E Schools

The ICT infrastructure of the educational system is an issue of understanding the technological conditions and development under which new ways of working and learning can emerge. ICT infrastructure is regarded here as a hardware, e.g. PC's, servers, etc., the physical networks that connect the computers locally and globally (LAN, the Internet etc.) and content (educational software and platforms for networking). The ability to access and use computers and the Internet is seen as a most important enabler in the development of a digitally literate population. There is a significant role of schools (educational system) very often at very beginning in the process of creating e-skills within population.

The data on ICT in schools in Czech republic come from Institute for Information on Education.

Data for international comparison come from survey of the European Commission "Benchmarking Access and Use of ICT in European Schools".

The data on use of the ICT by individuals related to education come from an annual survey of the Czech Statistical Office on ICT usage in Czech households and by individuals. Eurostat database was used as a data source for an international comparison.

Note:

Total numbers of computers per 100 learners/students are lower than numbers of computers in several stages of education. The reason is, that in many school buildings reside two or more stages. Computers are often available for all students and also counted more than once. But to average of all school stages are these computers counted only once.

Definitions:

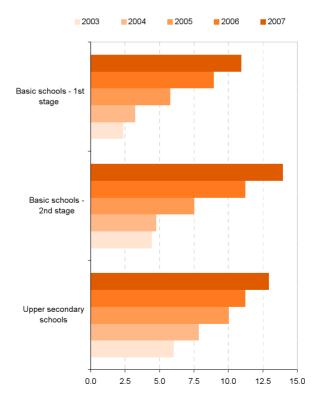
- Primary (basic schools 1st stage) 1st to 5th grades; ISCED 1
- Lower secondary (basic schools 2nd stage) 6th to 9th grades and lower grades of 6-8-year grammar schools; ISCED 2
- Upper secondary schools ISCED 3 and ISCED 4
- Higher professionals schools, non tertiary ISCED 5B
- Broadband ADSL, Cable TV, wireless and other types of access with speed connection 256 kb/s and more

Table E1 Number of computers per 100 sudents at schools

number of computers per 100 sudents

| | 2005 | 2006 | 2007 |
|---|------|------|------|
| Total number of PCs, all schools | 8.7 | 9.8 | 11.0 |
| Primary (basic schools - 1st stage) | 11.5 | 12.7 | 14.2 |
| Lower secondary (basic schools - 2nd stage) | 12.3 | 14.2 | 16.3 |
| Upper secondary schools | 12.8 | 13.0 | 14.4 |
| Higher professionals schools, non tertiary | 30.0 | 34.9 | 36.1 |
| PCs with internet access, all schools | 7.4 | 8.7 | 10.0 |
| Primary (basic schools - 1st stage) | 9.1 | 10.7 | 12.4 |
| Lower secondary (basic schools - 2nd stage) | 10.8 | 12.9 | 15.2 |
| Upper secondary schools | 11.4 | 12.0 | 13.5 |
| Higher professionals schools, non tertiary | 27.4 | 32.8 | 33.1 |
| PCs with broadband access, all schools | 5.6 | 7.7 | 9.2 |
| Primary (basic schools - 1st stage) | 5.7 | 8.9 | 10.9 |
| Lower secondary (basic schools - 2nd stage) | 7.5 | 11.2 | 13.9 |
| Upper secondary schools | 10.0 | 11.2 | 12.9 |
| Higher professionals schools, non tertiary | 25.6 | 31.7 | 32.7 |

Figure E1 Number of computers with a broadband connection per 100 students by type of school



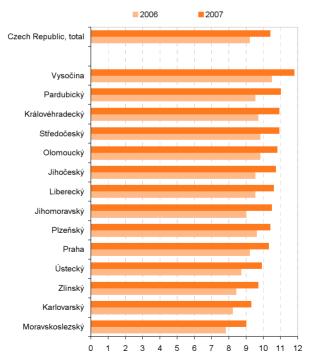
Source: Institute for Information on Education

