INFORMATION AND COMMUNICATION TECHNOLOGY (ICT) FOR INCLUSION

United Kingdom (England)

1. Policy Frameworks

This information was provided by Terry Waller (ICT Consultant) and Nigel Fulton (Department for Education, Agency Representative Board member).

1.1 Policies that impact on ICT for inclusion in the compulsory school sector

The Equality Act 2010 removes discrimination, places emphasis on an anticipatory duty, and also provides a legal framework for redress. All schools are responsible for ensuring that it is applied. From September 2012, auxiliary aids are included in this legislation, with a requirement that disabled pupils, who require additional services or technology to prevent them being put at a substantial disadvantage to their non-disabled peers, be provided with said aids from school or local authority (LA) resources where reasonable.

The Special Educational Needs (SEN) Code of Practice 2001, which came into effect in 2002, provides a framework for SEN provision in schools. This is statutory guidance, and schools and LAs are obliged to have regard to it. It includes reference to technological devices such as communication aids and other equipment.

Following extensive consultation in 2011, a Bill was introduced into Parliament in 20123 which sets out fundamental changes to the SEN system from 2014 as well as a new Code of Practice. A summary of the proposals in the Children and Families Bill can be found at:

http://www.education.gov.uk/a00221161/children-families-bill

The Academies Act 2010 shifts funding directly from the government to academy schools rather than via LAs and, along with other measures, proposes more freedom and autonomy of action, although LAs still have a legal role in ensuring that pupils' SEN are met. Academies have the same SEN obligations as local authority-maintained schools. At present, these are required by academies' funding agreements. The Children and Families Bill, referred to above, proposes to impose the same SEN statutory duties on academies as local authority-maintained schools.

The Pupil Premium, introduced in 2011, is in addition to main school funding and is intended to address underlying inequalities between children eligible for free school meals (FSM) and better-off peers. Schools are expected to use the funding for resources including ICT, targeted at pupils in the bottom 20% of achievement levels.

In Autumn 2012 it was announced that from April 2013 specialised augmentative and alternative communication (AAC) services would be commissioned by the NHS Commissioning Board for children and adults with complex communication needs alongside 119 other specialised health services.

1.2 Current policy on ICT for inclusion in relation to the main project themes

1.2 (i) ICT as a tool for promoting equity in educational opportunities.

The Equality Act 2010 (auxiliary aids were included in the reasonable adjustments duty in 2012) requires schools and LAs to make 'reasonable adjustments', e.g. if schools provide personal devices to pupils, then disabled pupils should expect to be similarly equipped if it is reasonable to do so and failure to provide the personal devices would put a disabled child at a substantial disadvantage. If software or technology is used in teaching and

learning, schools are expected to ensure that pupils can access them or that reasonable alternatives are provided to ensure equity of access.

1.2 (ii) Access to appropriate ICTs as an entitlement

There is no clear policy; however, all maintained schools are expected to follow the National Curriculum (currently being reviewed), which includes an Inclusion Statement with examples that highlight the role of technology and ICT to overcome barriers to learning.

1.2 (iii) Training of educational staff in the use of general and specialist ICTs

There is no explicit policy in this area.

Currently there is no specific training. In initial teacher training (ITT), all teachers receive some ICT training, but it is no longer a requirement for competence in order to qualify. Otherwise, continuing professional development (CPD) is largely fragmentary and individual.

The Department for Education (DfE) has published resources for the induction of trainees and newly qualified teachers (NQT, including user guides and film clips, to enhance their knowledge of SEN and disability. This focuses on the core skills required to manage SEN and disability in the classroom – in particular ITT and induction – and the advanced skills that some teachers may develop as part of their CPD.

The DfE has provided support to Dyslexia Action to establish a national service providing access to the curriculum for children with SEN, through accessible digital technologies. The service will transform the experience of thousands of learners and release education professionals from the mundane tasks of scanning, typing or searching for texts so they may support pupils more effectively. Dyslexia Action, together with the Royal National Institute of Blind People (RNIB), are making more than 1,500 core texts available in digital format for dyslexic pupils and those with visual impairment. See: www.load2learn.org.uk

1.2 (iv) The promotion of ICT research and development requiring a multi-stakeholder approach

This is not formalised or systematic, but there are some occasional instances of practice.

