



INFORMATION AND COMMUNICATION TECHNOLOGY (ICT) FOR INCLUSION

Czech Republic

1. Policy Frameworks

This information was provided by Zuzana Kaprová (Special Needs Education Policy and Strategy Expert).

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

The Governmental Policy on Information Technology in Education for 2000–2006 (extended until 2010) is considered a very important step towards implementing ICT into the education system at national level. The 2000–2006 policy covered three areas:

1. to provide hardware (HW), software (SW) and internet access to all schools in the Czech Republic;
2. to provide ICT training/education to teachers; and
3. to establish the positions of ICT co-ordinators/consultants at school level.

The implementation was generally funded through the national budget, in the face of reduced resources.

The Governmental Policy on Information Technology in Education, together with curricular reform, have opened the door towards broader support of inclusion through ICT. ICT has become a regular subject within the Framework Educational Programmes, as well as a regular part of schools' strategic objectives and planning, including teaching methods and inclusion.

The follow-up governmental policy, 'Developmental Strategy on ICT in Education for 2009–2013' ('Strategy 2009–2013'), aims to upgrade and support access to ICT to all Czech schools.

The main goals of Strategy 2009–2013 with respect to each school's needs are:

- support of ICT technology equipment;
- support of SW equipment;
- support of communication (schools–school authorities–families);
- support of in-service teacher training;
- methodological support.

Strategy 2009–2013 outlined the main areas of ICT support in education: school development towards innovative practice, teacher training, digitalisation of textbooks, upgrading of technologies and SW development.

The Strategy's 'School for the 21st century' ('School 21') Action Plan reflects the goals and further development in education, as well as the global needs of the information society. The 'School 21' Action Plan entails promoting ICT in schools, including access to high-speed internet, digital technology and access to different information resources and quality in-service teacher training to contribute to quality education for all pupils.



Implementation of the Strategy and of the 'School 21' Action Plan is funded through European Social Fund (ESF) resources, through the national budget and through regional and local school authority resources.

In addition to funding implementation of the Strategy 2009–2013, the Ministry of Education is supporting schools through the specific developmental project on removing barriers to access to education for pupils with special needs through assistive and adapted technology and specific SW each year.

The 'Profile School 21' web portal (*Profil Škola 21*), <http://skola21.rvp.cz/> is an important evaluation tool developed by the National Institute for Education as part of the National Methodological Portal (www.rvp.cz).

The National Methodological Portal aims to support schools/teachers in implementing curricular reform in general. It provides a virtual space for sharing educational materials, texts, ideas, expert discussion, online teacher training courses, etc.

The 'Profile School 21' portal itself is geared towards allowing individual schools to self-assess their implementation of ICT into school practice for the 21st century, planning for its further development. It is based on different indicators monitoring the level of implementation of ICT into the educational process (management and planning, ICT in the educational process, professional development, integration of ICT into school life, ICT infrastructure).

Policy design for access to education requires that each part of the education process be adapted to meet the needs of students with special needs. ICT is one of the key tools in inclusive classroom practice. Students with special needs are entitled to specific adaptation of assessment, including the use of appropriate ICT and other assistive technology.

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.

Systemic support of schools/teachers has been provided through the outcome of the specific project financed by the ESF (Methodology II – 2009–2011). The outcome of this project – the National Methodological Portal for teachers (www.rvp.cz) – assists teachers in implementing curricular reform and developing their teaching skills, including teaching-for-inclusion skills.

This portal's follow-up activities are funded by the national budget.

Another important project scheme, the Education for Competitiveness Operational Programme (ECOP), has been designed to support teachers' competences and innovative practice of schools, including inclusive practice and access to ICT and teacher training in this area.

A special initiative under ECOP – EU Money to Schools 2010–2012 (www.penizeskolam.cz) – supported a broad range of innovative school practice, including ICT literacy support, support of inclusive school practice, access to and application of ICT in all teaching subjects, and teacher training.

There are specific projects financed by European money – e.g. the 'Support Centres for Inclusive Education' project – that provide a broad range of support to schools, including consultancy in the field of ICT and its support of inclusion of pupils with special needs.



