code to access his book (via my account) until his teacher was able to set up her own account and give him access. He was very proud to scan the QR code and share the book he had written with his teacher and his Mum.

Copying from the board was something that C found very difficult, so we made sure that going forward any materials needed for reference were always on his desk, QR codes were available to enable quick access to websites and the recommendation of split screen was also made.
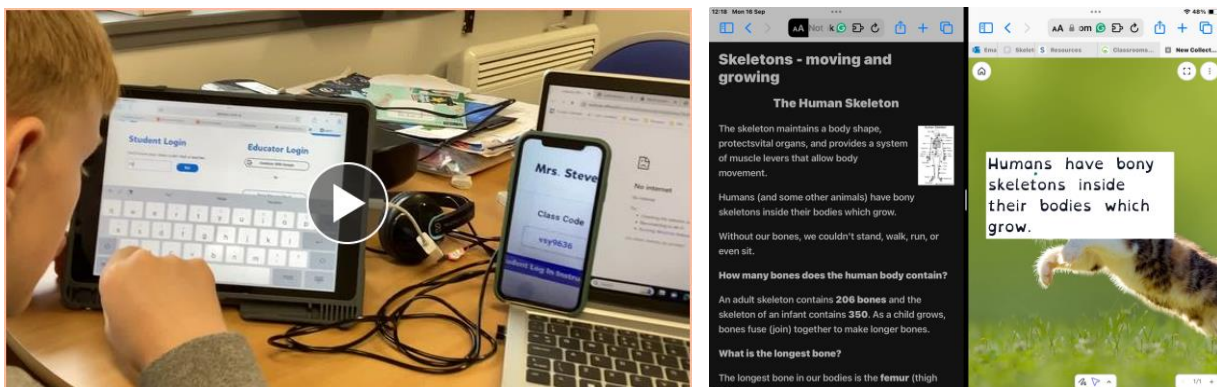

Figure 17: Alternative options to copying from the classroom board

Reading books of an age-appropriate level were difficult for C although he was keen to read. He had understandably lost interest in the texts being provided by school as he felt they were far too immature for him. We explored alternative options through Epic Books and RNIB Bookshare. C liked the idea of books that he was interested in and was happy to access these using his iPad.

"I really like the comic style books that my friends read".

And, now we had engagement and a motivated learner!

During my assessment we began looking at how to store and organise files in preparation for transition to High School. We spoke about naming each iPad *Notes* file with the date and task and that these could be created using Speech-To-Text.

As C prepared for High School transition last term I provided a support video on how to save to Google classroom directly from his iPad and how to use the tools that he was now familiar with: Siri dictation, speak selection, speak screen, typing feedback; speak words and hold to speak predictions.

Building up confidence in using all of these tools together now means that C has become much more independent in accessing the curriculum and he is overall more engaged in his own learning.