Table E2 Number of computers per 100 pupils at primary schools by regions, 2007

Number of PCs per 100 students in given region

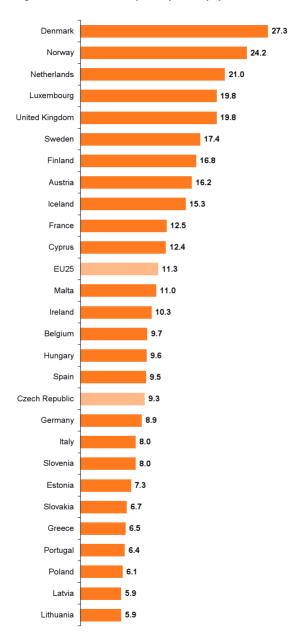
| Number of 1 Cs per 100 students in given region | | | | | | |
|---|-----------|----------------------|-----------------------------|--|--|--|
| | AII (16+) | with Internet access | with broadband access | | | |
| AII (16+) | 10.4 | 9.2 | 8.3 | | | |
| Praha | 10.3 | 9.6 | 9.0 | | | |
| Středočeský | 10.9 | 9.6 | 8.3 | | | |
| Jihočeský | 10.7 | 9.4 | 8.4 | | | |
| Plzeňský | 10.4 | 9.0 | 7.8 | | | |
| Karlovarský | 9.3 | 8.8 | 7.9 | | | |
| Ústecký | 9.9 | 8.7 | 7.9 | | | |
| Liberecký | 10.6 | 9.5 | 8.5 | | | |
| Královéhradecký | 10.9 | 9.7 | 8.6 | | | |
| Pardubický | 11.0 | 9.8 | 8.5 | | | |
| Vysočina | 11.8 | 10.5 | 9.5 | | | |
| Jihomoravský | 10.5 | 9.3 | 8.5 | | | |
| Olomoucký | 10.8 | 9.6 | 8.4 | | | |
| Zlínský | 9.7 | 8.9 | 8.1 | | | |
| Moravskoslezský | 9.0 | 7.9 | 7.1 | | | |

Figure E2 Number of computers per 100 pupils at primary schools in each Czech region (NUTS 3)



Source: Institute for Information on Education

Figure E3 Number of computers per 100 pupils/students, 2006



Source: EC, Benchmarking Access and Use of ICT in European Schools

Denmark 95% Estonia 95% Malta 95% Netherlands 92% 92% Iceland Finland 90% Norway 89% 89% Sweden Slovenia 85% Spain 81% Hungary 77% Luxembourg 77% United Kingdom 75% France 75% Belgium 74% 73% Portugal Italy 69% Austria 68% Latvia 67% EU25 67% 66% Ireland Germany 63% Czech Republic 63% 40% Slovakia Lithuania 33% Cyprus 31% 28% Poland 13% Greece

Figure E4 Schools with a broadband connection, 2006

Includes: Primary, Secondary and Higher professionals schools (non tertiary)

Source: EC, Benchmarking Access and Use of ICT in European Schools

Table E3 Use of selected ICT by students aged 16 and over

| | | | % |
|--|------|------|------|
| | 2004 | 2006 | 2007 |
| mobile phone | n.a. | 97.8 | 98.1 |
| personal computer | 93.9 | 96.9 | 97.3 |
| place of computer use | | | |
| home | 65.0 | 73.7 | 76.2 |
| school | 86.8 | 89.3 | 91.2 |
| another person's home | n.a. | 27.9 | 26.4 |
| other | n.a. | 12.3 | 9.7 |
| frequency of computer use | | | |
| every day or almost every day | 43.0 | 57.7 | 65.8 |
| at least once a week but not every day | 42.6 | 33.3 | 26.5 |
| less than once a week | 8.3 | 5.8 | 5.1 |
| Internet | 80.9 | 92.8 | 93.0 |
| place of internet use | | | |
| home | 44.5 | 59.6 | 64.4 |
| school | 70.7 | 80.1 | 84.3 |
| another person's home | n.a. | 31.3 | 30.0 |
| other | n.a. | 15.1 | 11.4 |
| frequency of internet use | | | |
| every day or almost every day | 20.0 | 40.1 | 51.8 |
| at least once a week but not every day | 44.1 | 40.3 | 35.2 |
| less than once a week | 16.8 | 12.5 | 6.0 |

as a percentage of all students aged 16 years and over

Figure E5 Place of computer use by computer users - students aged 16 and over, 2007

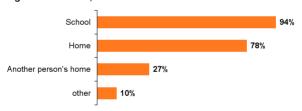
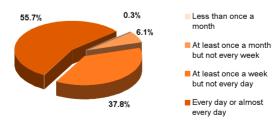


Figure E6 Frequency of internet use by internet users - students aged 16 and over, 2007



as a percentage of students (PC/Internet users) aged 16 years and over

Figure E7 Students aged 16 and over using internet at school, 2007

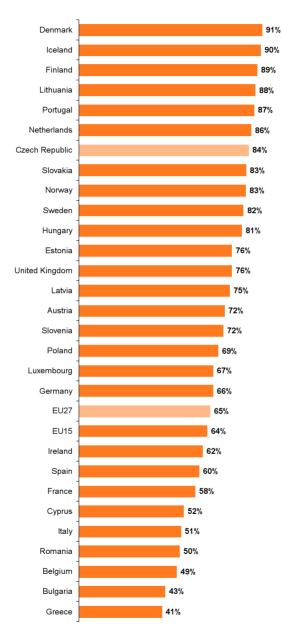


Figure E8 Teachers using computer in class, 2006

