# Information and Communication Technology (ICT) in Special Needs Education (SNE) - Future Visions for Policy, Practice and Research & Development

In September 2002, the Ministry for Education, Portugal and the European Agency for Development in Special Needs Education hosted an international conference on Information and Communication Technology (ICT) in Special Needs Education (SNE).

The conference was followed by a one-day working seminar where all experts from the ICT in SNE field and specifically invited guests from the IST field presented the situation in their countries and fields relating to one of three key areas: Policy, Practice and Research & Development. These areas were then extensively discussed leading to the production of series of recommendations in each of the three areas.

This paper presents the recommendations made by these experts, referring to some of the current key issues within ICT in education debates across Europe.

## The Future for ICT in SNE Policies?

Within the group, it was recognised that the term policy referred to a specific regional, national or even European level statement on principles, intentions, means, objectives and timetables relating to ICT in SNE. The agreed vision of future ICT in SNE policies was that **policies should be trans-sectoral** and **underpinned by the clear philosophy** of meeting individual learners' needs, promoting a school for all (as described in the Charter of Luxembourg, 1996) and promoting inclusion within all educational sectors.

ICT in SNE policies need to have phases of development: in the short term a recognisable (separate) specific action plan/strategy/policy for ICT in SNE; in the medium term, ICT in SNE becomes part of general strategy plans; finally, in the long term, ICT or SNE is not mentioned, but is accepted as "a given" within all ICT policies.

Overall, **policies need to provide the long-term vision**, but be flexible enough to **reflect local level needs** and major initiatives in all educational sectors. Polices need to be proactive in removing barriers to development and also and actively work on the conditions that support initiatives.

In relation to what needs to happen to make this vision a reality, it was suggested that there must be a deep and critical **process of questioning and reflection** in relation to the use of ICT in SNE, focussing upon questions such as: where are we now? How far have we come? Where do we want to go? What are others doing? What can we use? What do we have to do to achieve our goals?

This process would need to be lead by an advisory group (operating at regional, national and/or European levels), recognised by Ministries, who are

representative of all sectors and all responsible and interested parties. Such a group would have a clear role in advising on the formulation and implementation of trans-sectoral policies as well as have a clear responsibility for advising on promoting communication and exchange between different sectors of ICT practice. Crucially, they would have responsibility for providing advice on setting and implementing time frames for policy achievements.

It was acknowledged by the experts during the meeting that the first steps to be taken would need to be **raising awareness** in all sectors that there is a need for specific policies and responsible groups, as well as the specific awareness raising of policy makers at national level and European level to the challenges within the ICT in SNE sector.

## The Future for ICT in SNE Practice?

In relation to necessary developments within ICT in SNE practice, the formation of regional, national and inter-national **networks to facilitate connections** between good practice and resource centres and individuals are seen as crucial. This would be supported by an **in depth analysis and description of the factors leading to good practice.** Such an analysis would lead to the development of guidelines for support structures as well as more co-ordinated information about technology resources, the creation of virtual resource centres in connection with "physical" resource centres and more possibilities for virtual and physical exchanges between all professionals in the field.

It was argued that it is essential that all schools have opportunities to join networks and partnership projects. Specialist, pedagogy based ICT in SNE training needs to be extended coupled with more support for school development and change initiatives. School and service based developments should be directed by established guidelines concerning the use of ICT as a means of supporting inclusion and facilitating access to the curriculum.

Such a vision could only become reality if there is the **creation of virtual resource centres linked to "physical" resource centres**. Access to the enormous quantity and variety of information in the field needs to be better coordinated, better organised and better facilitated. **Teacher training** needs to needs to cover ICT and classroom management as well as the use of ICT in the curriculum at different educational levels.

School development and change needs more specifically targeted support with input and supervision of the work regarding ICT use in SNE and teamwork between teachers and other professionals requires support and facilitation. Finally, it is crucial that all hardware and software made available in SNE settings follows principles of design for all.

The actors who need to be involved in making this vision a reality include professionals within schools, pupils and their families, support service and resource centre staff, policy makers at all levels, community organisations and

NGOs, but also business enterprises and researchers. All possible stakeholders in the information society need to have an input into the development of practice within the ICT in SNE field. These stakeholders would need to be involved in taking the first steps towards establishing guidelines concerning PC/pupil ratios where ICT acts as a real facilitator of access to the curriculum for pupils with SENs.

Stakeholders would all need to be active in promoting teamwork between teachers and other professionals to help find suitable ICT solutions for meeting individual learning needs. This would include teachers having access to "easy" to use software that follows design for all principles as well as more interactive demonstrations of products. However, within the teaching profession, there needs to be more acceptance of teachers' own personal responsibility for their learning and development in relation to ICT.

## The Future for ICT in SNE Research and Development?

The future of research and development within the ICT in SNE field should focus upon learning and how to improve it. The **design and development of inclusive technology** will facilitate participation taking account of diverse user groups, their wide-ranging needs, users' roles, cultures and languages. In order for inclusive technology to be developed however, **educationalists should be active participants** in shaping research and development and there should be a facilitation of greater interaction between all actors concerned.

Developments should be seen in terms of technology, but also in terms of **information and an effective knowledge base**. All new developments - both technological and educational - should be **based on research outcomes**; basic and applied research is needed, the latter being practical and realistic and **common procedures**, **guidelines**, **evaluation criteria**, **standards and research policies** should be developed.

There needs to be a **balance between market forces and regulations** and for this, a multi-disciplinary approach is required with support strategies such as communication and exchange platforms and networking of researchers (conferences and technical platforms for example) being necessary.

As a first step, all stakeholders whatever their level of involvement or interaction need to be involved in the development of a much broader and applicable knowledge base. They also need to be involved - either directly or indirectly via participatory approaches and/or experts - in the development of widely accepted guidelines regarding inclusiveness.

## Conclusions

The experts' group meeting in Lisbon represented all stakeholders in the information society. All hold a common vision: that of working towards a genuinely inclusive information society based on participation for all, including learners who have special educational needs. Their debates and deliberations

give clear pointers for the future of ICT in SNE. The Salamanca Statement (1994) states that all educationalists should ensure that special needs education forms part of every discussion dealing with education in all forums. The clear message from the experts meeting in Lisbon was that SNE must be a part of all ICT debates focussing upon ICT policy, practice or research and development.

#### Further Information

More information about the Lisbon conference and the ICT in SNE experts participating in the meeting can be found at: <a href="https://www.european-agency.org/ict\_sen\_db/index.html">www.european-agency.org/ict\_sen\_db/index.html</a>

More information about the ICT in SNE project (including copies of the project report in 13 languages) and the work of the European Agency in general is available from:

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