



INFORMATION AND COMMUNICATION TECHNOLOGY (ICT) FOR INCLUSION

Norway

1. Policy Frameworks

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

Equity in Education

The overall objective of the Norwegian educational system is to provide all children and young people with education and training of a high standard, independent of gender and ethnic, religious, sexual, social, economic and geographical factors. Norwegian schools are based on the principle of equal and adapted education for all in an inclusive, unified school.

Learning is a lifelong process and the provision of education and training and ways of learning must be tailored to suit individual needs and individual development according to each learner's aptitude and ability. Everyone shall be seen both as an individual and as a member of the learning community.

Structure

In Norway, all public education in Norway is free – including upper secondary school – and all children are guaranteed and obliged to complete ten years of basic education from the age of six. After primary and lower secondary school, all pupils have the right to three years at upper secondary school and 92% of the student population enters upper secondary school. Adults over the age of 25 have the right to primary and secondary education and individuals have the right to have their non-formal and informal learning evaluated and documented as a means of qualifying for further education. Norway has national core curricula for primary, secondary, upper secondary and adult education and these are rather flexible, as they are adapted to local conditions and individual pupils. There are local exams in addition to the national written – and in some subjects, oral – exams.

The Norwegian Parliament and Government are responsible for developing the policy, defining the goals and deciding the budgets for education.

The Ministry of Education and Research is responsible for implementing national educational policy. National standards are ensured through legislation, regulations and national curricula. On behalf of the Government, the Ministry issues a yearly letter of tasks to all the agencies involved, such as higher education bodies and the Norwegian Directorate for Education and Training. The Ministry directly manages the tertiary education institutions.

The Directorate for Education and Training is a subordinate agency of the Ministry and is responsible for the development of Norwegian kindergartens and schools. Its main tasks include administration, supervision, analysis, documentation and quality assessment and development in kindergarten (age 1–5), primary (grades 1–10) and secondary education (grades 11–13). It is also in charge of the national resource centres and the national resource centre for special educational needs.



The County Governor's Department of Education is a link between local authorities, the Ministry and the Directorate on educational issues.

Municipal authorities manage compulsory education (grades 1–10).

County authorities are responsible for upper secondary education (grades 11–13).

Aims

The Government aims for Norwegian schools to be pioneers at global level in the use of ICT in teaching and learning and aims to ensure that everyone has the means and motivation to acquire the necessary skills for making optimal use of technology and new services. The Government wishes to use ICT actively to reduce inequalities in society. A successful digital inclusion policy is based on three main pillars:

1. access to the internet, equipment and content;
2. universally-designed solutions;
3. digital skills.

Based on these, the Government has identified the need to:

- ensure the whole of Norway has access to broadband internet;
- target universally-designed technology;
- strengthen the commitment to digital skills in the population;
- intensify ICT commitments in education.

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.

In Norway, computer literacy is implemented in the national curriculum as a basic skill. In order to facilitate the process of developing and revising the national subject-specific curricula, Norway developed the reference document *Framework for the Five Basic Skills*, namely orals skills, reading, writing, numeracy and use of digital tools. This document defines the five basic skills mentioned, describing their functions at different levels covering compulsory and secondary education.

1.2 (ii) Access to appropriate ICTs as an entitlement

It is the duty of the school owners (municipality or county) to provide the equipment students need. The right to the necessary equipment in training is irrespective of the municipality or county's economy. As school owners, the municipality and the county are obliged to find the teaching aids needed. Parents and guardians may appeal to the County Governor if they believe that school owners are not complying with the law.

If someone suffers from an injury or illness, assistive technology centres in every county provide help with assistive aids, interpreting services and ergonomic measures.

Applicants can apply for benefits from the Norwegian Labour and Welfare Organisation (NAV) local labour and welfare offices, for customised computer aids following specific guidelines established by the Directorate for Labour and Welfare.

Laws and regulations. National Insurance Act of 28 February 1997, No. 19, retrieved on 3 April 2012 from Lovdata.no.

Regulations relating to aids, etc. (1997). Regulations relating to technical aids to improve functioning in the workplace and in daily life and to the modification of machines at work. Established by the Ministry of Health and Social Affairs (now the Ministry of Labour and



Social Affairs) on 15 April 1997 with the Act of 28 February 1997 No. 19 relating to social security. Retrieved on 31 July 2012 from Lovdata.no.