There is no known research commissioned or promoted by the DfE.

1.2 (v) Data collection and monitoring in the use of ICT in inclusion

There is none known. Previously, annual surveys of ICT usage (*Harnessing Technology*, see: http://dera.ioe.ac.uk/1544/) were published, which included reference to teachers' use of assistive technology (AT) mainly from a confidence and competency perspective. The last survey was published in 2010.

1.3 Strategic plans for implementing policy on ICT for inclusion

There is no strategic activity. Schools are largely autonomous, although depending on funding arrangements they may seek the support of others for assessment and provision, e.g. speech and language therapy, LA, social care. Local authorities are responsible for making arrangements to meet children's SEN ; however, these tend not to include specific reference to provision of ICT, but are rather a general catch-all.

1.4 Monitoring and evaluation of policies or strategic plans relating to ICT for inclusion

Not monitored.

1.5 Main policy developments in ICT for Inclusion that have taken place since 2000

From 2000 onwards, policy was driven primarily through a series of strategies (National Grid for Learning 1998-2006, which focused on infrastructure, software and teacher competency; and the Harnessing Technology strategy 2005-2011, which, over time, provided a system-level approach to technological transformation across all sectors) that focused on embedding ICT use in schools. These focused on central funding (the Harnessing Technology Grant, which originally was ring-fenced funding for schools to invest in technology – often specified by government). The SEN and Inclusion team at Becta and the Special Educational Needs and Disability (SEND) division at the DfE worked to influence these initiatives to ensure that the needs of young people with special needs were considered and that projects were as inclusive as possible.

Harnessing Technology Strategy 2005:

http://webarchive.nationalarchives.gov.uk/20060315075935/dfes.gov.uk/publications/e-strategy/

Harnessing Technology Strategy 2008:

http://dera.ioe.ac.uk/8287/1/download.cfm%3FresID%3D37348

The policy and overarching strategy required all schools to consider how all pupils were included and advice on how this might be achieved was issued either by the DfE or Becta (the agency responsible for delivering the strategy). Becta closed in 2011 and central funding for ICT – that was used to provide exemplars, case studies and awards for notable practice by individuals or schools – stopped at that time.

Initiatives followed a range of themes, such as the value of personal computing for learners (Computers for Pupils 2006-7). Although this focused on social disadvantage, it included adaptation for those with special needs, as did the Home Access Programme 2008-11, which provided inclusive opportunities through the software and access devices that were made available under the scheme.

In 2011, following a series of initiatives that provided AAC technology for children with communication difficulties (Communication Aids Project 2002-2006), and the Better Communications Action Plan in 2009-12 (with grants for developing sustainable services, advice and guidance, etc.), the *Hello* campaign provided a national focus on communication, including a month dedicated to AAC technology (see: http://www.thecommunicationtrust.org.uk/about-the-trust/what-is-the-hello-campaign.aspx).

1.6 Current issues in relation to ICT for Inclusion

These do not seem to change over time. There continues to be a need for:

- increased awareness (of the latest technologies and how they can be applied inclusively) by professionals, and associated/joined-up CPD;
- clarity for funding;
- training for supporting adults;
- amenability of technical staff;
- a real imperative for developers to provide accessible learning resources (schools need to make reasonable adjustments, not developers provide accessible software/content).

1.7 Important short and long-term developments in ICT for Inclusion

Short-term:

- mechanisms to ensure schools can access reliable information and advice (research/evidence demonstrates how ICT can enable inclusive pedagogy);
- schools continuing to take a strategic longer-term view on ICT investment, and build in how they accommodate the needs of all learners (current/prospective);
- pressure on technology suppliers and service providers to deliver inclusive solutions (for example, through informed demand-side pressure, i.e. informed schools not buying inaccessible products);
- establishment of a national network of lifelong assessment and supply of AAC for people of all ages who need it (in the short term, it is likely to be established in 2014, but in the longer term there is the need for its statutory recognition as a right).

