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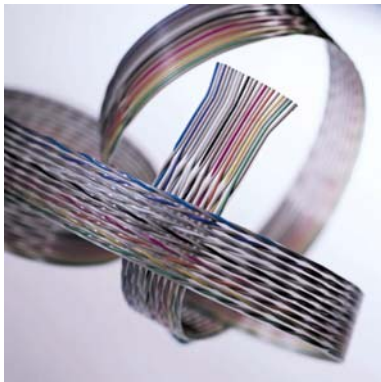


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Benchmarking Access and Use of ICT in European Schools 2006

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1 Executive Summary and Conclusion

The use of computers in European schools has reached almost the 100% saturation point in all member states, with hardly any deviations across school types.

However, there are large variations in the number of computers per 100 pupils. The clear European leaders are Denmark (27 computers per 100 pupils, 26 of which are connected to the internet), Norway (24 computers per 100 pupils / 23 internet connected), the Netherlands (21/20) and the UK (20/19) and Luxembourg (20/18). The figures in these countries are significantly higher than the European average of 11 computers per 100 pupils (of which 10 are internet computers). Almost all new member states belong to the group of laggards which include countries such as Latvia, Lithuania, and Poland; however Portugal and Greece also find themselves in this group of countries, with 100 pupils having to share only 6 computers.

In several European countries there still is an ICT catch-up process necessary in schools. This relates to three aspects: firstly, the necessary increase in the number of computers shared between 100 pupils; secondly, the improvement of the type of internet access with the move to a broadband connection; thirdly, the use of ICT for education in classrooms.

The level of ICT equipment in schools in Europe varies according to school type with an average of 9 computers per 100 pupils in primary schools (8 of which are internet connected) at the bottom end and 16 (14 internet) computers per 100 pupils in vocational schools at the top. Vocational schools are almost twice as well equipped with computers as primary schools. Only in three European countries – Germany, Luxembourg and Malta – are primary schools better equipped with ICT in terms of number of computers per 100 pupils. This may be an indication of a specific strategy to focus more on primary schools when it comes to the familiarisation of pupils with ICT.

The differences observable in the number of computers per 100 pupils by school types may point to the current focus of ICT investments in schools, which in most European countries seems to be on upper level schools where more attention and investment are placed. ICT investments in primary schools are probably not (yet) seen as the top political objective at which to aim, with few exceptions.

More than 80% of schools using computers use them in classrooms in the United Kingdom, Slovenia, the Netherlands, Cyprus, Ireland, Luxembourg, Sweden, Norway and Portugal. By contrast, in Greece, Hungary and Slovakia the figure is a very low 20%. This is less than a third – in some cases even only slightly more than a quarter – of the European average usage figure (61%).

Almost all European schools have internet access. In most countries the penetration rate is slightly below or at 100%, in no country is it below 90%, and the European average is 96%.

Again, the likelihood of school computers having internet access rises with the school level, i.e. it is lowest in primary schools and by far the lowest in Latvia (58%) followed by Hungary (61%), Lithuania (69%) and surprisingly also Austria (71%). These figures compare to a European average of 88% in primary schools. In some countries the figure is 100% or approaching it. The European average is highest in upper secondary level schools where it reaches a very high 96%.

The picture changes significantly when looking at the type of internet access and thereby considering only those schools with broadband access. Here again the Nordic countries, the Netherlands and Estonia and Malta from the new member states show top rates, with figures above 90%. In stark contrast is Greece, where just 13% of the schools have broadband internet access. Poland, Cyprus, Lithuania and Slovakia also show low figures ranging between 28% and 40% which are significantly below the European average of 67%.

The most popular broadband connection is DSL, followed by other connections, mainly a special cable modem using the television cable. There are noticeable country differences with the United Kingdom where only 4% of the schools with computers use a DSL connection, as opposed to a European average of 45%. However, here the use of cable modems or unknown broadband connection type is at very high levels. The situation is similar – but at higher DSL penetration levels – in Greece, Ireland, Lithuania, Poland and Sweden.

There is the general tendency that the higher the school level the better the internet access in terms of bandwidth. Not surprisingly, those countries with low broadband penetration rates in schools are high on alternative access media such as dial-up and ISDN connections.

In all European countries computer science is also taught as a separate subject. This holds true for most of the new member states, where it is the case in more than 80% or 90% of the schools (Poland, Hungary, Latvia, Slovenia, Lithuania and Estonia). Only Greece with 78%, ranking 12th, comes close to such high figures. All other old member states are significantly less active in teaching computer science as a separate subject and are much more actively using ICT as an integral part of teaching any of their subjects.

It appears as if many of the old member states have already been through a phase of teaching the use of ICT as a separate subject and thereby using computer labs intensively. In the meantime they seem to have shifted the focus and have made computers and the internet an integral part of teaching of (almost) all subjects. However, most of the new member states, as well as countries like Portugal, Italy and Spain seem to belong to the group of countries still at a rather early stage of a more intensive ICT use in schools, where this is still very often taught as a separate subject to familiarise pupils with the use of computers and the internet.

This can partially be confirmed when considering the responses on the question whether “computers and the internet are integrated into the teaching of most subjects”. Here the more advanced countries in terms of ICT use (United Kingdom, Sweden, Finland, the Netherlands, Denmark, etc) reach very high figures as opposed to comparatively low figures on the question asking about teaching computer science as a separate subject. The variation between countries is huge, with the United Kingdom reaching 94% of schools, where “computers and the internet are integrated into the teaching of most subjects” compared to 42% in Greece and 44% in Latvia. There is hardly any variation across school types on this indicator.

There are significant variations in the intensity of ICT use in schools across Europe. Extreme values are reached in the UK where 38% of those teachers using computers in class use it in more than 50% of the lessons. Interestingly, in those countries known for rather low ICT usage in schools, teachers using computers in class do so rather frequently and intensively. The high figures for using ICT in more than half of their lessons in Hungary (27%), Poland (24%), Greece (22%), and Portugal (19%) can be used to illustrate this.

Interestingly, teachers in countries like Sweden, Finland, Denmark, the Netherlands etc do not belong to the (very) intensive ICT users in class. Only around 10% or less of the teachers in these countries use computers in more than 50% of their lessons. One can only speculate about the reasons for this. It seems that in these countries the use of computers and the internet has become the norm for most of the teachers and pupils in all aspects of life and that there no longer is the need to put a special emphasis on this in the teaching processes at school.

However, most European countries still seem to be in the phase of increasing the frequency and intensity of ICT usage for education in class.

Over the past five years there has been a significant upward development in the availability and use of ICT in schools. The percentage of schools using computers for educational purposes has risen over the past five years from an already high 94% in the EU15 in 2001, to more than 99% in 2006. The 100% saturation point has (almost) been reached.

While in 2001 one hundred pupils in the EU15 had to share 8 computers the figure rose by 2006 to 12, an improvement of 50%. However, one needs to bear in mind that the average European figure is still some distance away from the European frontrunners.

Schools have moved over to broadband. Today, 72% of the schools in the EU15 are connected to the internet via a broadband network, and 43% of the new member states as well, resulting in an average of 67% of schools with broadband internet access. Six European countries have broadband penetration and access rates in schools of 90% and more, 15 countries 75% and above, while 22

countries achieve 50% and above. Only five countries remain below 50% (Greece, Poland, Cyprus, Latvia, and Slovakia) and only one below the 2001 average of 19% (Greece).

Schools have also strongly improved the technical ICT infrastructure in terms of LAN implementation and use and development and use of an own website. While in 2001 44% of the schools in the EU15 had their own website, that figure is now 62%. In the new member states today's figures are even higher, at 67%. Also the use of a LAN – which used to be at 47% of the EU15 schools – is now up to 54%. Again, the new member states are even better equipped, with 60% of the schools in these countries reporting the use of a LAN.

Improvements can also be observed in the use of computers in class, which applied to two thirds of the teachers in the EU15 in 2001 and has increased to 77% in 2006. Teachers in the new member states use computers to a lesser extent in class (61%) which results in a European EU25 average of 74%.

ICT use in computer labs has remained at more or less at the same level, with most of the new member states achieving higher figures than the old member states. It appears as if the use of computer labs is the starting point for most schools when it comes to the introduction and use of ICT. Pupils familiarise themselves with computers in computer labs and only after schools have invested more intensively in ICT does the use of ICT move into the classrooms and become an integral part of teaching (most of) the subjects. Portugal, Spain and Italy also seem to be at that stage, showing strongly increasing figures on the use of ICT in computer labs, but also in class.

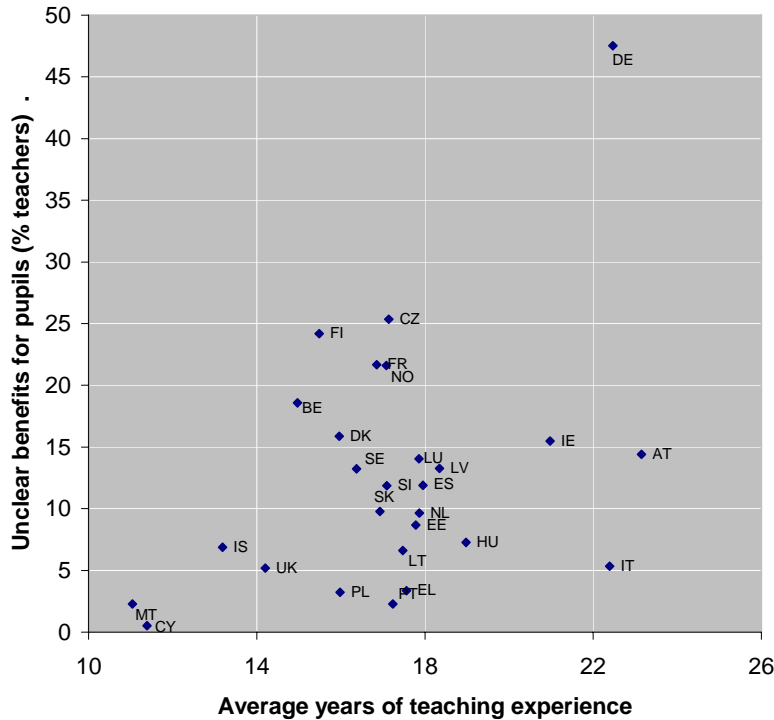
Only a very few teachers seem to have no or nearly no ICT user experience. Overall this group is small and amounts to less than 7% of all teachers. However, in Greece it reaches a substantial 31%, followed by Hungary (15%), Latvia (14%) and Slovakia (13%) whereas it is next to zero in Sweden, Denmark, Norway, Finland, the UK, Austria and the Netherlands. Teacher training seems to be an issue in several new member states and in Greece.

Motivation for and interest in using ICT in class still is a big issue in several European countries. In Europe, 16% of those teachers who do not use computers in class express the opinion that the use of ICT yields "no or unclear benefits". German teachers not using ICT in class seem to be by far the most sceptical with respect to the benefits which can be achieved by using ICT in class and reaches an extremely high 48% (or 10% of all teachers) – three times higher than the European average.

In the following five countries, more than 5% of all teachers are not using computers because they say they see "no or unclear benefits": Germany (10.5%), Latvia (8.6%), France (7.5%), Belgium (5.8%) and the Czech Republic (5.5%)

There exists a strong correlation between this scepticism and lack of motivation to use ICT in class and the age of teachers: the older the teachers, i.e. the longer they are teaching, the more likely they are to lack motivation for ICT use in class because they do not see benefits in its use for pupils. This becomes apparent when cross-tabulating both indicators (cf. below). It shows that in Germany teachers have an average of 23 years of teaching experience, i.e. they are old compared to their colleagues in almost all other EU member states and show higher figures (48%, which is three times the EU25 average) on lack of motivation and scepticism for using ICT in class because to them there are no clear benefits for pupils. Two other countries – Austria and Italy – have a more experienced teacher workforce comparable to that of Germany.. But here the scepticism is at a much lower level. Contrasting results, i.e. young (less experienced) teachers who are very fond of ICT use in class because of the benefits for pupils, are particularly notable in Malta and Cyprus as new member states and in the United Kingdom.

Percentage of teachers* stating that the use of ICT in class does not reveal clear benefits for pupils by the average years of teaching experience in Europe 2006



(* teachers not using computers in class)

Better technical ICT maintenance and support is a key issue for two thirds of the European schools. This particularly applies to many of the countries with poor ICT equipment and use such as Lithuania (90%), Cyprus (89%), Greece (83%), and also Ireland (85%). The situation seems to be poorest in primary schools. However, in countries with excellent levels of ICT equipment in schools and high levels of satisfaction with ICT, better ICT support can also be an issue, as can be illustrated by the example of Norway. ICT equipment in Norwegian schools is at a top level compared to other countries. The majority of Norwegian teachers are satisfied with the technical access means at their schools: 80% state that their school is well-equipped with computers and 83% express the opinion that their internet connection is fast enough. Highest satisfaction rates can be found in vocational schools (90%). However, a very high 73% wish there were better support and maintenance actions taken. This is especially the case in primary schools, with 76% of the teachers stating this as an issue. This seems to point to an area where there is some need for improvement in Norwegian schools.

There seems to be a significant need for improvement of the technical ICT maintenance and support in schools as articulated by an average of 75% of the European schools, with top demands reaching almost 90% in some new member states and in Greece. Actions need to be taken, especially in primary schools, where the demand is highest. As demonstrated by the example of Norway, this problem can also be found in frontrunner countries where schools are very well-equipped with ICT but where teachers lack technical support. It is in this area where improvements could most likely have a very positive impact on an even better use of ICT in schools, to the advantage of both pupils and teachers alike.

In several countries known as the European frontrunners in ICT use in schools the use of computers and the internet has become the norm for most of the teachers and pupils in all aspects of life. There no longer is the need to place a special emphasis on its use in the teaching processes at school. The use of ICT is not a “conditio-sine-qua-non” for the learning success of pupils but can contribute to it and fulfil an important role in motivating pupils to learn.

Teacher ICT training still seems to be an issue in several new member states and Greece.

It is in countries such as Germany where it may be worthwhile to start activities addressed to the motivation of teachers for using ICT in class since this constitutes a key barrier to further IT uptake and use in class for teachers. In many cases this has to go hand-in-hand with an improvement of the number of computers per 100 pupils, the type of internet access (broadband internet connection) and the availability of technical support and maintenance offer to teachers.

Concise Country Briefs for each of the 27 countries include information on the ICT equipment and internet in schools, their use in class, comparisons of the situation in 2001 and 2006, attitudes on ICT use by teachers, results on access, competence and motivation for using ICT in school and the ICT readiness of teachers. In each of them a clear picture of the situation in the different countries is drawn also providing conclusions and specific recommendations for policy makers. For additional information on the key findings of the study please visit:

http://ec.europa.eu/information_society/newsroom/cf/itemlongdetail.cfm?item_id=2888

Introduction to the Study

2 Objectives

The study “eLearning Policy Indicators 2006” was started by the European Commission in January 2006.

The purpose of the study is:

Firstly, to obtain updated estimates for the indicator on the “number of pupils per computer with internet connection (broadband/non-broadband)” and relate it to other possible indicators of educational use of ICT in compulsory education.

Secondly, to look at which ICT infrastructures are available and how these are used by teachers in schools.

Thirdly, to document the main analysis and results in a final report

Fourthly, to provide “country briefs” describing the situation in each country.

Thus the objectives of the study have been to:

- Design two questionnaires, in cooperation with DG Information Society and DG Education and Culture, in order to measure ICT availability and use at schools in the EU25, Norway and Iceland
- carry out a head teacher survey and a classroom teacher survey in order to obtain information on the schools and subsequently on teachers, focusing on their use of ICTs in the learning process. The study followed the methodological approach and used the updated instrument from the precursor studies to obtain estimates and up-to-date data for the former eEurope e-learning indicator
- develop a final report including the overall data tables and graphics and reports on key results
- develop 27 “country briefs” describing the situation in each country.

Thus this study will significantly enhance the capacity of the i2010 programme to achieve its goals in relation to benchmarking ICT availability and use of e-learning at schools, a key aspect of the information society’s development in the Member States.

Altogether 28 reports have been developed including 27 country briefs and an overall results report which includes a summary of key findings and an overall conclusion.

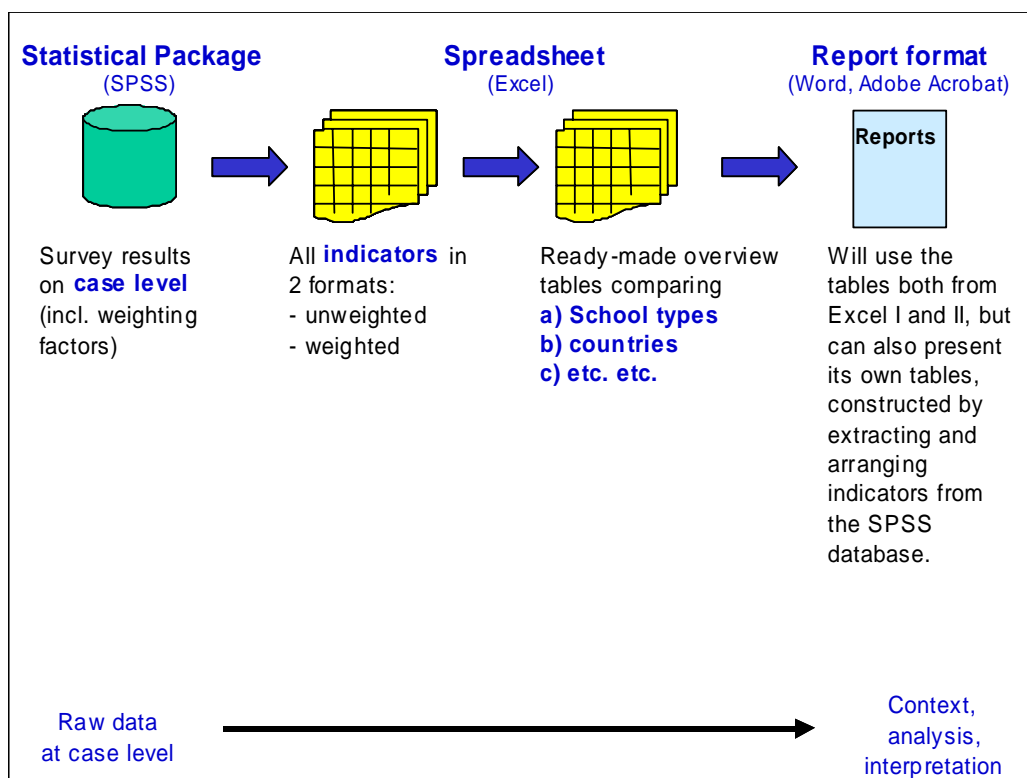
2.1 Overall Results Report

For the overall report the raw (case level) data delivered by the fieldwork organisation was:

- a) stored in an SPSS file. From there
- b) The case level data was weighted by applying an appropriate weighting scheme so that data can be made available in weighted forms;
- c) The data were then converted into indicator components, aggregated and harmonised;
- d) The resulting statistics were then converted to spreadsheet formats and delivered as such and in tables.

The figure below illustrates the main stages of the current "data processing value chain".

From raw survey data to Final Analysis Report: The path of data processing in the study



Stage 1: Working database, case level, SPSS

Survey results are stored on case level in an SPSS database. Values for weighting are added. A calculation of statistical components (often using the SPSS frequencies facility) for all indicators will be carried out.

Stage 2: Working database

The database stores aggregate results for breakdowns by country, school type etc. Values for each indicator are calculated and presented in this database.

Stage 3: The "Overview tables"

In order to present the main results in a ready-to-use format, the most important indicators are presented in a collection of tables comparing the results by

- a) Type of school
- b) Type of locality
- c) Type of internet connection
- d) Level of education
- e) Education location
- f) Percentage of pupils per computer/school type/teaching subject
- g) Total number of pupils per computer/teaching level/school type/teaching subject
- h) Country.

2.2 Country Briefs

Each of the Country Briefs provides an overview of the situation in the countries surveyed. Altogether 27 Country Briefs are available in a common format, one for each member state of the enlarged European Union, Norway and Iceland. Each Country Brief covers the following items:

- ICT equipment and internet in schools
- The use of computers and the internet in schools
- Comparison of the situation in 2001 and 2006
- Access, competence and motivation for using ICT and the internet in schools
- Country background data
- The educational system in the country
- The use of ICT in education
- The study
- The approach
- Country Briefs
- More Information
- Notes about the data sources used.

Survey Results

3 Access to and use of ICT in European Schools

3.1 Infrastructure and Access

3.1.1 Computer Equipment in Schools

Computer equipment is available in nearly 100% of European schools. There are hardly any deviations across school types.

There are large variations in the number of computers per 100 pupils. The clear European leaders are Denmark (27 computers per 100 pupils), Norway (24), the Netherlands (21) and the UK and Luxembourg (20). These figures are significantly higher than the European average of 11 computers per 100 pupils. Top figures are reached in vocational schools in Denmark (50) which has reached a situation where two pupils share one computer. Very good results are also achieved in vocational schools in Norway (39), the United Kingdom (29), the Netherlands (28) and Austria (25).

Almost all new member states belong to the group of laggards, with countries like Latvia, Lithuania, and Poland, where 100 pupils have to share 6 computers. Portugal and Greece also belong to this group with the same figures.

The level of ICT equipment in schools varies according to school type, with 9 computers per 100 pupils in primary schools at the bottom end and 16 computers per 100 pupils in vocational schools at the top. Vocational schools are almost twice as well-equipped with computers as primary schools. Only in three European countries – Germany, Luxembourg and Malta – are primary schools better equipped with ICT in terms of number of computers per 100 pupils.

28% of the European vocational schools belong to the group of schools which have more than 20 computers per 100 pupils. 19% of the upper secondary schools still find themselves in this group but only around 14% of the lower level schools. This pattern is more or less consistent throughout the member states with some exceptions. For example in Luxembourg all school types reach penetration levels of almost 50% of the schools using more than 20 computers per 100 pupils. In countries like Germany, Estonia and Malta the computer use in upper secondary schools is surprisingly low with only around 5% of these schools using them compared to an average of more than 10%.

The existing differences in the number of computers per 100 pupils by school types may point to the focus of ICT investments in schools which in most European countries seems to be on upper level schools, where more attention and investment is directed. ICT investments in primary schools and lower secondary schools are probably not (yet) seen as the top political objective at which to aim.

Computer use for educational purposes is at very high levels in secondary and vocational schools almost everywhere in Europe (between 90% and 100%), a little lower in primary schools but significantly lower in primary schools in some countries such as Latvia (65%) and Hungary (68%).

Total number of computers per 100 pupils by school type

	Total	Primary schools	Lower secondary schools	Upper secondary schools	Vocational schools
BE	9.7	7.7	13.3	11.9	13.6
CZ	9.3	7.6	7.2	10.9	12.1
DK	27.3	18.6	18.4	37.3	50.3
DE	8.9	10.6	8.3	8.0	9.4
EE	7.3	6.1	6.0	6.4	14.1
EL	6.5	4.8	6.6	9.0	19.9
ES	9.5	8.6	10.0	11.3	11.8
FR	12.5	8.1	11.4	19.7	25.1
IE	10.3	9.2	9.6	10.6	14.6
IT	8.0	5.7	6.9	10.7	12.4
CY	12.4	7.3	12.1	18.6	19.8
LV	5.9	5.5	5.6	5.4	7.0
LT	5.9	5.5	5.9	5.9	8.3
LU	19.8	22.6	21.3	20.9	7.9
HU	9.6	6.8	7.8	11.6	16.4
MT	11.0	12.8	8.9	8.9	12.2
NL	21.0	15.4	19.7	22.4	27.5
AT	16.2	11.4	13.8	20.6	24.3
PL	6.1	5.6	5.7	7.3	7.2
PT	6.4	5.8	5.8	7.1	15.5
SI	8.0	8.0	8.0	8.1	9.0
SK	6.7	5.4	5.0	8.3	9.2
FI	16.8	12.2	12.3	17.5	22.2
SE	17.4	14.6	13.2	29.2	17.2
UK	19.8	15.9	25.0	26.4	28.5
IS	15.3	14.5	14.3	17.3	18.8
NO	24.2	18.1	21.9	40.9	38.8
EU25	11.3	9.4	10.8	12.5	15.6
EU25+2	11.4	9.5	10.9	12.7	15.8
EU15	12.1	10.2	11.8	13.6	16.8
NMS10	7.1	6.1	6.4	8.2	9.9

Base:	All schools of the respective breakdown category and country.
Questions	Q4; Q6
Wording:	Q4: How many pupils does your school have? Q6: In your school, how many computers are used for educational purposes for pupils, either to use alone or with a teacher? Please do not include computers that are only accessible to teachers or staff members.
Indicator:	Total number of computers (in breakdown aggregate) / total number of pupils (in breakdown aggregate) *100. (Note: not a school average, but aggregate estimator)

Source: empirica: LearnInd 2006 (HTS)

A majority of schools still use computers for education in dedicated computer labs, with 80% of European schools using computers reporting this to be the case. 60% already use computers for education in classrooms, a third also offer computers in their libraries and one in four in other locations in the school accessible to pupils. However, the figures vary greatly across countries. More than 80% of schools using computers in the UK, Slovenia, the Netherlands, Cyprus, Ireland, Luxembourg, Sweden, Norway and Portugal use ICT in classrooms. The comparable figures in countries like Greece, Hungary and Slovakia are below 20% which is less than a third – in some cases even only slightly more than a quarter – of the European average (61%).

Three quarters of classroom teachers are of the opinion that their school is well-equipped with computers, and slightly more express the opinion that their internet connection is sufficiently rapid. The situation seems to be slightly different mainly in France, Portugal, Latvia and Lithuania where a significantly smaller share of teachers is satisfied with the current ICT equipment in schools.

An interesting phenomenon was also observed: the actual level of ICT equipment in schools and the self-assessments of teachers as to the satisfaction with the ICT equipment vary. This can be illustrated by the example of Sweden and Finland. In both countries schools are very well-equipped with ICT and these are used intensively in class. However, both countries show rather low figures for teacher satisfaction concerning ICT equipment in schools. Further research is needed to obtain more information on the reasons for this phenomenon, i.e. whether much of the ICT in schools in these countries is outdated and of less than optimal quality or whether there are other reasons. In other countries we find the opposite: teachers showing high levels of satisfaction with the level of ICT equipment in their school, despite the fact that the overall level of equipment in these countries is comparatively low.

3.1.2 Internet Access in Schools

Almost all European schools have internet access. In most countries the penetration rate is slightly below or at 100%; in no country is it below 90%, giving a European average of 96%.

Differences across school types are negligible. Interestingly enough, the situation is poorest in French primary schools with just 88% of schools having internet access, while the European average for primary schools is 96%.

The picture changes significantly when looking at the type of internet access and thereby considering only those schools with broadband access. Here again the Nordic countries, the Netherlands and Estonia and Malta from the new member states show top rates with figures above 90%. In contrast is Greece, where just 13% of the schools have broadband internet access. However, Poland, Cyprus, Lithuania and Slovakia also show low figures ranging between 28% and 40% which are significantly below the European average of 67%. There is a general tendency that the higher the school level the better the internet access in terms of bandwidth.

The most popular broadband connection is DSL, followed by other connections, mainly a special cable modem using the television cable. There are noticeable country differences, for example in the UK where only 4% of the schools with computers have a DSL connection, as opposed to a European average of 45%. However, here the use of cable modems or unknown broadband connection type is at very high levels. The situation is similar – but at higher DSL penetration levels – in Greece, Ireland, Lithuania, Poland and Sweden.

Not all, but the vast majority of, school computers are connected to the internet (88% in the EU25). Most countries even reach beyond this European average or are close to it. The most dramatic exceptions are Cyprus and France, with just 71% and 73% of computers in schools connected to the internet.

Denmark has the highest number of internet connected computers per pupil: 100 pupils share 26 internet connected computers there. Norway, the Netherlands, the United Kingdom, Luxembourg, Sweden Finland, Iceland and Austria are also well above the European average of 10 internet computers per 100 pupils while other countries, Germany, Italy and Poland among them, provide significantly less internet connected computers to pupils.

Total number of internet computers per 100 pupils by school type

	Total	Primary schools	Lower secondary schools	Upper secondary schools	Vocational schools
BE	7.7	5.2	12.0	10.6	12.0
CZ	8.2	6.4	6.2	10.1	11.0
DK	26.3	17.9	17.9	37.2	48.0
DE	7.7	7.1	7.4	7.5	8.7
EE	7.2	6.1	5.9	6.4	13.8
EL	5.9	4.2	6.1	8.3	19.1
ES	8.5	7.4	9.2	10.6	11.2
FR	8.9	4.8	10.0	14.0	18.2
IE	8.7	7.0	8.9	9.9	14.0
IT	6.5	4.2	5.1	9.8	10.5
CY	8.9	6.1	9.9	12.1	9.6
LV	5.1	4.8	4.9	4.8	5.8
LT	5.2	4.7	5.2	5.4	7.8
LU	18.3	20.9	21.3	18.9	7.9
HU	8.6	5.9	7.1	11.0	14.8
MT	10.2	12.2	8.6	8.6	10.2
NL	20.0	14.2	18.4	20.4	26.8
AT	14.2	7.0	12.8	19.8	23.1
PL	5.6	4.7	5.2	7.0	6.8
PT	5.4	4.4	5.2	6.2	15.3
SI	7.5	7.4	7.5	7.8	8.5
SK	5.8	4.9	4.5	6.9	7.4
FI	16.2	11.3	11.9	17.2	21.7
SE	16.5	13.8	12.7	27.5	17.0
UK	18.5	14.6	23.4	24.9	28.4
IS	14.8	14.1	14.3	17.2	17.6
NO	22.7	16.0	20.5	39.9	38.6
EU25	9.9	7.7	9.7	11.4	14.1
EU25+2	10.0	7.8	9.8	11.6	14.3
EU15	10.6	8.2	10.7	12.4	15.1
NMS10	6.4	5.3	5.8	7.7	8.9
Base:	All schools of the respective breakdown category and country.				
Questions	Q4; Q6				
Wording:	Q4: How many pupils does your school have ? Q6: In your school, how many computers are used for educational purposes for pupils, either to use alone or with a teacher? Please do not include computers that are only accessible to teachers or staff members. Q11: Of the computers used for educational purposes by pupils, either alone or with a teacher, approximately how many are connected to the internet?				
Indicator:	Total number of internet computers (in breakdown aggregate) / total number of pupils (in breakdown aggregate) *100. (Note: not a school average, but aggregate estimator)				

Source: empirica: LearnInd 2006 (HTS)

3.2 ICT use in Schools

3.2.1 Computers and internet

Again, the likelihood of school computers having internet access rises with the school level. The European average in upper secondary level schools is at a very high 96%. It is lowest in primary schools and by far the lowest in Latvia (58%) followed by Hungary (61%), Lithuania (69%) and surprisingly also Austria (71%). These figures compare to a European average of 88% in primary schools, but some countries already reach, or are close to reaching, 100%.

Percentage of teachers who have used computers in class in the last 12 months in Europe

	Total	Primary schools	Lower secondary schools	Upper secondary schools	Vocational schools
BE	69.0	66.9	73.7	74.8	78.3
CZ	78.3	82.4	78.9	69.5	71.0
DK	94.6	95.7	94.4	97.8	93.5
DE	78.0	78.0	77.2	80.4	78.6
EE	59.7	60.9	61.5	53.3	46.8
EL	35.6	32.8	38.0	44.1	58.0
ES	68.2	68.9	66.6	65.5	67.5
FR	65.5	65.7	56.1	72.1	78.9
IE	81.7	86.5	64.1	64.2	69.9
IT	72.4	71.6	71.9	72.4	81.6
CY	75.0	87.2	39.8	50.7	58.2
LV	34.9	35.7	37.8	33.6	27.7
LT	59.3	58.7	65.0	64.1	74.3
LU	70.2	74.4	54.2	43.6	61.8
HU	42.8	36.8	40.1	60.0	64.1
MT	74.5	82.6	59.1	59.1	76.7
NL	90.0	91.7	80.9	77.4	84.0
AT	87.9	87.9	87.5	81.3	86.1
PL	61.4	60.2	60.3	67.1	70.9
PT	69.5	70.0	66.2	71.7	75.2
SI	67.6	71.7	71.6	53.6	52.2
SK	70.3	72.0	73.1	65.5	69.7
FI	85.1	88.0	77.1	80.5	81.4
SE	90.9	90.0	91.7	94.6	87.7
UK	96.4	97.4	90.4	91.5	92.9
IS	79.5	78.6	84.7	84.2	83.3
NO	89.4	90.4	89.4	79.4	82.4
EU25	74.3	75.2	70.9	73.0	76.7
EU25+2	74.5	75.3	71.2	73.0	76.7
EU15	77.2	78.0	74.8	76.1	78.8
NMS10	61.3	60.6	59.5	64.1	68.1
Base:	All teachers				
Question:	Q7				xx.x%: based on at least 50 cases.
Wording:	How have you used computers and/or the internet for work in the last 12 months?... you used a computer and/or the internet in class* while teaching				xx.x%: based on at least 10 cases.
Indicator:	Percentage of teachers who used computers in class in the last 12 months				

Source:LearnInd 2006 (CTS)

These figures are based on the statements from head teachers. In addition it appears worthwhile to consider the actual use of ICT in class by classroom teachers. Here it becomes apparent that the situation varies between the countries. One can basically differentiate the European countries into three groups:

- Group 1 where most attention in terms of ICT use by teachers in class is in primary schools, mainly in the new member states: the Czech Republic, Estonia, Ireland, Cyprus, Latvia, Luxembourg, Malta, and Slovenia;
- Group 2 where most attention in terms of ICT use by teachers in class is in upper level schools, and primarily in vocational schools: Belgium, Greece, France, Italy, Lithuania, Hungary, Poland and Portugal, and
- Group 3 where ICT use by teachers in class shows only little variation and seems to be at comparable (and mostly very high) levels throughout the different school types: Denmark, Germany, Spain, the Netherlands, Austria, Slovakia, Finland, Sweden, the United Kingdom, Iceland and Norway.

However, these figures do not provide any information on the frequency and intensity of use. It is among teachers in upper level schools and especially vocational schools where one finds the largest group of heavy ICT users in class, i.e. using ICT in more than 50% of their lessons. At the EU25 level 25% of vocational teachers belong to this group of heavy users compared to 15% in primary schools.