Some devices may be covered by social security, as per sections 10-6 and 10-7 of the Insurance Act (1997).

Section 10-6 deals with allowances for the improvement of functioning in daily life. It states that once a member's ability to function in daily life has been substantially and permanently impaired due to illness, injury or disability, they are paid benefits under section 10-7. This benefit is provided in connection with the measures necessary and appropriate to improve the member's ability to function in daily life or the care that they should be accustomed to receiving at home.

Furthermore, in relation to benefit forms, section 10-7 states that a member who meets the conditions of section 10-5 or section 10-6 may receive compensation in the form of lending, grants or loans for aids, including school aids, with the exception of teaching materials.

On its website, the NAV (2011) states the following about equipment for training, stimulation, play and sport:

Children and young people under 26 can get equipment for training and stimulation in order to maintain and/or improve motor and cognitive abilities. The premise is that their functioning is permanently and substantially impaired. Aids for play and sport must be necessary and appropriate for normal activity and development. Emphasis is placed on the individual's particular needs.

If someone needs an aid, they can contact the health services in the municipality. When an aid is granted, they must receive systematic training in how and in which situations the aid can be used.

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

Statped

Statped (the National Support System for Special Needs Education) is managed by the Norwegian Directorate for Education and Training. Norwegian pupils are entitled to teaching that is as specially adapted as possible. Insofar as possible and advisable, this should take place in the local mainstream school. In many cases, schools and local authorities will require guidance and competence. Statped assists local authorities in this work and provides special teaching services at individual and system level in areas in which the country's 430 local authorities do not have sufficient competence. Statped can offer part-time courses for pupils and for the parents and guardians of deaf, blind and deaf-blind children and pupils needing alternative, supplementary communication. Other teaching will take place at the school in the pupil's own local authority area, but with individual adaptation.

Assistive Technology Centre

Pupils or students with special requirements are entitled to individually adapted tuition (Education Act, Chapter 5, Section 5-1). Assistive aids (such as a computer) may be a necessary part of the tuition process. When tuition depends on assistive aids, co-operation will be required between the educational institution and the Assistive Technology Centre. The local authorities are responsible for their citizens' health and rehabilitation. Providing assistive aids is part of this responsibility. When the local authorities do not have sufficient expertise, they have to enlist the help of specialist services at higher levels. The Assistive Technology Centres are resource centres serving the whole county in the field of assistive aids. They know how assistive aids, sign language interpreters and ergonomic assistance



can compensate for or alleviate loss of functions. The Assistive Technology Centres provide advice and guidance to the local authorities and to other partners in the county. They also organise and carry out courses for the municipal service and other partners; distribute information about the Centres' activities and area of work; provide information about national and local ranges of assistive aids; collect, systemise and document experience; develop methodology; and take a proactive approach to development work.

The Norwegian Centre for ICT in Education

The centre itself does not train teachers in the use of ICT. However, it plays an important role in raising awareness and promoting the use of ICT in schools.

The purpose of the Norwegian Centre for ICT in Education is to contribute to the development and realisation of ICT policy. It co-operates with relevant public and private institutions and also participates in international co-operation. Its goals are to improve the quality of education and to improve learning outcomes and learning for children, pupils and students through the use of ICT in education.

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

The Norwegian Government regards ICT as an important factor for creating growth, jobs and new services. Practically all of the Norwegian population is online. Norway still needs to educate enough people with high-level and relevant ICT skills. Norway has to ensure that the young generation wishes to study technology-related academic fields and has to inspire them to do so as early as in kindergarten. People in other fields besides the traditional 'tech environments', such as health workers and the police force, must also have the skills and knowledge that will allow them to utilise ICT in their fields. The ICT policy's scope extends across different sectors of society, and the Ministry of Government Administration, Reform and Church Affairs is responsible for co-ordinating the policy.

Please also see 2.1 (iv) in the 'Country Practice' section.

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

Norway does not collect or monitor data on the use of ICT in inclusion.

1.3 Strategic plans for implementing policy on ICT for inclusion

Norway does not currently have any formal governmental ICT strategy. As school owners, it is the municipality and county's task to ensure the use of ICT in education for all. To ensure this, the Government established a centre for ICT.