Figure 18: High interest, lower reading level text
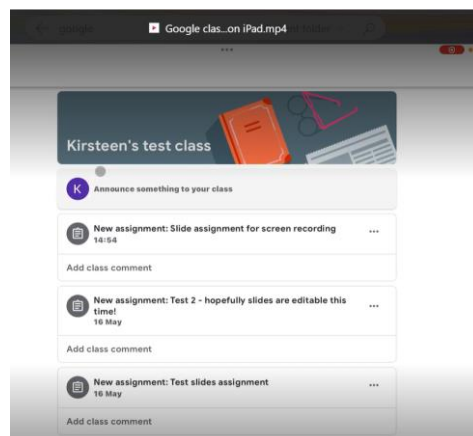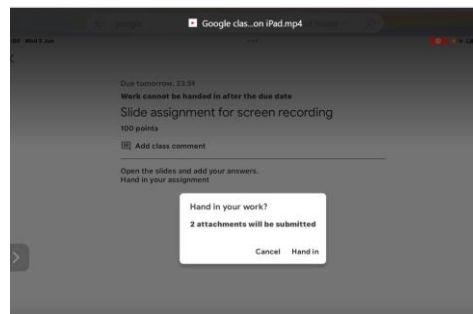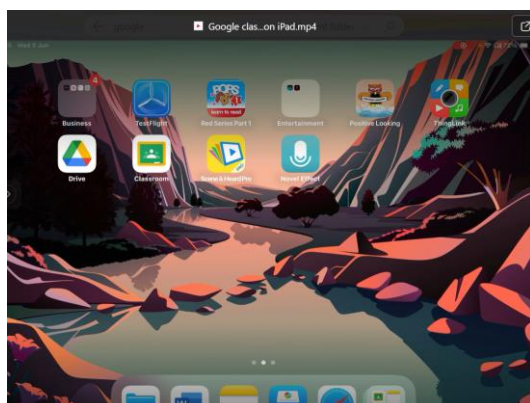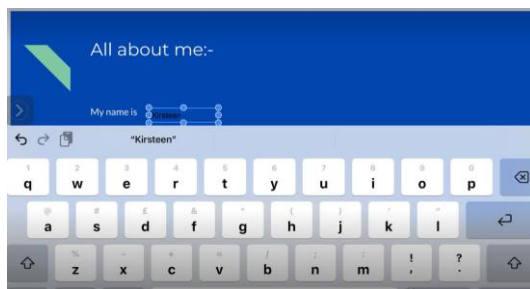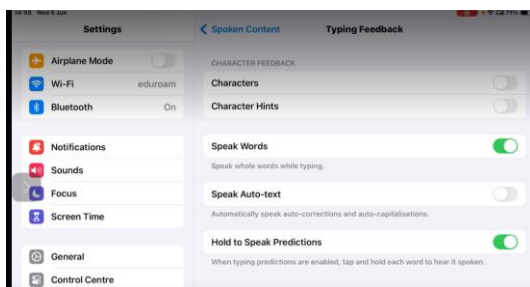
Early Primary Learner with Complex Communication and Physical Support Needs

Calum is now in Primary 2 within mainstream provision at his local Primary School. He was referred to CALL Scotland in nursery and has complex communication and physical support needs and a mild visual impairment. He was using low tech eye pointing for communication and his SLT wanted to trial a high-tech eye gaze device with him to develop his independent communication.

Figure 19: Tobii Eye Mobile Plus eye-gaze controlled AAC device

We met Calum and his support team and following assessment, we loaned a Tobii Eye Mobile Plus AAC device with Grid 3 software and VocoChat vocabulary, to augment his vocalisations and eye pointing within specific activities in nursery and at home.
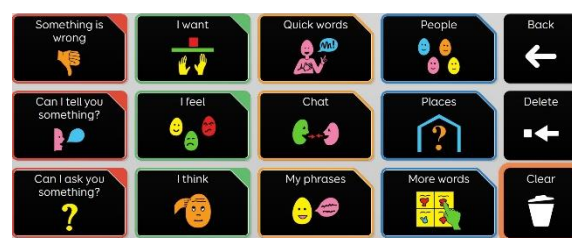
Figure 20: VocoChat high-contrast AAC app

He made good progress and, as he was moving up to Primary School, the team around the child now felt he needed to expand his expressive communication further and develop his access to a comprehensive language system. This would provide him with access to the alphabet and writing templates, so that he could start to develop his literacy skills and his general curricular access within early primary education. It was also felt by the team that having a device mounted on his chair would make a huge difference in his use of it across school, at home and out and about in his community.