3.2.2 School website, e-mail address, LAN, intranet

More sophisticated levels of ICT equipment and use of ICT in schools can also be measured by inquiring into the availability of a school website or an intranet. Interestingly enough almost two thirds of European schools already have their own website.

Other indicators used include the availability of e-mail addresses for the majority of teachers and pupils and the use of a LAN. Two thirds of the European teachers already have an e-mail address from their school but only a quarter of the pupils.

The availability and use of an intranet can probably be seen as an indicator for the sophisticated equipment and use of ICT in schools. More than 40% of European schools have already reached this level, whereby the frontrunners reach figures beyond 60% or even 70% (such as Denmark and Iceland). This is in sharp contrast to countries such as Portugal (9%), Greece (10%), Estonia and Cyprus (17%) and Ireland (18%). The differences across school types are substantial, with only around a third of European primary schools and more than 50% of upper secondary and vocational schools using an intranet. The same holds true when looking at these differences at country level: while only around 5% of Portuguese and Greek primary schools report having an intranet, this figure reaches more than 90% in vocational schools in countries such as Luxembourg and the Netherlands.

The existence of ICT support or maintenance contracts in schools is an indication of the kind and level of support given to teachers to make better use of ICT in teaching.

There is no homogenous picture – no matter which type of school – when it comes to the availability of a support or maintenance contract with an ICT service provider to support the schools in ICT matters. The figures range from 12% in Portugal to 82% in the UK with a European average of 47%. This indicates that in countries like the United Kingdom and the Netherlands, but also in new members states like Latvia, Malta and the Czech Republic (to name just a few), schools have recognised the importance of this kind of support to motivate teachers to further use ICT in class. At the other extreme, in countries like Portugal and France, but also the well advanced Norway (the latter with impressive figures on the number of computers per 100 computers and schools with broadband internet access, especially in primary schools) hardly any ICT-related support is provided. It is in these countries and schools that the survey has also revealed the highest levels of demand for ICT support or maintenance contract, which for instance in Norway is stated to be lacking and strongly demanded by almost 75% of the teachers.

3.2.3 ICT use as part of teaching subjects

In all European countries computer science is taught as a separate subject, although to a varying extent. In most of the new member states this is the case in more than 80% or 90% of the schools (Poland, Hungary, Latvia, Slovenia, Lithuania, and Estonia). However, schools in the new member states are not as advanced in the integration of computers and the internet into the teaching of most subjects. It appears that many of the other member states in the meantime shifted focus and made computers and the internet an integral part of teaching of (almost) all subjects. This can partially be confirmed when considering the responses on the question whether “computers and the internet are integrated into the teaching of most subjects”. Here the more advanced countries in terms of ICT use (United Kingdom, Sweden, Finland, the Netherlands, Denmark, etc) reach very high figures as opposed to comparatively low figures on the question about teaching computer science as a separate subject. The variation between countries is huge, with the United Kingdom reaching 94% of schools, where “computers and the internet are integrated into the teaching of most subjects” compared to 42% in Greece and 44% in Latvia. Interestingly, there is hardly any variation across school types on this indicator.

ICT also plays an important role in teaching foreign languages. This is the case in more than 75% of European schools. Again the Nordic countries are the frontrunners (with figures well above 80% or even 90%). Hungary (39%), Latvia (39%) and Greece (48%) can be found at the tail end.

More than half of the schools also use ICT for supporting students with special needs. Only in eight of the 27 countries surveyed can one find figures below the European average of 57%. Extremely low values in terms of consideration of ICT for supporting pupils with special needs can be found in Ireland where only 27% of schools report this to be the case, followed by France (29%), Greece (38%) and Belgium (40%). Again, the lower the school level the less ICT is used for supporting pupils with special needs.

3.3 Comparison of the situation in 2001 and 2006

Note: This section includes comparisons of the Eurobarometer Flash 94/1001 and 95/102 results from 2001 with those from the current surveys from 2006. Please bear in mind that the figures are not directly comparable due to the use of slightly different approaches and methodologies.

The percentage of schools using computers for educational purposes has risen over the past 5 years from an already high 94% in the EU15 in 2001 to more than 99% in 2006. The 100% saturation point has (almost) been reached.

While in 2001 one hundred pupils in the EU15 had to share 8 computers the figure rose to 12 in 2006, an improvement of 50%. However, one needs to bear in mind that the average European figure is still some distance away from the European frontrunners.

ICT equipment and use in schools in Europe 2001 and 2006

	Use of computers for teaching in %		No. of computers / 100 pupils		Broadband connection in schools in %		Own Web page in %		Own LAN in %	
	2006	2001	2006	2001	2006	2001	2006	2001	2006	2001
BE	98	99	10	10	74	18	69	44	57	50
CZ	100		9		63		75		81	
DK	100	99	27	31	95	64	99	75	74	66
DE	100	94	9	5	63	8	70	48	66	40
EE	99		7		95		87		72	
EL	100	72	7	5	13	3	37	15	50	18
ES	96	88	9	7	81	10	53	43	80	35
FR	99	96	12	10	75	10	29	37	22	38
IE	100	100	10	11	66	-	36	38	52	42
IT	100	94	8	6	69	24	73	37	35	60
CY	99		12		31		51		23	
LV	98		6		67		41		54	
LT	97		6		33		60		50	
LU	99	94	20	32	77	3	64	47	59	49
HU	97		10		77		56		56	
MT	100		11		95		63		60	
NL	100	100	21	13	92	27	87	44	87	44
AT	99	90	16	11	68	23	64	43	68	45
PL	95		6		28		68		56	
PT	97	70	6	4	73	4	61	25	14	25
SI	100		8		85		96		88	
SK	99		7		40		65		72	
FI	100	100	17	17	90	52	86	77	50	28
SE	100	97	17	15	89	31	84	81	69	71
UK	100	100	20	14	75	15	73	50	65	63
IS	99		15		92		94		65	
NO	100		24		89		82		59	
EU25	99		11		67		63		55	
EU25+2	99		11		67		63		55	
EU15	99	94	12	8	72		62	44	54	47
NMS10	97		7		43		67		60	

Indicators (2001):

Indicators:

“Computers used for education, intranet and internet”:

- “use of computers for education”;
- “internet connection, yes”; “web-page, yes”;
- “internal PC network, yes”

“Number of computers used by 100 pupils”;

“Does your school have access to the Internet by any of the following technical means ...

- <an ADSL line>,
- <television cable>,
- <satellite>?

Source: Eurobarometer Flash 94 / 101 2001

Use of computers for teaching in % (2006):	
Base:	All schools of the respective breakdown category and country.
Question:	Q6
Wording:	In your school, how many computers are used for educational purposes for pupils, either to use alone or with a teacher? Please do not include computers that are only accessible to teachers or staff members.
Indicator:	% of schools answering "1" or more to Q6.
Source:	empirica: LearnInd 2006 (HTS)
No. of computers / 100 pupils (2006):	
Base:	All schools of the respective breakdown category and country.
Questions	Q4; Q6
Wording:	Q4: How many pupils does your school have? Q6: In your school, how many computers are used for educational purposes for pupils, either to use alone or with a teacher? Please do not include computers that are only accessible to teachers or staff members.
Indicator:	Total number of computers (in breakdown aggregate) / total number of pupils (in breakdown aggregate) *100. (Note: not a school average, but aggregate estimator)
Source:	empirica: LearnInd 2006 (HTS)
Broadband connection in schools in % (2006):	
Base:	All schools of the respective breakdown category and country.
Question:	Q9
Wording:	Q9: By which of the following means does your school mainly have access to the internet: [...] (c) an (A)DSL line; (d) other broadband connection; e.g. cable (a special cable modem using the television cable), fibre optic, satellite; (e) broadband, but don't know which type
Indicator:	% of schools stating at least one type of broadband connection (c,d,e).
Source:	empirica: LearnInd 2006 (HTS)
Own Web page in % (2006):	
Base:	All schools
Question:	Q12a
Wording:	Q12a: Does your school have ... its own home page or website
Indicator:	Percentage of all schools that have their own home page or website
Source:	empirica: LearnInd 2006 (HTS)
Own LAN in % (2006):	
Base:	All schools
Question:	Q12d
Wording:	Q12d: Does your school have ... a LAN (local area network)
Indicator:	Percentage of all schools that have a LAN (local area network)
Source:	empirica: LearnInd 2006 (HTS)

In 2001, the range was from 32 computers per 100 pupils in Luxembourg to 4 in Portugal. Six out of the 15 EU member states had more than 10 computers per 100 pupils.

In 2006, the range was similar: from 27 in Denmark to 6 in Portugal, but in the meantime 10 of the former EU15 had already reached a figure of more than 10 computers per 100 pupils. Only three of the new member states reach figures above 10 computers per 100 pupils in 2006: Cyprus (12), Malta (11) and Hungary (10).

In 2001 a third of the European schools from the old member states (EU15) were still connected to the internet via dial-up modem. Today (2006) this figure is down to just 5%. The corresponding figure for ISDN connections is 72% in 2001 and just 17% in 2006. Schools have moved over to broadband: 50% of the schools in the EU15 are connected to the internet via a DSL connection in 2006. The figure for

2001 was just 5%. The figures have increased ten-fold over 5 years only. However, the new member state schools are less well-equipped with 26% of them possessing a DSL connection which brings the overall EU25 average down to 45%, still a remarkable figure.

The figures on the total percentage of schools connected to any kind of broadband connection are provided in the table above. It shows that in 2001 Denmark with 64% and Finland with 52% of schools connected to broadband ranked top. In those days, no Irish school was connected to broadband internet and in the vast majority of member states only less than a quarter of schools had a broadband connection. The average of schools with a broadband internet connection stood at 19%.

The situation has changed dramatically over the past five years. Today, 72% of the schools in the EU15 are connected to the internet via a broadband network and 43% already of the new member states, resulting in an average of 67% of schools with broadband internet access.

Six countries have broadband penetration and access rates in schools of 90% and more. 15 countries reach a broadband penetration rate of 75% and above. Only five countries remain below 50% (Greece, Poland, Cyprus, Latvia, Slovakia) and only one below the 2001 average of 19% (Greece).

Schools have also strongly improved their degree of ICT infrastructure availability and sophistication for the development of own websites, the implementation of a LAN or an intranet. While in 2001 44% of schools in the EU15 had their own website, that figure is now 62%. In the new member states today's figures are even higher at 67%. The use of a LAN – which used to be in 47% of the EU15 schools – is now up to 54%. Again, the new member states are even better equipped, with 60% of the schools in these countries reporting the use of a LAN.

Improvements can also be observed in the use of computers in class: in 2001 by around a quarter (28%) of the teachers in the EU15, but in 2006 an increase to 68%. Computer use in classrooms has dramatically increased from 2001 to 2006, for instance in Denmark from 31% to 72%, in Germany from a rather low 12% to 66%. Greece has managed to increase from 8% to 18%, Italy from a very low 5% to 32% and the frontrunner United Kingdom from an already very high 54% in 2001 to 95% in 2006.

ICT use in computer labs has more or less remained at the same level with most of the new member states achieving the highest figures. It appears as if the use of computer labs is the starting point for most schools when it comes to the introduction and use of ICT. Pupils are familiarised with computers in computer labs and only after schools have invested more intensively in ICT does the use of ICT move into the classrooms and become an integral part of (most of) the subjects taught. Most new member states seem to be at a comparatively early stage of ICT use in schools. Portugal, Spain and Italy also seem to be at that stage since they have over the past five years strongly increased the use of ICT in computer labs.

Percentage of schools which offer and use computers in classrooms, computer labs and school libraries in Europe in 2001 and 2006

	Classroom		Computer labs		Library	
	2006	2001	2006	2001	2006	2001
BE	79	41	75	71	23	25
CZ	48		91		20	
DK	72	31	91	88	71	69
DE	66	12	86	88	23	19
EE	28		91		34	
EL	18	8	84	69	7	8
ES	48	24	81	81	40	6
FR	77	26	66	56	36	47
IE	89	42	47	54	11	9
IT	32	5	99	96	25	4
CY	89		73		41	
LV	41		97		67	
LT	48		89		62	
LU	88	36	44	59	33	-
HU	19		96		37	
MT	52		56		21	
NL	92	31	49	41	27	31
AT	65	24	51	73	17	5
PL	23		97		39	
PT	81	26	70	51	61	34
SI	93		100		89	
SK	19		89		4	
FI	77	49	74	56	14	13
SE	86	47	48	67	24	15
UK	95	54	79	75	49	51
IS	68		84		49	
NO	84		82		54	
EU25	61		81		33	
EU25+2	62		81		34	
EU15	68	28	77	79	33	31
NMS10	30		95		37	

Indicators (2001):

"Where do your pupils generally access the Internet for learning purposes":

- "in the classroom";
- "in the computer lab"
- "in the school's library"
- "at home"
- "others"

Base: those using internet in teaching

Source: Eurobarometer Flash 95 / 101 2002

Indicators (2006):

Base: All schools who have computers for educational purposes for pupils

Question: Q8

Wording: Q8: How many computers are installed for educational purposes for pupils to use either alone or with a teacher (a) in (a) computer lab(s); (b) in the classroom(s), (c) in the school library

Indicator: Percentage of all schools stating (a), (b) or (c) location of computer use

Source: empirica: LearnInd 2006 (HTS)

3.4 ICT use of teachers

The general use of computers by teachers is very high and reaches almost 100%. This includes the use of computers for work and outside work. Only Greece is lagging slightly behind with a percentage of 89% of all teachers. There are no remarkable variations across school types.

The computer is seen as a means for preparing lessons among 89% of the European teachers who have used a computer in the class in the last 12 months. Again Greece is at the tail end with just 66% but Ireland, Italy and Slovakia also only reach figures of 80% and below. There are hardly any variations according to school type.

Computer use in class is at a high level and reaches an average of 74%. However, there are large variations across countries with just 35% in Latvia and 36% in Greece compared to 96% in the UK and 95% in Denmark.

3.4.1 ICT use by pupils in class

Computers are used by pupils as well as teachers in two thirds of the schools, mostly in the frontrunner countries, with figures reaching beyond 80% and in Denmark even 93%. Greece (23%), Latvia (33%) and Hungary (36%) achieve the lowest figures.

There is no difference according to school types except in Greece, where the very low use of ICT is at an even lower rate in primary schools where it reaches only 20%.

3.4.2 Intensity of ICT use and material used in lessons

There are significant variations in the intensity of ICT use in schools across Europe. Highest rates are reached in the United Kingdom where 38% of those teachers using a computer in class use it in more than 50% of the lessons. Interestingly in those countries with a lower ICT usage in schools, teachers using computers in class do so more intensively. The figures for Hungary (27%), Poland (24%), Greece (22%), and Portugal (19%) can be used to illustrate this.

In several countries known as the European frontrunners in ICT use in schools the use of computers and the internet has become the norm for most of the teachers and pupils in all aspects of life.

The material used for teaching using ICT comes from a variety of sources. It includes material looked up on the internet (83%), whereby online material from established educational sources is seen as important in 74% of the teachers indicating this. Highest figures are reached in the United Kingdom (94%), probably an indication of the good existing supply in this area in this country or in the English language. Material available on the school's computer network is used by 63% of the teachers, with the UK and the Netherlands again reaching top values with 84% and 83%. Offline material such as CD-ROMs is still used very intensively and by 83% of those responding.

3.4.3 ICT competence of teachers

Depending on the country and type of school, there are different levels of competence and skills among teachers for using computers in class. Two thirds are very confident in using text processors, while one third have the necessary skills to develop electronic presentations. However, one can identify a significantly lower competence in primary schools, where the necessary skills are provided by only 30% as opposed to 46% and 47% in upper secondary and vocational schools. Two thirds state themselves to be confident and competent in the use of e-mail slightly more than one third in installing software. Latvia, Lithuania, France and Portugal are the countries where ICT skills among teachers are lowest. No clear picture emerges about the frontrunners, and this varies a lot across the different tasks.

Only very few teachers seem to have no, or next to no, ICT user experience. Looking at all teachers this group is small and amounts to less than 7% of all teachers. However, in Greece it reaches a substantial 31% followed by Hungary (15%), Latvia (14%) and Slovakia (13%), whereas it is next to zero in Sweden, Denmark, Norway, Finland, the UK, Austria and the Netherlands¹.

3.4.4 Teacher attitudes on ICT use

The vast majority of European teachers see the advantages of ICT use in school and especially of using ICT for letting pupils do exercises and practise (80%). However, in some countries only substantially less than the European average sees this as important and relevant: Luxembourg (43%), Italy (59%), Greece (62%) and, Portugal (65%). These are mostly countries where ICT is used to a much lesser extent in schools than the average and which are some distance away from the top users.

It is mainly in these countries again that teachers express the opinion that other forms of ICT use in schools are also less important.

A very high 86% state that pupils are more motivated and attentive when computers and the internet are used in class. There are only small variations on this across countries, with figures ranging from 73% in Iceland to 95% in Portugal and Cyprus.

A fifth of European teachers still believe that using computers in class does not have significant learning benefits for pupils. This holds true especially for Spain (52%), Sweden (48%) and Iceland (47%) followed by Hungary (33%), France (32%), Austria (28%) and Finland (27%). These results shows that this opinion bears little relation to the sophistication in use of ICT in schools since it is being expressed by teachers from frontrunner countries as well as those lagging behind.

3.4.5 ICT in schools and use by teachers according to locality

An analysis of the survey data according to the location of schools was carried out differentiating according to locality as follows:

- Densely populated areas
- Intermediate areas and
- Thinly populated areas.

¹ Definition of the skills variable "SKILL":

Four skills questions were asked of the responding classroom teachers:

- How confident do you feel using a text processing programme on a computer such as Word?
- How confident do you feel creating a presentation with text and images such as Powerpoint?
- How confident do you feel using e-mail to communicate with others?
- How confident do you feel downloading and installing software onto a computer?

Answer categories for each of these were

- very confident
- fairly confident
- not very confident
- not at all confident
- don't know

These questions were not asked of respondents who had stated earlier that they would not use computers.

For each answer, a score was allocated such that "very confident" received 5 points, "fairly confident" 4 points, "not very confident" 3 points and "not at all confident" 2 points. "Don't know" answers were treated as "not at all confident". Computer non-users received 0 points on all items.

An average score ranging from 0 to 5 was calculated using the arithmetic mean. The four cut-off points for a grouped variable were chosen as follows:

- 0.00 - 2.50: "no or factually no user experience"
- 2.75 - 3.25: "novice ICT skills"
- 3.50 - 4.25: "good ICT skills"
- 4.50 - 5.00: "very good ICT skills"

The definition of the type of locality is based on the classification of “degrees of urbanisation” which is also used in the Labour Force Survey. The following degrees of urbanisation have been identified:

- **Densely-populated area.** This is a contiguous set of local areas, each of which has a density superior to 500 inhabitants per square kilometre, where the total population for the set is at least 50,000 inhabitants.
- **Intermediate area.** This is a contiguous set of local areas, not belonging to a densely-populated area, each of which has a density superior to 100 inhabitants per square kilometre, and either with a total population for the set of at least 50,000 inhabitants or adjacent to a densely-populated area.
- **Thinly-populated area.** This is a contiguous set of local areas belonging neither to a densely-populated nor to an intermediate area.

From the data it becomes apparent that schools in metropolitan and urban areas are better equipped with ICT and connection to the internet compared to those in sub-urban and thinly populated areas. This holds true for almost all indicators as depicted in the following table.

Computer use and internet connection in schools according to type of locality in Europe 2006 (EU25 averages; percentage figure)

	Densely populated areas	Intermediate areas	Thinly populated areas
Computers in computer lab	87.3	83.8	71.5
Computers in the classroom	62.0	58.2	63.0
Computers in school library	41.0	30.5	27.9
Computers in other locations	28.3	29.5	23.7
Broadband access to the internet	73.7	66.1	60.6
DSL connection to the internet	48.4	51.8	37.7
Percentage of all school computers connected to the internet	88.2	88.1	86.4
Own school website	70.8	66.2	52.8
Own LAN	61.3	54.7	49.6
Own intranet	48.3	39.8	33.9
Support or maintenance contract with a service provider	52.0	44.9	43.9

Base:	All schools which have computers for educational purposes for pupils
Question:	Q8
Wording:	Q8: How many computers are installed for educational purposes for pupils to use either alone or with a teacher (a) in (a) computer lab(s); (b) in the classroom(s), (c) in the school library
Indicator:	Percentage of all schools stating (a), (b) or (c) location of computer use
Source:	empirica: LearnInd 2006 (HTS)
Base:	All schools of the respective breakdown category and country.
Question:	Q9
Wording:	Q9: By which of the following means does your school mainly have access to the internet: [...] (c) an (A)DSL line; (d) other broadband connection; e.g. cable (a special cable modem using the television cable), fibre optic, satellite; (e) broadband, but don't know which type
Indicator:	% of schools stating (a) as type of broadband connection; % of schools stating any of (a) to (e) as type of broadband connection;
Source:	empirica: LearnInd 2006 (HTS)
Base:	All schools with an internet connection
Question:	Q12a, d, e, f
Wording:	Q12a, d, e, f: Does your school have ... (a) its own home page or website ... (d) a LAN (local area network) ... (e) an Intranet ... (f) a support or maintenance contract with a service provider
Indicator:	Percentage of all schools that have their own home page or website, a LAN (local area network), an Intranet, a support or maintenance contract with a service provider
Source:	empirica: LearnInd 2006 (HTS)

However, there are no real differences in the type of use of ICT in schools according to locality as reported by head teachers responding to the questions on the use of computers and the internet.

The same holds true for the use of ICT by classroom teachers. Those teachers working in urban areas make only slightly more intensive use of ICT in their classes.

3.4.6 ICT in schools and use by teachers according to type of internet access

Schools and teachers using a broadband internet connection as opposed to a narrowband one are better equipped with ICT and are more likely to use ICT in a more advanced way.

In the Europe of 2006 there are 12 computers per 100 pupils in schools connected to broadband as opposed to 9.5 computers in schools without. The European average is 11.

The better equipment of schools refers to all locations of ICT use: computer lab (82% of schools with broadband connection use ICT in this location compared to 80% of schools with narrow band connection), classroom (64% compared to 54%), school library (37% compared to 27%), other locations (29% compared to 23%).

These schools also have a higher percentage of computers connected to the internet: 90% compared to 84% and are much more likely to use ICT in a more advanced way, i.e. developing and using an intranet or own website, using a LAN, etc.

Computer use and internet connection in schools according to type of internet connection in Europe 2006 (EU25 averages; percentage figure)

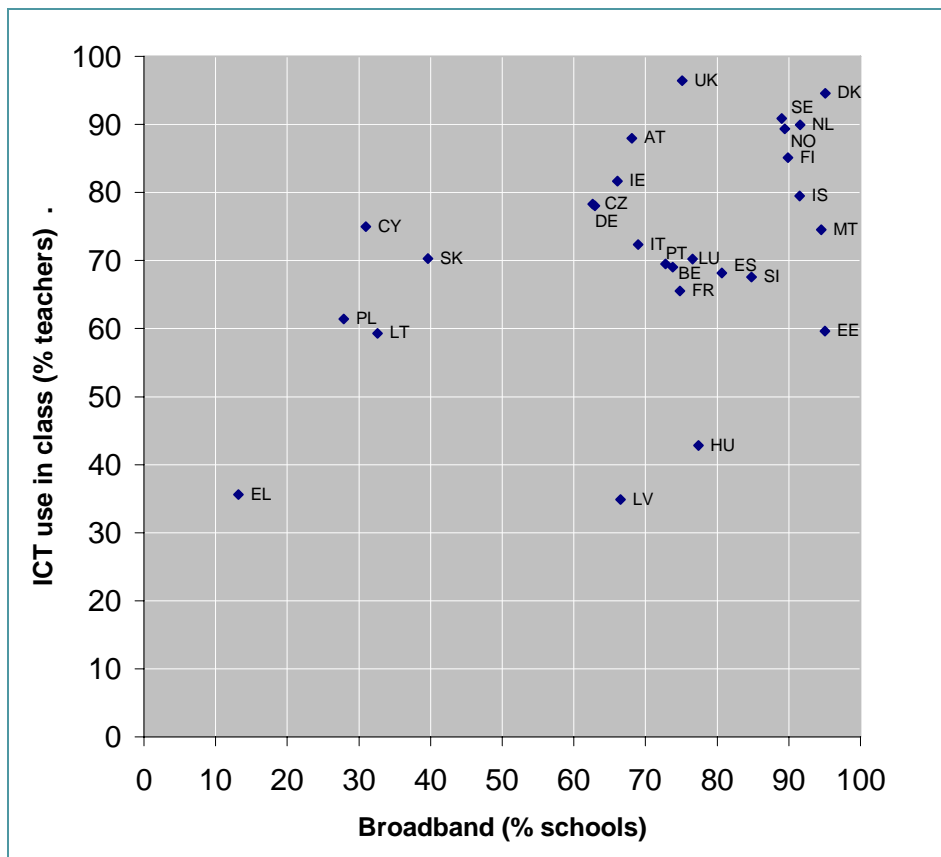
	Schools with broadband internet connection	Schools with narrowband internet connection
Percentage of all school computers connected to the internet	90	84
Own school website	68	59
E-mail address for majority of teachers	71	61
E-mail address for majority of pupils	27	19
Own LAN	61	50
Own intranet	46	35
Support or maintenance contract with a service provider	51	45

Base:	All schools of the respective breakdown category and country.
Question:	Q9
Wording:	Q9: By which of the following means does your school mainly have access to the internet: [...] (c) an (A)DSL line; (d) other broadband connection; e.g. cable (a special cable modem using the television cable), fibre optic, satellite; (e) broadband, but don't know which type
Indicator:	% of schools stating (a) as type of broadband connection; % of schools stating any of (a) to (e) as type of broadband connection;
Source:	empirica: LearnInd 2006 (HTS)
Base:	All schools with an internet connection
Question:	Q12a, d, e, f
Wording:	Q12a, d, e, f: Does your school have ... (a) its own home page or website ... (d) a LAN (local area network) ... (e) an Intranet ... (f) a support or maintenance contract with a service provider
Indicator:	Percentage of all schools that have their own home page or website, a LAN (local area network), an Intranet, a support or maintenance contract with a service provider
Source:	empirica: LearnInd 2006 (HTS)

However, in terms of attitudes towards the use of ICT in schools and classes, the differences between the different groups of schools are negligible but it seems that broadband connected schools have integrated the use of ICT more widely into the teaching of most subjects, i.e. 78% compared to 71%.

The following graphic illustrates this. Here it becomes apparent that countries with very high broadband penetration levels such as the Nordic countries also lead in ICT use in class. By contrast one finds Greece ranking very low on both indicators. A group of countries made up of Poland, Lithuania, Slovakia and Cyprus can be characterised as medium to strong ICT users in class despite their rather low figures on broadband internet connection, i.e. they seem to make optimal use of their limited infrastructure. Other new member states like Latvia, Hungary and Estonia with much higher broadband penetration rates are much less active ICT users in class (except Estonia).

Percentage of teachers using ICT for teaching by percentage of schools connected to the internet via broadband in Europe 2006



3.4.7 ICT in schools and use by teachers according to teaching experience

The younger the teachers, the more use they make of ICT in schools and the more competent they feel in its use. This is the unsurprising main result from the analysis of the classroom teacher survey results on the use of ICT in schools according to teaching experience, which can be used as an age indicator of teachers. Some typical results can be used to illustrate this:

Almost twice as many young teachers (those with less than 5 years teaching experience) (23%) use ICT in more than half of their lessons compared to older teachers (those with more than 20 years teaching experience) (13%).

80% of the younger but only 56% of the older teachers feel very competent in using text processors. The situation is comparable in all other uses of ICT such as for the development of electronic presentations, the use of e-mail, downloading and installing software.

10% of older teachers as opposed to 2% of younger teachers report that they have no, or next to no, experience in using ICT. More than half (57%) of the younger ones report having very good ICT skills while for the older teachers the figure is below a third (31%).

In line with these results are the results on the reasons for not using ICT in school, where 27% of the older teachers (not using computers for teaching) report “lack of adequate skills” as a reason but only 12% of the younger ones. The corresponding figures on “lack of interest” are 10% and 4% of the teachers not using computers in class.

However, there are almost no differences across the age groups in relation to the attitudes towards the quality of the ICT equipment in schools and the problems and barriers for further use by teachers but also in terms of the benefits it brings for pupils.

3.4.8 ICT use by teachers according to subject taught

Around 90% of European teachers have in the past 12 months used or are using a computer to prepare lessons, whereby the range is from 87% of those teachers teaching subjects in the areas of physical and artistic/crafts education to 92% in vocational education. Teachers in physical and artistic/crafts education use a computer in class less than those in science, mathematics and computer science (68% as opposed to 80%).

Teachers teaching science, mathematics and computer science (22%) and active in vocational education (23%) are the most intensive users of the computer in class (in more than 50% of their lessons). This compares to only 5% of the literature and language teachers, with those in primary education (17%), humanities and social science (13%) and physical and artist/crafts education (16%) in the mid-field.

A similar pattern emerges with respect to teachers’ ICT competence, which is highest in respect to the use of text processors among science, mathematics and computer science teachers (70%) and lowest among those teaching literature and languages (56%). 10% of the latter group also report that they have no, or next to no, ICT user experience, which is around twice as high compared to teachers of other subjects. It is therefore not surprising that almost 50% of the science, mathematics and computer science teachers and those in vocational education possess good ICT user skills, whereas the corresponding figures for literature and language teachers and physical and artistic/crafts teachers are only 31% and 35%.

Almost half of the non-using artistic/crafts teachers are those reporting that their subject does not lend itself to being taught via computers (48%), whereas this figure is just 33% for vocational teachers and around 20% or less in all other subjects.

The differences on the other indicators are much less pronounced or do not even occur

3.5 Barriers: non-use of ICT by teachers

Teachers not using computers in class report different barriers preventing them from using ICT for teaching:

- “Lack of computers” is the reason stated by 49% of teachers currently belonging to the non-IT users for teaching purposes. The variation between countries is huge, with Lithuania 78%, Latvia 66%, France 63%, Slovenia 61% giving this as an important barrier, while these figures reach only between 27% and 31% in the Netherlands, Italy, Denmark and the United Kingdom.
- “The subject does not lend itself to being taught via computers” is the reason given by 24% and mostly by those teachers in physical and artistic/craft education.
- Another quarter states “lack of skills” as a constraining factor: in Germany this figure reaches a very high 46% and is more than twice as high as the European average. There seems to be a real problem in ICT training of teachers in German schools especially in primary schools where this figure reaches an even higher 53%. There also seems to be a

strong correlation of this phenomenon with the age of the teachers, since 66% of the German teachers have more than 20 years of teaching experience, i.e. are rather old on average. This compares to a European average of 48% for the whole of Europe. Similar results – although at lower level – occur in France and Spain where almost a third of the teachers not using computers in class report lack of skills as the reason for not using ICT. Interestingly, and when looking at the results of all teachers on the availability of sufficient computer skills among teachers, less than a third of German teachers report this to be an issue. This figure is below the European average of 42%.

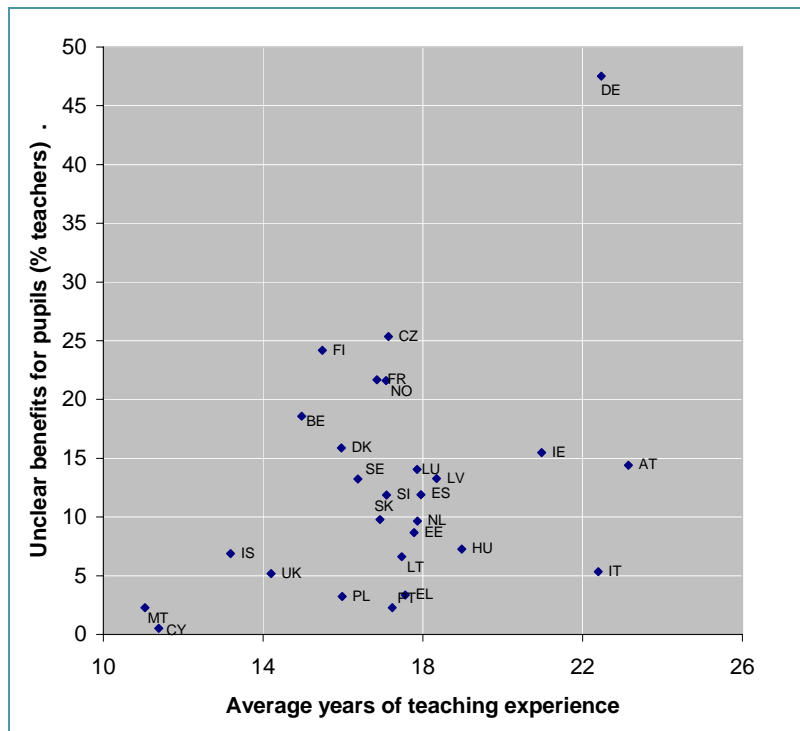
- “Lack of adequate material” is a constraint for 20%, but is not an issue in Iceland and the United Kingdom where the figure is only 4%.
- 16% of teachers not using computers in class still express the opinion that the use of ICT reveals “no or unclear benefits”. German teachers not using ICT in class seem to be by far the most sceptical with respect to the benefits which can be achieved by using ICT in class, at 48% this is three times higher than the European average. Only in four other countries are above average values achieved: these are the Czech Republic 25%, Finland 24%, France and Norway 22%. In all other countries substantially more teachers are of the opinion that ICT use in class brings clear benefits for pupils. There exists a correlation between this scepticism and a lack of motivation to use ICT in class with the age/amount of teaching experience of teachers: the older the teachers the more likely they will lack motivation to use ICT in class because they do not see benefits in its use for pupils.

Percentage of teachers (not using computers in class) stating that the use of ICT in class does not reveal clear benefits for pupils by years of teaching experience in Europe 2006

	<5 y	5-9 y	10-19 y	20+ y
EU25	12.6	9.2	16.7	18.5

- This also becomes apparent when cross-tabulating both indicators on an aggregate level (cf. below). This shows that in Germany teachers have an average of 23 years of teaching experience, i.e. they are old compared to their colleagues in almost all other EU member states, and reveals extremely high figures on lack of motivation and scepticism for using ICT in class because to them there are no clear benefits for pupils. However, in Germany, even the younger non-using teachers are rather sceptical about the benefits of ICT in class. Two other countries – Austria and Italy –have an “old” teacher workforce of about the same average age, but here the scepticism is at much lower levels.

