SENnet

Make learning accessible

The Special Educational Needs Network

SENnet brings together key actors, in particular policy-makers and teachers, to improve learning for students with special needs in mainstream schools through the use of technology.

The term "special needs" is not well defined internationally according to the OECD, but it usually covers those for whom a special learning need has been formally identified because they are mentally, physically or emotionally disadvantaged.

While technology can benefit all students, for those with disabilities it can change lives. It enables them to access learning, gives them greater autonomy, unlocks potential for those with communication difficulties, enables tasks to be personalised and increases confidence, provided teachers are adequately supported. In a recent report (TALIS, 2013), teachers stated that their greatest needs were using technology and supporting students with special needs.

SENnet was funded by the European Commission over three years to November 2014 and continues its work. At the network's core are partners from seven countries – Austria, Belgium, Denmark, Estonia, Italy, Portugal and Turkey – coordinated by European Schoolnet. There are four areas of activity: networking, research, digital resources and teacher support. On the following pages we describe what happened in each area, what was learnt and how you can find out more.

Networking: peer learning in action

What happened

The primary aim of SENnet was to build up a sustainable network of policy-makers (including members of European Schoolnet's Special Needs Education Working Group) and practitioners in the field of special needs and ICT. Activities included national and European communities of practice, networking key influencers in 30 countries and 13 seminars and peer learning visits to schools, ministries and specialist centres in six countries.

What was learnt

A SENnet Facebook group is proving popular, active and useful, with over 200 members, mostly teachers, posting messages in a range of languages.

The peer learning visits, combining workshops with ministry and agency representatives and school visits, provided a unique insight into innovations, successes and challenges related to the use of ICT for inclusion of students with special needs in mainstream schools. Some highlights:

> **Italy, Florence:** there is a national policy of mainstreaming of students with special needs since 1977, supported by 90 regional centres; 208,000 students are identified as having special needs; a vocational school was visited.

> **Belgium, Brussels:** There is a national policy to provide students with dyslexia with digital versions of textbooks; a hospital school was visited and a video-conferencing system demonstrated.

> **Denmark, Copenhagen:** Research shows that inclusion benefits all students, provided teachers are competent; there are strong moves to integrate the 84,000 students identified as having special needs into mainstream schools.

> **Austria, Bad Hofgastein:** 4% of students in Austria are described as having special needs; a well equipped school was visited providing individual care within a mainstream campus; there is a summer computer camp for visually impaired students.

> **Portugal, Lisbon:** All but 1,600 of the 50,570 students with individual education plans attend mainstream schools; 25 regional centres support teachers; schools with coordinated multi-agency support were visited.

> **Estonia, Tallinn:** There are 28 special schools and a strong emphasis on parental choice; an all-age school, including 80 students with special needs, was visited – 96% of students bring their own device.

Find out more:

Sign up to the Facebook group, join national communities, read the workshop and visit reports (details on the back page).

Reports and studies: documenting good practices

What happened

Each year, the network agreed on an annual topic relevant to current needs: Integrating students with special needs into mainstream classrooms, Universal Design for Learning, and Tablet computers and inclusion. Partners researched and reported the topics, producing analyses and case studies of good practice, including over 20 sub-titled videos related to technology and special needs education. In addition, annual reports on innovation were produced, including one devoted to games.

What was learnt?

- **In most EU countries more and more students with special needs are integrated into mainstream schools rather than special schools.** The report shows in detail how this is taking place country by country.

- Universal Design for Learning is relatively unknown in Europe but has much to offer, in particular the principle of multiple means of representation, expression and engagement to cater for individual needs. By designing learning environments from the outset to meet the challenge of individual differences, including the challenges of students with disabilities, we make better learning environments for everyone.

- Tablets, often personally owned, remove the stigma of being different. Thanks to the integration of text-enlargement, voice-transcription, location-aware and text-to-speech technologies, mobile devices can dramatically improve the learning of students with physical disabilities (UNESCO, 2013).

Find out more:

Read the thematic and innovation reports; watch the video case studies.

Digital learning resources

What happened

At the start of SENnet's activities a search for 'special needs' produced just 17 resources in the Learning Resource Exchange, a single access point to some 200 000 resources in national collections. Network members, led by STIL Denmark set about identifying digital resources of particular value for learners with special needs, both already in the LRE and resources suggested in a European survey. As the label 'special needs' is too broad to be useful, partners worked with experts on extending the range of terms to describe resources and make them discoverable in large databases.