Additional specific funding and national resources allocation allow for the provision of ICT (HW, SW, adaptive and assistive technology), which supports access to education for students with special needs, at any phase of the education process.

Education and training of teachers to develop their ICT skills for inclusive education is offered and supported by the national budget funding support.

1.2 (ii) Access to appropriate ICTs as an entitlement

The entitlement to access to ICT as a tool for equalising education conditions for students with special needs is enshrined in the Education Act (Act No. 561/2004 and its amendments).

Using ICT to remove barriers to education for students with special educational needs (SEN) has been promoted and funded by European money and public national budget and other public money.

Additional national budget resources from the Ministry of Education are secured to support access to education for students with SEN. This programme enables schools to upgrade ICT equipment, including HW and SW, teaching programmes, adapted technology, etc. each year.

Specific projects using ESF resources within the area of education are undertaken.

Special educational centres working as consultancy and support-to-inclusion educational institutions should also provide information to schools on specific ICT that is needed to support access to education for students with SEN.

Students with special needs use specific ICT (including iPads) in class.

Using ICT at schools and support of information literacy rank among the priorities of the curricular reform. ICT is a part of the Framework Educational Programme (www.rvp.cz), not just as one of the subjects but also as a tool for developing the school environment and culture.

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

Initial teacher training (at university level) includes compulsory ICT training. Specialists from the special education consultancy centres and/or support centres for inclusive education instruct teachers on how to operate and use specific technology for students with special needs.

In-service teacher training (including training for teachers, ICT teachers and ICT school co-ordinators) is systematically funded by the national budget through Ministry of Education-approved courses.

A wide range of lifelong learning courses, e-learning courses and web portals targeted at ICT literacy are available, as well as specific courses/portals for people with special needs. Teachers' needs in this area are monitored regularly in order to meet these needs.

NGOs, organisations operated by the Ministry of Education, universities, educational companies and specialised professional organisations, such as the Union of School IT Professionals – *Jednota školských informatiků* (www.jsi.cz), contribute to increasing the professional development of ICT specialists/teachers, in addition to administering targeted monitoring and providing recommendations to policy-makers.



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

NGOs, professional organisations and universities contribute to increasing the professional development of ICT and specialists/teachers skills and knowledge. They administer targeted monitoring and provide recommendations to policy-makers.

The 'Profile School 21' specific programme offers schools a mean of evaluating their ICT implementation, in addition to an educational platform. The data is collected and is used by each school and by the Ministry of Education as a source of knowledge for future changes and development at school and/or national level.

The Helpnet.cz web portal (www.helpnet.cz) provides a wide range of information and networking, sharing examples of good practice and innovative SW in education and in support of people with special needs.

The I-SEN platform (www.iSEN.cz) is a platform for exchanging experience and good practice in iPad and iPod Touch application in education, with special focus on access to education and the inclusion of pupils with special needs.

The Czech Republic is participating in the European Schoolnet activities.

There are number of conferences covering the ICT area organised by universities/colleges, schools and/or other companies. The 2013 INSPO (internet and information systems for people with special needs) conference was held in Prague as a platform for presenting the latest ICT developments in the respective area.

In-service teacher training (including training for teachers-ICT school co-ordinators) is funded by the national budget through Ministry of Education-approved courses reflecting the latest development and concept of ICT implementation into education.

Initial teacher training (at university level) includes compulsory ICT training.

Specialists from the special education consultancy centres provide instructions on how to operate and use specific technology for students with special needs and their teachers, in line with the latest developments.

A wide range of lifelong learning courses is available, including specific courses for people with special needs and professionals working in the respective area. The courses are organised by different institutions, including NGOs working in the area of support for people with special needs, as well as private sector companies working in the ICT field.

The 'Profile School 21' web portal provides a platform for sharing and developing good practice and knowledge-based approaches, including e-learning ICT courses.

ICT school co-ordinators play an important role in directing, guiding, advising and sharing the latest information and development in the respective area.

The Czech Republic is participating in the International Computer and Information Literacy Study survey (ICILS, www.icils.cz).

The data collected from all sources is evaluated and used to draft recommendations.

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

Data collection and monitoring are currently the standard task of the Czech School Inspection within the thematic studies (www.csicr.cz).

Eurostat and European Schoolnet projects provide relevant data.