Percentage of teachers (not using computers in class) stating that the use of ICT in class does not reveal clear benefits for pupils by the average years of teaching experience in Europe 2006



- Only less than 10% mention “lack of interest of teachers” as a reason for non-use. This is in line with the previous results. Again, German teachers not using computers in class rank top on “lack of interest” in using computers in class. The figure of 22% is almost three times as high as the European average of 9%. The situation is just the opposite in countries such as the UK and Malta where lack of interest does not seem to play a role, since here this statement receives a zero mention. This also applies to many other European countries where one can observe very low values on this aspect of non-use.
- “Lack of content in national language” reaches 9% but is only a more substantial issue in Slovakia (21%), France (14%), Germany (14%), the Czech Republic (11%) and Latvia (10%), where values above this average are achieved. It is not an issue at all in the United Kingdom, Austria, and Luxembourg where it is at 0%.
- Better technical ICT maintenance and support is a key issue for two thirds of the European schools. This particularly applies to many of the countries with poor ICT equipment and use such as Lithuania (90%), Cyprus (89%), Greece (83%), and from the old member states, Ireland (85%). The situation seems to be the poorest in primary schools. However, in countries with excellent levels of ICT equipment in schools and high levels of satisfaction with ICT, better ICT support can also be an issue, as illustrated by the example of Norway. ICT equipment in Norwegian schools is at a top level compared to other countries. A majority of Norwegian teachers are satisfied with the technical access means at their schools: 80% state that their school is well-equipped with computers and 83% express the opinion that their internet connection is fast enough, with highest satisfaction rates in vocational schools (90%). However, a very high 73% wish there were better support and maintenance actions taken. This is especially the case in primary schools with 76% of the teachers stating this as an issue. This seems to point to an area where there is some need for improvement in Norwegian schools.
- Almost 40% of European teachers also have difficulties in finding adequate learning materials for ICT-based teaching. There are only small variations across countries and schools types (with few exceptions).

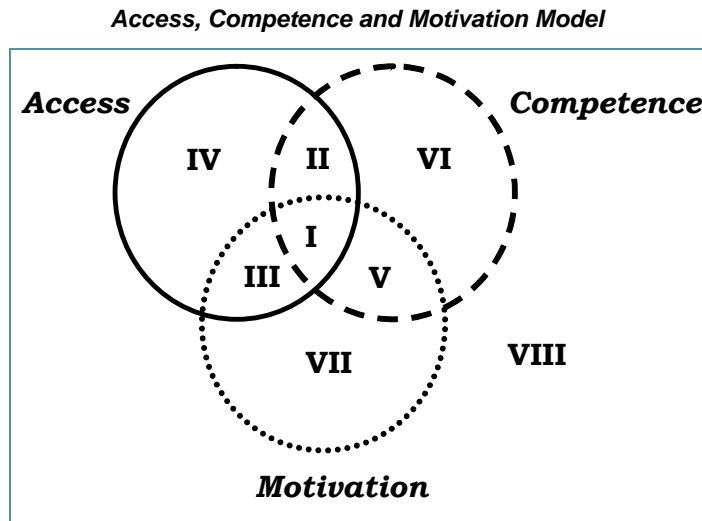
3.6 Access, Competence and Motivation for Using ICT and the Internet in Schools

3.6.1 The Access, Competence and Motivation Model (ACM model)

The ACM model as developed by Viherä and Nurmela (2001) was applied in this project to generate a typology according to the “propensity to the use of computers and internet by teachers in classroom situations at schools”. The typology in the figure below takes account of the three main categories of preconditions which need to be given for a school to make use of computers and the internet in the teaching process in classrooms, computer labs etc.

This model has been adopted for the project, arguing that the three main categories of preconditions which need to be given for a person to start using computers, the internet and eServices also applies to teachers in their behaviour to start using ICT and the internet in classroom situations in schools as asked for in the LearnInd CTS.

These are: **access** (to computers and the internet at school), **competence** (in using the computer software and the internet, and applying it for teaching purposes), and **motivation** (gauged through the attitude that using computers in classrooms results in significant learning benefits). Any attempt to group the classroom teachers according to their propensity to becoming users of computers and the internet in their teaching processes needs to take account of these three dimensions.



Source: based on Viherä & Nurmela 2001.

In more detail, we distinguish between a number of basic factors which determine the propensity of teachers to use computers and the internet in class. The ACM model is a (necessarily) simplified typology that assigns to each respondent a binary (yes/no) value on each of the three dimensions: access, competence and motivation.

It needs to be stressed that all the indicators for the ACM typology come from the Classroom Teacher Survey (CTS); therefore access is to be understood as a *perceived* level of computer equipment at schools and teachers' satisfaction therewith rather than an objective measure of equipment status. Objective equipment and access data has only been gathered in the Head Teacher Survey (HTS) and is hence not usable (because no micro-data linking is possible) for the desired typology.

Access is measured using the answers to the CTS survey question Q14 (2) "Our school is well-equipped with computers" and Q14 (3) "The internet connection we have is sufficiently fast". In case a respondent agrees with both assertions, the variable "access" assumes the value 1, otherwise it is zero.

Competence is measured using the variable skill that has been previously described (cf. above). Competence assumes the value 1 if good or very good ICT skills are achieved, otherwise it is zero.

Motivation is measured using Q14 (8). Those teachers are defined as motivated (motivation=1) who disagree with "Using computers in class does not result in significant learning benefits", otherwise motivation assumes the value 0.

Combining the three binary variables, teachers are classified into 8 ACM statuses depending on the presence or absence of either concept.

Because of the likely differences between teachers currently using computers and the internet at school and the non-users, typologies have been analysed separately for both sub-groups of the teachers – see below for the typology of all teachers and only of those not using computers and the internet in classroom situations.

3.6.2 Access, Competence and Motivation of all Teachers

What is noticeable when analysing the CTS survey data is that more than 80% of the European teachers describe themselves as competent in using computers and the internet in classroom situations, two-thirds dispose of the necessary motivation for doing so (according to their own opinion), and 60% describe the ICT infrastructure in their schools and the internet connection as sufficiently rapid. However, there are large variations across the countries on all three dimensions.

With respect to **access**, countries such as Lithuania, Latvia, Cyprus and Malta can be found at the bottom end with figures below 45%, compared the frontrunners Slovenia, United Kingdom, Hungary and Denmark all reaching figures beyond 70%. One needs to bear in mind that these figures are based on the attitudes of the teachers which merely reflect their feelings as to the quality and speed of the computer equipment and speed of the internet access and therefore do not constitute an absolute measurement. In the case of Malta in particular there seems to be a certain paradox: classroom teachers describe their internet access and the availability of computers at school as sub-optimal whereas from the HTS we know that schools in this country are very well-equipped, with 100% using computers for educational purposes, 100% of schools with internet access and 95% of the schools having broadband access. Concerning the number of computers per 100 pupils, Malta also reaches a figure which is above the EU25 average.

Competence levels seem to be high almost everywhere, with more than 80% or 90% of the teachers describing themselves as competent in using the ICT infrastructure in classrooms whereas teachers in Greece (60%), Portugal (70%), Hungary (71%) and France (76%) rank at the bottom end.

Motivation is lowest in Iceland, Sweden and Spain with figures around or even below 40%. Poland, Malta, Portugal rank top with figures above 80% and some of them close to 90%. At a first glance it appears to be a surprise that countries like Sweden and Finland rank rather low on this dimension. But again, one probably needs to consider that the use of computers and the internet by all citizens, including teachers, in these ICT frontrunner countries has for some time been part of daily life, whereas in other countries, which are at a lower level of penetration, motivation is of key importance and mentioned as such in the use of computers and the internet.

Access, Motivation and Competence of Teachers for Using ICT and the Internet in Schools – by Country

Country	Access	Competence	Motivation
BE	53.0	84.5	66.5
CZ	55.6	85.5	69.4
DK	71.3	93.3	70.9
DE	65.2	81.7	67.2
EE	60.0	78.5	75.4
EL	50.1	60.0	74.5
ES	64.4	81.7	41.6
FR	41.3	76.0	54.9
IE	43.5	84.3	72.8
IT	52.1	77.4	77.5
CY	45.0	85.0	80.0
LV	42.2	52.3	62.4
LT	51.4	68.2	77.0
LU	59.1	81.8	61.9
HU	71.5	71.1	50.7
MT	45.0	90.0	85.0
NL	78.5	92.0	70.8
AT	61.0	89.0	57.9
PL	65.2	81.3	87.0
PT	38.5	69.7	84.1
SI	76.2	82.1	78.6
SK	51.8	84.4	79.3
FI	63.3	84.9	57.8
SE	67.9	93.3	41.4
UK	75.1	93.6	81.5
IS	58.8	88.2	29.4
NO	68.1	90.9	72.8
EU25	60.3	82.1	68.4
EU25+2	60.7	82.0	68.4
EU15	61.4	79.3	78.1
NMS10	60.5	82.6	66.2

Base: All teachers; **Source:** empirica: LearnInd 2006 (CTS)

Calculating all the types of the ACM model with data from the CTS survey yields the following results:

A substantial 38% of European classroom teachers included in the sample are endowed with access to computers and the internet at school, the competence to use the Internet for teaching purposes, and the necessary motivation to do so (type I). The breakdown per country also shows that a third of European teachers report that they have good access to the internet and the necessary competence and motivation to use ICT in classroom situations. This group is largest in the United Kingdom – where it comprises 60% of the teachers – and smallest in Latvia, Iceland and France, where it encompasses less than 20% of the teachers.



















Interestingly, types III, V, VII and VIII are next to non-existent among teachers in the countries included in the sample: persons who have neither access nor motivation and competence (VIII), those with access but without competence and motivation (VII) but also those without access and competence but motivation (V) and those lacking competence but having access and motivation (III), are very rare.











It appears as if motivation seems to be a critical factor, since 14% with access lack both motivation and competence and another 10% also lack motivation despite their competence and access to ICT. The existence and considerable relative size of this group of teachers with a lack of motivation in all ten countries covered by the sample indicates that access alone is by no means a sufficient condition for uptake of ICT use in schools. Getting schools online is not enough if the goal is to involve as many teachers and pupils as possible in using the Internet and eLearning services as an integral part of the teaching and learning process.

On the contrary, only 4% of the European teachers have neither access, nor the necessary competence and motivation (type VIII).

In some countries at least access is also critical since more than one in five report that they dispose of competence and motivation but lack access. The situation is most critical in Malta with more than 40% of teachers reporting this, followed by Portugal, Cyprus and Ireland where this figure is around 35%. The opposite situation can be observed in countries such as Iceland, Hungary, Sweden and the Netherlands, where only around 10% of teachers with motivation and competence report a lack of access.

Propensity to take up computers and the internet in classroom situations among all teachers – by country

Country		VIII	VII	VI	V	IV	III	II	I	Score*)
		access, competence, motivation	access, competence, motivation	access, competence, motivation	access, competence, motivation	access, competence, motivation	access, competence, motivation	access, competence, motivation	access, competence, motivation	
	UK	0.7	1.2	5.6	1.8	11.0	2.7	16.8	60.2	250
	NL	1.1	2.6	7.3	1.5	18.3	2.9	11.7	54.7	241
	SI	2.0	4.7	4.2	2.4	10.0	9.2	15.2	52.2	237
	DK	1.6	1.2	7.0	1.7	19.3	2.2	18.5	48.6	235
	PL	1.9	2.6	3.1	6.9	5.4	7.4	22.9	49.9	234
	NO	2.6	2.6	7.6	1.5	14.2	2.2	20.2	49.1	232
	NMS10	3.2	4.0	5.6	6.4	9.2	7.2	22.6	42.0	220
	MT	2.7	1.1	6.6	2.6	6.0	2.0	44.5	34.4	219
	SK	3.1	1.7	6.6	6.0	9.3	4.9	32.3	36.0	215
	DE	4.8	5.5	8.4	3.5	14.1	4.6	18.1	41.0	214
	EE	3.9	4.2	6.3	5.9	10.0	7.8	23.5	38.3	214
	CZ	4.3	3.9	9.7	4.9	13.7	4.8	20.7	38.0	211
	EU25	4.3	3.9	9.7	5.0	13.7	4.8	20.7	37.9	211
	EU25+2	2.7	2.6	11.0	3.9	14.3	5.2	26.9	33.4	211
	CY	3.7	1.8	8.1	6.9	6.2	3.9	35.6	33.8	210
	EU15	4.6	3.9	10.6	4.7	14.7	4.3	20.3	37.0	209
	AT	2.7	3.6	15.2	2.3	20.7	2.5	19.0	34.1	208
	IT	4.3	3.4	6.8	8.5	8.1	6.5	28.4	34.2	207
	FI	4.1	4.5	13.1	2.1	20.6	4.3	17.4	34.0	206
	LU	5.5	5.6	12.0	3.3	15.6	2.4	19.4	36.1	204
	BE	5.9	2.7	12.5	4.4	12.5	2.4	24.2	35.3	204

	SE	2.7	2.0	17.9	0.0	36.0	1.9	11.5	28.0	203
	IE	5.0	1.9	12.0	5.5	8.2	3.2	34.0	30.2	201
	LT	5.7	3.8	8.6	12.5	5.1	9.7	22.0	32.6	196
	HU	6.1	12.3	8.1	3.3	22.8	7.3	11.1	29.1	193
	PT	5.6	1.8	5.0	15.0	3.6	8.0	35.9	25.1	192
	ES	6.0	7.1	15.7	2.0	29.6	3.2	11.9	24.5	188
	EL	6.9	6.0	5.1	14.1	7.4	12.9	23.8	23.7	185
	IS	6.1	5.4	21.5	0.9	37.0	0.9	10.2	17.9	178
	FR	8.7	4.5	18.4	6.8	13.5	4.1	24.8	19.2	172
	LV	12.0	7.4	10.9	16.1	7.4	12.1	18.9	15.2	157
*) Score = 3*I + 2*(II+III+IV) + V+VI+VII										

Base: All teachers; Source: empirica: LearnInd 2006 (CTS)




















3.6.3 Access, Competence and Motivation of Teachers not Using Computers and the Internet at School









When looking at those teachers not using computers and the internet at school, it becomes apparent that lack of access seems to be the largest barrier.

19% of European teachers in this group of non-users are motivated and competent to use computers and the internet as part of the teaching process but lack access. This group is largest in Malta and Portugal with figures of 40% and almost 30%. Another 8% lack access and competence but dispose of motivation, 12% lack access and motivation but are competent and 9% rate negatively on all three indicators.

However, a quarter of teachers not using a computer dispose of access, competence and motivation, i.e. they should be ready to start but for some specific reason – which requires further investigation – they do not. This group is very large in the United Kingdom (55%) followed by Denmark (47%) and the Netherlands (44%) and smallest in Iceland (8%), Latvia (10%), Spain (14%) and France (15%). These could be candidates for making use of computers in school in the near future indicating that the share of frontrunner countries such as the United Kingdom, Denmark and the Netherlands, already at high levels concerning the use of ICT by teachers in schools, are further moving ahead and widening the gap with the laggards such as the countries above showing low figures on this indicator.

Propensity to take up computers and the internet in classroom situations among teachers not using computers and the internet at school – by country

Country		VIII	VII	VI	V	IV	III	II	I	Score)
		access, competence, motivation	access, competence, motivation	access, competence, motivation	access, competence, motivation	access, competence, motivation	access, competence, motivation	access, competence, motivation	access, competence, motivation	
	UK	2.8	3.8	6.4	5.7	8.2	3.6	14.5	55.0	233
	DK	2.3	2.3	8.4	2.3	17.7	3.6	16.4	46.9	229
	NL	2.9	3.8	9.8	2.6	18.0	6.8	12.5	43.6	222
	NO	4.4	5.4	10.9	1.9	15.5	3.9	20.2	37.7	211
	PL	3.0	4.8	4.6	10.1	7.0	10.9	24.6	34.9	209
	SI	4.5	11.7	8.4	4.8	10.4	14.9	14.1	31.1	197
	MT	6.1	3.3	10.6	4.2	6.5	5.8	39.5	24.1	194
	FI	6.2	8.7	13.6	3.0	20.8	5.0	13.4	29.5	192
	NMS10	5.8	7.5	7.0	10.0	10.2	10.9	21.3	27.4	191
	CY	8.9	3.6	4.7	15.9	6.2	5.1	27.5	28.0	186
	IT	8.7	5.6	6.9	11.5	8.1	11.9	20.4	27.0	186
	LU	7.6	7.0	14.8	4.8	18.7	0.6	19.2	27.3	185
	AT	4.7	6.6	22.6	0.7	17.0	3.1	20.7	24.6	185
	IE	9.9	3.8	12.2	5.9	8.5	4.6	28.2	26.8	185
	SE	4.6	6.0	25.8	-	31.9	-	9.1	22.6	182
	EU25	9.0	7.7	11.6	8.1	12.1	8.0	18.9	24.6	179
	EU25+2	8.9	7.7	11.6	8.1	12.2	7.9	18.9	24.7	179
	BE	10.6	4.5	14.9	6.9	12.7	3.8	19.9	26.8	179
	CZ	6.2	5.9	13.5	7.3	15.6	8.7	24.9	18.0	179
	EE	7.6	7.3	9.7	9.7	10.8	12.5	23.8	18.6	177
	PT	9.5	3.1	5.4	19.2	3.8	7.5	29.2	22.3	176

	EU15	9.8	7.8	12.9	7.6	12.7	7.2	18.3	23.8	176
	SK	9.0	4.9	6.8	14.5	9.4	12.9	23.1	19.4	175
	DE	11.6	12.5	11.1	6.7	10.5	7.6	15.1	25.0	172
	EL	8.9	8.1	4.3	18.4	6.8	16.0	20.6	16.9	168
	HU	9.2	18.7	9.5	5.0	21.7	10.3	8.3	17.4	166
	LT	10.2	4.1	10.6	19.8	4.7	10.2	20.9	19.6	165
	FR	12.7	6.6	17.9	7.6	12.8	5.8	22.0	14.6	157
	ES	12.0	13.7	19.0	2.4	22.7	4.9	11.3	14.1	155
	IS	13.1	14.0	24.3	0.9	31.8	0.9	7.5	7.5	142
	LV	16.9	8.6	11.1	16.8	5.7	13.4	17.3	10.2	140

*) Score = 3*I + 2*(II+III+IV) + V+VI+VII

Base: Teachers not using computers in classrooms; **Source:** empirica: LearnInd 2006 (CTS)

Annexes

Annex I: Results of the Head Teacher Survey 2006

Table A1-1: Percentage of schools which use computers for educational purposes by school type

Country	Total	Primary Schools	Lower Secondary Schools	Upper Secondary Schools	Vocational Schools
BE	97.7	97.5	99.1	98.6	98.0
CZ	99.6	99.4	99.6	100.0	100.0
DK	100.0	100.0	100.0	100.0	100.0
DE	99.6	99.5	100.0	100.0	98.8
EE	98.6	99.4	99.3	99.0	89.6
EL	100.0	100.0	100.0	100.0	100.0
ES	95.8	97.1	99.4	99.2	86.7
FR	99.3	99.2	100.0	100.0	98.8
IE	100.0	100.0	100.0	100.0	100.0
IT	99.6	99.4	100.0	100.0	100.0
CY	98.9	98.5	100.0	100.0	100.0
LV	97.6	97.7	100.0	99.6	95.6
LT	96.7	96.1	99.7	100.0	100.0
LU	99.0	98.7	100.0	100.0	100.0
HU	97.3	96.7	99.9	99.6	99.0
MT	100.0	100.0	100.0	100.0	100.0
NL	100.0	100.0	100.0	100.0	100.0
AT	99.2	98.6	99.6	99.0	100.0
PL	95.3	97.0	98.7	92.4	95.3
PT	97.0	96.4	99.3	100.0	98.6
SI	99.8	100.0	100.0	98.5	100.0
SK	98.9	98.9	99.7	98.6	98.0
FI	100.0	100.0	100.0	100.0	100.0
SE	99.9	100.0	100.0	100.0	96.4
UK	99.8	100.0	99.5	98.7	96.0
IS	99.5	100.0	100.0	100.0	94.6
NO	99.8	99.7	100.0	100.0	100.0
EU25	98.7	98.9	99.7	98.5	97.1
EU25+2	98.7	98.9	99.7	98.5	97.2
EU15	99.1	99.2	99.8	99.6	97.1
NMS10	96.7	97.5	99.3	95.8	97.2
Base:	All schools of the respective breakdown category and country.			xx.x%:	based on at least 50 cases.
Question:	Q6			xx.x%:	based on at least 10 cases.
Wording:	In your school, how many computers are used for educational purposes for pupils, either to use alone or with a teacher? Please do not include computers that are only accessible to teachers or staff members.			xx.x%:	based on less than 10 cases
Indicator:	% of schools answering "1" or more to Q6.				

Source: empirica: LearnInd 2006 (HTS)

Table A1-2: Percentage of schools which use computers for educational purposes by internet access type and type of locality

Country	Total	Narrowband Internet access schools	Broadband internet access schools	Schools in densely populated areas	Schools in intermediate areas	Schools in thinly populated areas
BE	97.7	100.0	100.0	97.5	98.0*)	98.0*)
CZ	99.6	100.0	100.0	100.0	98.5	100.0
DK	100.0	100.0	100.0	100.0	100.0	100.0
DE	99.6	100.0	100.0	99.3	99.6	100.0
EE	98.6	100.0	100.0	95.8*)	95.8*)	99.7
EL	100.0	100.0	100.0	100.0	100.0	100.0
ES	95.8	100.0	100.0	93.7	97.3	98.3
FR	99.3	100.0	100.0	98.9	98.0	100.0
IE	100.0	100.0	100.0	100*)	100*)	100.0
IT	99.6	100.0	100.0	98.9	100.0	100.0
CY	98.9	100.0	100.0	#NV	100*)	100*)
LV	97.6	100.0	100.0	95.3*)	95.3*)	98.4
LT	96.7	100.0	100.0	92.8	N/A	98.1
LU	99.0	100.0	100.0	98.9*)	98.9*)	98.9*)
HU	97.3	100.0	100.0	98.4	100.0	95.8
MT	100.0	100.0	100.0	100*)	100*)	100*)
NL	100.0	100.0	100.0	100.0	100.0	100.0
AT	99.2	100.0	100.0	98.9	100.0	98.7
PL	95.3	100.0	100.0	97.0	95.1	94.1
PT	97.0	100.0	100.0	100.0	98.5	100.0
SI	99.8	100.0	100.0	98.9	100.0	100.0
SK	98.9	100.0	100.0	97.8	99.2	99.0
FI	100.0	100.0	100.0	100*)	100*)	100.0
SE	99.9	100.0	100.0	99.7*)	99.7*)	100.0
UK	99.8	100.0	100.0	100.0	99.5	100.0
IS	99.5	100.0	100.0	N/A	98.7	100.0
NO	99.8	100.0	100.0	100.0	100.0	99.7
EU25	98.7	100.0	100.0	98.4	98.7	99.0
EU25+2	98.7	100.0	100.0	98.4	98.7	99.0
EU15	99.1	100.0	100.0	98.6	99.1	99.8
NMS10	96.7	100.0	100.0	97.4	96.5	96.4
Base:	All schools of the respective breakdown category and country.			xx.x%: based on at least 50 cases. xx.x%: based on at least 10 cases. xx.x%: based on less than 10 cases *): This value represents collapsed adjacent cells (due to sample sizes too small)		
Question:	Q6					
Wording:	In your school, how many computers are used for educational purposes for pupils, either to use alone or with a teacher? Please do not include computers that are only accessible to teachers or staff members.					
Indicator:	% of schools answering "1" or more to Q6.					

Source: empirica: LearnInd 2006 (HTS)

Table A1-3: Total number of computers per 100 pupils by school type

Country	Total	Primary Schools	Lower Secondary Schools	Upper Secondary Schools	Vocational Schools
BE	9.7	7.7	13.3	11.9	13.6
CZ	9.3	7.6	7.2	10.9	12.1
DK	27.3	18.6	18.4	37.3	50.3
DE	8.9	10.6	8.3	8.0	9.4
EE	7.3	6.1	6.0	6.4	14.1
EL	6.5	4.8	6.6	9.0	19.9
ES	9.5	8.6	10.0	11.3	11.8
FR	12.5	8.1	11.4	19.7	25.1
IE	10.3	9.2	9.6	10.6	14.6
IT	8.0	5.7	6.9	10.7	12.4
CY	12.4	7.3	12.1	18.6	19.8
LV	5.9	5.5	5.6	5.4	7.0
LT	5.9	5.5	5.9	5.9	8.3
LU	19.8	22.6	21.3	20.9	7.9
HU	9.6	6.8	7.8	11.6	16.4
MT	11.0	12.8	8.9	8.9	12.2
NL	21.0	15.4	19.7	22.4	27.5
AT	16.2	11.4	13.8	20.6	24.3
PL	6.1	5.6	5.7	7.3	7.2
PT	6.4	5.8	5.8	7.1	15.5
SI	8.0	8.0	8.0	8.1	9.0
SK	6.7	5.4	5.0	8.3	9.2
FI	16.8	12.2	12.3	17.5	22.2
SE	17.4	14.6	13.2	29.2	17.2
UK	19.8	15.9	25.0	26.4	28.5
IS	15.3	14.5	14.3	17.3	18.8
NO	24.2	18.1	21.9	40.9	38.8
EU25	11.3	9.4	10.8	12.5	15.6
EU25+2	11.4	9.5	10.9	12.7	15.8
EU15	12.1	10.2	11.8	13.6	16.8
NMS10	7.1	6.1	6.4	8.2	9.9
Base:	All schools of the respective breakdown category and country.			xx.x%:	based on at least 50 cases.
Questions	Q4; Q6			xx.x%:	based on at least 10 cases.
Wording:	Q4: How many pupils does your school have ? Q6: In your school, how many computers are used for educational purposes for pupils, either to use alone or with a teacher? Please do not include computers that are only accessible to teachers or staff members.			xx.x%:	based on less than 10 cases
Indicator:	Total number of computers (in breakdown aggregate) / total number of pupils (in breakdown aggregate) *100. (Note: not a school average, but aggregate estimator)			*):	This value represents collapsed adjacent cells (due to sample sizes too small)

Source: empirica: LearnInd 2006 (HTS)

Table A1-4: Total number of computers per 100 pupils by internet access type and type of locality

Country	Total	Narrowband Internet access schools	Broadband internet access schools	Schools in densely populated areas	Schools in intermediate areas	Schools in thinly populated areas
BE	9.7	7.4	10.6	9.3	10.5*)	10.5*)
CZ	9.3	9.0	9.4	9.2	8.8	9.7
DK	27.3	30.0	27.3	25.5	30.5	26.0
DE	8.9	9.3	8.8	9.1	8.8	8.8
EE	7.3	8.6	7.3	6.71*)	6.71*)	7.8
EL	6.5	5.8	9.5	5.9	6.7	8.3
ES	9.5	11.3	9.7	7.5	11.8	16.6
FR	12.5	15.8	12.4	14.0	9.7	12.3
IE	10.3	9.2	10.6	10.9*)	10.9*)	9.9
IT	8.0	7.6	8.2	8.2	7.6	8.1
CY	12.4	9.5	15.1	12.9	11.3*)	11.3*)
LV	5.9	6.4	5.7	4.65*)	4.65*)	7.0
LT	5.9	6.0	5.9	4.7	N/A	6.6
LU	19.8	21.7	19.0	19.7*)	19.7*)	19.7*)
HU	9.6	9.3	9.7	10.4	9.3	8.9
MT	11.0	12.6	10.9	10.9*)	10.9*)	10.9*)
NL	21.0	16.9	21.2	23.8	19.9	17.1
AT	16.2	14.4	16.9	13.9	16.2	17.6
PL	6.1	6.4	5.8	5.8	5.8	7.2
PT	6.4	6.1	6.6	9.2	8.8	9.7
SI	8.0	9.2	7.9	7.0	7.4	9.2
SK	6.7	6.8	6.7	6.2	6.3	7.4
FI	16.8	16.8	16.8	16.9*)	16.9*)	16.7
SE	17.4	21.5	17.1	16.4*)	16.4*)	18.0
UK	19.8	18.3	20.3	19.1	18.3	20.8
IS	15.3	18.1	15.3	N/A	14.9	15.9
NO	24.2	23.5	24.3	22.8	26.2	24.0
EU25	11.3	9.5	12.0	11.2	10.5	12.2
EU25+2	11.4	9.6	12.1	11.2	10.6	12.5
EU15	12.1	10.9	12.6	11.9	11.1	13.6
NMS10	7.1	6.8	7.5	6.8	6.7	7.8
Base:	All schools of the respective breakdown category and country.			xx.x%: based on at least 50 cases. xx.x%: based on at least 10 cases. xx.x%: based on less than 10 cases *): This value represents collapsed adjacent cells (due to sample sizes too small)		
Questions	Q4; Q6					
Wording:	Q4: How many pupils does your school have ? Q6: In your school, how many computers are used for educational purposes for pupils, either to use alone or with a teacher? Please do not include computers that are only accessible to teachers or staff members.					
Indicator:	% of schools having more than 20 computers per 100 pupils					

Source: empirica: LearnInd 2006 (HTS)

Table A1-5: Percentage of schools which use computers for education in computer labs by school type

Country	Total	Primary Schools	Lower Secondary Schools	Upper Secondary Schools	Vocational Schools
BE	74.7	65.7	96.7	98.6	98.0
CZ	90.7	86.5	96.7	99.4	100.0
DK	90.6	91.0	94.2	96.2	84.7
DE	85.8	77.5	95.4	94.9	88.8
EE	91.4	91.3	96.8	98.5	93.0
EL	84.0	74.1	99.0	100.0	100.0
ES	81.0	78.6	96.1	97.7	84.6
FR	66.2	59.5	95.6	100.0	96.3
IE	47.4	35.6	98.4	98.7	100.0
IT	98.8	98.4	100.0	99.0	100.0
CY	73.4	62.0	100.0	100.0	100.0
LV	97.1	96.1	99.4	100.0	100.0
LT	89.1	87.2	98.2	99.8	98.0
LU	44.3	32.3	100.0	100.0	100.0
HU	95.9	95.1	97.8	99.1	97.3
MT	55.5	29.3	100.0	100.0	100.0
NL	48.6	43.0	74.5	78.9	68.3
AT	50.7	21.1	87.6	98.3	84.4
PL	97.1	96.0	99.4	98.8	100.0
PT	69.6	62.4	97.9	99.0	89.3
SI	100.0	100.0	100.0	100.0	100.0
SK	89.1	87.6	89.3	92.4	90.3
FI	73.7	64.3	95.1	96.7	90.9
SE	47.8	39.2	69.5	67.0	79.4
UK	79.3	75.9	98.9	99.3	95.3
IS	84.1	82.8	100.0	91.4	88.3
NO	81.7	76.7	84.1	100.0	94.7
EU25	80.5	74.2	95.8	97.2	92.7
EU25+2	80.5	74.2	95.6	97.2	92.7
EU15	77.5	70.5	95.1	96.6	90.9
NMS10	94.6	92.6	97.7	98.6	98.5
Base:	All schools that use computers for education of the respective breakdown category and country.			xx.x%:	based on at least 50 cases.
Question:	Q8a			xx.x%:	based on at least 10 cases.
Wording:	Q8a: How many computers are installed for educational purposes for pupils to use either alone or with a teacher... in (a) computer lab(s)			xx.x%:	based on less than 10 cases
Indicator:	% of schools (that use computers) answering "1" or more to Q8a.				

Source: empirica: LearnInd 2006 (HTS)

Table A1-6: Percentage of schools which use computers for education in computer labs by internet access type and type of locality

Country	Total	Narrowband Internet access schools	Broadband internet access schools	Schools in densely populated areas	Schools in intermediate areas	Schools in thinly populated areas
BE	74.7	64.8	78.7	78.4	70.5*)	70.5*)
CZ	90.7	87.4	92.6	94.2	91.7	88.1
DK	90.6	84.9	90.8	93.1	89.9	89.9
DE	85.8	82.2	88.9	88.2	85.1	82.1
EE	91.4	82.3	91.9	95.3*)	95.3*)	89.9
EL	84.0	83.9	94.6	93.5	98.0	67.2
ES	81.0	53.4	86.2	87.9	83.1	66.5
FR	66.2	34.1	74.4	80.4	69.5	57.3
IE	47.4	32.3	54.6	86.3*)	86.3*)	38.2
IT	98.8	99.1	98.6	98.9	100.0	96.6
CY	73.4	65.5	93.4	78.7	67.8*)	67.8*)
LV	97.1	98.3	97.5	96.2*)	96.2*)	97.4
LT	89.1	90.6	89.8	82.2	N/A	91.4
LU	44.3	33.8	47.6	44.3*)	44.3*)	44.3*)
HU	95.9	95.8	96.5	99.1	95.6	94.3
MT	55.5	34.5	56.7	55.5*)	55.5*)	55.5*)
NL	48.6	35.6	49.8	47.5	51.4	45.5
AT	50.7	34.3	58.2	64.7	53.3	45.7
PL	97.1	98.6	97.9	98.9	96.9	95.7
PT	69.6	70.6	68.8	94.2	91.7	88.1
SI	100.0	100.0	100.0	100.0	100.0	100.0
SK	89.1	87.5	91.4	94.3	86.7	88.5
FI	73.7	43.8	76.9	91.4*)	91.4*)	67.7
SE	47.8	22.3	50.9	61.3*)	61.3*)	42.0
UK	79.3	75.6	80.6	86.1	88.0	65.8
IS	84.1	53.9	86.7	N/A	92.0	79.0
NO	81.7	73.5	82.7	90.3	88.8	78.6
EU25	80.5	79.6	81.9	87.3	83.8	71.5
EU25+2	80.5	79.5	81.9	87.3	83.8	71.7
EU15	77.5	72.2	80.1	85.7	81.6	65.2
NMS10	94.6	95.6	95.2	96.2	95.3	93.2
Base:	All schools that use computers for education of the respective breakdown category and country.			xx.x%: based on at least 50 cases.		
Question:	Q8a			xx.x%: based on at least 10 cases.		
Wording:	Q8a: How many computers are installed for educational purposes for pupils to use either alone or with a teacher... in (a) computer lab(s)			xx.x%: based on less than 10 cases		
Indicator:	% of schools (that use computers) answering "1" or more to Q8a.					