What was the outcome?

- 630 free resources were identified in the Learning Resource Exchange in a range of languages, mostly for students with special needs but also some for professional development.

- An extended metadata application profile and vocabulary allied to the IMS Access For All specification that has been designed, documented and tested, and reported at conferences for standards bodies based not on disease or disability but on what the resource provides, e.g. text to speech, keyboard control, simplified language, visual enhancement.

- Over 200 Open Educational Resources, identified by partners, were tagged and added to the Learning Resource Exchange. They are mostly available under Creative Commons licenses.

- A dedicated SENnet collection (http://lreforschools.eun.org/web/guest/sennet) was created in the Learning Resource Exchange, containing links to more than 600 OERs in ten languages in the LRE of particular value for learners with special needs.

- A prototype accessible interface was designed and implemented in SENnet, in eight languages, adaptable for other projects, devices and web sites.

Find out more:

Read the reports on the processes behind this work: Survey Report on the availability of digital resources for special educational needs and Resources for learners with SEN on the LRE.

Professional development modules

What was done?

DGE Portugal developed an open online course for teachers in mainstream schools to help them understand better special needs education, assistive and inclusive technologies and support their work with students with special needs.

The course is in English and modular so that localization, translation and adding further resources by network members was a simple matter.

Six modules were created:

- Inclusion of students with special needs in mainstream schools
- Instructional accommodations and modifications
- Universal Design for Learning
- Web Accessibility
- Assistive Technologies
- Accessible Open Educational Resources

In total some 2 000 teachers took part in the courses. Portugal ran three national courses, one of them a MOOC, with over 900 participants. Estonia ran four national courses. In both cases, courses were tutored and participants certified. Italy, Belgium, Austria and Turkey have localized modules and made them available in their national platforms for self learning, validated by users.

What was learnt?

- There is a strong demand from teachers to build their capacity to support students with special needs and, in some cases, a sense of isolation and frustration when students with disabilities move from special to mainstream schools.

- There is no 'one size fits all' solution to professional development in ICT and SEN. In some countries teachers prefer a face to face course, in others a short online self-access course, and in others courses that lead to accreditation, but sufficient evidence has been gathered in SENnet to suggest that there is an unmet demand for online courses on special needs and ICT.

Find out more:

Take a look at the English course, localised and translated by partners in Austria, Belgium, Estonia, Italy, Portugal (MOOC) and Turkey

Testimonials and challenges

> "Invaluable learning about strategies and policies of other countries, and sharing it with colleagues in Denmark." *Partner*

> "Close cooperation with Austrian SEN community." *Partner*

> "Shared best practice between project partners and possibility to disseminate it among Estonian teachers." *Partner*

> "Awakening conscious about ICT usage in SEN, reaching more resources about SEN in Turkish Education System, cooperation with SEN Schools and Directorate in the Ministry." *Partner*

> "The SEN vocabularies will be used in the Italian digital content repository; the peer learning visits and research reports have been feeding our knowledge and research activities." *Partner*

> "SENnet reinforced activities led by the Portuguese network CRTIC and it will continue activities, namely: assessing students' needs, production of video and adapted materials, and teacher counselling and training." *Partner*

> "In Belgium we started the development of e-learning modules (a dream that was waiting for a long time) and the school visits and policy in other countries were eye-openers." *Partner*

> "More such initiatives are highly needed!!!" *Teacher in eTwinning Learning Event*

> "The network functioned overall very well within the network of partners. Networking also functioned at national level as each of the partners contacted organisations or key people dealing with SEN or dealing with ICT according to the nature of their own organisation." *External evaluator*

SENnet

This document is online at sennet.eun.org with links to all reports and materials mentioned, as well as a version for those who are print-disabled.

Join SENnet: sennet.eun.org
Facebook: facebook.com/groups/SENnetwork
Mailing list: sennet@eun.org
Twitter: #SENnet

Partners:

European Schoolnet
http://www.europeanschoolnet.org

Direção-Geral da Educação (DGE)
http://dge.mec.pt

Education Group GmbH
http://www.edugroup.at

Indire
http://www.indire.it

National Ministry of Education in Turkey (MONE)
http://aoa.meb.gov.tr

Information Technology Foundation for Education
http://www.hitsa.ee

National Agency for It and Learning
http://www.stil.dk/

Belgian organisation specialised in SEN
http://www.letop.be