Figure 21: 2-hit ABC Phonic keyboard

We provided Calum with some accessible picture books made in Grid 3 from our Bookbug Digital Library. He loved being able to read the books, make comments and turn the pages independently with his eyes and the books were a real motivator in his use of the eye gaze device, as
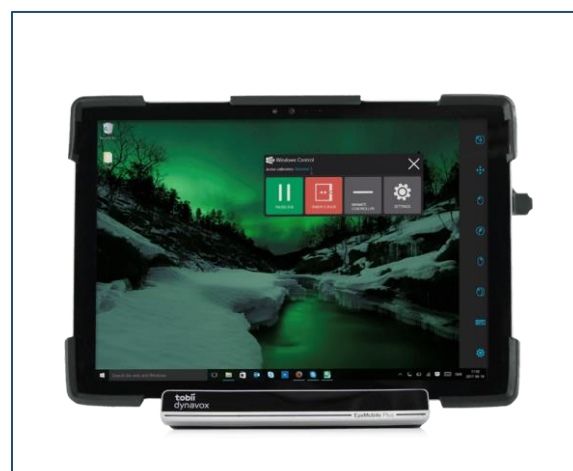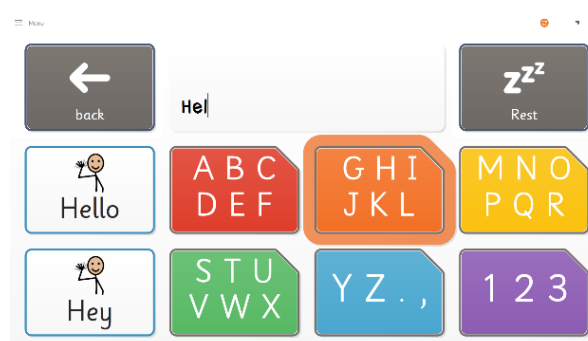

Figure 22: An accessible copy of *Five Bears* in the Grid 3 AAC app

well as in developing his access and communication skills. He particularly liked the 'Five Bears' book, about making new friends. A perfect story for starting Primary 1.

Following the successful loan, we liaised with Smartbox to put together an equipment list of hardware and software that Calum would require.

We also liaised with school and home to get photos of Calum positioned in his two wheelchairs with his loan eye gaze device, so that we could provide the information Smartbox needed to specify the correct Rehadapt mounting equipment required for the new eye gaze device to be mounted on both of his chairs.

Calum now has his own Grid Pad Eye 13 device that can be mounted on both of his wheelchairs. The equipment was purchased through his local AAC funding pathway, jointly between Education and Health. Having the device mounted on his chairs has made a huge difference in him using the device for spontaneous communication at home with his family and also more readily in school.

Close partnership working between CALL Scotland and the local AAC Advisor, school team around the child and family, as well as staff flexibility in adapting to the learner's changing educational needs, have enabled Calum to be successfully supported in the early primary mainstream classroom.

Figure 23: Wheelchair mounting Calum's device

Figure 24: GridPad Eye 13

Figure 25: GridPad Eye 13

Assistive Technology and National Qualifications

CALL has collaborated with colleagues in the Scottish Qualifications Authority around the use of technology in examinations and assessment since 2005. The partnership is funded by SQA and has led to the development of Digital Question Papers and assistive technologies such as free text readers and the Scottish and Gaelic computer voices.

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CALL continued to work with colleagues in SQA, schools and local authorities to develop digital assessment arrangements for students with additional support needs.

In previous years we undertook research into the role of internet-based technologies in examinations[30] [31] [32] which suggested that the SQA policy that prohibited devices to access the internet during examinations was a factor preventing students from using iPads and Chromebooks as digital assessment arrangements. A report with findings was submitted to SQA in August 2022 and revised in January 2023[33].

SQA subsequently asked us to:

> *"find ways for candidates using centre-issued devices to use these, including any accessibility tools, that they use during teaching and learning, in secure assessments, including external exams, without compromising the integrity of the assessment."*

We approached practitioners and established a working group to investigate **Chromebooks in SQA Examinations** and a second group to look at **iPads in SQA Examinations**. As part of this work, we researched tools (exam.net, Trelson Assessment and OrbitNote) that could potentially be used to manage digital assessment arrangements using the existing SQA digital question papers and have arranged for the providers of these tools to demonstrate and work with the groups. This work was featured in Could students with ASN use own devices in exams next year? in the TES Magazine on 30th August 2023.