Source: empirica: LearnInd 2006 (HTS)

Table A1-7: Percentage of schools which use computers for education in classrooms by school type

Country	Total	Primary Schools	Lower Secondary Schools	Upper Secondary Schools	Vocational Schools
BE	78.8	83.5	70.9	64.8	69.9
CZ	47.6	48.0	44.7	46.3	42.3
DK	71.5	72.1	69.9	67.2	80.1
DE	66.1	80.1	61.2	55.2	56.5
EE	27.9	27.6	25.3	28.2	40.5
EL	17.8	24.5	5.9	8.1	0.0
ES	47.6	49.9	35.9	38.8	48.4
FR	76.7	76.9	74.8	69.3	72.9
IE	89.0	94.1	67.1	67.6	64.2
IT	32.2	38.3	34.9	20.8	19.1
CY	89.5	95.3	74.1	77.4	84.7
LV	40.7	36.9	37.6	48.6	55.6
LT	48.0	47.1	47.0	55.4	54.0
LU	88.2	98.7	80.1	82.6	14.6
HU	18.5	19.3	17.6	18.5	17.5
MT	51.7	77.3	12.8	12.8	16.4
NL	92.1	95.4	83.7	83.0	74.2
AT	64.8	87.4	37.3	39.8	36.7
PL	22.7	18.7	23.9	30.4	28.8
PT	81.4	88.9	54.5	50.1	46.1
SI	93.1	96.4	96.4	84.6	83.4
SK	19.2	17.8	17.1	19.9	21.5
FI	76.9	79.8	80.4	76.4	58.2
SE	85.5	89.2	84.5	76.3	73.3
UK	95.2	96.4	88.4	88.1	74.9
IS	67.7	71.9	38.7	47.9	34.8
NO	84.0	89.0	79.4	72.6	68.7
EU25	61.4	67.4	51.4	46.6	46.2
EU25+2	61.6	67.6	51.8	46.8	46.4
EU15	68.2	75.0	58.8	51.9	50.5
NMS10	29.5	28.6	30.5	33.9	32.6
Base:	All schools that use computers for education of the respective breakdown category and country.			xx.x%:	based on at least 50 cases.
Question:	Q8b			xx.x%:	based on at least 10 cases.
Wording:	Q8b: How many computers are installed for educational purposes for pupils to use either alone or with a teacher... in the classroom(s)			xx.x%:	based on less than 10 cases
Indicator:	% of schools (that use computers) answering "1" or more to Q8b.				

Source: empirica: LearnInd 2006 (HTS)

Table A1-8: Percentage of schools which use computers for education in classrooms by internet access type and type of locality

Country	Total	Narrowband internet access schools	Broadband internet access schools	Schools in densely populated areas	Schools in intermediate areas	Schools in thinly populated areas
BE	78.8	79.0	78.5	75.9	82.0*)	82.0*)
CZ	47.6	45.9	48.9	51.4	46.6	45.8
DK	71.5	86.2	71.5	73.9	63.9	74.6
DE	66.1	69.8	63.8	72.3	65.2	55.1
EE	27.9	41.5	27.4	31.1*)	31.1*)	26.7
EL	17.8	17.9	9.6	11.1	12.2	28.2
ES	47.6	61.0	45.0	43.0	46.7	56.7
FR	76.7	91.6	73.5	74.3	76.5	78.0
IE	89.0	90.7	88.6	80.0*)	80.0*)	91.1
IT	32.2	30.8	32.8	34.5	30.1	32.3
CY	89.5	93.4	80.1	82.1	97.1*)	97.1*)
LV	40.7	41.1	40.9	47.3*)	47.3*)	38.3
LT	48.0	48.2	48.4	53.0	N/A	46.2
LU	88.2	100.0	86.3	88.2*)	88.2*)	88.2*)
HU	18.5	19.6	17.8	24.2	15.8	16.6
MT	51.7	65.5	50.9	51.6*)	51.6*)	51.6*)
NL	92.1	79.6	93.3	91.0	92.0	93.5
AT	64.8	77.5	59.1	53.7	64.4	67.7
PL	22.7	21.8	23.0	26.6	19.4	22.1
PT	81.4	86.9	78.7	51.4	46.6	45.8
SI	93.1	92.6	93.2	93.4	91.2	94.3
SK	19.2	20.8	16.7	18.3	21.9	18.4
FI	76.9	77.0	76.8	77.9*)	77.9*)	76.5
SE	85.5	77.7	86.5	80.1*)	80.1*)	87.8
UK	95.2	91.5	96.5	94.0	96.8	97.2
IS	67.7	59.5	68.4	N/A	74.7	63.3
NO	84.0	84.6	83.9	88.8	87.2	82.4
EU25	61.4	53.9	64.4	62.0	58.2	63.0
EU25+2	61.6	54.1	64.7	62.2	58.4	63.4
EU15	68.2	66.2	68.8	66.9	64.4	72.7
NMS10	29.5	27.1	31.9	33.3	25.6	29.3
Base:	All schools that use computers for education of the respective breakdown category and country.			xx.x%: based on at least 50 cases.		
Question:	Q8b			xx.x%: based on at least 10 cases.		
Wording:	Q8b: How many computers are installed for educational purposes for pupils to use either alone or with a teacher... in the classroom(s)			xx.x%: based on less than 10 cases		
Indicator:	% of schools (that use computers) answering "1" or more to Q8b.					

Source: empirica: LearnInd 2006 (HTS)

Table A1-9: Percentage of schools having internet access by school type

Country	Total	Primary Schools	Lower Secondary Schools	Upper Secondary Schools	Vocational Schools
BE	96.9	96.4	99.1	98.6	98.0
CZ	99.2	98.8	99.2	100.0	100.0
DK	99.2	98.9	98.9	100.0	100.0
DE	97.5	95.5	99.6	100.0	98.8
EE	98.1	99.1	98.9	99.0	87.0
EL	96.6	95.0	99.1	99.1	100.0
ES	94.7	95.7	99.1	98.6	86.7
FR	90.3	88.4	99.4	100.0	97.5
IE	98.4	98.2	99.4	99.5	100.0
IT	97.8	96.5	96.7	100.0	100.0
CY	95.0	93.9	94.4	100.0	100.0
LV	94.3	93.3	97.0	99.6	95.6
LT	94.5	93.6	98.8	100.0	98.0
LU	95.5	94.5	100.0	100.0	100.0
HU	96.1	95.0	98.8	99.2	99.0
MT	100.0	100.0	100.0	100.0	100.0
NL	100.0	100.0	100.0	100.0	100.0
AT	99.2	98.6	99.6	99.0	100.0
PL	92.7	92.4	98.7	92.4	95.3
PT	92.1	90.4	98.6	100.0	98.6
SI	99.8	100.0	100.0	98.5	100.0
SK	97.5	96.9	98.8	98.6	98.0
FI	99.7	100.0	100.0	100.0	97.0
SE	99.9	100.0	100.0	100.0	96.4
UK	99.8	100.0	99.5	98.7	96.0
IS	99.5	100.0	100.0	100.0	94.6
NO	99.8	99.7	100.0	100.0	100.0
EU25	96.2	95.4	99.0	98.4	97.0
EU25+2	96.2	95.4	99.1	98.4	97.0
EU15	96.5	95.6	99.2	99.5	96.9
NMS10	94.7	94.5	98.8	95.7	97.2
Base:	All schools of the respective breakdown category and country.			xx.x%:	based on at least 50 cases.
Question:	Q9			xx.x%:	based on at least 10 cases.
Wording:	Q9: By which of the following means does your school mainly have access to the internet: ...			xx.x%:	based on less than 10 cases
Indicator:	% of schools stating at least one type of internet connection.				

Source: empirica: LearnInd 2006 (HTS)

Table A1-10: Percentage of schools having internet access by internet access type and type of locality

Country	Total	Narrowband Internet access schools	Broadband internet access schools	Schools in densely populated areas	Schools in intermediate areas	Schools in thinly populated areas
BE	96.9	100.0	100.0	97.5	96.2*)	96.2*)
CZ	99.2	100.0	100.0	100.0	98.5	99.1
DK	99.2	100.0	100.0	100.0	98.4	99.3
DE	97.5	100.0	100.0	97.5	97.5	97.5
EE	98.1	100.0	100.0	93.9*)	93.9*)	99.7
EL	96.6	100.0	100.0	98.6	100.0	92.9
ES	94.7	100.0	100.0	93.0	95.7	96.9
FR	90.3	100.0	100.0	84.9	91.4	92.8
IE	98.4	100.0	100.0	100*)	100*)	98.1
IT	97.8	100.0	100.0	96.9	98.0	98.9
CY	95.0	100.0	100.0	90.3	100*)	100*)
LV	94.3	100.0	100.0	94.7*)	94.7*)	94.1
LT	94.5	100.0	100.0	91.1	N/A	95.7
LU	95.5	100.0	100.0	95.4*)	95.4*)	95.4*)
HU	96.1	100.0	100.0	96.0	100.0	94.7
MT	100.0	100.0	100.0	100*)	100*)	100*)
NL	100.0	100.0	100.0	100.0	100.0	100.0
AT	99.2	100.0	100.0	98.9	100.0	98.7
PL	92.7	100.0	100.0	97.0	92.2	89.6
PT	92.1	100.0	100.0	100.0	98.5	99.1
SI	99.8	100.0	100.0	98.9	100.0	100.0
SK	97.5	100.0	100.0	96.7	98.6	97.4
FI	99.7	100.0	100.0	100*)	100*)	99.6
SE	99.9	100.0	100.0	99.7*)	99.7*)	100.0
UK	99.8	100.0	100.0	100.0	99.5	100.0
IS	99.5	100.0	100.0	N/A	98.7	100.0
NO	99.8	100.0	100.0	100.0	100.0	99.7
EU25	96.2	100.0	100.0	96.0	96.5	96.1
EU25+2	96.2	100.0	100.0	96.0	96.5	96.2
EU15	96.5	100.0	100.0	95.9	96.9	96.8
NMS10	94.7	100.0	100.0	96.8	94.6	93.5
Base:	All schools of the respective breakdown category and country.			xx.x%: based on at least 50 cases.		
Question:	Q9			xx.x%: based on at least 10 cases.		
Wording:	Q9: By which of the following means does your school mainly have access to the internet: ...			xx.x%: based on less than 10 cases		
Indicator:	% of schools stating at least one type of internet connection.					

Source: empirica: LearnInd 2006 (HTS)

Table A1-11: Total number of internet connected computers per 100 pupils by school type

Country	Total	Primary Schools	Lower Secondary Schools	Upper Secondary Schools	Vocational Schools
BE	7.7	5.2	12.0	10.6	12.0
CZ	8.2	6.4	6.2	10.1	11.0
DK	26.3	17.9	17.9	37.2	48.0
DE	7.7	7.1	7.4	7.5	8.7
EE	7.2	6.1	5.9	6.4	13.8
EL	5.9	4.2	6.1	8.3	19.1
ES	8.5	7.4	9.2	10.6	11.2
FR	8.9	4.8	10.0	14.0	18.2
IE	8.7	7.0	8.9	9.9	14.0
IT	6.5	4.2	5.1	9.8	10.5
CY	8.9	6.1	9.9	12.1	9.6
LV	5.1	4.8	4.9	4.8	5.8
LT	5.2	4.7	5.2	5.4	7.8
LU	18.3	20.9	21.3	18.9	7.9
HU	8.6	5.9	7.1	11.0	14.8
MT	10.2	12.2	8.6	8.6	10.2
NL	20.0	14.2	18.4	20.4	26.8
AT	14.2	7.0	12.8	19.8	23.1
PL	5.6	4.7	5.2	7.0	6.8
PT	5.4	4.4	5.2	6.2	15.3
SI	7.5	7.4	7.5	7.8	8.5
SK	5.8	4.9	4.5	6.9	7.4
FI	16.2	11.3	11.9	17.2	21.7
SE	16.5	13.8	12.7	27.5	17.0
UK	18.5	14.6	23.4	24.9	28.4
IS	14.8	14.1	14.3	17.2	17.6
NO	22.7	16.0	20.5	39.9	38.6
EU25	9.9	7.7	9.7	11.4	14.1
EU25+2	10.0	7.8	9.8	11.6	14.3
EU15	10.6	8.2	10.7	12.4	15.1
NMS10	6.4	5.3	5.8	7.7	8.9
Base:	All schools of the respective breakdown category and country.				
Questions	Q4; Q6, Q11				
Wording:	Q4: How many pupils does your school have ? Q6: In your school, how many computers are used for educational purposes for pupils, either to use alone or with a teacher? Please do not include computers that are only accessible to teachers or staff members. Q11: Of the computers used for educational purposes by pupils, either alone or with a teacher, approximately how many are connected to the internet?				
Indicator:	Total number of internet computers (in breakdown aggregate) / total number of pupils (in breakdown aggregate) *100. (Note: not a school average, but aggregate estimator)				
	xx.x%: based on at least 50 cases. xx.x%: based on at least 10 cases. xx.x%: based on less than 10 cases *): This value represents collapsed adjacent cells (due to sample sizes too small)				

Source: empirica: LearnInd 2006 (HTS)

Table A1-12: Total number of internet connected computers per 100 pupils by internet access type and type of locality

Country	Total	Narrowband Internet access schools	Broadband internet access schools	Schools in densely populated areas	Schools in intermediate areas	Schools in thinly populated areas
BE	7.7	5.5	8.6	7.6	8.0*)	8.0*)
CZ	8.2	7.8	8.4	8.0	7.9	8.7
DK	26.3	28.0	26.3	25.2	28.6	25.2
DE	7.7	7.3	7.9	7.9	7.4	7.2
EE	7.2	8.5	7.2	6.7*)	6.7*)	7.7
EL	5.9	5.2	9.1	5.3	6.4	7.3
ES	8.5	8.8	8.8	6.8	10.5	15.0
FR	8.9	8.7	9.5	10.0	7.6	8.2
IE	8.7	5.6	9.7	10.0*)	10.0*)	8.0
IT	6.5	6.0	6.8	6.8	6.3	6.4
CY	8.9	7.4	10.7	9.0	8.6*)	8.6*)
LV	5.1	5.5	5.0	3.9*)	3.9*)	6.1
LT	5.2	5.2	5.3	4.3	N/A	5.7
LU	18.3	20.2	17.7	18.3*)	18.3*)	18.3*)
HU	8.6	8.1	8.8	9.4	8.2	7.9
MT	10.2	10.6	10.2	10.2*)	10.2*)	10.2*)
NL	20.0	16.3	20.3	22.4	19.2	16.4
AT	14.2	11.9	14.9	13.2	13.8	15.2
PL	5.6	5.7	5.6	5.5	5.3	6.1
PT	5.4	4.4	5.8	5.3	5.4	6.0
SI	7.5	8.7	7.4	6.8	7.1	8.5
SK	5.8	6.1	5.7	5.2	5.5	6.5
FI	16.2	14.2	16.5	16.8*)	16.8*)	15.5
SE	16.5	20.6	16.2	15.7*)	15.7*)	17.0
UK	18.5	16.5	19.1	17.6	17.3	19.3
IS	14.8	17.3	14.7	N/A	14.2	15.6
NO	22.7	21.0	22.8	21.7	24.4	22.4
EU25	9.9	7.9	10.8	9.8	9.2	10.5
EU25+2	10.0	7.9	10.9	9.8	9.3	10.7
EU15	10.6	8.8	11.3	10.4	9.7	11.6
NMS10	6.4	6.0	6.9	6.3	6.0	6.8
Base:	All schools of the respective breakdown category and country.				xx.x%: based on at least cases.	
Questions	Q4; Q6, Q11				50	
Wording:	Q4: How many pupils does your school have ?				xx.x%: based on at least cases.	
	Q6: In your school, how many computers are used for educational purposes for pupils, either to use alone or with a teacher? Please do not include computers that are only accessible to teachers or staff members.				10	
	Q11: Of the computers used for educational purposes by pupils, either alone or with a teacher, approximately how many are connected to the internet?				xx.x%: based on less than 10 cases	
Indicator:	Total number of internet computers (in breakdown aggregate) / total number of pupils (in breakdown aggregate) *100. (Note: not a school average, but aggregate estimator)				*): This value represents collapsed adjacent cells (due to sample sizes too small)	

Source: empirica: LearnInd 2006 (HTS)

Table A1-13: Percentage of schools having broadband internet access by school type

Country	Total	Primary Schools	Lower Secondary Schools	Upper Secondary Schools	Vocational Schools
BE	73.8	69.3	83.7	87.5	86.8
CZ	62.6	54.9	60.3	77.2	76.4
DK	95.1	94.1	95.4	93.7	98.9
DE	62.9	54.1	72.0	82.5	68.1
EE	95.0	95.6	95.7	96.7	87.0
EL	13.2	7.8	19.8	26.6	66.3
ES	80.7	79.0	92.8	95.9	81.6
FR	74.8	70.3	96.2	87.6	90.2
IE	66.1	62.4	79.8	81.6	82.6
IT	69.0	62.8	52.6	78.2	82.2
CY	31.0	14.3	64.4	73.4	84.7
LV	66.5	64.3	66.5	70.2	73.7
LT	32.6	32.5	32.0	30.9	39.9
LU	76.5	73.3	87.4	100.0	91.1
HU	77.4	74.3	78.6	86.3	87.7
MT	94.5	92.6	97.8	97.8	100.0
NL	91.6	91.4	93.8	95.9	92.7
AT	68.1	58.6	72.3	82.7	85.5
PL	27.9	20.1	29.3	40.2	42.3
PT	72.8	69.8	83.9	87.4	91.0
SI	84.8	83.6	83.6	89.3	91.0
SK	39.6	31.3	35.9	62.9	57.5
FI	89.9	87.0	94.0	98.5	94.8
SE	89.0	86.8	95.4	94.9	88.2
UK	75.1	74.1	80.4	81.0	70.9
IS	91.5	91.0	100.0	100.0	89.7
NO	89.4	87.0	91.1	96.5	94.7
EU25	66.9	64.3	70.5	74.3	74.9
EU25+2	67.1	64.6	70.8	74.5	75.1
EU15	72.0	69.2	77.7	82.6	79.8
NMS10	43.4	39.5	50.2	55.0	59.4
Base:	All schools of the respective breakdown category and country.				
Question:	Q9			xx.x%: based on at least 50 cases.	
Wording:	Q9: By which of the following means does your school mainly have access to the internet: [...] (c) an (A)DSL line; (d) other broadband connection; e.g. cable (a special cable modem using the television cable), fibre optic, satellite; (e) broadband, but don't know which type			xx.x%: based on at least 10 cases.	
Indicator:	% of schools stating at least one type of broadband connection (c,d,e).			xx.x%: based on less than 10 cases	

Source: empirica: LearnInd 2006 (HTS)

Table A1-14: Percentage of schools having broadband internet access by internet access type and type of locality

Country	Total	Narrowband Internet access schools	Broadband internet access schools	Schools in densely populated areas	Schools in intermediate areas	Schools in thinly populated areas
BE	73.8	0.0	100.0	79.6	67.2*)	67.2*)
CZ	62.6	0.0	100.0	73.9	63.0	55.5
DK	95.1	0.0	100.0	95.7	98.4	93.1
DE	62.9	0.0	100.0	69.8	59.0	56.0
EE	95.0	0.0	100.0	93.9*)	93.9*)	95.5
EL	13.2	0.0	100.0	15.9	22.2	6.7
ES	80.7	0.0	100.0	86.7	82.5	67.6
FR	74.8	0.0	100.0	81.0	82.4	68.5
IE	66.1	0.0	100.0	84.1*)	84.1*)	61.8
IT	69.0	0.0	100.0	78.2	69.2	54.5
CY	31.0	0.0	100.0	40.7	20.5*)	20.5*)
LV	66.5	0.0	100.0	72.3*)	72.3*)	64.4
LT	32.6	0.0	100.0	44.5	N/A	28.3
LU	76.5	0.0	100.0	76.5*)	76.5*)	76.5*)
HU	77.4	0.0	100.0	81.4	83.0	73.3
MT	94.5	0.0	100.0	94.5*)	94.5*)	94.5*)
NL	91.6	0.0	100.0	88.9	93.7	91.3
AT	68.1	0.0	100.0	66.9	72.8	65.1
PL	27.9	0.0	100.0	40.1	24.7	20.8
PT	72.8	0.0	100.0	73.9	63.0	55.5
SI	84.8	0.0	100.0	93.4	85.1	81.0
SK	39.6	0.0	100.0	60.1	43.8	31.9
FI	89.9	0.0	100.0	95.7*)	95.7*)	87.9
SE	89.0	0.0	100.0	95.4*)	95.4*)	86.2
UK	75.1	0.0	100.0	81.4	69.7	69.2
IS	91.5	0.0	100.0	N/A	98.7	86.8
NO	89.4	0.0	100.0	93.6	90.7	88.4
EU25	66.9	0.0	100.0	73.7	66.1	60.6
EU25+2	67.1	0.0	100.0	73.8	66.3	61.2
EU15	72.0	0.0	100.0	77.2	71.4	66.8
NMS10	43.4	0.0	100.0	53.4	39.0	39.6
Base:	All schools of the respective breakdown category and country.			xx.x%: based on at least 50 cases. xx.x%: based on at least 10 cases. xx.x%: based on less than 10 cases		
Question:	Q9					
Wording:	Q9: By which of the following means does your school mainly have access to the internet: [...] (c) an (A)DSL line; (d) other broadband connection; e.g. cable (a special cable modem using the television cable), fibre optic, satellite; (e) broadband, but don't know which type					
Indicator:	% of schools stating at least one type of broadband connection (c,d,e).					

Source: empirica: LearnInd 2006 (HTS)

Table A1-15: Percentage of all computers that are connected to the internet by school type

Country	Total	Primary Schools	Lower Secondary Schools	Upper Secondary Schools	Vocational Schools
BE	80.6	67.4	91.4	90.8	90.0
CZ	88.5	83.5	86.1	92.0	91.2
DK	96.3	96.5	97.2	99.7	95.5
DE	85.6	66.9	89.0	93.8	92.3
EE	98.8	99.1	99.3	99.5	98.1
EL	90.1	86.6	91.4	92.3	96.0
ES	89.8	86.7	91.6	94.2	95.2
FR	72.5	59.0	87.2	74.2	75.2
IE	84.7	76.0	92.9	93.4	94.9
IT	81.7	72.6	73.2	91.7	84.3
CY	71.4	82.7	81.8	63.7	48.6
LV	86.3	85.8	86.4	88.3	83.6
LT	87.7	85.4	87.9	91.8	93.3
LU	92.9	92.6	100.0	90.6	100.0
HU	91.6	87.0	91.2	95.5	93.7
MT	92.8	95.1	96.5	96.5	83.5
NL	95.3	92.3	92.2	90.6	97.6
AT	87.1	61.0	93.1	96.1	95.0
PL	91.3	84.3	90.8	95.5	94.5
PT	84.1	75.9	89.2	86.2	98.4
SI	95.2	94.1	94.1	97.3	96.0
SK	86.8	89.6	90.2	83.8	80.8
FI	96.6	92.2	96.7	98.6	98.0
SE	94.7	94.6	96.2	94.1	99.1
UK	93.9	92.0	94.4	95.1	99.8
IS	96.1	97.1	100.0	98.4	92.5
NO	93.4	88.4	93.2	97.4	99.4
EU25	88.0	81.6	90.5	92.1	91.1
EU25+2	88.1	81.8	90.6	92.2	91.3
EU15	87.7	81.0	90.6	91.9	91.0
NMS10	90.4	86.2	90.2	93.4	92.0
Base:	All schools				
Question:	Q6, Q7, Q11				
Wording:	Q6: In your school, how many computers are used for educational purposes for pupils, either to use alone or with a teacher? Please do not include computers that are only accessible to teachers or staff members. Q7: How many of these are used ... [at each level] Q11: Of the computers used for educational purposes by pupils, either alone or with a teacher, approximately how many are connected to the internet? ...			xx.x%: based on at least 50 cases. xx.x%: based on at least 10 cases. xx.x%: based on less than 10 cases	
Indicator:	Percentage of all computers that is connected to the internet				

Source: empirica: LearnInd 2006 (HTS)

Table A1-16: Percentage of all computers that are connected to the internet by internet access type and type of locality

Country	Total	Narrowband Internet access schools	Broadband internet access schools	Schools in densely populated areas	Schools in intermediate areas	Schools in thinly populated areas
BE	80.6	74.6	82.1	82.3	77.9*)	77.9*)
CZ	88.5	86.7	89.4	86.8	89.0	89.8
DK	96.3	93.1	96.4	98.6	93.7	97.1
DE	85.6	78.7	89.3	87.2	84.7	81.3
EE	98.8	98.6	98.9	98.4*)	98.4*)	99.1
EL	90.1	89.8	95.1	90.2	95.0	86.9
ES	89.8	77.6	91.2	89.9	89.1	90.5
FR	72.5	65.4	76.5	71.7	77.7	70.9
IE	84.7	59.9	92.0	91.3*)	91.3*)	80.6
IT	81.7	78.1	83.5	82.1	82.9	78.4
CY	71.4	77.7	70.1	69.0	76.3*)	76.3*)
LV	86.3	85.3	88.0	84.7*)	84.7*)	87.2
LT	87.7	87.5	89.5	90.9	N/A	86.4
LU	92.9	93.5	92.9	92.8*)	92.8*)	92.8*)
HU	91.6	88.6	92.8	93.5	91.9	89.4
MT	92.8	84.3	93.3	92.8*)	92.8*)	92.8*)
NL	95.3	96.2	95.3	94.3	96.4	95.4
AT	87.1	82.0	88.4	95.0	84.3	86.4
PL	91.3	89.7	96.2	95.7	90.7	85.1
PT	84.1	72.9	87.5	86.8	89.0	89.8
SI	95.2	96.8	94.9	96.8	96.2	93.3
SK	86.8	89.9	85.0	83.0	88.3	88.2
FI	96.6	84.3	98.0	99.2*)	99.2*)	93.3
SE	94.7	96.0	94.6	95.5*)	95.5*)	94.3
UK	93.9	90.8	94.7	93.4	94.2	92.8
IS	96.1	95.8	96.2	N/A	95.2	97.5
NO	93.4	89.2	93.6	95.1	92.8	93.0
EU25	88.0	83.7	89.9	88.2	88.1	86.4
EU25+2	88.1	83.7	90.0	88.3	88.2	86.7
EU15	87.7	82.1	89.7	87.8	87.9	86.2
NMS10	90.4	89.1	92.4	92.4	90.7	87.8
Base:	All schools			xx.x%: based on at least 50 cases. xx.x%: based on at least 10 cases. xx.x%: based on less than 10 cases		
Question:	Q6, Q7, Q11					
Wording:	Q6: In your school, how many computers are used for educational purposes for pupils, either to use alone or with a teacher? Please do not include computers that are only accessible to teachers or staff members. Q7: How many of these are used ... [at each level] Q11: Of the computers used for educational purposes by pupils, either alone or with a teacher, approximately how many are connected to the internet? ...					
Indicator:	Percentage of all computers that is connected to the internet					

Source: empirica: LearnInd 2006 (HTS)

Table A1-17: Percentage of schools having their own home page or web site by school type

Country	Total	Primary Schools	Lower Secondary Schools	Upper Secondary Schools	Vocational Schools
BE	69.2	61.0	92.0	93.1	94.4
CZ	74.8	63.0	78.9	99.4	99.2
DK	98.7	98.1	98.1	100.0	100.0
DE	70.2	53.5	81.8	93.9	82.8
EE	87.1	87.3	93.9	96.9	80.7
EL	36.8	28.1	51.0	53.6	63.8
ES	53.2	51.6	62.8	75.8	60.4
FR	29.0	20.6	64.8	86.5	82.6
IE	36.2	27.8	72.5	71.6	70.7
IT	72.6	65.2	58.9	88.3	89.2
CY	50.9	34.0	87.5	93.6	100.0
LV	40.6	36.3	40.4	61.7	62.8
LT	60.3	53.8	63.2	84.8	98.0
LU	64.4	56.9	100.0	100.0	100.0
HU	55.6	44.4	56.5	89.5	93.2
MT	62.7	56.3	69.6	69.6	100.0
NL	87.3	85.4	92.9	100.0	96.5
AT	64.2	45.2	80.7	99.0	95.9
PL	68.0	54.7	82.2	85.6	89.1
PT	61.2	56.3	74.4	85.7	75.4
SI	95.5	94.4	94.4	98.5	100.0
SK	65.3	55.3	68.3	90.7	90.2
FI	86.1	81.6	95.9	100.0	97.0
SE	83.8	80.2	96.3	92.4	90.9
UK	73.4	71.2	86.2	87.8	87.3
IS	93.6	92.9	100.0	100.0	94.6
NO	81.6	77.2	76.6	100.0	100.0
EU25	63.0	54.5	75.5	87.4	84.9
EU25+2	63.2	54.8	75.5	87.5	85.1
EU15	62.2	54.3	76.5	87.5	82.8
NMS10	66.7	55.2	72.6	87.4	91.7
Base:	All schools			xx.x%:	based on at least 50 cases.
Question:	Q12a			xx.x%:	based on at least 10 cases.
Wording:	Q12a: Does your school have ... its own home page or web site			xx.x%:	based on less than 10 cases
Indicator:	Percentage of all schools that have their own home page or website				

Source: empirica: LearnInd 2006 (HTS)

Table A1-18: Percentage of schools having their own home page or web site by internet access type and type of locality

Country	Total	Narrowband internet access schools	Broadband internet access schools	Schools in densely populated areas	Schools in intermediate areas	Schools in thinly populated areas
BE	69.2	65.1	73.3	76.0	61.3*)	61.3*)
CZ	74.8	66.7	80.5	91.3	73.3	65.6
DK	98.7	100.0	99.4	100.0	96.4	99.3
DE	70.2	63.0	77.0	77.6	70.1	55.1
EE	87.1	82.3	89.0	90.3*)	90.3*)	85.8
EL	36.8	36.2	50.2	42.7	48.1	25.5
ES	53.2	53.4	56.7	53.3	51.5	54.7
FR	29.0	20.7	34.5	37.8	25.5	25.6
IE	36.2	25.1	42.4	53.7*)	53.7*)	32.0
IT	72.6	63.9	78.6	74.1	75.6	65.3
CY	50.9	41.3	79.1	61.8	39.3*)	39.3*)
LV	40.6	44.1	42.7	56.3*)	56.3*)	34.8
LT	60.3	62.9	65.8	73.2	N/A	55.7
LU	64.4	57.8	69.9	64.4*)	64.4*)	64.4*)
HU	55.6	48.3	60.2	80.2	65.0	40.0
MT	62.7	80.4	61.7	62.7*)	62.7*)	62.7*)
NL	87.3	85.0	87.6	96.9	89.6	72.8
AT	64.2	52.3	70.4	92.0	60.0	60.7
PL	68.0	69.6	82.2	89.7	71.2	48.7
PT	61.2	65.4	66.7	91.3	73.3	65.6
SI	95.5	89.6	96.8	98.9	98.0	92.4
SK	65.3	60.5	76.5	92.0	69.9	55.5
FI	86.1	62.3	89.0	97.1*)	97.1*)	82.3
SE	83.8	79.3	84.4	79.5*)	79.5*)	85.6
UK	73.4	68.7	75.0	77.5	72.7	67.6
IS	93.6	59.8	97.1	N/A	98.7	90.3
NO	81.6	66.5	83.6	96.8	94.6	76.2
EU25	63.0	59.4	68.1	70.8	66.2	52.8
EU25+2	63.2	59.5	68.4	70.9	66.4	53.3
EU15	62.2	56.2	67.3	68.2	65.2	53.0
NMS10	66.7	66.6	74.9	86.4	71.6	52.0
Base:	All schools			xx.x%: based on at least 50 cases.		
Question:	Q12a			xx.x%: based on at least 10 cases.		
Wording:	Q12a: Does your school have ... its own home page or web site			xx.x%: based on less than 10 cases		
Indicator:	Percentage of all schools that have their own home page or website					

Source: empirica: LearnInd 2006 (HTS)

Table A1-19: Percentage of schools having a school e-mail address for the majority (more than 50%) of teachers by school type

Country	Total	Primary Schools	Lower Secondary Schools	Upper Secondary Schools	Vocational Schools
BE	57.8	57.5	61.1	54.2	54.6
CZ	83.6	84.2	81.4	83.3	82.9
DK	89.5	87.1	88.6	86.9	94.1
DE	57.6	62.2	56.8	53.0	58.8
EE	69.8	68.8	72.8	80.5	72.6
EL	44.2	46.5	37.0	46.3	35.5
ES	65.1	66.4	66.3	69.3	58.1
FR	67.8	65.4	76.6	67.4	77.4
IE	56.0	56.5	52.1	51.4	62.6
IT	66.3	66.3	67.0	63.2	59.0
CY	49.1	45.1	57.5	61.0	57.6
LV	59.6	57.2	60.3	61.1	62.1
LT	57.2	55.6	58.7	53.5	64.0
LU	78.0	74.1	100.0	91.3	100.0
HU	42.8	34.9	43.3	64.7	72.2
MT	78.9	82.3	68.6	68.6	83.2
NL	90.6	89.3	94.4	96.2	97.0
AT	76.0	74.3	76.8	72.7	82.0
PL	33.3	30.6	37.9	38.0	33.7
PT	31.6	28.9	43.3	41.2	53.0
SI	93.4	93.4	93.4	91.2	96.4
SK	73.1	72.9	74.3	73.8	70.8
FI	95.0	93.5	99.1	99.9	97.0
SE	95.9	95.3	97.6	97.9	85.9
UK	85.3	84.6	90.5	87.9	79.7
IS	96.1	96.8	77.3	100.0	94.6
NO	79.3	75.4	76.1	95.0	94.3
EU25	65.2	66.4	64.2	61.4	63.4
EU25+2	65.4	66.5	64.4	61.7	63.7
EU15	69.0	70.2	67.8	64.8	65.5
NMS10	48.1	46.9	54.0	53.5	56.6
Base:	All schools			xx.x%:	based on at least 50 cases.
Question:	Q12b			xx.x%:	based on at least 10 cases.
Wording:	Q12b: Does your school have ... a school e-mail address for the majority (more than 50%) of teachers			xx.x%:	based on less than 10 cases
Indicator:	Percentage of all schools that have a school e-mail address for the majority (more than 50%) of teachers				

Source: empirica: LearnInd 2006 (HTS)

Table A1-20: Percentage of schools having a school e-mail address for the majority (more than 50%) of teachers by internet access type and type of locality