'Profile School 21' provides data on ICT in schools.



The data collected is evaluated and used to draft recommendations and plan follow-up actions.

1.3 Strategic plans for implementing policy on ICT for inclusion

Inclusive education and the entitlement to use ICT are enshrined in the Education Act. There is national support for promoting the use of ICT for inclusion – additional funding through the national budget and/or ESF money is operated by the Ministry of Education to support the development of ICT generally and specifically for inclusive education of pupils with special needs.

Implementation of the ‘Strategy 2010–2013’ and its Action Plan will contribute to promoting ICT accessibility and access to education for students with special needs.

A grant initiative funded by the ESF supports schools in developing specific teaching materials and SW to promote access to education for pupils with special needs. These materials are available from the national repository of digital learning resources (www.dum.rvp.cz).

Schools are absolutely autonomous in their ICT for inclusion policy decisions. The special pedagogical consultancy centres make recommendations to mainstream schools regarding assistive technology for pupils with SEN. Additional funding is available through targeted developmental projects (Ministry of Education, regional school authorities and other institutions, including international ones).

The special educational centres provide advice and guidance and may offer mainstream schools free loans of specific technology, in addition to advice and guidance to support the inclusion of pupils with SEN.

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

Monitoring and evaluation is a regular part of the Czech School Inspection’s activities, including monitoring and evaluation of the ICT policy within the thematic studies (www.csicr.cz).

The Ministry of Education is monitoring the situation of ICT for inclusion equipment in order to review the focus of the developmental programmes for schools.

In-service training for teachers, including ICT teaching specialists, is monitored by the Ministry of Education through the National Institute for Education (www.nuv.cz) and through the National Institute for Future Education (www.nidv.cz) and the broad range of courses on offer focusing on ICT and inclusive education is being updated.

The ‘Profile School 21’ evaluation tool provides relevant data on the implementation of ICT policy into practice.

The data collected is evaluated and used to draft recommendations and plan follow-up actions.

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

Please see Section 1.1:

- The Governmental Policy on Information Technology in Education for 2000–2006;
- Developmental Strategy on ICT in Education for 2009–2013 (‘Strategy 2009–2013’);
- Entitlement to access to assistive technology enshrined in the Education Act;



- Access to internet;
- ICT as part of the national curricula;
- ICT as part of daily school practice;
- Development of ICT school co-ordinators;
- In-service teacher training;
- Funding of resources to promote ICT equipment in schools;
- Funding of specific HW, SW, teaching material, digital textbooks development, etc.;
- ICT including iPads and iPods in school programmes;
- Specific web portals.

1.6 Current issues in relation to ICT for Inclusion

The 'Developmental Strategy on ICT in Education for 2009–2013' ('Strategy 2009–2013') was approved, as was its Action Plan. Unfortunately, the financial situation means that not all the proposed broad-minded goals have been put into practice at the planned level. Adapted provisions have been designed to effectively fulfil the goals, using fewer and more modest resources.

Some of the issues currently being discussed include:

- Upgrading of ICT in schools is an on-going process and should be given permanent governmental support as a priority.
- Teachers should be given effective, flexible and easy-to-reach support and be motivated to carry out effective and professional use of ICT.
- ICT is mentioned in the Draft of the new Strategy for Education 2020 ICT.

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

- Schools have general access to internet;
- On-going support to equip schools with ICT;
- ICT assisting students with special needs;
- Development of specific SW and adapted HW;
- Networking;
- Access to specific portals;
- A tool for schools to evaluate ICT implementation;
- Focus on 'safe' ICT.

2. Country Practice

This information was provided by Daniela Růžicková (Expert), Petr Naske (Teacher, President of the Union of School IT Professionals – *Jednota školských informatiků*) and Zuzana Kaprová (Special Needs Education Policy and Strategy Expert).



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

In October 2010, the online tool Profile School 21 was launched – <http://skola21.rvp.cz/> – on the educational web portal Methodological Portal for the Framework Education Programme for Compulsory Education (*Metodický Portál RVP*) of the Ministry of Education, run by the National Institute for Education. Schools can use this tool to implement and integrate ICT into school practice. The tool allows schools to monitor and plan further development of ICT in five important areas:

- Management and planning;
- ICT within the school educational programme;
- Professional development;
- Integration of ICT into school practice; and
- ICT infrastructure.