- The Centre for ICT in Education was established on 1 January 2010 and works actively to ensure that ICT contributes to improved quality of education, enhanced learning outcomes and improved learning strategies for children, pupils and students. This involves helping the education sector to better exploit ICT's potential for education, learning and innovation through a comprehensive approach to ICT in schools. The centre also collects and makes available information on education and employment and provides support in education and career choices.
- KS, which is the employer and interest organisation for all municipalities and counties in Norway, has placed regional and local ICT policy on the agenda with the action plan *IKT og grunnopplæringen 2008–2012 – lokal digital agenda i skolen* ('ICT and basic education 2008–2012 – Local digital agenda in schools'). See: http://www.ks.no/PageFiles/20836/IKT_grunnopplaering_2008_2012_rev_des_2010.pdf

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KS has chosen to develop its own sub-strategy for ICT in basic education as part of eKommune 2012, which is co-ordinated with the KS term strategies for the period 2008 to 2012. Strategies are also based on KS's political platform, *Knowledge for upcoming generations*. The target groups for this sub-strategy are primarily local and regional authorities as school owners, and both politicians and the administration, but the strategy also targets the management of each school. It will be a useful tool in efforts to achieve national and local educational objectives. KS highlights four priority areas where it is important to have a strategic plan if the introduction and educational use of ICT in basic education is to succeed:


- School owners and school leadership must have the necessary knowledge of strategic IT management.
- Teachers must have the necessary skills to use ICT in their subjects.
- Teachers must have access to digital learning resources of sufficient quality.
- Digital tools must be used in assessment.

This development is partly due to earlier work described in several plans and reports:

- The Committee for Quality in Primary and Secondary Education in Norway. [Brosjyre/Veiledning, Ministry of Education and Research, 04/06/2003]. The Committee for Quality in Primary and Secondary Education in Norway was appointed by Royal Resolution on 5 October 2001. The Committee submitted its main report to the Minister of Education on 5 June 2003. The Committee uses the concept 'overall competence' about the learning achieved by pupils and apprentices. Overall competence is expressed by the Education Act and the General Part of the National Curriculum as foundational competence, which comprises reading and writing skills and arithmetic and numeracy skills; English skills; digital competence; learning strategies and motivation (effort and stamina); and social competence.
- Social Security Administration and the Ministry of Education and Research (2001). Dissemination of ICT facilities in schools, education and research (2003).

The 2003 report *School for digital competence* assesses the need for broadband in basic education using educational criteria. The Norwegian Government wishes to point out that the aim of improved PC coverage and broadband in elementary schools still stands. The differences between schools and municipalities are still too great.

- Report no. 30 to the Storting (2003–2004), abridged version (Brosjyre/Veiledning, Ministry of Education and Research, 26/04/2004). 'It requires changes in attitudes, but also knowledge, competence and opportunities for teachers in their daily work [...] and changes. This Report heralds comprehensive efforts regarding competence development in schools.'
- Report No. 20 (2004–2005) to the Storting, Commitment to Research. (White Paper, Ministry of Education and Research, 18/03/2005). The Programme for Digital Literacy was a national initiative on ICT for 2000 to 2003, which was followed by the Programme for Digital Competence.
- Programme for Digital Competence 2004–2008, with attachments. This programme's vision is digital competence for all. It has four priority areas: infrastructure; competence development; R&D and digital teaching resources; and curricula and working methods. See: <http://odin.dep.no/ufd/norsk/tema/satsingsomraade/ikt/045011-990066/dok-bu.html>

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- Ministry of Government Administration and Reform (2006). *An Information Society for All*. See: <http://odin.dep.no/fad/norsk/dok/regpubl/stmeld/071001-040005/dok-bn.html>

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

Sylvia Söderström compiled a report on diversity and inclusion, consisting of a pilot study on the use of ICT in the primary school day and children with disabilities. The main findings of this report were that parents, teachers and local mobility compound the school's lack of expertise in the use of ICT tools and that individual adaptation is one of the main barriers. The lack of competence is due to numerous factors, such as lack of time and resources, lack of leadership and interest and lack of preparation and knowledge.