Centre and local authority staff were keen to be involved in practical trials but they were constrained by:

- limitations with the software
- delays in making apps available on students' iPads;
- restrictions of technical management;
- concerns about investing time and energy into introducing and implementing a system without assurance that it would be acceptable for use in SQA examinations;

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[30] Nisbet, P. (2021) **Assistive Technology Assessment Arrangements in the Context of Covid-19**. Briefing Paper commissioned by Scottish Qualifications Authority. January 2021.

[31] Nisbet, P. (2021) **Assistive Technology and Assessment Arrangements following Covid-19**. Briefing Paper commissioned by Scottish Qualifications Authority. July 2021.

[32] Nisbet, P. (2021) **Assistive Technology and Assessment Arrangements following Covid-19**. Published Report, commissioned by Scottish Qualifications Authority. October 2021.

[33] Nisbet, P. (2023) Nisbet, P. (2023) **SQA Assessment Arrangements and Assistive Technologies in 2022**. Research Report commissioned and submitted to Scottish Qualifications Authority. January 2023.

- concerns about investing time and energy into introducing and implementing a system without an identified source of funding, should the trials be successful;
- limited time and teaching and technical staff;
- a lack of exemplar materials and past papers and Scotland-specific support.

A report summarising the work was submitted to SQA on 17 May 2024 and contributed towards development of a new policy around internet-connected devices that was announced by SQA on 13th June 2024[34]:

We have carried out extensive research with centres across Scotland to understand how ICT devices (including Chromebook and Apple devices) are being used in teaching, learning and assessments, and the benefits and barriers experienced. Research has highlighted that learners have increasingly been using Chromebook and Apple devices in learning and teaching. These devices require an internet connection to operate, and centres were not confident these could be secured and meet current ICT security requirements.

We will be amending our ICT security requirements to allow Apple and Chromebook devices to be used in external exams, provided that the restricted internet connection is only used to enable the operation of the device.

This new policy should permit learners to use iPads, Chromebooks and Windows devices in examinations.

However, there is a great deal of work to be done with colleagues in schools and centres to develop practical tools and processes.

Assessment arrangements in 2024

In August 2024 SQA published information showing that the number of pupils for whom AA were requested and the number of requests continues to rise - the number of learners increased by 13% to 32,030 and the number of requests by 13.9% to 104,695, compared to 2023. This is a slightly higher rate of increase compared to 2022 to 2023 (10% and 12.75% respectively).