Country	Total	Narrowband internet access schools	Broadband internet access schools	Schools in densely populated areas	Schools in intermediate areas	Schools in thinly populated areas
BE	57.8	60.7	59.3	57.5	58.1*)	58.1*)
CZ	83.6	85.8	83.4	86.2	82.2	82.8
DK	89.5	88.7	90.2	93.8	89.6	87.5
DE	57.6	59.5	58.8	52.5	59.4	64.6
EE	69.8	75.3	71.0	72.7*)	72.7*)	68.6
EL	44.2	45.5	47.4	37.7	58.4	47.6
ES	65.1	73.5	67.9	62.9	64.6	69.7
FR	67.8	74.9	75.1	54.5	74.0	72.7
IE	56.0	66.5	52.2	53.0*)	53.0*)	56.7
IT	66.3	71.1	66.4	61.7	68.1	70.3
CY	49.1	55.5	43.6	38.3	60.5*)	60.5*)
LV	59.6	56.9	65.8	52.1*)	52.1*)	62.3
LT	57.2	60.6	60.7	49.6	N/A	60.0
LU	78.0	61.9	86.6	78.0*)	78.0*)	78.0*)
HU	42.8	49.5	43.4	51.8	41.4	38.9
MT	78.9	100.0	77.6	78.8*)	78.8*)	78.8*)
NL	90.6	83.8	91.2	90.8	93.4	85.9
AT	76.0	78.8	75.6	80.4	74.2	76.2
PL	33.3	37.8	31.7	35.5	32.8	32.0
PT	31.6	36.0	33.8	86.2	82.2	82.8
SI	93.4	100.0	92.5	91.0	95.6	93.0
SK	73.1	76.1	73.4	80.5	68.0	73.0
FI	95.0	89.2	96.0	95.6*)	95.6*)	94.8
SE	95.9	91.9	96.4	95.3*)	95.3*)	96.1
UK	85.3	79.0	87.5	84.3	86.8	85.1
IS	96.1	93.2	96.9	N/A	96.8	95.6
NO	79.3	49.8	82.9	98.5	87.7	74.0
EU25	65.2	61.2	70.7	62.0	65.4	68.0
EU25+2	65.4	61.2	70.9	62.1	65.6	68.2
EU15	69.0	67.1	73.0	64.2	69.4	73.5
NMS10	48.1	48.2	53.8	48.7	45.0	49.3
Base:	All schools			xx.x%: based on at least 50 cases.		
Question:	Q12b			xx.x%: based on at least 10 cases.		
Wording:	Q12b: Does your school have ... a school e-mail address for the majority (more than 50%) of teachers			xx.x%: based on less than 10 cases		
Indicator:	Percentage of all schools that have a school e-mail address for the majority (more than 50%) of teachers					

Source: empirica: LearnInd 2006 (HTS)

Table A1-21: Percentage of schools having a school e-mail address for the majority (more than 50%) of pupils by school type

Country	Total	Primary Schools	Lower Secondary Schools	Upper Secondary Schools	Vocational Schools
BE	19.6	15.7	33.2	28.1	27.9
CZ	45.4	45.7	44.9	43.8	41.5
DK	57.5	62.3	57.8	62.6	48.0
DE	19.7	16.9	21.9	21.5	25.1
EE	17.5	15.2	16.8	23.1	42.2
EL	6.1	5.0	9.2	11.0	23.1
ES	14.2	14.0	17.4	15.0	18.4
FR	19.0	15.4	29.6	26.0	41.3
IE	9.9	9.0	13.6	12.7	15.2
IT	11.3	6.8	10.0	20.6	14.7
CY	6.9	2.5	14.7	18.5	15.3
LV	33.9	33.2	35.3	38.3	35.3
LT	18.0	16.0	21.3	23.6	12.0
LU	22.6	20.2	87.4	68.9	8.9
HU	26.3	20.5	26.2	42.7	47.2
MT	66.4	69.6	62.7	62.7	49.5
NL	27.9	23.8	36.1	41.2	56.6
AT	21.4	9.9	29.0	26.0	39.7
PL	18.9	16.1	24.5	21.8	17.5
PT	12.1	10.3	22.1	19.5	27.3
SI	37.5	33.5	33.4	58.4	48.3
SK	24.3	21.2	27.8	28.7	26.6
FI	33.2	26.5	31.1	47.1	75.5
SE	69.6	65.5	71.7	80.5	65.0
UK	40.5	37.1	58.0	59.6	58.7
IS	35.6	26.9	77.3	83.9	69.4
NO	31.0	26.9	33.2	40.1	42.1
EU25	23.5	21.2	27.8	28.3	28.5
EU25+2	23.6	21.3	27.9	28.4	28.7
EU15	23.3	21.1	27.6	28.0	28.4
NMS10	24.4	22.0	28.3	29.0	28.7
Base:	All schools			xx.x%:	based on at least 50 cases.
Question:	Q12c			xx.x%:	based on at least 10 cases.
Wording:	Q12c: Does your school have ... a school e-mail address for the majority (more than 50%) of pupils			xx.x%:	based on less than 10 cases
Indicator:	Percentage of all schools that have a school e-mail address for the majority (more than 50%) of pupils				

Source: empirica: LearnInd 2006 (HTS)

Table A1-22: Percentage of schools having a school e-mail address for the majority (more than 50%) of pupils by internet access type and type of locality

Country	Total	Narrowband internet access schools	Broadband internet access schools	Schools in densely populated areas	Schools in intermediate areas	Schools in thinly populated areas
BE	19.6	15.5	21.7	18.4	20.9*	20.9*)
CZ	45.4	48.1	44.4	42.8	44.4	47.6
DK	57.5	74.0	57.2	52.4	65.5	55.5
DE	19.7	15.9	22.6	19.2	19.4	21.3
EE	17.5	16.0	17.9	26.2*)	26.2*)	14.0
EL	6.1	5.5	11.9	7.1	5.6	5.1
ES	14.2	11.7	15.5	11.6	11.6	21.3
FR	19.0	18.5	21.5	18.7	21.7	18.0
IE	9.9	7.5	11.4	9.47*)	9.47*)	10.1
IT	11.3	7.4	13.3	10.5	12.1	11.4
CY	6.9	7.2	7.5	3.8	10.1*)	10.1*)
LV	33.9	32.1	37.6	31.3*)	31.3*)	34.9
LT	18.0	19.1	19.1	17.9	N/A	18.1
LU	22.6	11.2	26.7	22.5*)	22.5*)	22.5*)
HU	26.3	31.7	26.3	34.0	40.1	17.5
MT	66.4	80.4	65.5	66.3*)	66.3*)	66.3*)
NL	27.9	21.2	28.5	27.1	29.3	26.6
AT	21.4	13.7	25.1	27.5	14.0	25.0
PL	18.9	21.0	18.9	24.5	17.0	15.9
PT	12.1	12.8	13.3	42.8	44.4	47.6
SI	37.5	32.6	38.4	28.2	45.1	36.1
SK	24.3	23.6	26.8	32.6	23.7	22.1
FI	33.2	26.7	34.0	60.7*)	60.7*)	23.7
SE	69.6	50.2	72.1	66.0*)	66.0*)	71.2
UK	40.5	31.3	43.6	43.2	42.0	35.1
IS	35.6	13.4	37.7	N/A	54.5	23.2
NO	31.0	16.4	32.7	57.1	29.3	26.6
EU25	23.5	19.0	26.8	23.7	22.1	23.9
EU25+2	23.6	19.0	26.9	23.9	22.2	24.0
EU15	23.3	16.8	26.7	23.0	21.7	24.5
NMS10	24.4	24.0	27.8	28.3	24.3	22.0
Base:	All schools			xx.x%: based on at least 50 cases.		
Question:	Q12c			xx.x%: based on at least 10 cases.		
Wording:	Q12c: Does your school have ... a school e-mail address for the majority (more than 50%) of pupils			xx.x%: based on less than 10 cases		
Indicator:	Percentage of all schools that have a school e-mail address for the majority (more than 50%) of pupils					
Source:	empirica: LearnInd 2006 (HTS)					

Source: empirica: LearnInd 2006 (HTS)

Table A1-23: Percentage of schools having a support or maintenance contract with a service provider by school type

Country	Total	Primary Schools	Lower Secondary Schools	Upper Secondary Schools	Vocational Schools
BE	28.9	24.6	39.0	42.7	38.0
CZ	65.8	76.4	72.9	44.4	48.0
DK	52.6	53.5	52.6	49.7	55.6
DE	33.7	33.8	33.5	34.4	44.8
EE	32.3	34.8	29.1	20.2	17.2
EL	43.9	39.9	58.7	46.4	43.5
ES	49.0	50.4	56.8	53.7	45.7
FR	30.1	27.7	43.4	36.7	53.1
IE	36.4	33.1	53.6	51.4	45.9
IT	53.2	52.8	44.7	61.8	50.0
CY	33.3	30.1	47.0	36.9	42.4
LV	68.6	67.1	69.6	68.0	75.2
LT	52.0	50.6	55.3	56.7	56.0
LU	28.8	33.8	0.0	0.0	8.9
HU	40.2	40.4	41.6	40.4	39.9
MT	67.7	75.0	53.7	53.7	33.6
NL	69.4	71.3	56.8	66.6	60.7
AT	32.3	28.2	45.6	37.4	27.8
PL	35.6	31.9	41.0	40.5	34.8
PT	13.4	10.5	30.3	24.0	27.3
SI	50.8	51.0	50.9	44.7	53.1
SK	64.6	69.5	66.6	50.0	53.3
FI	35.5	33.4	41.9	36.1	47.8
SE	59.1	58.7	62.2	58.7	58.7
UK	82.3	84.6	67.3	68.7	62.8
IS	59.7	64.0	16.0	50.2	37.7
NO	32.4	30.2	39.7	35.9	36.0
EU25	47.1	48.3	46.5	47.1	46.2
EU25+2	47.0	48.1	46.4	47.0	46.0
EU15	47.8	49.0	45.2	48.5	47.5
NMS10	44.3	44.9	50.2	43.7	41.9
Base:	All schools			xx.x%:	based on at least 50 cases.
Question:	Q12f			xx.x%:	based on at least 10 cases.
Wording:	Q12f: Does your school have ... a support or maintenance contract with a service provider			xx.x%:	based on less than 10 cases
Indicator:	Percentage of all schools that have a support or maintenance contract with a service provides				

Source: empirica: LearnInd 2006 (HTS)

Table A1-24: Percentage of schools having a support or maintenance contract with a service provider by internet access type and type of locality

Country	Total	Narrowband Internet access schools	Broadband internet access schools	Schools in densely populated areas	Schools in intermediate areas	Schools in thinly populated areas
BE	28.9	20.5	32.7	30.7	26.8*)	26.8*)
CZ	65.8	76.5	60.4	61.6	63.7	69.6
DK	52.6	43.7	53.4	56.0	61.6	46.3
DE	33.7	35.3	34.2	37.4	31.9	29.4
EE	32.3	33.3	32.9	28.7*)	28.7*)	33.6
EL	43.9	44.0	54.4	49.6	40.4	37.8
ES	49.0	37.1	54.4	51.0	46.7	47.6
FR	30.1	12.7	37.6	41.2	29.6	24.2
IE	36.4	28.8	41.0	42.3*)	42.3*)	35.0
IT	53.2	51.7	55.5	56.9	51.5	50.4
CY	33.3	36.0	33.2	27.7	39.3*)	39.3*)
LV	68.6	68.4	74.6	57.3*)	57.3*)	72.8
LT	52.0	53.2	58.5	44.1	N/A	54.8
LU	28.8	26.3	31.1	28.8*)	28.8*)	28.8*)
HU	40.2	34.8	43.6	42.3	35.9	40.7
MT	67.7	65.5	67.8	67.7*)	67.7*)	67.7*)
NL	69.4	78.2	68.6	66.5	73.3	66.7
AT	32.3	32.3	32.8	40.0	31.5	31.2
PL	35.6	39.4	36.2	39.6	34.0	33.7
PT	13.4	15.2	14.3	61.6	63.7	69.6
SI	50.8	39.1	53.0	48.5	51.9	51.0
SK	64.6	71.3	58.9	50.6	59.9	70.7
FI	35.5	37.4	35.5	44.1*)	44.1*)	32.6
SE	59.1	60.8	58.9	66.6*)	66.6*)	55.8
UK	82.3	81.6	82.7	83.3	89.9	78.3
IS	59.7	60.5	60.0	N/A	44.7	69.6
NO	32.4	33.5	32.3	43.5	32.8	30.3
EU25	47.1	44.9	50.8	52.0	44.9	43.9
EU25+2	47.0	44.9	50.5	52.0	44.9	43.6
EU15	47.8	44.3	51.3	53.4	45.8	43.1
NMS10	44.3	46.4	47.2	43.8	40.7	46.5
Base:	All schools			xx.x%: based on at least 50 cases.		
Question:	Q12f			xx.x%: based on at least 10 cases.		
Wording:	Q12f: Does your school have ... a support or maintenance contract with a service provider			xx.x%: based on less than 10 cases		
Indicator:	Percentage of all schools that have a support or maintenance contract with a service provider					

Source: empirica: LearnInd 2006 (HTS)

Annex II: Results of the Classroom Teacher Survey 2006

Table A2-1: Percentage of teachers who have used computers in class in the last 12 months by school type

Country	Total	Primary Schools	Lower Secondary Schools	Upper Secondary Schools	Vocational Schools
BE	69.0	66.9	73.7	74.8	78.3
CZ	78.3	82.4	78.9	69.5	71.0
DK	94.6	95.7	94.4	97.8	93.5
DE	78.0	78.0	77.2	80.4	78.6
EE	59.7	60.9	61.5	53.3	46.8
EL	35.6	32.8	38.0	44.1	58.0
ES	68.2	68.9	66.6	65.5	67.5
FR	65.5	65.7	56.1	72.1	78.9
IE	81.7	86.5	64.1	64.2	69.9
IT	72.4	71.6	71.9	72.4	81.6
CY	75.0	87.2	39.8	50.7	58.2
LV	34.9	35.7	37.8	33.6	27.7
LT	59.3	58.7	65.0	64.1	74.3
LU	70.2	74.4	54.2	43.6	61.8
HU	42.8	36.8	40.1	60.0	64.1
MT	74.5	82.6	59.1	59.1	76.7
NL	90.0	91.7	80.9	77.4	84.0
AT	87.9	87.9	87.5	81.3	86.1
PL	61.4	60.2	60.3	67.1	70.9
PT	69.5	70.0	66.2	71.7	75.2
SI	67.6	71.7	71.6	53.6	52.2
SK	70.3	72.0	73.1	65.5	69.7
FI	85.1	88.0	77.1	80.5	81.4
SE	90.9	90.0	91.7	94.6	87.7
UK	96.4	97.4	90.4	91.5	92.9
IS	79.5	78.6	84.7	84.2	83.3
NO	89.4	90.4	89.4	79.4	82.4
EU25	74.3	75.2	70.9	73.0	76.7
EU25+2	74.5	75.3	71.2	73.0	76.7
EU15	77.2	78.0	74.8	76.1	78.8
NMS10	61.3	60.6	59.5	64.1	68.1
Base:	All teachers in the respective breakdown category and country.				
Question:	q7				
Wording:	How have you used computers and/or the internet for work in the last 12 months?... you used a computer and/or the internet in class* while teaching				
Indicator:	Percentage of teachers who ever use computers in class				
Source:	empirica: LearnInd 2006 (CTS)				
	xx.x%: based on at least 50 cases. xx.x%: based on at least 10 cases. xx.x%: based on less than 10 cases *): This value represents collapsed adjacent cells (due to sample sizes too small)				

Source: empirica: LearnInd 2006 (CTS)

Table A2-2: Percentage of teachers who have used computers in class in the last 12 months by type of locality

Country	Total	Schools in densely populated areas	Schools in intermediate areas	Schools in thinly populated areas
BE	69.0	70.7	70.2	50.6
CZ	78.3	72.5	82.2	79.5
DK	94.6	93.7	95.1	94.7
DE	78.0	77.9	77.5	79.1
EE	59.7	53.7*)	53.7*)	62.0
EL	35.6	32.4	42.4	37.3
ES	68.2	63.4	67.8	77.5
FR	65.5	61.6	69.2	66.8
IE	81.7	74.3*)	74.3*)	83.7
IT	72.4	71.9	73.3	71.5
CY	75.0	70.9	72.8	81.1
LV	34.9	28.3*)	28.3*)	37.3
LT	59.3	50.5	N/A	62.3
LU	70.2	76.6	72.7	60.8
HU	42.8	45.4	40.7	42.2
MT	74.5	74.5*)	74.5*)	74.5*)
NL	90.0	90.8	89.1	90.5
AT	87.9	83.2	86.0	91.0
PL	61.4	60.8	63.1	60.7
PT	69.5	64.4	70.7	71.4
SI	67.6	61.1	63.0	73.5
SK	70.3	68.0	72.8	70.0
FI	85.1	79.7	83.9	86.3
SE	90.9	87.7	93.6	91.1
UK	96.4	95.6	97.4	97.7
IS	79.5	N/A	76.9	81.3
NO	89.4	86.0	86.1	90.6
EU25	74.3	73.2	75.3	74.4
EU25+2	74.5	73.3	75.4	74.7
EU15	77.2	73.2	75.3	74.4
NMS10	61.3	73.2	75.3	74.4
Base:	All teachers in the respective breakdown category and country.		xx.x%:	based on at least 50 cases.
Question:	q7		xx.x%:	based on at least 10 cases.
Wording:	How have you used computers and/or the internet for work in the last 12 months?... you used a computer and/or the internet in class* while teaching		xx.x%:	based on less than 10 cases
Indicator:	Percentage of teachers who ever use computers in class		*):	This value represents collapsed adjacent cells (due to sample sizes too small)

Source: empirica: LearnInd 2006 (CTS)

Table A2-3: Percentage of teachers who have used computers in class in the last 12 months by teaching experience

Country	Total	<5 y	5-9 y	10-19 y	20+ y
BE	69.0	74.9	73.2	62.1	69.4
CZ	78.3	75.4	80.1	78.7	78.1
DK	94.6	89.7	95.6	96.2	95.8
DE	78.0	82.0	81.5	80.9	76.3
EE	59.7	52.9	63.1	63.5	57.5
EL	35.6	49.6	44.3	41.9	26.3
ES	68.2	72.5	73.4	69.9	64.4
FR	65.5	70.9	67.0	64.8	63.1
IE	81.7	76.6	81.2	88.8	80.5
IT	72.4	59.6	65.6	73.9	73.0
CY	75.0	75.2	79.4	78.1	60.3
LV	34.9	28.1	39.9	35.8	33.8
LT	59.3	57.9	62.2	61.7	56.9
LU	70.2	85.1	61.4	79.2	65.2
HU	42.8	44.2	48.4	50.8	37.2
MT	74.5	68.1	84.2	79.3	59.1
NL	90.0	90.9	90.5	93.8	88.2
AT	87.9	94.2	85.5	78.0	90.2
PL	61.4	53.9	55.2	69.6	59.0
PT	69.5	67.5	74.9	72.8	65.2
SI	67.6	71.5	65.8	67.1	67.2
SK	70.3	66.4	73.6	77.5	65.7
FI	85.1	86.5	83.8	82.9	87.2
SE	90.9	87.0	85.9	95.5	93.1
UK	96.4	96.7	95.9	98.3	95.2
IS	79.5	75.9	86.5	82.0	71.6
NO	89.4	91.4	90.8	91.8	86.7
EU25	74.3	77.8	76.4	75.4	72.2
EU25+2	74.5	77.9	76.7	75.6	72.4
EU15	77.2	82.2	79.6	77.9	74.8
NMS10	61.3	57.4	60.4	67.7	57.8
Base:	All teachers in the respective breakdown category and country.				
Question:	q7		xx.x%: based on at least 50 cases.		
Wording:	How have you used computers and/or the internet for work in the last 12 months?... you used a computer and/or the internet in class* while teaching		xx.x%: based on at least 10 cases.		
Indicator:	Percentage of teachers who ever use computers in class		xx.x%: based on less than 10 cases		
			*): This value represents collapsed adjacent cells (due to sample sizes too small)		

Source: empirica: LearnInd 2006 (CTS)

Table A2-4: Percentage of teachers who have used computers in class in the last 12 months by subject of teaching

Country	Total	General primary education	Literature and languages	Humanities and social sciences	Science, mathematics, computer sciences	Physical and artistic/crafts education	Vocational education	
BE	69.0	70.9	64.9	76.0	69.3	66.5	76.8	
CZ	78.3	76.9	80.4	78.1	85.9	71.3	67.0	
DK	94.6	98.1	95.0	95.4	97.8	86.3	91.6	
DE	78.0	74.3	77.7	79.6	79.3	76.1	76.1	
EE	59.7	59.6	59.8	74.9	74.1	39.7	43.1	
EL	35.6	31.7	24.9	30.2	53.4	28.3	28.2	
ES	68.2	73.6	67.9	59.0	75.3	57.7	82.9	
FR	65.5	66.2	61.4	59.6	65.8	28.1	82.2	
IE	81.7	86.7	69.3	73.6	80.9	77.5	86.0	
IT	72.4	65.4	64.5	67.2	83.5	70.3	85.4	
CY	75.0	84.0	75.2	81.0	84.0	58.0	71.2	
LV	34.9	27.8	35.7	47.5	39.5	25.4	23.6	
LT	59.3	43.1	61.7	68.3	72.1	40.4	61.7	
LU	70.2	77.4	58.8	57.1	68.2	51.9	80.5	
HU	42.8	22.2	36.5	42.9	54.8	26.9	51.0	
MT	74.5	85.4	19.6	68.5	86.3	65.9	0.0	
NL	90.0	91.8	85.6	83.2	92.1	82.6	83.3	
AT	87.9	88.9	89.7	83.4	89.9	84.1	85.3	
PL	61.4	57.9	51.8	64.7	74.7	35.6	68.5	
PT	69.5	69.6	61.1	70.8	78.8	67.9	89.2	
SI	67.6	75.0	56.5	69.2	77.8	46.9	74.3	
SK	70.3	75.3	64.4	71.1	75.8	61.6	74.3	
FI	85.1	90.6	83.3	73.0	83.3	71.9	73.5	
SE	90.9	90.1	91.8	91.7	92.2	93.0	65.1	
UK	96.4	97.6	89.4	96.7	96.0	95.7	93.6	
IS	79.5	83.2	90.0	89.2	79.4	60.9	63.2	
NO	89.4	92.3	88.0	94.4	92.0	81.0	84.4	
EU25	74.3	77.8	69.7	74.5	80.3	67.8	77.4	
EU25+2	74.5	77.8	70.2	74.8	80.5	68.0	77.4	
EU15	77.2	79.4	73.1	77.3	82.2	74.8	80.7	
NMS10	61.3	57.2	55.6	63.9	73.2	42.5	64.5	
Base:	All teachers in the respective breakdown category and country.				xx.x%: based on at least 50 cases.			
Question:	q7				xx.x%: based on at least 10 cases.			
Wording:	How have you used computers and/or the internet for work in the last 12 months?... you used a computer and/or the internet in class* while teaching				xx.x%: based on less than 10 cases			
Indicator:	Percentage of teachers who ever use computers in class				*): This value represents collapsed adjacent cells (due to sample sizes too small)			

Source: empirica: LearnInd 2006 (CTS)

Table A2-5: Percentage of teachers whose pupils use a computer in class by school type

Country	Total	Primary Schools	Lower Secondary Schools	Upper Secondary Schools	Vocational Schools
BE	64.6	62.4	69.7	70.5	74.5
CZ	74.4	80.9	76.4	60.4	60.9
DK	92.5	94.2	93.1	91.5	89.4
DE	74.7	76.0	73.6	75.8	73.6
EE	52.3	54.2	54.2	42.9	34.8
EL	23.1	19.6	28.7	30.1	55.4
ES	60.1	61.6	57.7	56.4	58.7
FR	55.1	54.6	49.5	65.5	70.7
IE	66.6	70.8	47.8	49.1	56.3
IT	66.8	66.5	66.6	64.2	76.6
CY	50.9	61.3	17.9	32.7	33.7
LV	32.5	33.4	35.9	31.1	25.7
LT	47.3	46.3	54.3	51.4	54.7
LU	58.7	62.4	38.2	32.9	59.7
HU	35.8	32.7	34.4	45.3	48.1
MT	65.4	76.1	45.7	45.7	70.0
NL	87.5	90.1	77.9	68.3	75.3
AT	84.4	85.2	85.9	74.0	77.9
PL	53.0	53.5	49.3	55.3	62.5
PT	49.0	48.9	44.9	55.7	69.2
SI	60.2	66.8	67.1	34.6	37.5
SK	66.4	68.8	68.9	59.9	65.8
FI	78.8	82.0	72.2	72.3	77.6
SE	82.4	80.4	84.1	92.5	80.5
UK	82.8	84.9	70.9	71.5	81.8
IS	66.0	67.2	61.6	59.6	66.7
NO	86.2	87.6	88.0	72.8	77.2
EU25	66.3	67.3	64.0	63.7	69.7
EU25+2	66.5	67.5	64.3	63.8	69.7
EU15	69.0	69.7	68.0	67.5	72.5
NMS10	53.8	54.9	52.2	53.0	58.6
Base:	All teachers in the respective breakdown category and country.			xx.x%:	based on at least 50 cases.
Question:	q8			xx.x%:	based on at least 10 cases.
Wording:	When you use computers and/or the internet in class, ... is it only you, the teacher, who uses a computer to demonstrate or present something?			xx.x%:	based on less than 10 cases
Indicator:	Percentage of teachers who have pupil use a computer in class			*):	This value represents collapsed adjacent cells (due to sample sizes too small)

Source: empirica: LearnInd 2006 (CTS)

Table A2-6: Percentage of teachers whose pupils use a computer in class by type of locality

Country	Total	Schools in densely populated areas	Schools in intermediate areas	Schools in thinly populated areas
BE	64.6	67.2	64.9	45.0
CZ	74.4	67.0	79.3	76.0
DK	92.5	92.0	94.2	91.9
DE	74.7	74.7	73.4	77.1
EE	52.3	42.9*)	42.9*)	56.0
EL	23.1	23.1	28.5	21.4
ES	60.1	55.8	57.9	70.2
FR	55.1	55.1	62.0	52.6
IE	66.6	61.7*)	61.7*)	67.9
IT	66.8	66.7	67.9	65.1
CY	50.9	53.1	47.2	48.8
LV	32.5	26.2*)	26.2*)	34.8
LT	47.3	34.8	N/A	51.5
LU	58.7	63.1	57.3	54.8
HU	35.8	34.2	32.7	37.7
MT	65.4	65.3*)	65.3*)	65.3*)
NL	87.5	87.4	87.2	88.2
AT	84.4	78.9	82.4	87.7
PL	53.0	50.1	52.7	55.5
PT	49.0	45.3	51.0	49.3
SI	60.2	54.0	52.7	67.9
SK	66.4	65.1	68.9	65.9
FI	78.8	69.8	82.3	80.0
SE	82.4	71.0	88.4	84.0
UK	82.8	81.4	86.3	84.5
IS	66.0	N/A	57.9	72.0
NO	86.2	82.5	82.0	87.8
EU25	66.3	65.3	68.5	65.5
EU25+2	66.5	65.4	68.5	66.0
EU15	69.0	65.3	68.5	65.5
NMS10	53.8	65.3	68.5	65.5
Base:	All teachers in the respective breakdown category and country.		xx.x%: based on at least 50 cases.	
Question:	q8		xx.x%: based on at least 10 cases.	
Wording:	When you use computers and/or the internet in class, ... is it only you, the teacher, who uses a computer to demonstrate or present something?		xx.x%: based on less than 10 cases	
Indicator:	Percentage of teachers who have pupil use a computer in class		*): This value represents collapsed adjacent cells (due to sample sizes too small)	

Source: empirica: LearnInd 2006 (CTS)

Table A2-7: Percentage of teachers whose pupils use a computer in class by teaching experience

Country	Total	<5 y	5-9 y	10-19 y	20+ y
BE	64.6	68.7	69.3	55.7	67.0
CZ	74.4	72.9	74.2	74.6	74.8
DK	92.5	88.0	91.2	94.0	94.6
DE	74.7	79.8	74.2	78.5	73.1
EE	52.3	43.5	55.8	56.6	50.6
EL	23.1	32.7	26.5	28.6	17.0
ES	60.1	60.4	60.2	64.7	57.0
FR	55.1	56.8	55.9	54.2	54.5
IE	66.6	57.0	61.9	70.6	68.0
IT	66.8	53.1	62.9	68.8	67.0
CY	50.9	44.9	49.2	60.5	40.1
LV	32.5	28.1	39.0	32.8	30.9
LT	47.3	43.3	52.8	49.2	45.2
LU	58.7	58.4	52.2	62.0	60.5
HU	35.8	37.4	37.3	40.7	32.6
MT	65.4	62.3	73.0	65.1	56.7
NL	87.5	89.0	89.4	90.5	85.3
AT	84.4	81.9	82.8	72.5	87.7
PL	53.0	41.0	47.7	58.3	54.0
PT	49.0	48.4	53.6	48.8	47.4
SI	60.2	61.4	61.9	54.3	62.2
SK	66.4	61.9	70.3	72.4	62.8
FI	78.8	80.7	75.4	78.5	80.1
SE	82.4	81.3	72.9	85.0	86.7
UK	82.8	79.8	86.0	81.6	83.5
IS	66.0	60.2	73.9	70.3	56.8
NO	86.2	87.3	88.2	88.5	83.6
EU25	66.3	66.5	67.3	66.2	66.0
EU25+2	66.5	66.8	67.6	66.5	66.1
EU15	69.0	70.7	70.1	68.8	68.4
NMS10	53.8	47.2	52.9	58.0	52.9
Base:	All teachers in the respective breakdown category and country.			xx.x%:	based on at least 50 cases.
Question:	q8			xx.x%:	based on at least 10 cases.
Wording:	When you use computers and/or the internet in class, ... is it only you, the teacher, who uses a computer to demonstrate or present something?			xx.x%:	based on less than 10 cases
Indicator:	Percentage of teachers who have pupil use a computer in class			*):	This value represents collapsed adjacent cells (due to sample sizes too small)

Source: empirica: LearnInd 2006 (CTS)

Table A2-8: Percentage of teachers whose pupils use a computer in class by subject of teaching

Country	Total	General primary education	Literature and languages	Humanities and social sciences	Science, mathematics, computer sciences	Physical and artistic/crafts education	Vocational education	
BE	64.6	66.6	61.8	71.1	64.6	60.0	72.4	
CZ	74.4	76.4	78.3	73.1	81.5	70.2	56.4	
DK	92.5	96.6	93.1	90.3	97.4	82.2	85.0	
DE	74.7	72.6	74.7	75.9	76.7	73.2	64.8	
EE	52.3	55.8	52.7	63.9	68.5	31.2	31.4	
EL	23.1	18.6	15.9	21.5	41.7	12.0	12.1	
ES	60.1	53.7	61.7	45.2	69.8	51.2	69.2	
FR	55.1	54.9	55.1	54.6	52.6	18.3	77.8	
IE	66.6	69.7	62.7	64.1	68.4	49.1	71.6	
IT	66.8	63.9	59.6	59.0	77.4	57.5	76.1	
CY	50.9	51.1	56.0	49.8	57.0	27.1	47.1	
LV	32.5	25.8	32.7	43.8	37.0	23.9	23.6	
LT	47.3	28.3	51.2	49.6	60.8	32.5	40.1	
LU	58.7	64.7	46.8	48.0	58.0	50.3	80.5	
HU	35.8	19.7	29.6	31.1	49.1	22.8	37.4	
MT	65.4	78.9	11.7	44.2	69.4	60.3	0.0	
NL	87.5	90.9	79.4	75.3	87.3	82.6	70.9	
AT	84.4	85.9	88.0	82.1	86.1	84.1	69.0	
PL	53.0	50.6	41.5	51.4	67.3	29.7	61.2	
PT	49.0	47.7	49.8	41.6	65.7	45.2	45.2	
SI	60.2	72.9	48.3	56.0	66.6	40.4	59.8	
SK	66.4	70.1	61.8	66.5	71.7	58.3	70.3	
FI	78.8	84.6	74.1	73.0	76.7	67.0	69.2	
SE	82.4	83.6	87.5	75.2	85.1	65.9	65.1	
UK	82.8	84.8	70.3	86.8	83.1	79.8	87.3	
IS	66.0	73.3	74.7	70.3	70.6	41.4	52.7	
NO	86.2	89.4	84.9	91.8	88.6	76.2	81.2	
EU25	66.3	68.1	64.4	66.6	73.6	60.4	67.8	
EU25+2	66.5	68.2	64.9	66.9	73.8	60.6	67.9	
EU15	69.0	69.4	68.2	70.2	75.5	66.6	71.1	
NMS10	53.8	50.9	48.1	52.7	66.3	37.8	55.4	
Base:	All teachers in the respective breakdown category and country.				xx.x%: based on at least 50 cases.			
Question:	q8				xx.x%: based on at least 10 cases.			
Wording:	When you use computers and/or the internet in class, ... is it only you, the teacher, who uses a computer to demonstrate or present something?				xx.x%: based on less than 10 cases			
Indicator:	Percentage of teachers who have pupil use a computer in class				*): This value represents collapsed adjacent cells (due to sample sizes too small)			

Source: empirica: LearnInd 2006 (CTS)

Table A2-9: Percentage of teachers who use material they have searched the internet for by school type

