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1. Introduction
1. Introduction

Netbooks are a rapidly evolving category of small, light and inexpensive laptop computers suited for general computing and accessing web-based applications. Netbooks are still new phenomena in the mainstream educational setting; however, there are several pilots and projects around the world where each learner has a personal computer, allowing for one-to-one computing in education (Balanskat & Garolia, 2010, Pedro, 2010). One-to-one (1:1) computing in education refers to the current trend where low-cost computer devices, ranging from mobiles and handhelds to laptops or netbooks, have gained ground in educational contexts. 1:1 indicates the ratio of items per user, i.e. one netbook per learner. Typically, these devices are connected to the Internet and are owned by the learner, which means that they are also used outside of typical school environments, potentially blending the borders of formal and informal learning (Pedro, 2010).

This evaluation reports on the Acer-European Schoolnet Educational Netbook Pilot, which is running in parallel in six countries: France, Germany, Italy, Spain, Turkey and the UK. The Pilot explores how the introduction of netbooks and 1:1 pedagogy in schools can have an impact on the processes involved in teaching and learning, both inside and outside of school. 1:1 pedagogy highlights the fact that the learners have netbooks available at all times, taking advantage of a blended learning approach alternating online and offline activities, as well as individual and collaborative ones (see Section 4).

This report first describes the Pilot set-up and the evaluation procedure. Section 2 gives the highlights and emerging trends across the pilot countries. Section 3 is divided by country, allowing the reader to gain more insights into each specific Pilot country and how respondents reacted to questions such as the added value of netbooks on learners’ skills; general attitudes towards the use of netbooks in class; concerns in school; and how teachers plan for the use of notebooks. Finally, Section 4 briefly introduces the idea of 1:1 pedagogical netbook scenarios, which are co-designed with teachers throughout the Pilot to help them implement netbooks in their teaching.
1.1 Pre-pilot set-up

The pre-pilot phase started in January 2010 and ran until the end of the school year (depending on the country: June-July). It involved 10 classes (11-12 year olds, or first year of secondary education) in each of the six countries. The classes were identified with the help of the national or regional educational authority. Each participating school was asked to create a “netbook team” consisting of 3 to 5 subject teachers teaching the class, an ICT coordinator and a member of the senior leadership team.

The participating class was provided with Acer 10” netbooks and teachers each received an 11” Acer notebook. The “netbook team” was asked to plan and implement the use of netbooks for teaching and learning according to their national curricula. Cross-curricular projects involving two or more teachers working closely together were strongly encouraged; however, due to time constraints, any type of pedagogical project was accepted. The full deployment phase runs from September 2010 to June 2011, involving 40 classes in each country.

1.2 Evaluation and methodology

The evaluation of the Pilot is based on the evaluation framework of Heo & Seo (2009). It aims at understanding and documenting how learners and teachers use netbooks in various educational contexts, such as:

- In school and outside of school
- Individual use and collaborative use
- Educational use and leisure use

The evaluation will take into account the feedback from all stakeholders, including teachers, school heads, school ICT coordinators, learners and their parents. This will help better understand the needs of the future classroom, and help Acer and European Schoolnet better understand how technology can best serve pedagogical needs.

The pre-pilot evaluation, however, focused only on the feedback from teachers. The online evaluation was conducted from mid-May until mid-June, each participating country having a separate language version of the online questionnaire made available. 240 teachers completed the online questionnaire, giving an 80% response rate.

The pre-pilot evaluation questionnaire had five main sections. It gathered information on demographics; teachers’ classroom practices and the general use of ICT; their fears and expectations regarding the use of netbooks in class; their opinions regarding the netbook hardware and its suitability for a school environment; and finally the participants’ general opinion of the communication strategies within the Pilot.

This evaluation report concentrates on the sections concerning teachers’ fears and expectations regarding the use of netbooks and how they perceive netbooks in an educational environment. It should be emphasised that teachers had very varying amounts of time to actually use the netbooks in their teaching, owing to the different logistical arrangements in each country. Therefore, this part of the evaluation reports mainly on teachers’ plans, opinions, expectations and fears, and not on the actual use of netbooks in class.
Executive summary: emerging trends in teachers’ expectations regarding netbooks
2. Executive summary: emerging trends in teachers’ expectations regarding netbooks

This section gives the highlights and emerging trends across the pilot countries, looking at teachers’ expectations and fears, as well as how teachers perceive netbooks in the school environment.