There are 29 indicators, two of which focus on using ICT to support students with special needs.

The structure and description of the indicators, as well as links to relevant articles, are seen as the most important and useful tool for helping school management and ICT school co-ordinators to understand the ICT school concept at holistic level. Profile School 21 is an important tool in strategic ICT school development. Each indicator consists of four phases in the school's development – *Starting together, First experience, Gaining self-confidence, An example of good practice for others* – which help the schools to find their level of development and determine the direction for future development.

The profile is constantly updated by the National Institute for Education.

This tool is currently used by over 1,000 schools.

2.1 (ii) Access to appropriate ICTs as an entitlement

Please see answer in Section 1.

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

In addition to the answer provided in Section 1, the direct exchange of experience among teachers can be seen as an example of good practice in this field.

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

Additional resources (national, business-based and private) have been allocated to support development in this area. SW products developed by teachers and parents are also available.

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

Please see answer in Section 1.



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

Support from the Ministry of Education is delivered through the National Institute for Education by means of the educational portal RVP.cz (<http://rvp.cz/>).

This internet tool allows directors, experts, ICT co-ordinators and teachers at all types of schools in the Czech Republic (kindergartens, compulsory school level, secondary school level, higher education level, basic art schools, language schools) to share their experiences. It also offers information on how to develop the school educational programme, how to support inclusion and how to support innovative practice and teach different subjects. It provides guidance and inspiration for professional development, development of pupil/teacher key competences and their assessment, as well as other useful information (articles, digital tools and learning materials, wiki, digifolio, discussions, blogs, e-learning, etc.)

Another of this tool's main purposes is to serve as a useful platform for sharing experiences with other colleagues, offering comments and feedback on different articles, materials, etc.

The participating institutions include appointed schools, organisations run by the Ministry of Education, NGOs and other institutions working in the field of education.

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

Please see answer in Section 1.

The universities in the Czech Republic are highly autonomous, but following the implementation of the new curricula strategy and national educational programmes, ICT and inclusive education have become a standard part of initial teacher training.

Teachers can also ask for advice/guidance/training at particular university centres working in the field of inclusion for students with special needs, e.g. Teiresias Centre at Masaryk University, Tereza Centre in Prague.

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

There are tools which are designed to support teachers/schools in effective use of ICT for inclusion.

The position of ICT consultants/co-ordinators has been established in schools. Teachers can ask for support directly. Generally, the role of ICT co-ordinators is to support ICT implementation within the education process and classroom practice:

- The role of specialised teachers and their positions and responsibilities at schools must also be underpinned, through ICT co-ordinators, other competent teachers, consultants who have undertaken the specialised in-service training, special teachers, psychologists, etc.
- Schools' co-operation with external professionals from pedagogical and psychological consultancy institutions and NGOs working with people with SEN.
- Teamwork and experience sharing in everyday school practice.
- The DUM module is available on the RVP.cz methodological portal, consisting of a repository of OERs (Open Educational Resources), which are user-generated,



reviewed digital learning materials, published under a Creative Commons licence (CC BY-NC-SA 3.0).

This is one of the most commonly used modules for supporting inclusive education.

Guidance is provided by system consultancy institutions and consultancy from NGOs is also available, but greater teacher support and an effective network are needed.

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

Please see answer in Section 1;

- www.rvp.cz
- www.helpnet.cz
- conferences, seminars, professional organisations' web pages.

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

Please see Section 1.

Also:

- Directors/teachers are often reluctant. However, there are opportunities/resources that can be used effectively in this field.
- A clear governmental follow-up policy is needed.
- An effective financing model is needed.

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

There is systemic support for school directors and their approach. Access to resources has a major influence on the school environment and strategic planning in this field.

- motivation and methodical support for teachers: developing teachers' competences and self-confidence;
- infrastructure investments; availability of resources;
- teachers directly sharing positive experiences – effective networking;
- teamwork;
- peer-to-peer activities among students;
- community/regional-based support and networking among schools and ICT companies.

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

Please see Section 1 – enhanced governmental focus and support would be appreciated.