Country	Total	Primary Schools	Lower Secondary Schools	Upper Secondary Schools	Vocational Schools
BE	80.1	79.4	86.1	84.4	81.3
CZ	80.5	77.2	80.7	88.7	87.5
DK	84.9	82.6	84.9	92.5	84.3
DE	88.2	85.7	90.0	90.6	90.0
EE	96.7	96.7	97.1	97.3	96.8
EL	75.2	78.7	72.2	71.7	81.7
ES	84.6	84.3	88.2	82.0	81.3
FR	75.0	73.6	85.0	83.4	83.3
IE	79.4	78.2	82.0	83.5	79.6
IT	66.8	63.7	70.7	70.6	70.8
CY	77.3	76.4	76.7	83.8	87.4
LV	91.7	92.9	91.6	89.8	95.7
LT	88.4	86.4	89.7	91.4	92.1
LU	72.8	73.5	72.2	63.4	90.5
HU	82.2	81.4	81.6	84.1	87.4
MT	82.1	80.7	85.9	85.9	100.0
NL	77.5	77.6	80.4	79.8	73.2
AT	81.7	77.9	84.9	84.2	89.6
PL	80.1	75.1	83.1	85.5	79.3
PT	78.6	78.5	79.0	81.2	81.1
SI	70.6	69.4	69.8	79.0	78.3
SK	89.8	90.4	92.4	89.1	87.1
FI	90.9	91.4	90.9	93.7	88.7
SE	85.3	85.0	90.5	87.2	85.2
UK	93.8	93.9	93.1	94.2	97.8
IS	69.1	66.3	63.6	85.4	86.7
NO	85.8	85.2	88.5	89.2	84.9
EU25	82.7	81.8	86.4	85.7	84.2
EU25+2	82.8	81.8	86.5	85.7	84.2
EU15	82.9	82.2	87.1	85.3	84.3
NMS10	81.8	79.0	84.2	86.7	83.6
Base:	Teachers using computers in class				
Question:	q10			xx.x%: based on at least 50 cases.	
Wording:	Which of the following types of materials have you used when teaching your main subject(s) with the aid of a computer and/or the internet?... Material that you have searched the internet for			xx.x%: based on at least 10 cases.	
Indicator:	Percentage of teachers who use material they have searched the internet for			xx.x%: based on less than 10 cases	
				*): This value represents collapsed adjacent cells (due to sample sizes too small)	

Source: empirica: LearnInd 2006 (CTS)

Table A2-10: Percentage of teachers who use existing online material from established educational sources by school type

Country	Total	Primary Schools	Lower Secondary Schools	Upper Secondary Schools	Vocational Schools
BE	74.0	74.9	71.6	72.7	71.8
CZ	39.5	37.5	44.6	44.3	45.5
DK	76.2	78.5	79.5	81.0	64.0
DE	69.4	68.4	70.6	68.1	71.8
EE	86.5	89.1	88.9	83.8	58.0
EL	68.1	71.6	66.4	66.4	63.8
ES	83.0	84.9	83.6	80.6	77.8
FR	73.5	72.7	78.5	71.7	69.3
IE	87.1	87.7	84.6	84.3	84.0
IT	59.2	62.4	57.7	64.1	57.7
CY	80.3	82.7	65.0	72.9	62.1
LV	74.9	77.5	76.9	69.9	64.9
LT	76.9	75.5	78.0	82.6	73.7
LU	54.6	56.1	32.6	31.5	47.9
HU	55.1	53.7	53.9	55.2	59.9
MT	80.1	83.3	71.5	71.5	92.2
NL	80.8	83.8	75.8	74.6	58.2
AT	72.5	71.9	75.1	63.4	68.6
PL	64.7	60.3	66.1	73.6	67.1
PT	48.4	47.6	50.6	58.2	51.8
SI	53.9	52.4	54.2	61.6	56.0
SK	72.1	74.3	77.8	67.2	64.5
FI	77.7	81.6	80.7	65.1	52.1
SE	77.2	76.2	79.9	79.6	73.6
UK	94.2	95.6	86.2	85.8	89.0
IS	87.3	90.2	81.9	70.8	66.7
NO	71.2	71.5	69.0	73.7	71.7
EU25	74.2	76.1	72.0	71.5	68.3
EU25+2	74.2	76.0	72.0	71.5	68.4
EU15	76.4	78.6	74.4	72.6	70.0
NMS10	61.8	59.3	63.5	67.8	60.9
Base:	Teachers using computers in class				
Question:	q10			xx.x%: based on at least 50 cases.	
Wording:	Which of the following types of materials have you used when teaching your main subject(s) with the aid of a computer and/or the internet?... existing online material from established educational sources			xx.x%: based on at least 10 cases.	
Indicator:	Percentage of teachers who use existing online material from established educational sources			xx.x%: based on less than 10 cases	
				*): This value represents collapsed adjacent cells (due to sample sizes too small)	

Source: empirica: LearnInd 2006 (CTS)

Table A2-11: Percentage of teachers who use material that is available on the school's computer network or database by school type

Country	Total	Primary Schools	Lower Secondary Schools	Upper Secondary Schools	Vocational Schools
BE	52.2	52.9	51.0	51.3	51.0
CZ	79.9	82.8	83.2	72.9	72.7
DK	75.7	75.4	76.0	79.3	72.1
DE	71.4	71.1	74.1	70.9	73.4
EE	65.4	67.4	68.0	67.6	41.9
EL	54.9	58.8	51.9	51.1	57.0
ES	55.3	60.0	49.9	51.0	52.3
FR	39.9	38.4	47.9	46.1	48.4
IE	60.4	62.9	48.2	43.7	46.2
IT	55.9	56.0	50.4	59.8	58.9
CY	54.4	60.4	20.8	29.8	50.7
LV	60.3	62.0	60.5	56.2	53.9
LT	61.2	59.5	62.1	62.6	36.8
LU	54.9	55.0	39.9	41.7	45.2
HU	44.6	41.7	42.9	49.5	49.6
MT	26.2	22.8	31.8	31.8	48.7
NL	83.1	85.9	72.1	67.3	71.5
AT	67.5	64.5	75.2	57.7	67.0
PL	42.2	41.7	43.1	46.3	43.6
PT	46.3	46.4	40.3	49.7	62.2
SI	51.7	53.9	54.4	43.2	36.7
SK	71.5	75.1	72.2	61.2	58.0
FI	54.2	53.9	45.2	49.0	65.3
SE	71.9	71.8	71.4	73.2	71.6
UK	83.8	84.5	79.0	78.1	86.9
IS	71.2	70.6	81.7	70.8	66.7
NO	66.5	67.1	62.7	65.2	66.4
EU25	63.1	64.2	63.9	61.2	63.1
EU25+2	63.2	64.3	63.9	61.2	63.1
EU15	65.0	65.6	65.8	63.6	65.5
NMS10	52.7	55.0	57.0	53.0	52.3
Base:	Teachers using computers in class				
Question:	q10				
Wording:	Which of the following types of materials have you used when teaching your main subject(s) with the aid of a computer and/or the internet?... material that is available on the school's computer network or database				
Indicator:	Percentage of teachers who use material that is available on the school's computer network database				
	xx.x%: based on at least 50 cases. xx.x%: based on at least 10 cases. xx.x%: based on less than 10 cases *): This value represents collapsed adjacent cells (due to sample sizes too small)				

Source: empirica: LearnInd 2006 (CTS)

Table A2-12: Percentage of teachers who use electronic offline material (such as CD ROMS) by school type

Country	Total	Primary Schools	Lower Secondary Schools	Upper Secondary Schools	Vocational Schools
BE	81.3	84.7	70.6	72.2	76.9
CZ	86.6	86.0	84.9	87.8	86.9
DK	56.8	53.8	55.1	66.7	66.2
DE	88.3	92.4	84.4	88.8	88.8
EE	72.2	73.1	71.9	71.7	61.6
EL	82.9	88.3	77.3	75.4	79.5
ES	86.5	88.2	84.2	81.5	82.0
FR	82.1	85.2	65.1	70.8	72.7
IE	88.0	90.7	78.9	75.0	74.3
IT	82.7	84.6	82.3	81.0	85.6
CY	84.3	85.8	72.4	81.6	78.8
LV	64.5	64.6	65.0	67.7	62.9
LT	69.9	69.9	72.6	78.0	84.2
LU	66.8	68.8	73.9	64.8	52.1
HU	72.0	73.9	70.0	68.9	71.9
MT	80.1	82.7	70.4	70.4	82.6
NL	68.7	68.6	73.0	70.8	70.0
AT	90.2	96.6	89.2	74.3	74.3
PL	84.9	86.7	86.3	84.5	83.6
PT	67.6	68.2	65.6	67.6	45.1
SI	73.0	73.1	73.5	76.0	72.9
SK	82.2	84.8	84.1	76.3	71.7
FI	70.7	74.2	65.2	70.8	64.5
SE	67.4	67.1	64.5	63.4	65.1
UK	88.0	89.7	79.3	80.0	82.5
IS	56.4	54.3	54.6	66.7	63.3
NO	60.5	64.3	59.2	49.2	54.8
EU25	83.0	85.0	79.6	81.3	82.5
EU25+2	82.7	84.6	79.2	81.1	82.2
EU15	83.2	85.2	79.3	81.2	82.8
NMS10	82.2	83.1	80.5	81.5	81.0
Base:	Teachers using computers in class				
Question:	q10				
Wording:	Which of the following types of materials have you used when teaching your main subject(s) with the aid of a computer and/or the internet?... electronic offline material (such as CD ROMS)				
Indicator:	Percentage of teachers who use electronic offline material (such as CD ROMS)				
	xx.x%: based on at least 50 cases. xx.x%: based on at least 10 cases. xx.x%: based on less than 10 cases *): This value represents collapsed adjacent cells (due to sample sizes too small)				

Source: empirica: LearnInd 2006 (CTS)

Table A2-13: Percentage of teachers who use other learning material when using computers in class by school type

Country	Total	Primary Schools	Lower Secondary Schools	Upper Secondary Schools	Vocational Schools
BE	0.0	0.0	0.0	0.0	0.0
CZ	8.6	7.5	9.4	11.3	11.9
DK	6.6	5.8	5.6	10.2	12.9
DE	26.8	26.7	28.2	32.3	28.8
EE	2.2	2.0	2.1	1.9	6.4
EL	2.1	0.6	1.4	5.8	0.0
ES	2.6	1.5	2.7	5.5	6.2
FR	8.3	8.0	7.9	9.7	9.3
IE	0.6	0.4	1.2	1.8	2.5
IT	2.5	1.5	1.6	4.9	0.8
CY	7.4	8.8	1.7	1.4	0.0
LV	2.6	2.2	1.8	4.3	12.9
LT	0.9	1.1	0.9	0.4	2.7
LU	2.3	2.3	0.0	3.6	3.4
HU	8.1	6.0	7.0	12.4	12.9
MT	4.9	3.0	9.4	9.4	17.4
NL	1.3	0.7	5.6	4.2	4.3
AT	21.0	19.7	17.2	20.0	36.5
PL	13.1	12.7	15.8	18.7	14.4
PT	3.2	2.3	10.4	4.3	10.8
SI	6.1	4.5	4.5	13.4	12.4
SK	14.7	14.7	17.5	17.0	15.3
FI	4.0	3.8	7.2	1.9	3.0
SE	3.5	3.6	4.0	3.4	8.2
UK	0.9	0.7	2.1	0.9	3.3
IS	2.7	2.5	0.0	4.2	6.7
NO	11.7	11.2	15.3	11.6	16.0
EU25	8.8	7.1	13.2	14.2	14.7
EU25+2	8.8	7.2	13.2	14.2	14.7
EU15	8.4	6.7	13.8	14.1	15.0
NMS10	10.8	9.9	10.8	14.8	13.4
Base:	Teachers using computers in class			xx.x%: based on at least 50 cases.	
Question:	q10			xx.x%: based on at least 10 cases.	
Wording:	Which of the following types of materials have you used when teaching your main subject(s) with the aid of a computer and/or the internet?... other			xx.x%: based on less than 10 cases	
Indicator:	Percentage of teachers who use other learning material when using computers in class			*): This value represents collapsed adjacent cells (due to sample sizes too small)	

Source: empirica: LearnInd 2006 (CTS)

Table A2-14: Percentage of teachers who feel very confident at using text processors by school type

Country	Total	Primary Schools	Lower Secondary Schools	Upper Secondary Schools	Vocational Schools
BE	89.6	88.8	93.4	92.5	91.5
CZ	62.1	58.2	60.6	71.5	74.4
DK	81.7	82.6	81.7	84.6	75.4
DE	59.2	54.9	64.8	67.5	64.7
EE	45.7	45.0	45.1	51.1	51.7
EL	62.2	55.8	62.4	73.1	80.3
ES	62.1	58.5	67.8	72.0	71.9
FR	59.2	58.6	62.1	56.9	56.9
IE	57.8	54.8	67.1	73.9	72.0
IT	50.3	45.5	53.6	57.1	64.5
CY	80.9	81.8	86.2	71.8	85.9
LV	31.1	29.4	30.8	33.6	36.3
LT	39.1	35.2	40.2	43.7	47.4
LU	62.3	62.1	50.1	53.4	58.2
HU	71.9	71.1	73.3	74.6	74.0
MT	80.6	76.1	92.3	92.3	100.0
NL	80.8	80.8	86.5	89.0	75.9
AT	83.8	80.7	87.8	83.9	86.8
PL	62.1	55.6	62.8	75.3	77.3
PT	56.4	53.7	70.1	65.2	72.1
SI	63.9	62.8	62.1	67.2	74.4
SK	81.6	79.0	81.3	88.0	88.8
FI	52.6	51.3	54.8	58.7	53.6
SE	72.5	72.6	72.2	85.4	78.4
UK	76.6	75.9	79.8	79.9	73.6
IS	77.1	74.6	91.0	87.5	83.3
NO	67.8	67.8	70.2	69.5	64.8
EU25	65.0	63.6	67.0	70.1	69.4
EU25+2	65.1	63.6	67.0	70.1	69.4
EU15	65.3	64.3	68.2	69.6	67.9
NMS10	63.2	58.9	62.4	71.9	76.4
Base:	Teachers using computers in class				
Question:	q11			xx.x%: based on at least 50 cases.	
Wording:	For each the following situations, do you feel very confident, fairly confident, not very confident or you do not feel not at all confident when using a text processing programs on a computer such as Word?			xx.x%: based on at least 10 cases.	
Indicator:	Percentage of teachers who feel very confident at using text processors			xx.x%: based on less than 10 cases *): This value represents collapsed adjacent cells (due to sample sizes too small)	

Source: empirica: LearnInd 2006 (CTS)

Table A2-15: Percentage of teachers who feel very confident at creating electronic presentations by school type

Country	Total	Primary Schools	Lower Secondary Schools	Upper Secondary Schools	Vocational Schools
BE	41.3	35.2	60.9	62.0	59.1
CZ	28.2	22.2	27.7	43.4	44.3
DK	39.3	38.5	36.8	43.2	48.3
DE	26.2	19.9	32.9	34.8	39.0
EE	31.1	30.1	29.9	34.4	48.4
EL	47.8	38.3	52.3	65.7	61.6
ES	34.3	30.7	45.2	45.5	41.8
FR	18.9	15.5	30.5	32.8	34.6
IE	33.8	29.5	52.8	57.0	49.7
IT	43.1	39.4	42.0	50.2	56.8
CY	65.8	64.1	85.2	67.2	77.4
LV	15.3	13.3	14.7	15.3	20.5
LT	30.0	25.7	29.8	36.3	39.5
LU	24.2	19.4	49.7	54.7	87.0
HU	53.2	51.8	55.3	57.7	55.7
MT	61.0	54.1	78.7	78.7	73.9
NL	28.9	26.6	39.8	45.5	38.7
AT	36.7	23.2	50.4	54.6	60.0
PL	41.4	34.1	41.7	55.4	55.2
PT	28.7	22.9	55.1	49.6	64.0
SI	37.6	35.0	34.5	52.0	56.6
SK	57.9	55.4	58.6	66.1	66.9
FI	21.7	18.4	21.5	36.1	41.6
SE	31.0	25.4	33.4	56.0	58.4
UK	41.6	39.1	57.8	55.0	53.0
IS	46.6	41.3	54.7	75.0	63.3
NO	32.4	30.1	30.3	43.8	47.1
EU25	34.0	29.7	40.0	46.2	46.5
EU25+2	34.0	29.7	39.8	46.2	46.5
EU15	32.8	28.8	39.8	44.4	44.9
NMS10	41.0	35.6	40.5	52.1	53.5
Base:	Teachers using computers in class				
Question:	q11			xx.x%: based on at least 50 cases.	
Wording:	For each the following situations, do you feel very confident, fairly confident, not very confident or you do not feel not at all confident when creating a presentation with text and images such as PowerPoint?			xx.x%: based on at least 10 cases.	
Indicator:	Percentage of teachers who feel very confident at creating electronic presentations			xx.x%: based on less than 10 cases	
				*): This value represents collapsed adjacent cells (due to sample sizes too small)	

Source: empirica: LearnInd 2006 (CTS)

Table A2-16: Percentage of teachers who feel very confident at using e-mail by school type

Country	Total	Primary Schools	Lower Secondary Schools	Upper Secondary Schools	Vocational Schools
BE	86.2	83.9	92.9	90.6	89.1
CZ	73.1	70.1	74.3	80.5	79.5
DK	88.8	88.8	87.0	94.0	91.6
DE	71.4	68.6	73.0	77.0	75.6
EE	81.0	80.4	80.5	88.1	90.4
EL	59.9	52.4	66.9	68.3	68.6
ES	65.1	61.1	71.8	76.0	75.8
FR	57.0	55.3	63.7	63.3	63.4
IE	73.4	72.9	76.5	78.4	77.2
IT	37.1	31.2	38.3	56.3	47.4
CY	61.8	60.1	74.8	67.2	49.3
LV	39.2	36.4	37.5	44.0	57.5
LT	47.9	43.9	47.3	55.1	57.9
LU	79.5	77.6	89.1	88.8	100.0
HU	77.9	75.5	79.4	82.1	82.1
MT	76.3	69.9	92.5	92.5	91.3
NL	86.6	85.5	89.4	98.5	90.9
AT	76.9	72.4	83.3	87.4	82.2
PL	60.2	49.7	62.6	79.4	78.4
PT	39.0	33.6	62.5	60.7	71.0
SI	64.5	60.4	60.4	76.4	83.6
SK	76.8	74.0	76.8	83.7	83.9
FI	77.4	76.5	77.2	87.3	79.2
SE	84.7	82.9	86.8	95.1	90.2
UK	72.9	71.3	80.5	83.0	81.3
IS	74.8	73.9	63.7	83.3	76.7
NO	79.3	76.9	79.1	85.7	86.2
EU25	65.9	63.4	70.8	75.4	73.3
EU25+2	66.1	63.6	71.0	75.5	73.5
EU15	66.1	64.0	71.8	74.7	72.0
NMS10	64.8	59.1	67.1	77.8	79.4
Base:	Teachers using computers in class				
Question:	q11			xx.x%: based on at least 50 cases.	
Wording:	For each the following situations, do you feel very confident, fairly confident, not very confident or you do not feel not at all confident when using e-mail to communicate with others?			xx.x%: based on at least 10 cases.	
Indicator:	Percentage of teachers who feel very confident at using e-mail			xx.x%: based on less than 10 cases *): This value represents collapsed adjacent cells (due to sample sizes too small)	

Source: empirica: LearnInd 2006 (CTS)

Table A2-17: Percentage of teachers who feel very confident at downloading and installing software by school type

Country	Total	Primary Schools	Lower Secondary Schools	Upper Secondary Schools	Vocational Schools
BE	47.8	45.3	52.6	52.3	50.1
CZ	26.2	21.1	24.3	38.5	38.1
DK	42.8	42.4	42.1	49.6	41.0
DE	42.1	37.5	46.8	48.6	48.4
EE	21.8	20.4	21.7	28.0	32.1
EL	37.7	29.5	44.6	52.4	55.5
ES	38.3	34.7	45.4	49.4	41.5
FR	31.1	29.1	36.7	38.6	41.0
IE	50.1	49.3	57.2	56.4	56.3
IT	21.4	18.4	18.7	31.3	33.0
CY	35.4	32.1	53.7	48.5	37.9
LV	9.8	8.2	8.0	12.2	20.2
LT	15.1	14.2	14.9	19.6	15.8
LU	39.5	39.1	20.5	30.0	54.8
HU	58.2	57.4	58.9	61.7	59.7
MT	49.9	42.4	65.9	65.9	82.6
NL	37.8	36.9	44.6	52.2	39.8
AT	37.0	33.0	44.5	40.4	38.5
PL	36.0	28.5	35.2	52.2	55.1
PT	20.6	15.4	41.4	41.0	37.5
SI	16.7	14.1	13.4	26.2	31.9
SK	39.1	35.2	37.3	52.2	50.0
FI	23.1	22.0	22.8	32.3	35.3
SE	36.4	31.9	39.4	51.7	52.1
UK	39.9	39.3	43.9	42.5	45.3
IS	21.1	19.2	9.1	33.3	33.3
NO	36.8	38.0	35.8	40.6	39.9
EU25	35.8	33.0	40.2	45.1	44.4
EU25+2	35.8	33.1	40.1	45.0	44.4
EU15	36.0	33.6	42.2	44.4	43.3
NMS10	34.6	28.9	32.8	47.4	49.6
Base:	Teachers using computers in class				
Question:	q11			xx.x%: based on at least 50 cases.	
Wording:	For each the following situations, do you feel very confident, fairly confident, not very confident or you do not feel not at all confident when downloading and installing software onto a computer?			xx.x%: based on at least 10 cases.	
Indicator:	Percentage of teachers who feel very confident at downloading and installing software			xx.x%: based on less than 10 cases	
				*): This value represents collapsed adjacent cells (due to sample sizes too small)	

Source: empirica: LearnInd 2006 (CTS)

Table A2-18: Percentage of teachers with no or next to no user experience by school type

Country	Total	Primary Schools	Lower Secondary Schools	Upper Secondary Schools	Vocational Schools
BE	7.6	8.7	3.5	4.4	3.3
CZ	5.2	5.5	5.9	4.1	4.0
DK	1.2	1.5	1.3	0.0	2.4
DE	7.2	9.1	5.8	4.5	3.6
EE	8.4	8.5	8.6	7.1	4.6
EL	31.1	32.3	34.0	25.5	13.5
ES	7.6	8.7	6.0	6.4	4.5
FR	7.4	7.3	9.8	6.7	2.8
IE	7.6	5.7	14.6	13.4	12.4
IT	9.5	11.8	11.3	5.9	1.6
CY	6.7	3.8	16.3	11.7	7.4
LV	13.6	14.5	13.7	13.3	13.8
LT	8.6	8.6	8.2	8.1	3.9
LU	3.3	3.7	3.3	1.6	0.0
HU	14.8	17.0	15.6	7.7	7.4
MT	4.8	4.3	5.4	5.4	0.0
NL	1.7	1.5	2.8	4.8	0.3
AT	1.5	1.5	3.2	2.5	0.0
PL	6.3	6.6	5.3	6.1	5.0
PT	10.0	11.5	4.0	3.4	3.9
SI	4.9	5.2	5.2	3.3	4.2
SK	12.7	12.4	11.4	13.9	12.3
FI	2.7	2.3	4.5	2.3	5.1
SE	1.0	1.1	0.3	2.1	1.2
UK	1.3	1.0	4.5	2.5	2.0
IS	3.8	4.3	7.6	0.0	0.0
NO	2.1	2.3	2.4	1.8	1.3
EU25	6.8	7.2	7.2	5.9	3.7
EU25+2	6.8	7.2	7.1	5.9	3.7
EU15	6.6	6.9	6.6	5.6	3.1
NMS10	8.0	8.9	8.8	7.0	6.0
Base:	All teachers in the respective breakdown category and country.			xx.x%:	based on at least 50 cases.
Question:	q11			xx.x%:	based on at least 10 cases.
Wording:	Compound of question 11 for more information see footnote page 39			xx.x%:	based on less than 10 cases
Indicator:	Percentage of teachers with no or next to no user experience			*):	This value represents collapsed adjacent cells (due to sample sizes too small)

Source: empirica: LearnInd 2006 (CTS)

Table A2-19: Percentage of teachers with novice ICT skills by school type

Country	Total	Primary Schools	Lower Secondary Schools	Upper Secondary Schools	Vocational Schools
BE	7.9	8.8	3.4	3.7	4.5
CZ	9.2	11.7	10.4	4.1	4.4
DK	5.5	5.0	5.6	2.2	6.1
DE	11.2	12.5	9.4	7.9	11.2
EE	13.4	12.7	13.1	14.9	19.9
EL	8.8	9.6	8.1	7.4	5.7
ES	10.7	11.7	9.7	8.2	7.8
FR	16.6	17.1	16.1	13.2	13.2
IE	8.0	7.7	7.2	9.0	9.9
IT	13.1	12.8	10.4	12.7	14.2
CY	9.5	7.3	15.3	14.0	12.3
LV	33.9	34.0	33.9	32.8	27.3
LT	23.2	24.7	21.9	20.3	19.6
LU	13.5	13.8	4.6	13.4	25.3
HU	14.1	16.2	13.9	8.5	5.2
MT	3.7	3.7	3.5	3.5	0.0
NL	6.3	6.9	3.0	0.0	5.2
AT	9.5	11.3	7.3	5.5	8.4
PL	12.4	15.4	12.7	6.9	8.5
PT	20.3	23.3	10.7	6.1	2.0
SI	13.5	14.4	14.7	10.2	12.5
SK	3.0	3.5	2.2	2.0	1.1
FI	12.2	13.6	11.5	8.0	7.6
SE	5.6	5.8	6.3	1.4	8.5
UK	5.1	5.5	2.6	2.9	1.1
IS	9.7	10.8	15.3	1.8	2.8
NO	6.8	7.6	4.9	6.9	5.3
EU25	11.2	12.0	10.2	8.3	9.5
EU25+2	11.1	11.9	10.1	8.2	9.4
EU15	10.9	11.4	9.0	8.1	10.1
NMS10	12.7	14.8	13.6	8.8	7.3
Base:	All teachers in the respective breakdown category and country.			xx.x%:	based on at least 50 cases.
Question:	q11			xx.x%:	based on at least 10 cases.
Wording:	Compound of question 11 for more information see footnote page 39			xx.x%:	based on less than 10 cases
Indicator:	Percentage of teachers with novice user skills			*):	This value represents collapsed adjacent cells (due to sample sizes too small)

Source: empirica: LearnInd 2006 (CTS)

Table A2-20: Percentage of teachers with good ICT skills by school type

Country	Total	Primary Schools	Lower Secondary Schools	Upper Secondary Schools	Vocational Schools
BE	34.4	36.3	31.2	28.8	29.6
CZ	46.5	47.1	45.7	46.5	44.0
DK	33.1	30.5	34.8	27.6	33.0
DE	42.4	45.7	40.3	36.5	36.3
EE	49.7	50.9	49.4	46.8	43.9
EL	32.6	33.7	29.6	32.0	31.3
ES	44.0	45.4	40.6	39.0	41.6
FR	45.4	46.8	40.6	40.7	42.8
IE	37.3	40.5	28.4	24.6	25.0
IT	49.3	51.8	51.5	44.2	36.4
CY	32.6	33.7	27.2	31.4	36.9
LV	42.2	42.4	43.6	43.4	42.5
LT	48.4	48.7	48.4	49.1	51.1
LU	48.6	47.3	70.8	60.9	37.6
HU	32.6	31.1	32.9	35.0	39.2
MT	31.3	34.5	28.8	28.8	20.0
NL	40.4	42.0	31.9	27.0	34.6
AT	43.2	51.9	31.3	35.0	31.1
PL	41.3	42.4	44.9	34.7	27.4
PT	43.2	43.5	39.7	46.7	40.8
SI	47.4	46.5	47.0	47.1	46.4
SK	30.0	31.9	30.5	24.9	24.7
FI	49.7	49.7	43.9	50.9	49.4
SE	50.1	53.9	44.8	29.7	19.4
UK	35.1	36.6	26.7	27.7	35.6
IS	45.3	48.4	23.0	31.6	36.1
NO	41.2	41.8	40.1	39.2	37.6
EU25	42.0	43.5	40.0	37.0	36.4
EU25+2	42.0	43.4	40.0	37.0	36.4
EU15	42.3	44.0	39.4	36.8	37.1
NMS10	40.5	40.9	41.6	37.4	33.7
Base:	All teachers in the respective breakdown category and country.			xx.x%:	based on at least 50 cases.
Question:	q11			xx.x%:	based on at least 10 cases.
Wording:	Compound of question 11 for more information see footnote page 39			xx.x%:	based on less than 10 cases
Indicator:	Percentage of teachers with good user skills			*):	This value represents collapsed adjacent cells (due to sample sizes too small)

Source: empirica: LearnInd 2006 (CTS)

Table A2-21: Percentage of teachers with very good ICT skills by school type

Country	Total	Primary Schools	Lower Secondary Schools	Upper Secondary Schools	Vocational Schools
BE	50.2	46.2	61.9	63.0	62.6
CZ	39.1	35.7	38.1	45.3	47.6
DK	60.2	63.0	58.3	70.3	58.5
DE	39.3	32.6	44.5	51.1	48.9
EE	28.5	27.9	28.9	31.2	31.7
EL	27.4	24.5	28.3	35.1	49.5
ES	37.7	34.3	43.7	46.4	46.1
FR	30.6	28.9	33.4	39.3	41.2
IE	47.0	46.1	49.8	53.0	52.6
IT	28.0	23.6	26.8	37.2	47.8
CY	51.3	55.1	41.2	42.9	43.4
LV	10.2	9.1	8.8	10.5	16.4
LT	19.9	18.0	21.5	22.5	25.4
LU	34.6	35.2	21.3	24.2	37.1
HU	38.4	35.7	37.6	48.7	48.2
MT	60.2	57.6	62.3	62.3	80.0
NL	51.6	49.6	62.3	68.2	59.9
AT	45.8	35.3	58.2	57.0	60.5
PL	40.0	35.5	37.1	52.3	59.1
PT	26.4	21.8	45.6	43.8	53.3
SI	34.3	34.0	33.1	39.5	36.9
SK	54.2	52.2	55.8	59.2	61.9
FI	35.4	34.4	40.1	38.8	37.8
SE	43.3	39.2	48.5	66.7	70.8
UK	58.5	56.9	66.1	67.0	61.4
IS	41.3	36.5	54.0	66.7	61.1
NO	49.8	48.3	52.6	52.1	55.8
EU25	40.0	37.4	42.7	48.8	50.4
EU25+2	40.1	37.5	42.8	48.9	50.5
EU15	40.3	37.7	44.9	49.6	49.8
NMS10	38.8	35.4	36.0	46.8	53.0
Base:	All teachers in the respective breakdown category and country.			xx.x%:	based on at least 50 cases.
Question:	q11			xx.x%:	based on at least 10 cases.
Wording:	Compound of question 11 for more information see footnote page 39			xx.x%:	based on less than 10 cases
Indicator:	Percentage of teachers with very good user skills			*):	This value represents collapsed adjacent cells (due to sample sizes too small)

Source: empirica: LearnInd 2006 (CTS)

Table A2-22: Percentage of teachers stating computer/internet should be used in teaching for letting pupils do exercises and practise by school type

Country	Total	Primary Schools	Lower Secondary Schools	Upper Secondary Schools	Vocational Schools
BE	82.5	81.9	82.5	85.1	88.3
CZ	92.9	93.6	92.6	91.8	92.3
DK	78.4	79.1	78.2	83.2	73.9
DE	87.0	88.9	85.7	80.0	80.0
EE	87.0	87.3	87.0	85.7	85.0
EL	61.5	63.9	55.1	59.1	56.2
ES	90.7	91.0	90.8	90.2	86.8
FR	72.9	72.0	77.6	73.6	74.5
IE	79.0	80.6	71.1	71.6	75.5
IT	59.3	58.1	54.7	63.4	65.0
CY	64.9	65.6	58.6	68.5	55.0
LV	84.1	87.8	88.0	81.8	74.5
LT	70.0	68.2	71.3	70.1	45.0
LU	43.1	45.7	43.3	32.4	17.6
HU	70.3	69.4	71.5	71.8	76.9
MT	81.2	87.0	69.0	69.0	71.3
NL	88.0	89.2	81.3	74.5	88.2
AT	93.8	93.2	95.2	92.4	93.7
PL	76.1	75.6	78.3	76.2	80.8
PT	64.6	65.9	57.3	63.9	64.2
SI	70.5	73.8	73.6	62.9	61.6
SK	95.3	95.4	95.2	94.4	95.5
FI	89.8	90.7	84.7	87.6	92.8
SE	90.0	89.4	91.2	94.5	89.0
UK	88.8	89.0	87.2	89.0	96.0
IS	81.4	82.9	84.6	70.2	72.2
NO	75.7	77.2	69.6	79.3	79.0
EU25	79.9	80.4	81.5	79.1	80.6
EU25+2	79.9	80.3	81.3	79.1	80.5
EU15	80.2	80.7	81.9	79.2	79.9
NMS10	78.8	79.0	80.3	78.9	83.1
Base:	All				
Question:	q13				
Wording:	What do you think for what computers and the internet should be used for in teaching?... letting pupils do exercises and practise				
Indicator:	Percentage of teachers with stating computer/internet should be used in teaching for letting pupils do exercises and practise				
	xx.x%: based on at least 50 cases. xx.x%: based on at least 10 cases. xx.x%: based on less than 10 cases *): This value represents collapsed adjacent cells (due to sample sizes too small)				

Source: empirica: LearnInd 2006 (CTS)

Table A2-23: Percentage of teachers stating computer/internet should be used in teaching for letting pupils retrieve information in a self directed manner by school type

Country	Total	Primary Schools	Lower Secondary Schools	Upper Secondary Schools	Vocational Schools
BE	84.8	83.8	89.8	88.8	91.6
CZ	92.5	92.3	94.1	92.8	91.1
DK	94.2	93.9	95.3	91.1	95.9
DE	96.6	95.8	95.8	96.6	96.3
EE	96.3	96.0	96.1	97.6	98.5
EL	69.9	70.0	69.3	68.0	65.8
ES	93.5	93.3	94.3	93.3	93.5
FR	70.6	68.5	81.0	80.1	76.7
IE	79.4	78.1	85.0	85.2	88.0
IT	69.3	69.2	73.6	65.7	76.2
CY	90.9	91.0	88.4	92.1	92.6
LV	91.8	92.1	93.0	92.1	90.9
LT	66.9	65.7	69.9	71.6	50.9
LU	76.2	74.9	82.6	82.7	93.0
HU	88.3	88.6	89.1	88.8	87.1
MT	82.1	80.1	86.5	86.5	100.0
NL	93.3	93.9	87.0	93.3	90.9
AT	85.7	77.2	95.9	94.9	96.7
PL	87.2	85.2	88.2	90.7	89.7
PT	72.8	72.0	71.2	82.6	82.5
SI	83.5	84.3	83.8	84.4	80.0
SK	94.1	93.8	95.4	94.8	93.8
FI	88.8	85.8	90.3	97.3	97.8
SE	81.3	78.3	80.3	92.8	92.0
UK	91.4	90.6	93.8	94.9	90.0
IS	90.1	89.7	77.1	94.7	94.4
NO	65.0	63.0	69.5	67.1	65.6
EU25	85.0	83.6	89.8	88.4	89.9
EU25+2	84.8	83.4	89.5	88.3	89.7
EU15	84.4	83.0	90.2	87.9	90.1
NMS10	87.8	86.9	88.7	89.9	89.3
Base:	All				
Question:	q13				
Wording:	What do you think for what computers and the internet should be used for in teaching?... letting pupils retrieve information in a self directed manner				
Indicator:	Percentage of teachers with stating computer/internet should be used in teaching for letting pupils retrieve information in a self directed manner				
	xx.x%: based on at least 50 cases. xx.x%: based on at least 10 cases. xx.x%: based on less than 10 cases *): This value represents collapsed adjacent cells (due to sample sizes too small)				