2.1 Expectations regarding the impact of netbooks on learning

On average, 79% of Acer-European Schoolnet Netbook Pilot teachers (n=240) think that netbooks will positively impact on learning. About 3/4 think that they will also allow for students’ personalised learning.

General expectations regarding the use of netbooks in teaching and learning are extremely positive among Italian and the UK respondents: 90% of the participating teachers think that netbooks will have a positive impact on learning. The German, Spanish and Turkish teachers polled around average for this question (77%), whereas only 58% of the French teachers believed in their positive impact on learning. Moreover, on average 74% of all the participating teachers think that the use of netbooks will allow for students’ personalised learning; however, French teachers were still more sceptical about this (55%) (Table 1 in the Annex).

On average, 31% of teachers would like to see confirmation of the educational value of netbook activities before using them in their teaching. Interestingly, Turkish teachers seemed overwhelmingly keen to see such evidence compared to other teachers (81%), whereas 71% of French said that they would not need such confirmation prior to using netbooks in their teaching (Table 2 in the Annex).
On average, 89% of Acer-European Schoolnet Netbook pilot teachers (n=240) think that the use of netbooks can add value in improving students’ ICT skills.

The majority of responding teachers think that the use of netbooks can improve students’ ICT skills, with UK, Italian and Spanish teachers voting above the average of 89%. Moreover, 74% think that netbooks can add value to improve students’ personal skills (e.g. initiative, persistence). In general, the responding teachers considered netbooks to add less value on the other 21st century skills such as social skills (58%), intellectual skills (57%) and critical skills (49%). Interestingly, about 1/3 of these teachers indicated that had not yet formed an opinion on the added value of netbooks (Table 3 in the Annex).

Only a very few teachers think that parents and the school head will not be supportive of the use of netbooks. More concerns relate to technical problems and technical support in schools.

Less than 5% of teachers are convinced that parents or the school head will not be supportive about the use of netbooks. On average, 49% of teachers are worried about technical problems, e.g. freezing or inability to access the Internet. This figure is very consistent across all the countries (Table 4 in the Annex). There are fewer concerns (average 32%) as regards the lack of technical support in school; however, here the figures range from 56% in Spain being worried to only 13% in the UK. Limited Internet access, especially due to the difficulty of accessing the wireless network in different parts of school, is still a concern; on average, 35% in all countries think that this is an issue which could make using netbooks in class difficult. Moreover, this is a major concern in Turkey (59%).

2.2 What type of netbook activities do teachers plan?

When preparing students’ use of netbooks teachers plan mostly for individual or collaborative work to be done in class rather than at home.

On average, half of the teachers (52%) say that they will plan mostly for students’ individual work and 49% for collaborative work, both to be done in class. In general, teachers plan less for students’ use of netbooks at home (e.g. homework), 35% say they plan for individual homework and 25% plan for students’ homework to be done collaboratively online.

There are differences among countries as regards this question; respondents from France, Turkey and to a certain extent Spain seem to plan to combine different types of netbook activities (e.g. both individual and collaborative work done in class), as opposed to respondents from the UK, Germany and Italy, who seem to indicate a preference for one single activity with netbooks (Table 5 in the Annex).

2.3 ICT skills and their effect on teachers’ attitudes

About 1/3 of the Acer-European Schoolnet teachers claim to have expert or good ICT skills, while 2/3 say they have moderate or beginner-level skills.

In the pre-pilot evaluation, the participants were asked to self-assess their ICT skills. 36% of all respondents self-assess as having expert or good skills in the use of ICT, whereas 64% declare they have moderate or beginner skills. This trend holds in all the participating countries except for the UK and Spain. 81% of the responding UK teachers claim to be experts in the use of ICT, whereas in Spain only 20% self-assessed as having these expert skills (Table 6 in the Annex).