Long-term:

- funded research and development into ICT for inclusion – particularly multi-disciplinary to include education, health, social care and creative industries, families and users. This is currently happening to some extent within the adult sector (Department for Business, Innovation and Skills), but is not a priority for the school sector.
- development of indicators linked to existing data collection mechanisms that support schools in their measurement of progression and achievement of young people with disabilities and how this is supported by technology – perhaps building on existing initiatives such as Achievement for All (see: http://www.education.gov.uk/schools/leadership/schoolperformance/a00199926/achievement-for-all and http://www.afa3as.org.uk/);
- development of a valued and sustainable training provision for all adults involved with children who have SEN, including families/carers.

2. Country Practice

This information was provided by Terry Waller (ICT Consultant).

2.1 Main developments in practice in ICT for Inclusion since 2000 in relation to the main project themes

2.1 (i) ICT as a tool for promoting equity in educational opportunities

- increased opportunities for differentiation of learning resources and activities;
- ICT has been embedded into the mainstream curriculum;
- personalised learning has become easier to achieve;
- increased availability of specialised resources;
- improved quality of specialist resources;
- the convergence of specialist and generic technology, e.g. touch access, voice control and speech feedback on tablet devices;
- shift in priorities in schools to take difference into account, e.g. RAISEonline. Different approach taken by the current government;

- increased awareness through campaigns such as *Hello*, Right to a Voice, Every Disabled Child Matters, and the Communications Aids Project.

In 2000, the use of ICT for promoting equity was very much the exception rather than the rule. Although the tools were available, they were not often used. Since then, younger teachers, more open to the use of ICT, have come along and things have moved forward. Today, the main issues are funding-related. There still needs to be a change in the way many teachers view ICT as a tool for bringing about equality of access to the curriculum; too often, 'word prediction' is seen as not acceptable, while scribing is. All students in primary schools could use new programmes, such as Clicker 6, and this would promote a greater feeling of inclusion; at the same time, Clicker 6 could offer additional support to students who require it. The widespread use of interactive whiteboards has placed students with visual impairments (VI) at a disadvantage, as contrast is poor; students with VI can sometimes overcome this by making use of the laptop monitor rather than the whiteboard. Physically disabled students require ICT assessments to ensure they can access a computer and also that they have suitable software to meet their needs.

2.1 (ii) Access to appropriate ICTs as an entitlement

- technology that is cheaper, easier to use, more accessible and used in everyday life;
- convergence of specialist and generic technology (as above);
- preponderance of technology;
- ageing population has led to more interest from large suppliers;
- policies of companies such as Apple in providing accessibility options on all devices.

In 2000, physically disabled students were often taught in the corridor or in the corner of the classroom, as laptop computers were not readily available. This did nothing for inclusion. Now ultra-portables are available, but are rarely used, as the cost is too high. All too often, students are given teachers' old laptops with small hard drives and low memory. These are usually heavy and have a very short battery life.

Computer suites are now commonplace in both primary and secondary schools; however they are not usually equipped for physically disabled students and are usually set out at adult height, with students on office swivel chairs on wheels – not good for the Foundation Stage Class!

Access to ICT is something of a postcode lottery; some schools have excellent provision but, unfortunately, this is not always the case.

The latest development is the use of iPads in schools; schools that have embraced this have found them to be very beneficial. However, few have an overall strategy for adoption of this technology or have necessarily developed a business case that establishes a benchmark and measures progress/improvement in learning outcomes.

2.1 (iii) Training of educational staff in the use of general and specialist ICT

- progress is threatened as the LA role diminishes and funding decreases;
- training opportunities have had to be matched to national strategies;
- specialist training opportunities have decreased, but the need continues to grow;
- there is very little training.

Many teachers only require minimal training in the use of ICT, as it is now part of everyday life. Unfortunately, for some teachers, no amount of training makes much difference. This is not an age thing; it is more to do with having a positive attitude towards the use of ICT. If teachers want to learn, they will. If teachers want to promote an inclusive setting through the use of ICT, they will.