Source: empirica: LearnInd 2006 (CTS)

Table A2-24: Percentage of teachers stating computer/internet should be used in teaching for teaching about office tools by school type

Country	Total	Primary Schools	Lower Secondary Schools	Upper Secondary Schools	Vocational Schools
BE	52.7	50.0	63.3	66.2	68.3
CZ	68.5	65.1	69.3	74.8	77.4
DK	51.6	51.3	51.9	44.0	53.2
DE	63.5	55.3	69.9	68.7	72.6
EE	40.6	39.5	40.9	46.7	51.6
EL	32.0	30.9	28.1	35.8	38.2
ES	92.3	92.8	93.3	91.9	89.3
FR	77.1	76.8	78.3	77.6	78.2
IE	58.7	58.7	60.5	59.4	62.8
IT	24.5	19.3	27.5	26.8	43.6
CY	60.4	64.6	50.7	52.7	40.3
LV	58.8	60.9	61.2	56.8	59.5
LT	52.5	49.0	54.9	50.3	31.3
LU	20.0	20.7	16.0	16.6	11.8
HU	43.6	39.6	43.0	56.7	59.8
MT	44.0	44.3	44.6	44.6	64.7
NL	51.8	50.7	53.4	38.9	63.4
AT	70.3	54.9	88.6	80.9	91.8
PL	45.1	38.9	44.5	60.4	64.7
PT	47.6	49.1	43.4	41.4	49.0
SI	31.9	31.4	31.9	32.3	31.5
SK	79.7	77.3	79.5	87.3	89.9
FI	57.9	57.0	51.2	63.7	73.4
SE	72.5	72.1	74.3	82.6	73.4
UK	74.9	76.3	68.5	66.4	71.2
IS	77.1	78.3	69.4	70.2	69.4
NO	64.6	68.8	63.3	51.5	49.8
EU25	61.3	60.5	64.0	63.8	69.6
EU25+2	61.3	60.6	64.0	63.7	69.4
EU15	63.5	63.1	68.2	64.4	70.1
NMS10	51.0	47.2	51.8	62.1	67.6
Base:	All				
Question:	q13				
Wording:	What do you think for what computers and the internet should be used for in teaching?... teaching for teaching about office tools				
Indicator:	Percentage of teachers with stating computer/internet should be used in teaching for teaching about office tools				
	xx.x%: based on at least 50 cases. xx.x%: based on at least 10 cases. xx.x%: based on less than 10 cases *): This value represents collapsed adjacent cells (due to sample sizes too small)				

Source: empirica: LearnInd 2006 (CTS)

Table A2-25: Percentage of teachers stating computer/internet should be used in teaching for collaborative and productive work by pupils by school type

Country	Total	Primary Schools	Lower Secondary Schools	Upper Secondary Schools	Vocational Schools
BE	74.8	74.0	80.6	79.3	77.6
CZ	86.6	88.3	88.9	83.0	83.1
DK	95.4	95.0	96.3	98.8	94.2
DE	80.0	81.5	77.3	79.5	76.3
EE	72.0	71.2	74.3	77.8	79.0
EL	75.6	78.8	74.3	67.0	63.3
ES	82.4	82.3	85.0	81.7	80.9
FR	85.0	84.6	86.4	89.7	89.1
IE	81.8	82.0	81.3	81.6	84.1
IT	78.6	80.2	85.5	76.0	77.4
CY	83.0	85.3	81.1	75.5	77.9
LV	83.2	85.1	84.3	86.2	87.3
LT	78.2	75.9	79.7	77.1	68.5
LU	66.0	71.8	22.6	31.3	39.2
HU	57.4	57.3	57.5	58.0	60.8
MT	55.4	56.8	54.9	54.9	64.0
NL	82.9	84.6	73.9	82.1	75.0
AT	72.9	71.9	71.5	72.5	72.8
PL	59.9	57.3	62.9	64.0	61.5
PT	72.9	71.8	80.9	75.3	79.9
SI	54.4	51.5	52.1	62.1	64.2
SK	91.7	92.0	93.0	92.1	92.2
FI	79.4	80.0	73.6	85.0	80.5
SE	78.5	78.6	84.8	85.5	79.2
UK	95.7	96.6	90.4	90.7	97.0
IS	73.3	72.6	77.1	75.4	80.6
NO	58.0	58.6	56.2	61.2	59.0
EU25	80.5	81.8	79.1	78.3	77.7
EU25+2	80.2	81.5	78.8	78.2	77.5
EU15	83.4	84.7	82.1	81.3	79.6
NMS10	67.2	66.9	70.4	70.0	70.4
Base:	All				
Question:	q13				
Wording:	What do you think for what computers and the internet should be used for in teaching?... collaborative and productive work by pupils				
Indicator:	Percentage of teachers with stating computer/internet should be used in teaching for collaborative and productive work by pupils				
	xx.x%: based on at least 50 cases. xx.x%: based on at least 10 cases. xx.x%: based on less than 10 cases *): This value represents collapsed adjacent cells (due to sample sizes too small)				

Source: empirica: LearnInd 2006 (CTS)

Table A2-26: Percent of teachers agreeing or strongly agreeing: Pupils are more motivated and attentive when computers and the internet are used in class by school type

Country	Total	Primary Schools	Lower Secondary Schools	Upper Secondary Schools	Vocational Schools
BE	82.7	85.1	77.1	75.6	77.6
CZ	80.1	85.3	81.6	68.4	69.2
DK	80.9	84.0	80.4	81.1	72.9
DE	81.0	81.8	80.2	76.6	81.7
EE	90.7	91.4	90.9	88.3	89.1
EL	90.6	90.9	91.8	88.2	93.1
ES	88.7	90.3	87.5	85.8	84.1
FR	76.8	76.7	82.6	75.4	77.7
IE	90.7	91.1	88.5	89.6	93.6
IT	89.1	90.5	88.2	85.4	90.1
CY	95.1	97.0	93.6	89.1	85.8
LV	84.3	84.4	85.1	80.2	75.4
LT	93.8	93.3	94.6	94.9	96.0
LU	83.9	84.3	82.4	79.9	94.1
HU	92.5	93.4	93.1	89.6	91.0
MT	91.2	93.7	88.4	88.4	93.3
NL	89.4	91.3	85.3	84.6	78.9
AT	77.7	83.6	74.8	57.3	67.5
PL	92.2	92.8	89.4	90.0	91.5
PT	95.2	95.0	95.8	96.6	88.5
SI	89.7	91.0	90.5	82.6	87.1
SK	86.7	87.8	87.6	83.9	86.0
FI	76.8	77.1	76.4	78.6	77.4
SE	86.3	85.8	86.6	85.9	67.3
UK	93.8	94.6	90.6	88.2	91.6
IS	73.3	75.8	84.5	53.2	60.7
NO	89.8	92.8	91.5	73.3	74.7
EU25	86.3	87.4	85.2	82.9	83.5
EU25+2	86.3	87.4	85.3	82.8	83.4
EU15	85.5	86.7	83.8	81.5	82.9
NMS10	90.1	91.2	89.2	86.6	85.7
Base:	All, excl. „don't know“				
Question:	q14				
Wording:	Finally, can you please tell me whether you strongly agree, somewhat agree, somewhat disagree or strongly disagree with the following statements in relation to your school. Pupils are more motivated and attentive when computers and the internet are used in class				
Indicator:	Percentage of teachers agreeing or strongly agreeing: Pupils are more motivated and attentive when computers and the internet are used in class				
	xx.x%: based on at least 50 cases. xx.x%: based on at least 10 cases. xx.x%: based on less than 10 cases *): This value represents collapsed adjacent cells (due to sample sizes too small)				

Source: empirica: LearnInd 2006 (CTS)

Table A2-27: Percent of teachers agreeing or strongly agreeing: Our school is well equipped with computers by school type

Country	Total	Primary Schools	Lower Secondary Schools	Upper Secondary Schools	Vocational Schools
BE	65.9	62.2	75.4	76.8	77.0
CZ	73.4	71.8	69.9	76.6	77.3
DK	82.5	83.3	79.9	88.7	87.0
DE	81.4	79.3	83.6	84.4	86.9
EE	71.3	70.0	72.3	74.0	81.6
EL	66.3	59.3	77.9	78.6	90.7
ES	73.9	73.1	77.2	80.0	78.2
FR	55.7	50.0	75.6	78.5	83.2
IE	65.9	64.2	70.8	74.4	75.7
IT	71.9	62.9	75.8	87.0	93.0
CY	68.1	68.4	57.8	73.2	78.7
LV	61.1	60.1	61.8	65.3	69.0
LT	63.2	61.1	69.4	73.1	76.4
LU	70.9	68.5	87.4	80.7	97.9
HU	82.4	79.9	82.8	89.5	91.6
MT	76.5	80.5	69.4	69.4	73.3
NL	84.8	85.9	73.8	83.4	84.3
AT	74.5	68.6	78.6	68.0	84.2
PL	78.4	75.1	80.9	84.8	85.3
PT	51.0	46.3	66.4	74.2	78.2
SI	83.8	85.9	87.0	70.2	77.8
SK	73.8	74.4	73.3	72.8	75.7
FI	70.8	66.1	72.5	84.1	85.0
SE	75.8	74.2	73.4	91.6	90.5
UK	86.9	87.6	81.9	82.9	83.7
IS	77.4	75.5	84.6	89.5	88.9
NO	79.5	77.9	81.5	85.9	89.4
EU25	74.2	71.0	78.9	82.2	84.9
EU25+2	74.3	71.0	79.0	82.2	84.9
EU15	73.7	70.3	79.6	82.5	85.5
NMS10	76.5	74.2	77.1	81.1	82.6
Base:	All, excl. „don't know“				
Question:	q14				
Wording:	Finally, can you please tell me wether you strongly agree, somewhat agree, somewhat disagree or strongly disagree with the following statements in relation to your school. Our school is well equipped with computers				
Indicator:	Percentage of teachers agreeing or strongly agreeing: Our school is well equipped with computers				
	xx.x%: based on at least 50 cases. xx.x%: based on at least 10 cases. xx.x%: based on less than 10 cases *): This value represents collapsed adjacent cells (due to sample sizes too small)				

Source: empirica: LearnInd 2006 (CTS)

Table A2-28: Percent of teachers agreeing or strongly agreeing: The internet connection we have is sufficiently fast by school type

Country	Total	Primary Schools	Lower Secondary Schools	Upper Secondary Schools	Vocational Schools
BE	76.0	74.7	78.2	77.3	76.6
CZ	71.6	67.7	70.6	79.9	79.7
DK	83.7	80.8	82.2	86.3	87.5
DE	79.4	75.2	83.9	81.5	84.3
EE	81.1	79.7	80.9	85.8	89.1
EL	72.3	72.0	75.7	72.0	86.4
ES	81.2	80.2	83.2	85.3	85.8
FR	66.1	62.0	80.7	85.6	86.5
IE	59.9	57.8	68.1	69.3	68.7
IT	70.4	59.7	71.3	87.0	85.0
CY	61.8	57.2	76.4	72.2	71.3
LV	69.9	69.2	69.1	75.4	76.6
LT	77.3	77.9	76.5	80.6	79.2
LU	81.5	80.9	93.6	81.5	73.5
HU	85.7	86.7	85.7	82.8	82.8
MT	57.6	57.4	64.1	64.1	66.7
NL	89.8	90.3	88.3	89.8	88.5
AT	78.1	70.8	85.9	88.8	87.4
PL	79.6	72.6	85.8	90.3	87.0
PT	69.0	66.7	74.8	78.9	81.0
SI	90.0	90.3	91.3	90.7	87.2
SK	69.7	65.4	70.2	83.0	87.0
FI	83.6	80.6	87.1	90.1	95.4
SE	88.2	87.7	91.0	96.0	92.7
UK	84.0	84.2	82.8	81.4	91.6
IS	77.8	75.3	84.7	94.7	91.4
NO	83.4	81.5	83.0	88.9	89.6
EU25	77.2	74.2	81.7	83.9	85.1
EU25+2	77.3	74.2	81.7	83.9	85.1
EU15	77.0	74.2	82.0	83.2	85.2
NMS10	78.2	74.0	80.7	85.9	84.4
Base:	All, excl. „don't know“				
Question:	q14				
Wording:	Finally, can you please tell me whether you strongly agree, somewhat agree, somewhat disagree or strongly disagree with the following statements in relation to your school. The internet connection we have is sufficiently fast				
Indicator:	Percentage of teachers agreeing or strongly agreeing: The internet connection we have is sufficiently fast				
	xx.x%: based on at least 50 cases. xx.x%: based on at least 10 cases. xx.x%: based on less than 10 cases *): This value represents collapsed adjacent cells (due to sample sizes too small)				

Source: empirica: LearnInd 2006 (CTS)

Table A2-29: Percent of teachers agreeing or strongly agreeing: Existing teaching materials on the Internet are of poor quality by school type

Country	Total	Primary Schools	Lower Secondary Schools	Upper Secondary Schools	Vocational Schools
BE	25.4	24.5	29.1	29.6	28.3
CZ	33.3	28.6	29.4	43.3	45.5
DK	34.5	34.5	33.7	36.8	35.6
DE	28.7	26.5	33.2	34.2	32.7
EE	18.5	17.6	18.6	22.7	28.9
EL	35.1	34.2	35.3	35.7	47.9
ES	40.3	40.4	39.2	41.4	42.3
FR	30.2	27.8	38.0	37.5	44.4
IE	40.5	37.6	51.9	53.6	45.8
IT	30.8	28.7	32.5	36.5	39.5
CY	31.6	35.1	20.9	23.1	12.1
LV	19.8	19.0	19.5	21.6	24.6
LT	34.4	37.4	33.9	32.5	35.1
LU	35.3	33.3	36.0	41.8	83.3
HU	33.4	30.8	35.7	37.9	38.6
MT	26.3	25.4	26.3	26.3	6.7
NL	28.4	27.3	35.7	35.6	33.9
AT	26.4	20.1	32.4	41.6	38.0
PL	28.7	28.2	26.9	34.2	37.2
PT	27.9	26.3	32.1	35.0	39.5
SI	29.5	26.0	26.1	46.8	41.0
SK	25.0	23.1	22.6	29.5	33.4
FI	23.1	19.3	23.5	38.9	43.3
SE	54.0	54.4	60.5	45.1	40.6
UK	22.8	20.8	32.0	35.7	32.8
IS	39.7	37.6	54.5	51.0	50.0
NO	48.6	49.8	48.6	43.7	44.9
EU25	29.9	28.0	33.5	36.1	37.0
EU25+2	30.2	28.3	33.7	36.1	37.0
EU15	30.1	28.0	35.3	36.7	36.6
NMS10	29.3	28.0	28.2	34.4	38.3
Base:	All, excl. „don't know“				
Question:	q14				
Wording:	Finally, can you please tell me whether you strongly agree, somewhat agree, somewhat disagree or strongly disagree with the following statements in relation to your school. Existing teaching materials on the Internet are of poor quality				
Indicator:	Percentage of teachers agreeing or strongly agreeing: Existing teaching materials on the Internet are of poor quality				
	xx.x%: based on at least 50 cases. xx.x%: based on at least 10 cases. xx.x%: based on less than 10 cases *): This value represents collapsed adjacent cells (due to sample sizes too small)				

Source: empirica: LearnInd 2006 (CTS)

Table A2-30: Percent of teachers agreeing or strongly agreeing: Teachers in our school do not have sufficient computer skills by school type

Country	Total	Primary Schools	Lower Secondary Schools	Upper Secondary Schools	Vocational Schools
BE	56.4	59.2	52.4	49.7	45.9
CZ	32.0	31.2	33.6	32.9	34.4
DK	52.1	52.7	56.7	35.0	44.9
DE	35.1	37.3	34.8	28.8	28.4
EE	24.9	23.5	24.0	29.0	39.4
EL	65.7	65.1	66.9	62.1	36.7
ES	48.2	49.8	45.9	46.1	45.8
FR	47.6	48.2	49.1	46.0	38.7
IE	59.0	56.4	72.2	69.7	67.2
IT	58.4	62.0	62.9	51.2	50.4
CY	41.6	33.0	66.6	60.6	72.9
LV	33.8	33.3	33.8	36.9	34.7
LT	31.2	33.3	30.2	28.4	17.1
LU	54.2	56.8	29.2	36.2	61.4
HU	50.8	51.8	51.1	49.9	48.3
MT	44.0	38.9	51.5	51.5	59.3
NL	54.9	56.9	55.2	51.4	41.0
AT	38.6	39.7	39.3	35.4	33.4
PL	24.7	24.5	24.7	27.3	25.8
PT	37.3	38.3	36.8	33.1	22.2
SI	37.7	35.3	35.9	48.0	46.3
SK	32.6	34.5	33.1	26.8	30.0
FI	43.0	43.3	37.2	52.5	52.7
SE	73.6	75.7	76.7	62.0	70.3
UK	27.0	24.8	39.8	37.8	33.8
IS	37.9	38.5	50.0	31.3	31.3
NO	63.8	66.0	61.5	59.1	59.9
EU25	42.0	42.9	42.0	38.8	37.0
EU25+2	42.3	43.1	42.3	38.9	37.2
EU15	44.5	45.1	44.9	41.3	38.3
NMS10	30.6	31.5	33.8	31.6	32.0
Base:	All, excl. „don't know“				
Question:	q14				
Wording:	Finally, can you please tell me whether you strongly agree, somewhat agree, somewhat disagree or strongly disagree with the following statements in relation to your school. Teachers in our school do not have sufficient computer skills			xx.x%: based on at least 50 cases. xx.x%: based on at least 10 cases. xx.x%: based on less than 10 cases *): This value represents collapsed adjacent cells (due to sample sizes too small)	
Indicator:	Percentage of teachers agreeing or strongly agreeing: Teachers in our school do not have sufficient computer skills				

Source: empirica: LearnInd 2006 (CTS)

Table A2-31: Percent of teachers agreeing or strongly agreeing: Better technical maintenance and support is required in our school by school type

Country	Total	Primary Schools	Lower Secondary Schools	Upper Secondary Schools	Vocational Schools
BE	73.9	77.2	66.5	64.9	63.8
CZ	52.5	53.5	54.5	51.0	51.4
DK	55.9	59.3	58.6	50.5	46.6
DE	56.4	60.4	53.3	55.3	50.4
EE	66.0	68.5	67.0	61.5	50.0
EL	83.2	84.3	80.7	76.3	66.3
ES	63.8	63.8	60.8	61.2	59.3
FR	75.9	77.9	71.2	64.6	64.7
IE	84.6	85.8	78.7	78.9	84.6
IT	66.6	70.9	70.1	56.4	57.4
CY	88.4	93.8	80.0	71.7	73.0
LV	70.9	72.8	73.4	66.4	61.9
LT	89.7	90.1	88.3	92.9	94.1
LU	54.8	54.9	52.6	59.7	57.0
HU	80.7	83.2	81.3	72.3	73.0
MT	64.7	64.4	65.4	65.4	25.0
NL	54.4	54.4	56.8	42.8	56.0
AT	53.3	62.3	40.3	43.1	46.7
PL	60.4	63.4	62.6	56.0	50.7
PT	74.7	77.3	66.6	64.6	36.5
SI	47.2	44.4	44.2	59.6	55.1
SK	70.3	69.5	71.5	72.5	70.4
FI	61.3	64.2	55.4	55.8	52.0
SE	63.5	66.1	65.9	49.7	30.5
UK	60.6	62.4	52.0	52.5	54.6
IS	35.4	38.3	23.0	19.3	22.2
NO	73.3	76.3	74.1	59.6	54.6
EU25	64.8	67.7	61.5	58.8	55.5
EU25+2	64.9	67.8	61.6	58.8	55.5
EU15	64.8	67.8	59.1	57.9	55.2
NMS10	64.6	67.3	68.3	61.6	56.9
Base:	All, excl. „don't know“				
Question:	q14				
Wording:	Finally, can you please tell me wether you strongly agree, somewhat agree, somewhat disagree or strongly disagree with the following statements in relation to your school. Better technical maintenance and support is required in our school				
Indicator:	Percentage of teachers agreeing or strongly agreeing: Better technical maintenance and support is required in our school				
	xx.x%: based on at least 50 cases. xx.x%: based on at least 10 cases. xx.x%: based on less than 10 cases *): This value represents collapsed adjacent cells (due to sample sizes too small)				

Source: empirica: LearnInd 2006 (CTS)

Table A2-32: Percent of teachers agreeing or strongly agreeing: It is hard to find adequate learning materials for teaching by school type

Country	Total	Primary Schools	Lower Secondary Schools	Upper Secondary Schools	Vocational Schools
BE	46.3	45.4	51.8	51.0	48.7
CZ	35.4	31.8	34.2	43.0	44.9
DK	37.7	35.9	38.0	34.8	37.2
DE	38.5	34.6	41.0	43.5	39.0
EE	39.2	37.4	39.4	40.0	45.4
EL	51.4	49.1	52.1	53.4	50.6
ES	44.0	42.3	43.4	44.1	49.5
FR	43.2	42.9	40.4	48.0	47.2
IE	52.3	50.5	60.2	59.0	57.0
IT	42.6	38.9	41.5	47.5	52.1
CY	37.3	38.2	31.6	39.3	14.7
LV	31.8	31.4	31.6	34.1	39.6
LT	38.2	38.9	38.7	35.9	35.9
LU	44.6	45.8	35.0	34.4	50.7
HU	47.2	46.8	47.5	48.0	52.1
MT	19.2	13.4	30.2	30.2	6.7
NL	43.1	40.3	63.6	48.1	54.6
AT	23.6	19.1	26.1	34.9	34.9
PL	23.1	22.9	27.3	20.8	23.7
PT	38.2	37.4	41.5	42.7	39.2
SI	42.1	39.7	39.5	57.2	48.3
SK	41.0	39.3	41.0	44.7	48.2
FI	47.8	46.8	47.0	51.5	57.5
SE	61.9	62.9	71.3	54.9	35.3
UK	31.2	30.3	36.7	35.2	34.5
IS	36.6	35.1	61.4	38.6	42.9
NO	48.3	49.1	47.9	40.0	43.2
EU25	38.7	37.4	40.7	40.9	42.7
EU25+2	38.8	37.5	40.8	40.9	42.7
EU15	40.5	38.6	42.5	44.5	44.4
NMS10	30.5	30.8	35.3	30.8	35.8
Base:	All, excl. „don't know“				
Question:	q14				
Wording:	Finally, can you please tell me whether you strongly agree, somewhat agree, somewhat disagree or strongly disagree with the following statements in relation to your school. It is hard to find adequate learning materials for teaching				
Indicator:	Percentage of teachers agreeing or strongly agreeing: It is hard to find adequate learning materials for teaching				
	xx.x%: based on at least 50 cases. xx.x%: based on at least 10 cases. xx.x%: based on less than 10 cases *): This value represents collapsed adjacent cells (due to sample sizes too small)				

Source: empirica: LearnInd 2006 (CTS)

Table A2-33: Percent of teachers agreeing or strongly agreeing: Using computers in class does not have significant learning benefits for pupils by school type

Country	Total	Primary Schools	Lower Secondary Schools	Upper Secondary Schools	Vocational Schools
BE	21.1	21.1	22.2	20.1	17.9
CZ	13.4	12.2	14.1	15.5	15.6
DK	14.7	12.9	15.5	10.5	15.8
DE	18.8	16.9	19.7	21.7	20.9
EE	15.9	15.5	15.9	20.4	15.3
EL	16.3	13.9	20.6	23.1	14.6
ES	52.3	51.3	53.6	56.2	53.6
FR	32.2	32.4	27.1	36.7	31.7
IE	21.5	20.4	27.4	24.1	23.6
IT	13.0	11.8	13.0	13.6	18.5
CY	14.7	12.7	15.9	22.9	14.2
LV	15.7	15.0	15.4	17.1	15.4
LT	15.2	16.8	16.0	15.8	6.2
LU	23.8	22.8	31.4	33.3	25.8
HU	33.1	32.7	32.8	34.0	33.2
MT	3.3	3.8	1.1	1.1	6.7
NL	20.4	18.0	29.4	31.6	32.9
AT	28.1	26.8	26.6	39.8	29.6
PL	3.6	4.0	4.3	4.2	3.9
PT	9.3	9.4	9.5	7.7	4.1
SI	10.4	10.5	10.5	13.6	10.6
SK	5.0	5.7	5.4	3.6	1.7
FI	26.9	26.4	31.7	28.3	19.5
SE	48.4	52.1	44.4	37.0	36.5
UK	10.3	9.8	14.7	14.0	12.5
IS	46.9	47.0	45.3	48.9	40.0
NO	16.7	14.9	16.4	27.5	25.0
EU25	20.7	20.6	22.5	22.4	23.0
EU25+2	20.6	20.5	22.4	22.4	23.0
EU15	23.1	22.5	25.7	26.6	26.2
NMS10	9.5	10.5	13.1	10.6	10.5
Base:	All, excl. „don't know“				
Question:	q14				
Wording:	Finally, can you please tell me wether you strongly agree, somewhat agree, somewhat disagree or strongly disagree with the following statements in relation to your school. Using computers in class does not have significant learning benefits for pupils				
Indicator:	Percentage of teachers agreeing or strongly agreeing: Using computers in class does not have significant learning benefits for pupils				
	xx.x%: based on at least 50 cases. xx.x%: based on at least 10 cases. xx.x%: based on less than 10 cases *): This value represents collapsed adjacent cells (due to sample sizes too small)				

Source: empirica: LearnInd 2006 (CTS)

Annex III: Methodology Report

Universe / Sample population

In order to assure the comparability of school levels in all countries UIS-OECD-EUROSTAT "Mapping of national education programmes to ISCED 97 for school academic/year 2002/2003"² was used for composing the sample frame. Based on that, each country divided its school system into ICSED codes and made different combinations that existed in its country.

Exhibit A3-1: Universe number of schools (2006)

Country		Total	Primary	Lower Secondary	Upper Secondary*	Vocational / Professional
BE	Belgium	5414	3845	1569		
CZ	Czech Republic	6358	1370	2992	1996	
DK	Denmark	2912	2375		437	100
DE	Germany	34255	13650	12059	5423	3123
EE	Estonia	670	91	264	257	58
EL	Greece	9632	5870	1759	1832	171
ES	Spain	18984	8514	3885	5772	813
FR	France	54451	43896	6605	3950	
IE	Ireland	3897	3159	402		336
IT	Italy	36275	17229	7761	5830	5455
CY	Cyprus	523	368	63	92	
LV	Latvia	1061	79	460	411	111
LT	Lithuania	1589	245	675	593	76
LU	Luxemburg	177	146	31		
HU	Hungary	4453	3128	1325		
MT	Malta	171	100	61		10
NL	Netherlands	9631	7703	543	470	915
AT	Austria	6145	3221	1229	1370	325
PL	Poland	27786	12207	6294	5978	3307
PT	Portugal	8966	6976	935	974	81
SI	Slovenia	589	447		142	
SK	Slovakia	3472	825	1711	860	76
FI	Finland	4332	2667	859	806	
SE	Sweden	7953	7004		839	110
UK	United Kingdom	25045	20855	4190		
IS	Iceland	213	31	152	29	1
NO	Norway	3594	1955	1196	443	

² http://forum.europa.eu.int/Public/irc/dsis/edtcsl/library?l=/public/unesco_collection/programmes_isced97&vm=detailed&sb=Title

*Upper secondary educational level schools include also vocational education, which is coded under ISCED 2 or 3 or is given together with upper secondary education

Sampling frame and method

The sample was composed using official databases, which contained contact data of schools. In the majority of countries the sample was drawn from a database received from the Ministry of Education.

Exhibit A3-2: Directories from which samples were drawn (CTS and HTS)

Country		Directory / database
BE	Belgium	Ministry of Education of Flemish Community and Ministry of Education of French Community
CZ	Czech Republic	Institute for Information in Education
DK	Denmark	Ministry of. Education
DE	Germany	Ziegenhorn VDI
EE	Estonia	Estonian Ministry of Education and Research
EL	Greece	Ministry of Education
ES	Spain	Ministry of Education
FR	France	Ministry of Education National
IE	Ireland	Department of Education
IT	Italy	Ministry of Instruction
CY	Cyprus	Ministry of Education and Culture
LV	Latvia	Ministry of Education and Science
LT	Lithuania	Centre of Information Technologies of Education
LU	Luxemburg	Ministère de l'Education et de la formation professionnelle
HU	Hungary	Ministry of Education
MT	Malta	The government website was accessed at www.gov.mt where the education section offers information that includes lists of the schools that fall under different levels and different administrative bodies
NL	Netherlands	source of the database is CFI, but not all addresses included phone numbers. Some addresses have been provided with phone number by Cendris. Phone numbers of approximately 300 vocational schools have been looked up on the internet
AT	Austria	Statistik Austria
PL	Poland	Ministry of Education and Science
PT	Portugal	Ministry of Education
SI	Slovenia	Slovene Ministry of Education and Sport
SK	Slovakia	Ústav informácií a prognóz školstva
FI	Finland	Salesleads by TDC Hakemistot Oy
SE	Sweden	"Kursinfo 2005/2006" published by the Swedish School Authorities
UK	United Kingdom	Learning Direct
IS	Iceland	Ministry of Education and the Icelandic Teachers Union
NO	Norway	The universe of primary and lower secondary schools is gathered from the GSI-register (grunnskolenes informasjonssystem) and information about upper secondary and upper secondary vocational schools is from Ssb (Statistiscs Norway).

For each country a separate template of sample frames was composed by TNS Emor. These templates contained data about school types across regions as well as location type. School types were defined based on the ISCED codes provided in UIS-OECD-EUROSTAT. Location type distribution was made according to the Eurostat type of locality classification which differentiates densely populated, intermediate and thinly populated municipalities³. Apart from that, each country was divided into 3-7 regions depending on the size of a country.

Based on the data provided by countries, TNS Emor composed quotas for each country. Two level stratification was used – quotas for first stage, random simple for second. The quotation for region by school type and location type were endorsed. Simple random selection was conducted by the local agency or the local source of the contact base. Both private and public schools were included in the sample. It was also obligatory to include schools of other teaching languages than official language of a country to the sample.

Simple random sampling was used inside a quota cell. This means that if the quota for primary schools in region1 was 100 and the total number of primary school in this region was 800, then a random sample selection was be made among those 800 schools. This covered also both private and public schools and schools of other teaching languages than official language of a country.

No more than 50% of interviews could have been made in one school level. At least 10% of respondents had to be from schools, which provided professional/vocational or combined program of vocational and upper secondary level education (in case a country did not have special quota for those schools). It did not matter whether vocational education level was coded as ISCED 3 or ISCED 4.

There were no duplication in samples of head teacher and classroom teacher survey. This was only allowed in countries with small universe sizes (e.g Malta, Cyprus, Iceland, Estonia, Latvia etc) and in cases where the last quota cells were very difficult to achieve or there were not enough schools of a certain type. Priority was to include as many different schools as possible. In both surveys, 5 attempts were made before giving up, only if responded refused, this person was not contacted again.

³ Densely populated area refers to a set of closely related local units, each one of which having a density greater than 500 inhabitants per km², and the total population of which being of at least 50 000 inhabitants; Intermediate area refers to a set of closely related local units that do not pertain to a densely populated area, each one of which having density greater than 100 inhabitants per km², and where the total population is at least of 50 000 inhabitants or it refers to a set that is adjacent to a highly populated area. Thinly populated area (rural): refers to a set of closely related local units that are not part of a densely populated area, or of an intermediate area. (A set of local areas totalling less than 100 km², not reaching the required density, but entirely enclosed within a densely-populated or intermediate area, is to be considered to form part of that area. If it is enclosed within a densely-populated area and an intermediate area it is considered to form part of the intermediate area).

Exhibit A3-3: Method for drawing school samples (CTS and HTS)

Country		Sampling method
BE	Belgium	Simple random sampling
CZ	Czech Republic	Simple random selection from full list of schools
DK	Denmark	Simple random selection
DE	Germany	Selection from full list of schools, list was mixed before selection
EE	Estonia	Simple random selection from full list of schools
EL	Greece	Simple random selection from level of education and region and location type
ES	Spain	Simple random selection from full list of schools
FR	France	Simple random sampling
IE	Ireland	Simple random selection from full list of schools
IT	Italy	Simple random selection
CY	Cyprus	Full list of schools - simple random sampling
LV	Latvia	Full list of schools - simple random sampling
LT	Lithuania	Full list of schools - simple random sampling
LU	Luxemburg	Full list of schools - simple random sampling
HU	Hungary	Simple random selection
MT	Malta	Full list - simple random sampling
NL	Netherlands	Simple random selection from full list of schools
AT	Austria	Simple random selection
PL	Poland	Simple random sampling
PT	Portugal	Simple random selection
SI	Slovenia	Simple random sampling
SK	Slovakia	Full list of schools - simple random sampling
FI	Finland	fully random drawing from the database from the classes that were assessed to contain the target group
SE	Sweden	A random sample of full list of schools
UK	United Kingdom	Simple random selection from full list of schools
IS	Iceland	Full list of schools - simple random sampling
NO	Norway	Simple random sampling from full list of schools

The CATI program generated a randomly chosen letter. The interviewer asked for the person with a surname that started on the generated letter. If there was more than one teacher whose surname started with the selected letter, the person that is first alphabetically was chosen. If the correct person was not available, an appointment was made. At least 5 attempts were made, before taking another teacher.

Only in Malta due to instructions dictated by the Education Department, the Head Teacher would randomly select a teacher that would be available for an appointment during which they would be interviewed.

Fieldwork

Fieldwork was coordinated by the TNS Emor and conducted in cooperation with its local TNS offices excluding Iceland, Cyprus, Austria, Slovenia and Malta where TNS does not have offices. In these countries partners with whom TNS has experiences before were used.

Pilot interviews prior to the regular fieldwork were conducted with 20 schools in both target groups in Estonia and Greece in February 2006, in order to test the questionnaire (structure, comprehensibility of questions).