ICT-experienced teachers are more certain of the added value of the use of netbooks.

The participating teachers were asked how they consider the added value of netbook use on different learners’ skills. The responding teachers were divided into two groups based on their self-assessed ICT competencies, as explained above. Both groups think very similarly about the added value of netbooks in motivating students to learn more (expert ICT skills: 77% vs. moderate ICT skills: 75%) and in improving students’ ICT skills (90% vs. 86% respectively).

However, we can see differences in what these two groups think of the added value of netbooks. 86% of ICT-experienced teachers think that the use of netbooks can improve students’ personal skills (e.g. initiative, persistence), against only 67% of beginner/moderately-skilled ICT users. Moreover, as
regards improving social skills, 71% compared to 52% respectively think that netbooks can add value. Similarly, the ICT-experienced teachers also believe more in netbooks improving students’ intellectual skills (69% vs. 51%). (See Figure 1 here below and Figure 4 in the Annex).

ICT-experienced teachers have a more positive attitude towards the use of netbooks in general, compared to beginners/moderate-level teachers.

The participating teachers were asked about their expectations and fears regarding the use of netbooks. Self-assessed ICT competencies were again used point out differences in teachers’ responses. As expected, in certain questions the differences come out strongly. For example, 27% of moderate/beginner-skilled teachers said “I will not have adequate training to support netbook use,” whereas only 6% of the ICT-experienced teachers think that they will need training. Moreover, 34% of the beginner/moderate teachers say that they “do not know which software to use on netbooks appropriate for my teaching”, against 8% of “expert/good ICT” teachers. Additionally, only 25% of ICT-experienced teachers would like to see confirmation of the educational value of netbook activities before using them, while 36% of the beginner/moderately skilled would want it. Similarities also emerged: almost 20% of teachers in both categories (18% and 19%) think that the school timetable will inhibit the use of netbooks in class (Figure 4 in the Annex).

2.4 Technical issues

Teachers are very positive about the suitability of netbooks for the school environment.

84% of all respondents think that the size of the netbooks is suitable for the classroom environment. 89% say that their weight is suitable for pupils, 81% think that the size of netbooks and the keyboard is also suitable (Figure 2). 68% of the respondents said that the battery lasted as long as needed in school without having to recharge at inappropriate times (Figure 5 in the Annex).
3 Evaluation by country
3. Evaluation by country

Whilst the Executive Summary focused on the emerging trends and commonalities throughout the pilot countries in teachers’ expectations, fears and opinions regarding netbooks in the school context, this section gives a more detailed view of the pre-pilot evaluation by country. It also provides more information on the slightly different schemes that each country had (e.g. procedures in the selection of the participating schools and teachers, the period of the time to use the netbooks with students) and gives more details on teachers’ answers without attempting to compare countries with one another.

3.1 France

- 9 schools, for a total of 10 classes, were selected for the pre-pilot in collaboration with the regional inspectorate of the Académie de Nancy-Metz.
- The first country to receive the netbooks, in late February 2010.
- Evaluation: 80% response rate (68% female, 32% male). 72% had been teaching for more than 10 years.
- 49% self-evaluate as having moderate ICT skills, 36% good or expert level.
- A majority of the French teachers (70%) said they were willing to participate in the project after hearing about it in their school, whereas 15% said they informed their school head about the project.

3.1.1 Added value of netbooks, as opposed to the use of ICT in general

French teachers estimate very positively the impact of netbooks on the development of ICT skills, but are less certain of the likelihood of improving social, intellectual and critical skills.

85% of French teachers think that netbooks, as opposed to the general
use of ICT, will improve students' ICT skills (e.g. use of online resources) and 72% believe that netbooks add value by improving students' personal skills (e.g. initiative, persistence). Only 51% agree that the use of netbooks, as opposed to the general use of ICT, will motivate students to learn more, whereas 38% of them have not yet formed an opinion on this (the highest rate of all countries).