Learning Management System (LMS) Report:

The Norwegian Association of the Blind, with funding from the Education Directorate, commissioned the Swedish firm Funka Nu to conduct research into universal design for digital learning platforms in Norwegian schools. The three most commonly used platforms in primary and secondary schools (Fronter, itslearning and PedIT) were rated by Funka Nu's experts. The LMS has also been tested by using primary school children with and without disabilities and their parents.

The Norwegian Association of the Blind, which commissioned the research, finds the results discouraging. It says that poor availability means that children who are initially struggling in school face barriers that make school life more difficult. This applies to children with visual impairments, but also children with dyslexia, mobility or cognitive disabilities.


The Centre for ICT in Education has been commissioned by the Ministry of Education to disseminate knowledge and encourage universal design of ICT in basic education. The Centre believes it is important that suppliers of learning platforms take the results of the report into account and show willingness to change their products and development processes.

As the purchasers of learning platforms, school owners have a responsibility and should demand that ICT solutions use universal design so that they can be used by as many people as possible.

The Norwegian Association of the Blind's LMS report can be found here: <https://www.blindforbundet.no/internett/nyheter/RapportLMSProsjekt2011>

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

- Reforms have provided all grades with new curricula with clearly stated competence objectives. The curriculum has emphasised basic skills in reading, in numeracy and in the use of digital tools. We have strengthened the commitment to digital skills among the population.
- Access to broadband internet, equipment and content has increased.
- Digital skills have increased both among teachers and pupils.
- There are more and better universally-designed solutions for pupils with special needs.
- The law underlining the rights of pupils who need alternative and technical aids.
- The establishment of the Centre for ICT in Education, even though inclusion is not its main task.

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- Prioritisation of universal design and ICT solutions in government funding to publishing houses and others that develop educational resources for the compulsory school system.

1.6 Current issues in relation to ICT for Inclusion

A central issue is that practising inclusive education is a demanding task. It is thus important that the Government organises teacher training so as to ensure that all teachers are properly equipped with pedagogical and ICT qualifications for adapting teaching to the individual learners' needs.

Another central issue involves pedagogical and assistive ICT resources being made available in the Norwegian languages and offered to users at a reasonable cost.

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

The Government will be increasing the focus on digital skills and making better provisions for disadvantaged groups such as elderly persons, minority groups and those outside of the labour market – groups which at present fall behind in access to electronic solutions. However, school pupils and people in employment will also need to build their digital skills through school and working life in order to become discerning media users. Broadband policy in Norway has been addressed by Report to the Storting no. 49 (2002–2003) – *Broadband for Knowledge and Growth*. Accordingly, in the government platform document (Soria Moria Declaration), the Government sets out its objective for all citizens of Norway to be offered a broadband internet connection by the end of 2007.

The Government has the objective of providing schools throughout Norway with reliable and satisfactory access to high-speed broadband. According to Statistics Norway (2012), 86% of households in Norway have broadband. There are 223,286 computers for 614,894 pupils in schools (Grunnskolen Informasjonssystem, 2012).

Inclusive education is a continuous process of adjustments and reforms to meet new needs due to changes in the environment. Norwegian schools are based on the principle of equal and adapted education for all in an inclusive, unified school. In Norway, computer literacy is implemented in the national curriculum as a basic skill, in line with mathematics, reading and writing. However, the way in which it is implemented in schools varies. Access to computers and the internet for all pupils and teachers and the use of digital learning resources also vary. There are differences in access both among municipalities and among lower secondary schools. Teachers' ICT skills are an important factor for quality in the use of ICT in the classroom, but they vary a lot.

2. Country Practice

This information was provided by Morten Dahl (Senior Advisor at the Norwegian Centre for ICT in Education).

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

Education is not an arena for rapid or frequent change and the use of ICT has not been a pedagogical game changer so far. However, the Monitor 2011 study, *The Digital State of Affairs in Norwegian Schools*, shows that the majority of Norwegian teachers of seventh and ninth grade agree that the use of ICT promotes reading, writing and collaboration.



More than 80% agree that the use of ICT facilitates differentiated education. ICT is being used in the classroom and it is perceived as useful in the pedagogical practice of teachers.

The Monitor series is published by the Norwegian Centre for ICT in Education.

Two-thirds of the teachers in the Monitor 2011 study use email for communication with both pupils and parents. There is a lot of teacher interest in using social media such as Facebook in education, but privacy issues still represent a barrier to widespread use.