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[34] Nisbet, P. (2024) Internet-enabled technology can be used in SQA exams in 2025!
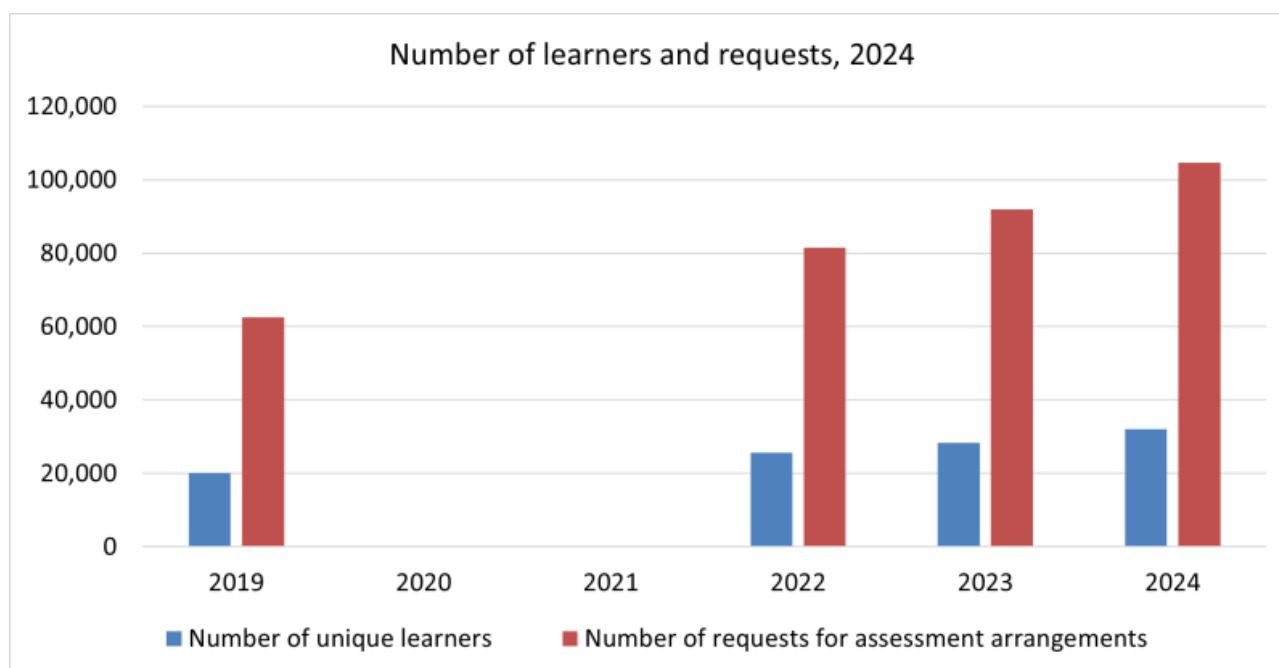
Figure 26: Number of requests for AA, and candidates, 2019 to 2024

Digital assessment arrangements in 2024

The number of requests for use of ICT (i.e. any device and word processor) and for digital question papers (DQPs) has continued to increase. Extra time and separate accommodation are still the most common type of arrangements, followed by use of technology.

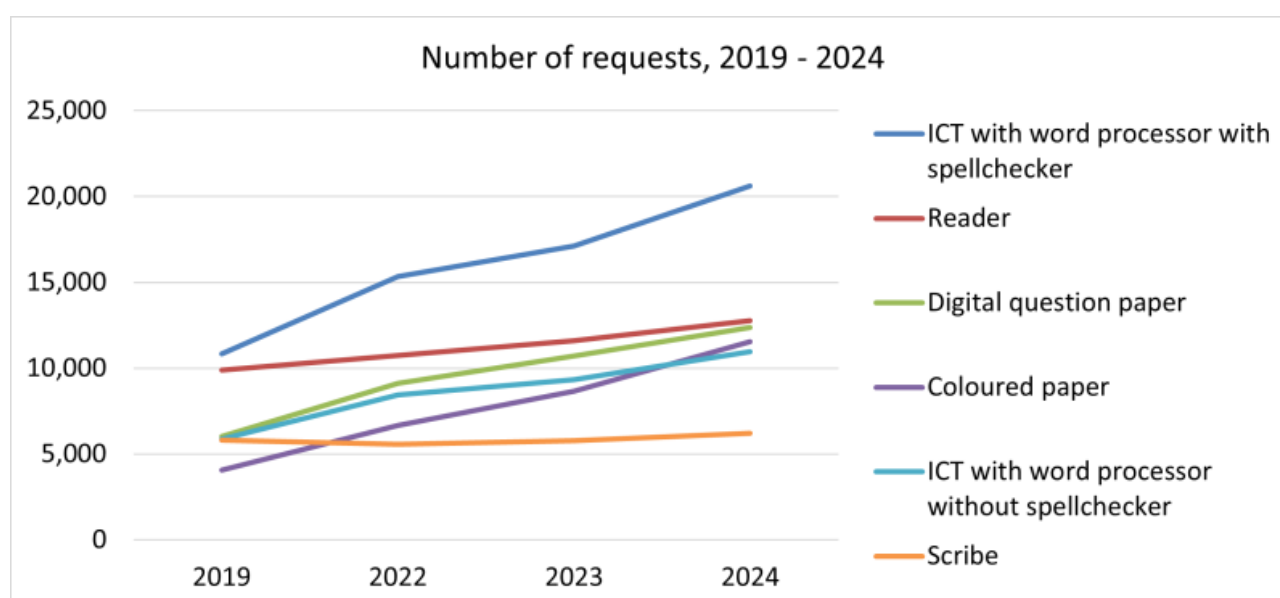**Figure 27: Number of requests for technology, readers, scribes and coloured paper 2019 to 2024**