To a lesser extent they consider that students could improve their intellectual skills, such as problem solving (39%), their social skills (38%) and their critical skills (26%). However, in each of these areas about half of the French teachers indicated that they have not yet made up their minds, showing that they remain open to being convinced.

3.1.2 Teachers’ opinions about the impact of netbooks

More than half of French teachers are positive about the impact of netbooks on pupils’ education and think that they can extend learning beyond the school day. However, around 40% still remain undecided about netbooks’ use for informal remediation.

58% of the French teachers believe that netbook use can positively impact on learning; however, a large proportion (34%) have not yet formed an opinion about this. 61% agree that the use of netbooks will be relevant to preparing students for their examinations. About half of the respondents agree that the use of netbooks will allow for students’ personalised learning and will increase students’ engagement in school (55% and 50% respectively), but on these two issues the uncertainty is again more than 30%.

64% of the French teachers think that netbooks will help extend learning beyond the school day. About half of them also think that “ownership”, the fact that pupils have their own netbooks, will have a positive impact on their learning, whereas 43% have not yet formed an opinion on this. To a lesser extent (42%), they think that pupils’ access to netbooks at all times will have a positive impact on their learning, and half remain undecided on this issue.

Half of the teachers think that the individual use of netbooks provides opportunities for informal remediation both at home and at school, while 57% still need confirmation of the positive benefits of the collaborative use of netbooks for students’ informal remediation.

3.1.3 Teachers’ general attitude towards the use of netbooks in class

About 3/4 of French teachers have a positive attitude towards the educational value of netbook activities, although many teachers are still uncertain how the curriculum can support their use.

72% of French teachers are positive about the educational value of netbook activities and about half of them (55%) do not think that the school timetable will inhibit the use of netbooks in class. Regarding the curriculum supporting the use of netbooks, 42% have no opinion on this issue yet, whereas one third think that it will not support this use and 26% think that it will.

Almost 60% of French teachers are confident that they know how to integrate netbooks effectively into their teaching, whereas 1/3 have not formed an opinion on the issue. Again, 60% of French respondents think that using netbooks will increase their workload (similar rate in Spain, even higher in Italy).

3.1.4 Teachers’ concerns about netbooks in schools

French teachers are positive about their head teachers’ and parents’ support. More than half do not think that netbooks will be disruptive to teaching, but limited access to the Internet causes concerns.

French teachers are positive about their head teachers’ (85%) and parents’ support (69%) for the use of netbooks, and they are not concerned about the negative attitudes of other teachers (74%). However, only one third agree that they can improve teacher-student-parent communications, whereas 46% remain without opinion on the issue.

They consider the use of netbooks in the classroom positively: only 13% think their presence can be disruptive to teaching and 23% agree that students will be distracted by doing other things (such as surfing the Internet, texting, playing games). Moreover, 39% do not agree that
students will cheat when using netbooks, whereas half of the teachers have not yet formed an opinion on this issue.

French teachers' concerns mainly lie with technical problems (e.g. freezing or inability to access the Internet) (56%). The opinion is very split regarding the limited Internet access in schools affecting the use of netbooks in class: 39% do not think it has any effect, 36% think it has an effect and the remaining 24% have not yet formed an opinion on this. One quarter are also concerned about the lack of technical support in their schools, while 36% have not formed an opinion on the topic yet. E-safety, however, is of concern for 44% of the French teachers.

3.1.5 Teachers’ use of notebooks
French teachers most often use the notebook on their own at home to prepare lessons and homework.

92% of the French respondents intend to use their notebooks at home to prepare school work and 57% plan to do the same at school. Uncertainty is still quite high (around 30%) when they are asked whether they will use notebooks to collaboratively prepare lessons with other teachers. More or less the same percentage of teachers is prepared to use the device in school (36%) or at home online (28%) to cooperate with other teachers.

75% of the French teachers say they will plan mostly for pupils’ individual work to be done in class (higher than any other country); however, 66% also plan for pupils’ collaborative work at school and 48% at home.