In the middle of the last decade, there was a lot of interest in the use of electronic portfolios, both at policy level and in the classroom. Portfolios were promoted for both formative and summative assessment, but the use of portfolios in compulsory education has waned. The reason is probably that the e-portfolio as a concept partly overlapped with the functions of an LMS and most schools did not have the time or the competence to support two parallel systems.

There is often a gap between assessment and digital pedagogy. Pupils collaborate and search the internet for information all the time, except in their exams. There is a common agreement that today's education needs a broader repertoire of forms of assessment, but this is still a work in progress.

2.1 (ii) Access to appropriate ICTs as an entitlement

When talking about access to appropriate ICT, the most important development is the transition from proprietary software, often running on dedicated computers, to (net-based) web delivery of content, resources and functions. When using the web as the main platform for inclusive education, you can choose from a broad range of web browsers, some more adapted to special needs than others. However, most of them are hardware-independent and they will in time also appear on smartphones. The World Wide Web Consortium has well-known web content accessibility guidelines (WCAG) that are used to evaluate web content; please see the aforementioned report on LMS by Funka Nu.

Another important development is the drive towards 1:1 – that is, a computer for every pupil. Norway is still far from this goal: at present there are 3.11 pupils for each computer in compulsory education. However, for inclusion it is important that computers are personal tools, not shared resources. Some municipalities allow pupils to bring their own computers to school (Bring Your Own Device, or BYOD). While BYOD may speed up the transition to 1:1, it may at the same time exclude pupils from less affluent families.

The Norwegian Library of Talking Books and Braille (NLB) is a library for people who have problems reading printed text. The NLB produces and lends out electronic and braille books to people who are blind or visually impaired and others who have problems reading ordinary text because of dyslexia or other reading and writing difficulties. The NLB produces both recorded audio books and books with speech synthesis, all free of charge. The NLB also produces textbooks for students in colleges, universities and vocational schools. Blind and visually impaired students in Norway have the right to have the literature required for their studies produced in an accessible format. The English version of the NLB website is available at: <http://www.nlb.no/en/about-nlb/facts/facts-about-nlb/>

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

LærerIKT (2001–2005) was an initiative funded by the Department of Education. Over four years, 18,000 teachers participated in the programme, which gave participants basic knowledge of pedagogical use of ICT.

The next national project was *Lærende nettverk* (Learning network, 2004–2009), targeting schools rather than individuals and connecting schools to each other and to teacher



education institutions. The goal was to facilitate using ICT to harvest new knowledge and pedagogical results.

None of these projects had ICT as a tool for inclusion specifically on the agenda.

The Monitor 2011 study shows that ICT use by teachers of seventh and ninth grade has increased sharply since 2007, perhaps suggesting that most teachers are now comfortable with the general use of ICT. Monitor does not (yet) study changes in the use of ICT for inclusion.

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

Promotion of research, development and innovation on inclusive ICT based on a multi-stakeholder approach was the task of the IT Funk programme (ICT for people with disability) by the Research Council of Norway 1998–2012 (now closed). The programme funded research and innovation based on active user involvement and collaboration between end-users, developers (companies and academic institutions), other research communities and relevant public bodies, such as schools and special education centres. Projects targeted ICT accessibility for persons with specific impairments (e.g. visual, cognitive, mobility or hearing-related) and their results are relevant in many settings, including education. A description of the IT Funk programme and all projects funded since 1998 can be found at www.itfunk.org.

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

Skolementor.no is a free, net-based resource supporting school administrations in promoting digital competence, one of five main learning goals in Norwegian education. The system is developed and provided free of charge by the Centre for ICT in Education. Using a structured system for describing the use of ICT in the school, strong and weak points are identified and recommendations for improvements provided. In this way, Skolementor contributes to better understanding and planning of the school's policy and practice regarding ICT. Some municipalities have made use of the system compulsory, and school managers report that they find it very useful, inspiring, supportive and helpful in setting realistic goals for ICT use in their schools.

As mentioned earlier, the bi-annual Monitor series does not (yet) study changes in the use of ICT for inclusion.