This graph below shows the percentage of requests which included the different methods of support, which is useful for comparing trends with assessment arrangements. The use of ICT continues to be more commonly used compared with previous years, while readers and scribes are less commonly requested.
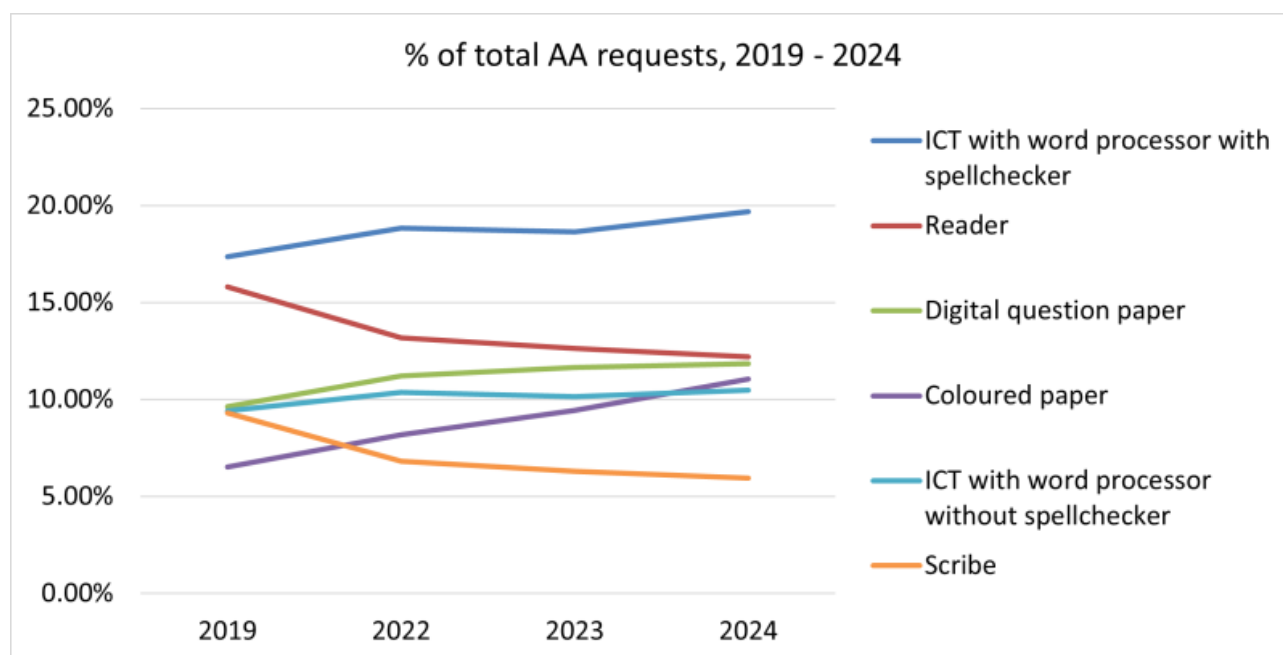
% of total AA requests, 2019 - 2024

Figure 28: % of total requests including technology, reader, scribe and coloured paper 2019 to 2024

Technology compared to scribes

There were 44,270 requests for ICT or digital papers in 2024 compared to 6,215 for scribes and proportionally, requests for scribes are becoming fewer over time.