2.1 (iv) The promotion of ICT research and development requiring a multi-stakeholder approach

- parents have been instrumental in developing software;
- many companies now involve users in R&D;
- there has been interest from .biz, e.g. Business Case for accessible online products;
- development of the BS 8878 web accessibility code of practice;
- disappointingly little movement in this direction.

Some specialist and, to a lesser extent, mainstream software firms are approachable and are keen to involve ICT users. Examples include Splash (www.splash-city.com), which welcomes comments and offers demo trial licences of its software; Crick Software, which sends questionnaires about its software and is quick to make suggested improvements; and Inclusive Technology, which welcomes feedback.

2.1 (v) Data collection and monitoring in the use of ICT for inclusion

- professional meetings;
- data is more qualitative than quantitative.

Where they are still in place, many LA advisers for ICT and SEN use systems to inform the services they provide (surveys and user satisfaction data) and this is sometimes published. There is no national standard or coordination of efforts in this area.

2.2 ICT to promote learning in inclusive settings

2.2 (i) Country-based networks to support teachers in using ICT to promote inclusive learning

There is a range of bottom-up, teacher- or practitioner-led communities of practice, which either meet or interact online, although the evidence seems to suggest that both are required for greatest impact.

These include, for example:

SNICT a group of advisers for ICT/Inclusion in the South-West http://lists.education.gov.uk/mailman/listinfo/snict

SENJIT practice and CPD networks across London, based at the Institute of Education, University of London http://www.ioe.ac.uk/research/16081.html

DfE-hosted online forums for inclusive practitioners, including the SENCO forum (for special needs coordinators in mainstream schools) and SENIT (those who support pupils and schools in technology use for pupils with SEN) http://lists.education.gov.uk/mailman/listinfo

The Inclusion Networks: a grouping of organisations encompassing industry, academia, teachers, advisers and third-sector bodies, which share knowledge on ICT for inclusion http://agent4change.net/bett-week/inclusion-and-special-needs/1431-new-sen-umbrella-group-launches-at-bett-2012.html

Communication Matters: a charity focusing on communication needs http://www.communicationmatters.org.uk/

JISC TechDis: based in FE/HE, but with some overlap in the schools sector. They provide expert advice, guidance, project management, etc. http://www.jisctechdis.ac.uk/

BATA: the British Assistive Technology Association, a social enterprise with a significant number of AT suppliers, but also membership across schools, LAs and the third sector; http://www.bataonline.org/

2.2 (ii) Initial teacher education in using ICT to promote inclusive learning

The government has indicated that a greater emphasis will be placed on SEN in ITT. From that, teachers could consider undertaking further CPD in SEND specialisms later in their career, hence the highly successful scholarship scheme (which runs in its current form once again this year).

Another example is the DfE-funded extended special school placements for trainee teachers as part of their ITT period over the last two years (around 1,400 have had the opportunity to undertake a four-week placement as a result). However, this funding has now ceased.

The DfE is working with the Teaching Agency to develop a longer-term framework that all ITT providers can use to expand the provision of special school placements (called the 'special school experience') across all ITT provider partnerships with schools.

These will be piloted this year, with a target of 50 extra placements. The evidence from a recent meeting of the Teaching Agency's SEN reference group is that teaching schools (schools which support new entrants to the teaching profession and other schools in providing in-service training for teachers0 are keen to implement this more widely. The aim is that by 2015 all trainees will have the opportunity to gain experience in a special school, although this will not be compulsory.

Some LA advisers indicate that student teachers and NQTs are very willing to learn and are receptive towards the use of ICT to support inclusion.

