INFORMATION AND COMMUNICATION TECHNOLOGY (ICT) FOR INCLUSION

Netherlands

1. Policy Frameworks

This information was provided by Berthold van Leeuwen, Dutch National Co-ordinator (The Netherlands Institute for Curriculum Development [SLO]).

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

There are no specific policies with a strong focus on enhancing inclusion through the use of ICT.

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.

Stimulating and facilitating R&D projects with a focus on ICT and inclusion.

1.2 (ii) Access to appropriate ICTs as an entitlement

Stimulating ICT in education in general through Kennisnet (please see section iv).

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

It is part of the curriculum in teacher training colleges.

Schools and teachers can organise support for courses themselves.

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

Kennisnet is an organisation funded by the Ministry of Education (http://about.kennisnet.nl/). It is the public educational organisation which supports and inspires Dutch primary, secondary and vocational institutions in the effective use of ICT. Kennisnet ensures that educational institutions are aware and take advantage of the opportunities offered by ICT. Research has shown that, for the use of ICT for educational purposes, a balanced and coherent use of four building blocks is essential. These blocks are: vision, expertise, digital learning materials and ICT infrastructure. Kennisnet facilitates the schools to achieve this. Barriers are removed and the strengths of the educational sector are bundled together.

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

Kennisnet monitors the use of ICT in education. However, it does not have a specific focus on inclusion.

1.3 Strategic plans for implementing policy on ICT for inclusion

Schools have a lot of autonomy in making their own policies.

Inclusion and ICT is not a very prominent topic at the moment.

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

There is no data available from the perspective of inclusion, only data with a more general focus.

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

Stimulating accessibility.

1.6 Current issues in relation to ICT for Inclusion

Accessibility.

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

No information is available on this issue.

2. Country Practice

This information was provided by Marco Zocca and Eric Veeleman (Curriculum Developers).

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

Due to the new legislation *Passend Onderwijs* (appropriate or tailor-made education), schools in the Netherlands have a duty to include children with special needs in compulsory school and offer them better education and care.

Teachers have to cope with a greater amount of children with differences in the classroom.

ICT is first of all of great help for teachers developing and monitoring individual lesson plans (please see the example of innovative practice for the Netherlands, STAP – a Tool to Arrange (educational) Plans).

Most of the schools in the Netherlands have a good working ICT infrastructure and good equipment and computer maintenance. The use of wireless solutions such as tablets and smartphone and cloud computing in the classroom is new. These solutions offer lower maintenance costs for schools and improved access to applications and data.

2.1 (ii) Access to appropriate ICTs as an entitlement

Accessibility is still a big issue. Although governmental organisations have to respect web guidelines (http://www.webrichtlijnen.nl/english) when they are developing websites, a lot of digital learning material is not accessible yet.

The Accessibility Foundation (http://www.accessibility.nl/english) helps organisations to improve the accessibility of the internet and other digital media for all people, including the elderly and people with disabilities. It also carries out monitoring and research.

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

The TPACK (Technological Pedagogical Content Knowledge) model is growing increasingly popular. This means that teachers are trained in finding a correct balance and using ICT in an appropriate way.

TPACK attempts to identify the nature of knowledge required by teachers for technology integration in their teaching, while addressing the complex, multi-faceted and situated nature of teacher knowledge. At the heart of the TPACK framework is the complex interplay of three primary forms of knowledge: Content Knowledge (CK), Pedagogical Knowledge (PK) and Technological Knowledge (TK). As must be clear, the TPACK framework builds on Shulman's idea of Pedagogical Content Knowledge.

Many organisations develop inspirational materials, such as how to use interactive whiteboards (http://www.slo.nl/primair/themas/digiborden), or offer (online) courses.

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

The promotion of ICT research in the field of special needs depends on individual initiatives like the Kinect project (please see the information provided as an example of innovative practice).

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

In 2010 the Accessibility Foundation performed research into the accessibility of (digital) resources for students with special needs in higher education.

A major part of the resources were not accessible, but the results of the research helped developers to improve their materials.

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

The Kennisnet Foundation is the biggest organisation in the Netherlands that supports primary and secondary schools in implementing ICT. Part of its efforts entails providing teachers with information about interesting new resources for special needs.

One of the bigger projects is Wikiwijs (www.wikiwijs.nl), a website were teachers can develop and share digital learning materials. It is potentially an interesting initiative, but no attention has been given to the content's accessibility.

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

Schools have funds for teacher training. Some universities offer post-graduate courses in special needs education for teachers. The TPACK approach (please see 2.1 iii) is not specially developed for ICT and inclusion.

There are also organisations specialised in a specific need, such as Bartiméus, which provides care, support, education and training for partially sighted or blind people. It performs research, trains teachers, gives support and offers experts who are specialised in ICT and this specific special need.

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

Teachers are connected to different online networks. They help each other and sometimes consult experts.
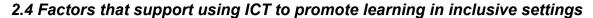
2.2 (iv) Important information sources about new developments, hardware and software products and ideas for using ICT to promote learning in inclusive settings

iPads, other tablets and smartphones are becoming increasingly popular. Other relevant topics include cloud computing, interactive whiteboards and games (please see the information provided regarding Kinect as an example of innovative practice).

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

A lot of learning materials are still not accessible for learners with special needs.

Teachers have to cope with greater demands, such as large classes, different learners, new technology, changes in pedagogical approaches, more paperwork, etc.

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

Better technology for every specific need.

Better communication that will facilitate working and learning together, not only in relation to children within the school but also children in other schools (global), teachers-teachers, teachers-experts, teachers-parents, etc.

Better learning materials will favour greater motivation amongst learners.

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

Improve accessibility of content.

Improve communication among teachers, experts, parents and learners.

More affordable new technology.