Spellcheck

Use of ICT with spellcheck (20,615 requests) is almost twice as popular as ICT without spellcheck (11,555), indicating the importance of spellchecking for pupils with additional support needs.

Readers compared to digital question papers

There were 12,780 requests for human readers (12.2% of the total) and 12,385 requests for digital question papers (11.8%) so the gap between requests for digital question papers and readers is narrowing. Although many pupils use digital papers and text-to-speech as an alternative to readers, we cannot compare the two directly because many pupils use DQPs without text-to-speech. This trend is encouraging because our hope is that more pupils will have the opportunity to access examinations independently and to rely less on human readers.

We also know that the number of requests do not represent the number of actual examinations where AA were used: for example, we know that staff sometimes request to use a human reader as a back-up in case of problems with technology.

Coloured Paper

Requests for coloured paper have increased quite sharply since 2022 when examinations re-started following the pandemic years: from 6,665 requests in 2022 to 11,555 - a 73% increase. In 2022, 8.2% requests for AA included colour paper, rising to 11% in 2024.

This is an interesting trend - it may indicate greater awareness of the impact of coloured resources for pupils with visual impairment, CVI or dyslexia. Of course, the page colour of digital question papers can be easily changed, but coloured hard copy papers are probably easier to manage and administer compared to organising ICT. The popularity of coloured papers does emphasise the importance of colour as an accessibility feature for examinations, assessments and learning resources.

GLOSSARY

AAC	Augmentative and Alternative Communication
ACiP:S	Augmentative Communication in Practice: Scotland
ADES	Association of Directors of Education in Scotland
ASL	Additional Support for Learning
ASLO	Association of Support for Learning Officers
ASN	Additional Support Needs
ASPEP	Association of Scottish Principal Educational Psychologists
AT	Assistive Technology
ATLAS	Assistive Technology Leaders Across Scotland (formerly ICTSLS)
B4A	Books for All
BETT	British Education and Training Technology Exhibition
CALL	Communication, Access, Literacy and Learning
CfE	Curriculum for Excellence
CFS	Communication Forum Scotland
CLA	Copyright Licensing Agency
CLPL	Career-long Professional Learning
CM	Communication Matters
CPD	Continuing Professional Development
ES	Education Scotland
FAACT	Fife Augmentative and Alternative Communication Team
FE	Further Education
GASS	Grant Aided Special Schools
GIRFEC	Getting It Right for Every Child
HE	Higher Education
HI	Hearing Impairment
ICT	Information and Communication Technology
IDT	Inclusive Digital Technology
JISC	Joint Information Systems Committee (in FE/HE)
Keycomm	Edinburgh & Lothians AAC service

LA   Local Authority

MH/MHSES Moray House/Moray House School of Education and Sport

NAIT   National Autism Implementation Team

NSAS   National Standardised Assessments for Scotland

PL   Professional Learning (previously referred to as CPD)

QMU   Queen Margaret University

RCSLT   Royal College of Speech and Language Therapists

RNIB   Royal National Institute for Blind People

SAVIE   Scottish Association for Visual Impairment Education

SCTCI   Scottish Centre for Technology for the Communication Impaired

SCERTS   Social Communication, Emotional Regulation and Transactional Support

SG   Scottish Government

SIG   Special Interest Group

SLA   Service Level Agreement

SLF   Scottish Learning Festival (Education Scotland run event every September)

SNSA   Scottish National Standardised Assessments

SQA   Scottish Qualifications Authority

SSC   Scottish Sensory Centre

TASSCC   Technological Assessment and Support Service for Children and the Curriculum (Aberdeen)

UoE   University of Edinburgh

VI   Visual Impairment

VIP   Visually Impaired Persons

VQ   Victoria Quay

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