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 voluntary network *Del og bruk* (Share and Use) for teachers, researchers, administrators, librarians and others interested in ICT in education, both in the classroom, on social media and in LMS. Over 9,500 members participate in 230 groups, including a group on the use of ICT for customised learning in basic education and beyond. The network's motto is 'Share, increase and use your digital competence – Together we are smarter'. See: <http://delogbruk.no/>

There is also a very active Facebook group called *Nettbrett i skulen* (Using tablets in school) with 384 members so far. Most participants are teachers and tablets used for inclusion is a prominent theme.



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

The Ministry of Education and Research lays down national curriculum regulations for individual courses. This includes teacher education in Norway.

On the basis of the curriculum regulations, the institutions develop curricula for compulsory and elective course modules. The curricula interpret and specify objectives and establish content, course literature, working methods and assessment arrangements for each subject. They also show the course's overall structure.

The national curricula for the compulsory part of the four-year teacher education mention ICT (briefly) and inclusion, but never in the same sentence. This dichotomy is often maintained when institutions develop curricula for teacher education. In the compulsory part of its teacher education, One university college has a course on digital competency, but inclusion is not targeted as a challenge or opportunity. The college also offers an optional course in special needs education, but this course curriculum does not include the words 'ICT' or 'digital'.

However, there are exceptions. One example is Vestfold University College, which offers a part-time course in adaptive learning with digital tools for teachers.

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

There is no data about the level of support to teachers working with ICT for inclusion. However, Monitor 2011 has some information about how teachers perceive the level of pedagogical and technical support they receive. The majority of seventh and ninth grade teachers express that they receive little or no pedagogical support for using ICT in the classroom.

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

Norwegian elementary and secondary schools are owned and operated by local authorities. The Norwegian Association of Local and Regional Authorities (KS) supports efforts regarding ICT in schools by providing advice to school owners and administrators. KS has developed a strategy 'ICT and basic education 2008–2012 – Local digital agenda in schools' as a tool for local politicians and administrators, as well as the head of each school, in their efforts to implement national goals regarding ICT as a basic skill.

Since late 2012, KS has offered its members free use of a system for implementing the national policy on ICT in compulsory education. The system was developed by the city of Drammen and describes operational goals, pedagogical software and videos, along with indicators and tests for evaluating the status of digital competence in the school. The system has two parts: one focuses on how to understand and teach digital skills to pupils at different grades (1–10) at www.iktplan.no, while the other system is a similar tool for entire schools, called www.digitaldømmekraft.no.

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

- There is little or no focus on ICT for inclusion in the compulsory part of teacher education programmes. As a result, most teachers are unaware of the great potential that ICT can have as a tool for inclusion, and some may even regard assistive technology as alien to teaching practice.
- Since compulsory education (including special needs education) is a local responsibility, user communities report that there are national differences in service



quality and access to supportive technologies. A national service level agreement or quality standard would help.

- Norway is a small market and Norwegian is only spoken by some five million people. As a result, many content resources and software packages are imported without the necessary localisation. National software and content development is expensive.

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

- New technological developments like tablets and smartphones are breaking down barriers of time and place, promising content delivery to users whenever and wherever they want it, and in the format of their choice. App development is driving down the cost of establishing new services.
- The market for digital resources is maturing, even in small countries like Norway. Content providers increasingly adhere to universal design principles.
- Digital competency among teachers, students and pupils is increasing, although we might wish for speedier progress.

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

The right to education and training is a universal entitlement in Norway, as is special education for pupils 'who either do not or are unable to benefit satisfactorily from ordinary teaching', (see the Norwegian Education Act at <http://www.regjeringen.no/en/doc/Laws/Acts/education-act.html?id=213315>).

The Anti-Discrimination and Accessibility Act came into force in 2008. Section 11 ('Requirement of universal design of information and communication technology') applies to technology and systems that are to be made available to the general public. In Proposition to the Odelsting No. 44 (2007–2008), it was stated that the duty should not apply to ICT solutions where the design is regulated by other legislation, and that the Education Act provides a general right to individual adaptation. The consequence of the preparatory works is therefore that the education sector is exempt from the Anti-Discrimination and Accessibility Act.

In an open consultation for a proposed provision regarding Section 11, many of the consultative bodies feared that citizens would be better protected under the Anti-Discrimination and Accessibility Act than pupils are under the Education Act.

Therefore the most important development with impact on ICT for inclusion might be that the education sector be included in Section 11 of the Anti-Discrimination and Accessibility Act. The Ministry of Education and Research is considering this as a possibility.