2.2 (iii) Practical support in classrooms to help teachers' use of ICT to promote inclusive learning

- LA training (although this is declining significantly due to the economic climate) and support. For example, one LA advisory teacher supports teachers and teaching assistants (TA) in the use of ICT with students who have a wide range of physical disabilities and/or medical conditions; visits physically disabled students in their schools; trains staff in the use of ICT in order to reduce access barriers to the curriculum; and also loans equipment/software on a try-before-you-buy basis;
- products and company support through free or paid-for events;
- increasing number of webinars, particularly by companies, but also by charities;
- geographical cluster support;
- national experts (freelance consultants) providing training;
- annual BETT exhibition: ICT trade show with seminars, keynote presentations and a SEN Zone. See:

  http://www.bettshow.com/Default.aspx?nid=35&refer=19&id=mainLnk2&id1=ssubLnk24 It is organised by the British Educational Supplier Association (BESA) http://www.besa.org.uk/home/ in conjunction with EMAP.

- AAC specialist centres, for example the ACE Centre http://www.ace-centre.org.uk/ and http://www.ace-north.org.uk/ (the two centres have just merged and their new website is under development) and CENMAC http://www.cenmac.com/ which provides on-site support, training and awareness events focusing on CT for pupils with communication support needs.

These are all dependent on school professional development budgets.

2.2 (iv) Important information sources about new developments, hardware and software products and ideas for using ICT to promote learning in inclusive settings

BETT Exhibition: http://www.bettshow.com/

SEN shows and conferences, e.g. TES Special Needs Exhibition, London: http://www.teachingexhibitions.co.uk/Exhibitions/TES+Special+Needs+Exhibition/London/2012/

nasen Live http://www.nasenlive.org.uk/home

Communication Matters road show and annual conference http://www.communicationmatters.org.uk/conference

Magazines and journals (print and online), for example: *MJO* www.agent4change.net; *Special Children* http://specialchildren-magazine.com/; *nasen Special* http://www.nasen.org.uk/special/

Freelance writers who specialise in this field, tweeters/bloggers (e.g. Carol Allen, Ian Bean, Richard Hurstwood)

Supplier websites and e-newsletters/print catalogues, e.g. http://www.cricksoft.com/uk/home.aspx, Inclusive Technology http://www.inclusive.co.uk/

Generally keeping oneself well-informed;

Internet searching;

Word-of-mouth from colleagues and from online communities of inclusive practitioners. See: http://lists.education.gov.uk/mailman/listinfo

2.3 Current obstacles to using ICT to promote learning in inclusive settings

- lack of time, training and budget;
- shortcomings in teacher/technician awareness, skills of adults who support the child and clarity over responsibility for provision;
- insufficient funding: the money is simply not available to provide hardware or software to fully meet the needs of students with disabilities;
- poor attitudes of some teachers: some are just not interested in the use of ICT and view word prediction as ‘cheating’ and giving too much support;
- lack of knowledge about what is available or of how to make good use of the resources already in place.

Having said this, some schools are excellent and provide amazing support.

2.4 Factors that support using ICT to promote learning in inclusive settings

Good quality assessment matching the user’s needs and setting;

On-going support;

Inclusion of all parties – child, teaching staff, technical staff, family, providers, advisers – in assessment, provision and on-going use;

An open attitude towards the use of ICT in order to support students with SEND;

Creating a good support balance (human support/resources) and being creative in the use of government funds for SEND, e.g. allocate some of the Statementing budget to resources, rather than using all of it on full-time TA support for a student;

Time allowed for training in the use of ICT or ensuring that the teacher is available when advisory services are there to offer support. Too often, it is only the TA and the student that we work with;

Regular monitoring and review;

Clear learning and communication goals, with a structured implementation programme.

2.5 Perceived short and long-term developments that will have an impact on ICT for Inclusion practice

Statutory right to a voice with a properly funded assessment and intervention programme, e.g. through speech and language therapy (SALT) service;

Awareness training for staff at all levels, including technical staff;

Research and development funding to improve the accessibility of existing products, e.g. learning platforms;

Long-term development: plan a strategy for ICT provision and inclusion across the LA rather than just within each individual school. There is too much variation in the level of support offered in different schools. Fund the provision to provide the necessary support. Let all students have the choice of recording method – ICT/handwritten/speech-to-text, etc. Move away from ICT being a subject that is taught in isolation; it needs to be a tool that is used across the curriculum.