Exhibit A3-4: Research companies which have conducted the fieldwork of the survey (2006)

	Country	Fieldwork organisation
BE	Belgium	TNS Dimarso
CZ	Czech Republic	TNS AISA
DK	Denmark	TNS Gallup
DE	Germany	TNS Infratest
EE	Estonia	TNS Emor
EL	Greece	TNS ICAP
ES	Spain	TNS Demoscopia
FR	France	TNS Sofres
IE	Ireland	TNS mrbi
IT	Italy	TNS Infratest
CY	Cyprus	CYMAR Market Research Ltd
LV	Latvia	TNS Latvia
LT	Lithuania	TNS Gallup
LU	Luxemburg	TNS ILRES
HU	Hungary	TNS Hungary
MT	Malta	MISCO International
NL	Netherlands	TNS NIPO
AT	Austria	FESSEL –GfK
PL	Poland	TNS OBOP
PT	Portugal	TNS euroteste
SI	Slovenia	CATI d.o.o.
SK	Slovakia	TNS AISA
FI	Finland	TNS Gallup
SE	Sweden	TNS Gallup
UK	United Kingdom	TNS Direct Services
IS	Iceland	IMG Gallup
NO	Norway	TNS Gallup

Exhibit A3-5: Number of interviews conducted (HTS / CTS)

Country		Head Teachers	Classroom teachers
BE	Belgium	450	807
CZ	Czech Republic	500	1000
DK	Denmark	315	848
DE	Germany	450	901
EE	Estonia	400	851
EL	Greece	500	1000
ES	Spain	518	1022
FR	France	501	869
IE	Ireland	403	626
IT	Italy	500	900
CY	Cyprus	150	600
LV	Latvia	451	902
LT	Lithuania	457	908
LU	Luxemburg	82	277
HU	Hungary	500	1000
MT	Malta	100	200
NL	Netherlands	515	890
AT	Austria	320	450
PL	Poland	500	1000
PT	Portugal	450	900
SI	Slovenia	253	460
SK	Slovakia	502	1000
FI	Finland	318	601
SE	Sweden	200	450
UK	United Kingdom	450	905
IS	Iceland	177	424
NO	Norway	494	708
TOTAL		10456	20499

Exhibit A3-6: Reasons for non-response - HTS

Reasons	BE	CZ	DK	DE	EE	EL	ES	FR	IE	IT	CY	LV	LT	LU	HU	MT	NL	AT	PL	PT	SI	SK	FI	SE	UK	IS	NO	Total
Gross sample	1082	1248	438	1919	626	890	8140	4432	572	3542	269	1023	734	267	1931	107	7948	1005	1130	2838	325	1056	537	434	727	218	1572	43014
School does not exist any more	0	6	3	4	0	4	0	0	1	0	0	1	9	1	2	5	124	0	0	16	0	9	2	0	2	2	16	207
Telephone number does not belong to school	8	3	0	133	0	2	1120	18	1	0	0	25	3	5	1	0	288	10	16	64	0	11	1	29	2	0	10	2781
Number does not exist any more	14	25	6	189	2	12	450	47	0	518	0	102	21	2	68	0	103	67	0	211	3	31	34	5	32	0	5	2394
Fax machine / modem	0	19	0	19	0	14	2	43	13	604	3	22	21	31	0	0	0	0	0	88	0	12	1	2	7	1	0	904
Net sample	1060	1195	429	1574	624	858	7472	4324	557	2420	266	873	680	228	1860	102	7433	928	1114	2459	322	993	499	398	684	215	1541	36728
Refused immediately	38	27	19	60	5	68	335	28	54	135	22	8	10	34	43	0	734	90	6	217	2	50	15	3	47	0	23	2296
Refused in the target group	14	107	28	100	3	0	4	13	0	53	23	4	5	16	14	2	47	68	83	45	10	26	16	0	36	12	22	753
Target respondent is not available during fieldwork period	12	77	16	46	0	0	0	2743	0	476	19	1	51	6	0	0	0	0	0	497	0	42	1	20	36	4	23	4070
Answering-machine	17	19	28	80	3	33	1	454	0	11	3	0	1	16	0	0	6	159	9	0	0	12	1	0	6	2	37	898
Nobody picks up phone	3	452	23	474	136	247	75	84	1	1245	49	289	102	58	9	0	3	291	102	203	0	334	144	0	30	8	31	4438
Quota completed	526	13	0	364	77	10	5618	501	99	0	0	120	54	16	1294	0	6128	0	414	1047	57	29	3	175	79	11	911	13800
Successful interview	450	500	315	450	400	500	535	501	403	500	150	451	457	82	500	100	515	320	500	450	253	500	319	200	450	178	494	10473

Exhibit A3-7: Reasons for non-response - CTS

Reasons	BE	CZ	DK	DE	EE	EL	ES	FR	IE	IT	CY	LV	LT	LU	HU	MT	NL	AT	PL	PT	SI	SK	FI	SE	UK	IS	NO	Total
Gross sample	1996	2440	1341	5622	1404	1521	15860	5301	1025	6263	677	1545	1215	529	3311	221	6447	1741	1988	5168	603	1783	889	1009	1641	647	4243	85055
School does not exist any more	2	9	10	21	0	1	0	0	1	0	0	0	6	0	9	17	2	0	49	26	0	8	3	0	0	0	16	180
Telephone number does not belong to school	9	29	0	148	0	20	1031	17	7	0	0	21	1	1	10	0	12	32	23	67	0	29	10	33	11	0	35	2666
Number does not exist any more	24	67	17	1031	2	6	447	48	0	926	0	85	2	1	52	0	271	126	0	621	6	61	6	23	26	0	9	4307
Fax machine / modem	0	31	0	132	0	17	2	48	18	1090	0	32	5	16	7	0	0	0	0	108	7	8	5	13	1	21	0	1563
Net sample	1961	2304	1314	4290	1402	1477	15278	5188	999	4247	677	1407	1201	511	3233	204	6162	1583	1916	4346	590	1677	865	940	1603	626	4183	75339
Refused immediately	220	122	108	374	5	48	223	48	193	230	8	30	30	16	156	0	817	98	79	559	16	104	22	7	75	0	160	4083
Refused in the target group	21	160	63	932	4	50	2	92	0	92	62	51	28	37	21	4	53	24	173	54	25	45	32	11	155	106	75	2376
Target respondent is not available during fieldwork period	86	207	88	117	6	87	0	2347	0	827	7	35	37	5	22	0	0	0	0	43	0	57	19	46	36	22	43	4137
Answering-machine	21	31	87	416	21	117	0	701	0	18	0	0	4	48	5	0	12	419	11	0	1	8	27	0	6	4	65	2023
Nobody picks up phone	27	748	120	1061	290	175	45	200	28	2180	0	245	129	111	75	0	53	592	136	392	15	425	12	32	14	49	587	7816
Quota completed	779	36	0	489	225	0	13108	931	152	0	0	144	65	17	1954	0	4337	0	517	2398	73	38	152	394	412	21	2545	34405
Successful interview	807	1000	848	901	851	1000	1002	869	626	900	600	902	908	277	1000	200	890	450	1000	900	460	1000	601	450	905	424	708	20499

Feedback on the fieldwork

No major problems were reported from the fieldwork with respect to interviewing. The overall feedback from the survey organisations was that fieldwork ran smoothly and that the questionnaire was well understood by most respondents. The main challenge was the fulfilment of the quotas and selection of CTS survey respondent.

Exhibit A3-8: Comments by national fieldwork companies on their experience (2006)

Country		Comments
BE	Belgium	It was quite difficult to reach the targeted number of interviews because it was the exam period before the Easter holidays (starting from April 3 rd) and because of the very strict and difficult contact procedure of CT survey.
CZ	Czech Republic	Head teachers sometimes express doubts about the reasonability of conducting large-scale e-Learning surveys in Czech Republic. It shows up that they are expected to deliver similar data to the official authorities.
DK	Denmark	Some schools were very annoyed being contacted again for carrying out the second interview in the same schools in the other target group.
DE	Germany	We had some problems with the local education authorities, some of them wanted to know, why we did the study
EE	Estonia	The selection of teachers was difficult. We had to contact teachers several times in order to get qualified person. We also made a lot of phone calls to teachers' mobile phones because we could not reach them during the time they were in class. Spring break was during the fieldwork period, due to that it was very difficult to reach teachers during that week. In HTS many directors were not aware of the number of computers in the breakdown of school levels or Internet connection speed, so we had to make appointment and call back.
EL	Greece	No problems occur.
ES	Spain	In HTS we had difficulties in meeting the cross quotas (region and school type).
FR	France	In both surveys we could not follow the estimated location type quotas, because the data about distribution of schools in the breakdown of location type was not available and estimations made by population did not apply to the actual situation in France.
IE	Ireland	The Primary school targets were met without any difficulty in both surveys because of the large amount of available sample. Secondary and Vocational targets were more difficult to achieve because of the limited sample number. There was additional difficulty in achieving the Vocational School target as many respondents in Secondary schools who offered Vocational level education, did not identify themselves as such at Q1 – for this reason the wording of Vocational Schools was changed mid way through fieldwork to Combined Secondary/Vocational School' as combined education was provided. One further difficulty was in meeting the location type quotas as we ended up in a position where we were trying to find Vocational schools in thinly populated areas – however, if the study is repeated, this is a factor we will build into the sample design. There was no official data available how schools by school type are distributed in different location types.
IT	Italy	We had problems receiving data about the universe - number of schools in the breakdown of school type, region and location type.

CY	Cyprus	<p>The Ministry of Education and Culture was informed about the survey and they provided CYMAR with a letter based on the letter sent by the European Commission. In the case that some teachers refused to answer saying that they would first need the Ministry's permission, the letter was faxed to them. This helped us complete the survey and avoid a higher refusal rate. In total, 14 teachers asked about the permission and it was faxed to them.</p> <p>Head teachers who could not reply to all questions immediately were contacted later based on the appointment agreed.</p>
LV	Latvia	<p>The complicated selection of CTS respondents caused a lack of understanding and dissatisfaction in some schools, especially as regards large schools in Riga. In individual cases, it was also the reason for refusal.</p> <p>In two of the weeks devoted to both surveys' fieldwork, there was spring break and the project week. During this time, the majority of teachers spent their time outside school. Therefore it was difficult to reach the required respondent.</p> <p>In small schools, recruitment time – the time spent in looking for the particular respondent, was shorter, as classrooms are located close to the teachers' room in these schools. At the same time, in larger schools the distance among classrooms is larger, and breaks were often too short to find and interview the teacher.</p> <p>Speaking about the subject taught in CTS, two teachers within one school could name the same subject, although each of them is teaching on a different level (one is teaching Mathematics in primary classes, while the other – in secondary school classes). In such case, there were situations where two teachers teaching the same subject in the same school could answer completely different to the question Q12. For example: one teacher could say that the subject is not suitable for teaching it with the help of computer, however, both teachers gives lessons to different class groups, and the other teacher could have not mentioned this reason. Probably, the other respondent did not have to answer this question at all, for he/she already uses both a computer and the Internet.</p> <p>In HT survey somewhat problematic was the question about the number of teachers in school. In several cases, amount of work of school teachers does not reach half a workload. For example: a teacher is working in 2-4 schools simultaneously, giving 1-2 lectures once a week in every school. Thereby, this teacher does not fit in the total number of teachers.</p> <p>Similar problems were encountered in determining the number of teachers at separate education levels.</p> <p>The scale given in the question Q13 was unclear to respondents. The wording of the question rather called for an affirmative or negative answer, without options – tend to agree or disagree.</p>
LT	Lithuania	<p>It was difficult to find a right person for CTS. Teachers have no personal telephone numbers and administration doesn't want to look for the teachers in the big school building.</p> <p>The most difficult question in CTS was the main subject that they teach. Teachers often teach several subjects and can't choose the main</p> <p>In HTS we had problems with question 9. Head teachers of many schools didn't know type of Internet connection. We had to make appointment and call back to these schools after type of Internet connection was identified.</p>
LU	Luxemburg	<p>No problems occur.</p>

HU	Hungary	We had problems meeting last quotas of CTS survey as there were not enough schools left in some quota cells.
MT	Malta	The actual sample once on the field differed to the original universe due to the fact that a number of schools had merged or closed down.
NL	Netherlands	We had big problems finding the universe of schools in Netherlands. The Ministry of Education was not co-operative. There is no central registration of all schools. We were sent from one office to the other. Especially the numbers for vocational schools were hard to get. We didn't get enough numbers for vocational schools for both surveys. Phone numbers of approximately 300 vocational schools have been looked up on the internet. Due to that we could not begin the survey on time and we also could not end it on time as we did not have enough phone numbers of vocational schools.
AT	Austria	In HTS because of a technical break down of our CATI-server our field department had problems with controlling the quota for some days – this is the reason, why we made too many interviews in location type C.
PL	Poland	No problems occur.
PT	Portugal	As we did not have official data about distribution of schools in the breakdown of location type. This variable was not used for weighting.
SI	Slovenia	The teachers in CTS were a bit harder to be reached (because of the nature of their work), but we solved this with appointments so they were called when they were not having classes and they left us the phone numbers where they could be reached at that time. In HTS we had very few refusals. Some of the respondents are interested in receiving a feedback, concerning the results of the survey.
SK	Slovakia	No major problems occur.
FI	Finland	The CTS questionnaire as such worked well, but the selection method caused sometimes great confusion, and necessitated high number of calls to the school in order to finally get the qualified person to be interviewed. HTS questionnaire worked fine and respondents (after they could be reached) were willing to cooperate in general. However, due to the nuances in the educational system, in a few cases there was misunderstanding concerning types of education given.
SE	Sweden	No problems occur.
UK	United Kingdom	We had problems defining the location type as the list given us did not include all settlements in UK. That's why we could not define all schools based on location type and had to create new variable. In both surveys we could not follow the estimated location type quotas, because the official data about distribution of schools in the breakdown of location type was not available and estimations made by population did not apply to the actual situation in UK.
IS	Iceland	No problems occur.
NO	Norway	In CTS the only problem we faced was due to quotas/sample – we were in shortage of sample to fulfill all of the quotas. In HTS fieldwork went fine, except from some difficulties filling the quotas.

Weighting schemes

After the fieldwork, weighting coefficients were computed using region, location type and school type.

Exhibit A3-9: Weighting principles (2006)

	Country	Description
BE	Belgium	School type by region and location type
CZ	Czech Republic	School type by regions and location type
DK	Denmark	School type by region and location type
DE	Germany	School type by region and location type
EE	Estonia	School type by region and location type
EL	Greece	School type by region and location type
ES	Spain	School type by region and location type
FR	France	School type by region as data about distribution of schools in the breakdown of location type was not available
IE	Ireland	School type by region has been used in weighting procedure as data about distribution of schools in the breakdown of location type was not available
IT	Italy	School type by region and location type
CY	Cyprus	School type by region and location type
LV	Latvia	School type by region and location type
LT	Lithuania	School type by region and location type
LU	Luxemburg	School type by region and location type
HU	Hungary	School type by region and location type
MT	Malta	School type by region and location type
NL	Netherlands	School type by region and location type
AT	Austria	School type by region and location type
PL	Poland	School type by region and location type
PT	Portugal	School type by region as data about distribution of schools in the breakdown of location type was not available
SI	Slovenia	School type by region and location type
SK	Slovakia	School type by region and location type
FI	Finland	School type by region and location type
SE	Sweden	School type by region and location type
UK	United Kingdom	School type by region as data about distribution of schools in the breakdown of location type was not available
IS	Iceland	School type by region
NO	Norway	School type by region and location type

Statistical accuracy of the survey: confidence intervals

Statistics vary in their accuracy, depending on the kind of data and sources. A "confidence interval" is a measure that helps to assess the accuracy that can be expected from data. The confidence interval is the estimated range of values on a certain level of probability of error. Confidence intervals for estimates of a population fraction (percentages) depend on the sample size, the probability of error, and the survey result (value of the percentage) itself. Further to this, variance of the weighting factors has negative effects on confidence intervals.

The calculation of confidence intervals is based on the assumption of (quasi-) infinite population universes. In practice, however, in some country and for some school levels the complete population of schools consists of only several hundred or even a few dozen of schools. In some cases, literally each and every school within a country-school type cell was contacted and asked to participate in the survey. This means that it is practically impossible to achieve a higher confidence interval through representative school surveys in which participation is not obligatory.

Exhibit A3-10: Confidence intervals

	Survey result	Lower limit at	Upper limit at	Lower limit at	Upper limit at
Sample n	(population share)	error probability of 5%		error probability of 1%	
1.000	5%	3,8%	6,5%	3,5%	7,1%
1.000	20%	17,6%	22,6%	16,9%	23,5%
1.000	50%	46,9%	53,1%	45,9%	54,1%
1.000	80%	77,4%	82,4%	76,5%	83,1%
1.000	95%	93,5%	96,2%	92,9%	96,5%
500	5%	3,4%	7,3%	3,0%	8,2%
500	20%	16,7%	23,7%	15,8%	25,0%
500	50%	45,6%	54,4%	44,3%	55,7%
500	80%	76,3%	83,3%	75,0%	84,2%
500	95%	92,7%	96,6%	91,8%	97,0%
200	5%	2,7%	9,0%	2,3%	10,6%
200	20%	15,0%	26,1%	13,7%	28,2%
200	50%	43,1%	56,9%	41,0%	59,0%
200	80%	73,9%	85,0%	71,8%	86,3%
200	95%	91,0%	97,3%	89,4%	97,7%
100	5%	2,2%	11,2%	1,7%	13,9%
100	20%	13,3%	28,9%	11,7%	32,0%
100	50%	40,4%	59,6%	37,5%	62,5%
100	80%	71,1%	86,7%	68,0%	88,3%
100	95%	88,8%	97,8%	86,1%	98,3%

Annex IV: Survey Questionnaires

HTS - Head Teacher Survey 2006 Questionnaire

Q: WELCOME *****

Hello, my name is _____ and I am calling on behalf of TNS (local agency). We are conducting a survey on behalf of the European Commission.

The aim of the survey is to find out how schools are equipped with computers and the internet. I would like to talk to the person who is most familiar with IT equipment and internet access for your school. This could be a school director, the principle, a department head or a teacher responsible for teaching IT.

Your school has been selected at random to participate and none of the responses given will be identified with any individual school or person.

The interview will last approximately 5 minutes.

If the correct person is not available, please make an appointment.

The interviewer has to make at least 5 attempts, before giving up.

Q: Q1 *****

C: SINGLE

Is your school a.. ? READ OUT

1	primary school
2	lower secondary school
3	upper secondary school
4	professional/vocational school

This is based on the school type (in the sample frame). For example, you have school based on ISCED classification 1+2+3. This is upper secondary school. This is single question. You may not code more than one answer.

You may adapt the list above based on the school names in your country. For example if you name upper secondary school in your country gymnasium, please use this. But you may not have more than 4 codes for this question and school names have to apply to the ones listed.

In Q1a you will specify which school levels have been taught in this school. Based on the example above you should specify if there is primary level, lower secondary level and upper secondary level, because later in the questionnaire you will ask questions based on Q1a about primary level, lower secondary level and upper secondary level.

Q: Q1a *****

C: more than one answer

Does your school provide ... ? READ OUT

1	primary level education
2	lower secondary level education
3	upper secondary level education
4	professional/vocational level education
5	combined program of vocational and upper secondary level education

Please put all education levels that a school has. For example: if it is gymnasium, where are pupil, who study in primary school, lower secondary level education and upper secondary level education; then mark all these three.

Q: Q2 *****

How would you describe the area where your school is located? Is it in a ...

1	densely-populated areas (based on sample frame file sheet3)
2	intermediate area (based on sample frame file sheet3)
3	thinly populated area (based on sample frame file sheet3)

To be adapted - based on sample frame and quotas. If this information comes from database, you do not have to ask this question

Q: Q3 *****

In which county/province/region is your school located?

To be adapted - based on sample frame and quotas. If this information comes from database, you do not have to ask this question

Q: Q4 *****

C: For each level coded at Q1a

How many pupils does your school have ?

		number of pupils
1	primary level education	...
2	lower secondary level education	...
3	upper secondary level education	...
4	professional/vocational level education	...
5	combined program of vocational and upper secondary level education	...

Type 0 if don't know or no answer -> end of interview (not valid interview)
This means that if at least in one of the levels respondent don't know the number or no answer, end the interview.

Interviewer: If respondent does not know the exact number, ask for a best estimate. If the respondent can only provide a range (e.g. 100 - 150), take the average (e.g. 125).

Q:Q5 *****

How many teachers does your school have in total (full-time equivalents)?

_____ teachers

Type 0 if don't know or no answer -> end of interview (not valid interview)

NB: two half-time teachers is equal to one full-time teacher

Q: Q5a *****

C: For each level coded at Q1a; only if Q1a=5 ask Q5_3 and Q5_4

How many teachers does your school have (full-time equivalents)?

		number of teachers
1	primary level education	...
2	lower secondary level education	...
3	upper secondary level education	...
4	professional/vocational level education	...

Type 0 if don't know or no answer -> end of interview (not valid interview)

This means that if at least in one of the levels respondent don't know the number or no answer, end the interview.

NB: two half-time teachers is equal to one full-time teacher

Interviewer: If respondent does not know the exact number, ask for a best estimate. If the respondent can only provide a range (e.g. 20 or 30), take the average (e.g. 25).

If a teacher gives lessons in lower secondary level and in upper secondary level, he/she will be counted into both levels.

The number of teachers across different education levels may not add up total number of teachers as a teacher may teach in more than one level of education.

The number of teachers may not be less than the total number of teachers in school (Q5), if we add up all teachers in different education levels.

Q: Q6 *****

In your school, how many computers are used for educational purposes for pupils, either to use alone or with a teacher? Please do not include computers that are only accessible to teachers or staff members.

_____ computers

Type 0 if there is no computers in school @ end of interview (valid interview)

Type 9999 don't know or no answer @ end of interview (not valid interview)

Interviewer: If respondent does not know the exact number, ask for a best estimate. If the respondent can only provide a range (e.g. 20 or 30), take the average (e.g. 25).

Q: Q7 *****

C: Ask all who have computers for educational purposes for pupils (valid number entered at Q6) and ask for each level coded at Q1a

How many of these are used ...

		number of computers
1	primary level education	...
2	lower secondary level education	...
3	upper secondary level education	...
4	professional/vocational level education	...
5	combined program of vocational and upper secondary level education	...

If none, enter as zero.

Type 9999 if don't know - please try to avoid this. Only after asking the average and respondent really cannot estimate this.

Interviewer: If respondent does not know the exact number, ask for a best estimate. If the respondent can only provide a range (e.g. 20 or 30), take the average (e.g. 25).

The number of computers across different education levels may not add up total number of computers as a single computer may be used in more than one level of education.

The number of computers may not be less than the total number of computers in school, if we add up all computers in different education levels.

The answers given at each individual part of this question cannot be greater than the total number of computers at Q6.

Q: Q8 *****

C: Ask all who have computers for educational purposes for pupils (valid number entered at Q6)

How many computers are installed for educational purposes for pupils to use either alone or with a teacher...

		number of computers
1	in (a) computer lab(s)	...
2	in the classroom(s)	...
3	in the school library	...
4	in other locations that are accessible to pupils in the school	...

If none, enter as zero.

Type 9999 if don't know - please try to avoid this. Only after asking the average and respondent really cannot estimate this.

Interviewer: If respondent does not know the exact number, ask for a best estimate. If the respondent can only provide a range (e.g. 20 or 30), take the average (e.g. 25).

The number of computers may not be less than the total number of computers in school, if we add up all computers at each individual part of this question.

The answers given at each individual part of this question cannot be greater than the total number of computers at Q6.

Q: Q9 *****

C: Ask all who have computers for educational purposes for pupils (valid number entered at Q6)

C: SINGLE

By which of the following means does your school mainly have access to the internet:

1	dial up connection
2	an ISDN line
3	an (A)DSL line
4	other broadband connection; e.g. cable (a special cable modem using the television cable), fibre optic, satellite
5	broadband, but don't know which type
6	another means of connection
7	the school is not connected to the Internet

Q: Q10 *****

C: Ask all with (A)DSL or Broadband connection (code 3-5 at Q9)

What is the speed of your main internet connection? Is it...

1	Less than 144kbps (kilo bits per second)
2	144kbps-1mbps (mega bits per second)
3	1mbps-2mbps
4	2mbps-5mbps
5	5mbps - 10mbps
6	More than 10mbps
7	don't know

Q: Q11 *****

C: Ask all with an internet connection (Code 1-6 at Q.9) and ask for each level which use computer in Q7. If don't know (9999) number of computers in respective school level in Q7, then do not ask Q11

Of the computers used for educational purposes by pupils, either alone or with a teacher, approximately how many are connected to the internet?

		<i>number of computers</i>
1	primary level education	...
2	lower secondary level education	...
3	upper secondary level education	...
4	professional/vocational level education	...
5	combined program of vocational and upper secondary level education	...

If none, enter as zero percentage.

Type 9999 if don't know - please try to avoid this. Only after asking the average and respondent really cannot estimate this.

Interviewer: If respondent does not know the exact number, ask for a best estimate. If the respondent can only provide a range (e.g. 20 - 30), take the average (e.g. 25).

Please compare the number of computers given in Q7 to respective school level. Number of computers with internet connection may not be bigger than the number of computers in respective school level.

Q: Q12 *****

C: Ask all with an internet connection (Code 1-6 at Q.9)

Does your school have ...?

1	its own home page or web site
2	school e-mail address for the majority (more than 50%) of teachers
3	school e-mail address for the majority (more than 50%) of pupils
4	a LAN (local area network)
5	an Intranet
6	a support or maintenance contract with a service provider
7	none of these

Q: Q13 *****

C: Ask all who have computers for educational purposes for pupils (valid number entered at Q6)

To what extent do you agree or disagree with the following statements regarding the educational use of computers and/or the internet in your school?

	1 strongly agree	2 agree	3 disagree	4 strongly disagree	5 don't know
computer science are taught as a separate subject					
computers and the internet are integrated into the teaching of most subjects					
computers and the internet are used for teaching traditional subjects or basic skills (e.g. reading,					

writing)					
computers and the internet are used for teaching foreign languages					
computers and the internet are used for coping with students with special needs (handicaps)					

Non-responses and reasons used for this survey:

- * answering-machine / fax machine / modem
- * nobody picks up phone
- * number does not exist any more
- * telephone number does not belong to school
- * quota completed
- * line is busy
- * appointment made to another time

- * refused immediately, could not specify if target respondent is available or not
- * refused in the target group
- * target respondent is not available during fieldwork period
- * school does not exist any more

CTS – Classroom Teacher Survey 2006 Questionnaire

Q: WELCOME *****

Hello, my name is _____ and I am calling on behalf of TNS (local agency). We are conducting a survey on behalf of the European Commission.

The aim of the survey is to find out the use of computers and the internet in schools.

Your school has been selected at random to participate and none of the responses given will be identified with any individual school or person.

The interview will last 5 minutes.

In order to ensure we have a random selection of teachers, could I please talk to the teacher whose surname starts with letter ...

Instructions: CATI program generate letter. If there is more than one teacher whose surname starts with the selected letter, please choose the person that is first alphabetically. e.g Mets and Meri - choose Meri.

Please program CATI script so that letters appear in a row - this will allow the interviewer to select a subsequent letter if necessary.

The order of letters must be rotated between interviews but you may exclude any letters, which are rarely used as the first letter of a surnames in your country.

If the correct person is not available, please make an appointment. Do not replace with a teacher who is available. At least 5 attempts have to be made, before taking another teacher.

Q: Q1 *****

C: SINGLE

Is your school a.. ? READ OUT

1	primary school
2	lower secondary school
3	upper secondary school
4	professional/vocational school

This is based on the school type (in the sample frame). For example, you have school based on ISCED classification 1+2+3. This is upper secondary school. This is single question. You may not code more than one answer.

You may adapt the list above based on the school names in your country. For example if you name upper secondary school in your country gymnasium, please use this. But you may not have more than 4 codes for this question and school names have to apply to the ones listed.

In Q1a you will specify which school levels have been taught in this school. Based on the example above you should specify if there is primary level, lower secondary level and upper secondary level. Because later in the questionnaire you will ask questions based on Q1a about primary level, lower secondary level and upper secondary level.

Q: Q1a *****

C: more than one answer

Does your school provide... ? READ OUT

1	primary level education
2	lower secondary level education
3	upper secondary level education
4	professional/vocational level education
5	combined program of vocational and upper secondary level education

Please put all education levels that a school has. For example: if it is upper secondary school, where are pupil, who study in primary school, lower secondary level education and upper secondary level education; then mark all these three.

Q: Q2 *****

How would you describe the area where your school is located? Is it in a ...

1	densely-populated areas (based on sample frame file sheet3)
2	intermediate area (based on sample frame file sheet3)
3	thinly populated area (based on sample frame file sheet3)

(to be adapted - based on sample frame and quotas. If this information comes from database, you do not have to ask this question)

Q: Q3 *****

In which county/province/region is your school located?

(to be adapted - based on sample frame and quotas. If this information comes from database, you do not have to ask this question)

Q: Q4 *****

C: Do not read out unless classification of subject is unclear.

C: Allow for a maximum of two responses

What is the main subject(s) that you teach?

1	Reading or writing at the primary level (simple and functional literacy, numeracy), other basic literacy skills
2	Arts (drawing, painting, sculpture), Music, Theatre, Dance, Craft Skills
3	Religion/Theology, Philosophy, Ethics
4	Native languages and literature
5	Foreign languages (living or 'dead' languages)
6	History, Geography, Social Sciences, Economics, Business Administration, Psychology, Pedagogy, Political science
7	Natural Sciences: Biology, Chemistry, Physics
8	Mathematics
9	Computer science
10	Sports / physical education
11	A vocational training subject in agriculture, forestry, fishery or veterinary
12	A vocational training subject in engineering, manufacturing and construction
13	A vocational training subject in clerical or office work
14	A vocational training subject in health and welfare, pedagogy, social work or care.
15	Don't know or no answer -> end of interview (<u>not valid interview</u>)

Interviewers should be fully familiar with the classification of subjects to save respondent's time. Please print out the list for interviewers, if necessary.

Q: Q5 *****

How many years have you been working as a teacher?

_____ years

99 don't know © end of interview (not valid interview)

Interviewer instruction: Please key in full years.

Less than 6 months = 0 (zero)

18 months = 2

Q: Q6 *****

Have you ever used a computer either for work or outside work?

1	Yes
2	No

The following questions are about the main subject(s) that you teach.

Q: Q7 *****

C: Ask all who have used a computer (Code 1 at Q6)

C: Multiple answers possible for codes 1 and 2

How have you used computers and/or the internet for work in the last 12 months?

1	you prepared lessons using a computer and/or the internet
2	you used a computer and/or the internet in class* while teaching
3	or you have not used a computer and/or the internet -> go to Q12

* "in class" means "during a teaching period ". It does not denote a specific location or room - the classroom, but may take place in a computer lab, or in any other location. (for instance German "im Unterricht").

Q: Q8 *****

C: Ask all who use computers and/or the internet in class (Code 2 at Q7)

When you use computers and/or the internet in class, ...?

1	are the pupils equipped with computers and/or the internet
2	is it only you, the teacher, who uses a computer to demonstrate or present something
3	or do both you and the pupils use computers and/or the internet

Q: Q9 *****

C: Ask all who use computers and/or the internet in class (Code 2 at Q7)

For what percentage of time have you used computers and/or the internet in class when teaching your main subject(s) in the past 12 months?

1	more than 75 % of all lessons
2	51 to 75 % of all lessons
3	25 to 50% of all lessons
4	11 to 24% of all lessons
5	6 to 10 % of all lessons
6	1 to 5% of all lessons
7	less than 1 % of all lessons
8	don't know

Q: Q10 *****

C: Ask all who use computers and/or the internet in class (Code 2 at Q7)

C: More than one answer allowed

Which of the following types of materials have you used when teaching your main subject(s) with the aid of a computer and/or the internet?

1	Material that you have searched the internet for
2	Existing online material from established educational sources
3	Material that is available on the school's computer network or database
4	Electronic offline material (such as CD ROMS).
5	Other

Q: Q11 *****

C: Ask all who have used a computer/Internet (code 1 at Q6) or have used a computer/internet for work (Code 1 or 2 at Q7)

For each the following situations, do you feel very confident, fairly confident, not very confident or you do not feel not at all confident when ?

	1 very confident	2 fairly confident	3 not very confident	4 not at all confident	5 <i>don't know</i>
using a text processing programs on a computer such as Word					
creating a presentation with text and images such as PowerPoint					
using e-mail to communicate with others					
downloading and installing software onto a computer					

Q: Q12 *****

C: Ask all who have not used a computer (Code 2 at Q6) or if does not use computers/internet in class (Q7#2)

C: More than one answer allowed

Why do you not use computers and/or the internet when teaching in class?

1	Lack of computers
2	Lack of adequate content/material
3	Lack of content in national language
4	Lack of adequate skills of teachers
5	No or unclear benefits
6	Lack of interest of teachers
7	Subject does not lend itself to being taught via computers
8	Other

Q: Q13 *****

C: All respondents

C: More than one answer allowed

What do you think for what computers and the internet should be used for in teaching?

1	letting pupils do exercises and practise
2	letting pupils retrieve information in a self directed manner
3	teaching about office tools
4	collaborative and productive work by pupils
5	none of these

Q: Q14 *****

C: All respondents

Finally, can you please tell me whether you strongly agree, somewhat agree, somewhat disagree or strongly disagree with the following statements in relation to your school.

	1 strongly agree	2 somewhat agree	3 somewhat disagree	4 strongly disagree	5 don't know
Pupils are more motivated and attentive when computers and the internet are used in class					
Our school is well equipped with computers					
The internet connection we have is sufficiently fast					
Existing teaching materials on the Internet are of poor quality					
Teachers in our school do not have sufficient computer skills					
Better technical maintenance and support is required in our school					
It is hard to find adequate learning materials for teaching					
Using computers in class does not have significant learning benefits for pupils					

Non-responses and reasons used for this survey:

- * answering-machine / fax machine / modem
- * nobody picks up phone
- * number does not exist any more
- * telephone number does not belong to school
- * quota completed
- * line is busy
- * appointment made to another time
- * refused immediately, could not specify if target respondent is available or not
- * refused in the target group
- * target respondent is not available during fieldwork period
- * school does not exist any more