INFORMATION AND COMMUNICATION TECHNOLOGY FOR INCLUSION

POLICY BRIEF

Policy context

The European policy documents Council Conclusions on Accessible Information Society and A Digital Agenda for Europe stress the important role of information and communication technology (ICT) in all areas of life, including education, employment, and cultural and social environment. Digital literacy must be considered a key competence for social inclusion on a personal level and a key facilitator for ‘progress towards an open, green and competitive knowledge society’ on a European scale (Council of the European Union, 2009, p. 6).

However, the 2013 Communication from the Commission on Opening Up Education argues that: EU education is failing to keep pace with the digital society and economy ... Digital technologies are fully embedded in the way people interact, work and trade; yet they are not being fully exploited in education and training systems across Europe (European Commission, 2013, p. 2).

The Communication also suggests that: In addition to broadening access to education, wider use of new technology and open educational resources can contribute to alleviating costs for educational institutions and for students, especially among disadvantaged groups. This equity impact requires, however, sustained investment in educational infrastructures and human resources (European Commission, 2013, p. 3).

The goal of broadening access to education through new technology is in line with the United Nations Convention on the Rights of Persons with Disabilities which recognises: ... the importance of accessibility to the physical, social, economic and cultural environment, to health and education and to information and communication, in enabling persons with disabilities to fully enjoy all human rights and fundamental freedoms (United Nations, 2006, Preamble, v).

Project findings

The findings of the Information and Communication Technology for Inclusion (ICT4I) project suggest that there are challenges for all policy makers and practitioners to adapt their thinking and then their ways of working in order to remove barriers and
enable all learners to benefit from the educational opportunities that widely available, affordable and accessible ICT can offer.

The ICT4I project identified five critical policy issues to be addressed:

- **Bridging the digital divide** in order to ensure that all learners benefit from ICT as a tool for their learning.
- Ensuring that ICT4I is seen as a cross-sectoral issue and is considered and visible in all relevant policy fields.
- Ensuring the availability and take-up of comprehensive and integrated pathways of teacher education in ICT4I, as a vital ‘pre-condition’ for any ICT4I initiative.
- Supporting the implementation of ICT4I-related research findings within classroom practice.
- Making meaningful data – both qualitative and quantitative – available for monitoring and informing policy and practice in ICT4I.

The overall conclusions of the ICT4I project identify potential levers that should be exploited in further attempts to address digital exclusion in education:

1. **Public procurement** of ICT hardware, software and digital learning materials that includes accessibility as a criterion (at national, regional and organisational levels).
2. A widely available programme of training for all stakeholders in the ICT4I ecosystem, including parents, teachers, school leaders, ICT support personnel, web administrators and IT and media professionals.
3. **School level policies and action plans** for ICT4I that comply with national level policies and are effectively monitored so as to inform the wider implementation of ICT4I.
4. **Support for school leaders** to develop their understanding of, positive attitudes towards and vision for ICT4I.

The ICT4I project concludes that the effective use of ICT to support learning in inclusive education exemplifies good teaching for all learners. However, ICT4I requires a new pedagogy that uses ICT to empower all learners to make and implement decisions about the learning approaches that are most effective for them. Such a new pedagogy would allow: ‘All individuals to learn, Anywhere, Anytime, through Any device, with the support of Anyone’ (European Commission, 2013, p. 3).
Recommendations

Emerging technologies present clear challenges, but also huge opportunities for policy makers to widen access and participation. The ICT4I project identified four main recommendations.

Policies for ICT for Inclusion should ensure that:

1. All learners should be able to effectively use ICT in their learning in inclusive settings. *This means that:*
   - ICT is used as a tool for supporting participation through personalised learning approaches for learners with disabilities and special educational needs in inclusive settings;
   - learners’ experience of general and specific ICT availability at school, home and upon transition to other educational sectors is seamless, with no gaps or differing levels of provision.

2. All teachers should be able to effectively use ICT to support learning in inclusive settings. *This means that:*
   - teachers’ attitudinal barriers to the use of technology and/or inclusive education are acknowledged and addressed via appropriate professional development;
   - teachers are effectively supported in their use of ICT to support learning, as well as the specific use of assistive technology;
   - teachers are effectively supported in their use of ICT as a tool for personalised learning in inclusive settings.

3. All schools are able to implement and maintain an effective, sustainable ICT4I infrastructure. *This means that:*
   - schools have access to an effective and sustainable ICT infrastructure;
   - schools and all professionals working within them are effectively enabled to use ICT to widen participation and increase learning opportunities for learners with disabilities and special educational needs;
   - school leaders are enabled to promote the use of ICT to support learning in inclusive education settings.
4. The ICT4I infrastructure at national and/or regional level is able to effectively support the work of all schools and teachers working in inclusive settings. *This means that:*

- all stakeholders see ICT4I as a tool to widen participation and increase educational opportunities for all learners, including those with disabilities and special educational needs;
- there is an agreed trans-sectoral policy for ICT4I at national level;
- there is an effective infrastructure for ICT4I across all educational, home and social settings;
- there is effective on-going dialogue and consultation involving all stakeholders in the ICT4I eco-system.
- there is support for research and development initiatives that take ‘user-involved’ as well as ‘user-centred’ approaches and lead to new, accessible ICT tools for all learners, including those with disabilities and special educational needs.

More information is available from the ICT4I project web area: [http://www.european-agency.org/agency-projects/ict4i](http://www.european-agency.org/agency-projects/ict4i)