### 3.2 Germany

- 10 schools, each with one class, were selected in the Thüringen region in collaboration with the local school authorities.
- The netbooks arrived in schools in March 2010.
- The kick-off meeting took place in Gotha on 29 April, 2010 with two visits in the selected schools.
- Evaluation: 78% response rate (67% female, 33% male). 93% have been teaching for 10 years or longer.
- 67% self-evaluate as having moderate ICT skills, 28% good or expert level.
- A vast majority of the German teachers (92%) said they were willing to participate in the project after hearing about it in their school.

#### 3.2.1 Added value of netbooks, as opposed to the use of ICT in general

German teachers are convinced of the value of netbooks in improving ICT and personal skills and motivating students to learn. Teachers have a split opinion as regards the value of netbooks in developing critical thinking skills.

The German respondents are persuaded of the added value of netbooks in improving students’ ICT skills (87%), in motivating students to learn more (77%) and in improving student’s personal skills (72%). Although their attitude is also positive as regards the development of students’ intellectual, spatial and motor skills and problem solving through netbooks, many of the German teachers have not yet formed an opinion on the added value of the netbooks, e.g. 63% do not have an opinion on whether netbooks can advance students’ social skills and 55% on whether they improve performance in subjects.
3.2.2 Teachers' opinions about the impact of netbooks

Overall positive attitude towards the positive impact of netbooks on learning, still undecided as regards collaborative as opposed to individual use of netbooks and as regards informal remediation in school.

More than 80% of the German teachers agree that netbooks will have a positive impact on learning, and on students’ engagement in school and education, and on personalised learning. 45% agree that netbooks will be relevant for preparing students for their examinations; however, about 40% remain undecided on this issue.

69% of the German teachers agree that the fact that pupils have their own netbook and that they have access to it all the time (54%) will have a positive impact on learning. 57% think that netbooks will help extend education beyond the school day.

As for netbooks’ value for providing opportunities for student’s informal remediation, 83% agree with this when used individually in school, but only 50% think that individual use at home could provide similar opportunities. Half of the German teachers are still undecided about the idea that the collaborative use of netbooks will offer opportunities for students’ informal remediation in school, or that the collaborative use of netbooks will motivate students more than when using them individually.

3.2.3 Teachers’ general attitude towards the use of netbooks in class

A positive attitude – however, more than 1/3 of teachers are still undecided on some of the issues.

Two thirds of German teachers are positive that they will effectively integrate netbooks into their teaching, that the existing content they use is suitable and that the school timetable will not hinder the use of netbooks. Moreover, more than half of the respondents know which software to use on netbooks that is appropriate for teaching. 47% of the German respondents are positive that the curriculum will not hinder the use of netbooks; however, 39% are still undecided on these points. A quarter of the German teachers think they will not have time to prepare for specific netbook initiatives, and do not have the adequate training required to use netbooks in class.

3.2.4 Teachers’ concerns about netbooks in schools

A very positive attitude towards the school head’s and parents’ support, and towards technical equipment available at school. Technical problems, Internet safety and Internet access are perceived as potential issues.

Most of the German teachers are very positive that the school head (94%) and parents (79%) will be supportive regarding the use of netbooks. However, only 31% agree that netbooks can improve teacher-student-parent communications and 42% still remain undecided on this issue.

The majority of German teachers (84%) disagree that the presence of netbooks in classroom will be disruptive to teaching and 70% are not concerned that students will be distracted by doing other things while using the netbook. More than half of them also do not see cheating as a problem.

About half of the teachers are concerned about technical problems with netbooks (e.g. freezing or inability to access the Internet), but for 40% this is not a problem. Likewise, 44% of the German teachers are concerned about Internet safety issues, but for 37% it is a non-issue. 41% of them have no concerns about limited Internet access making the use of netbooks difficult in class, but almost the same proportion of teachers say that this will be a difficult point, and 22% neither agree nor disagree.

3.2.5 Teachers’ use of notebooks

The majority of German teachers will use their notebooks for planning purposes, first at home, but also in school.

84% of the German teachers plan to use the notebook on their own at home to prepare lessons and homework; and two-thirds of them (67%) will use the notebook in school to prepare lessons and homework.

More than half of the German teachers will plan mostly for students’ individual work to be done in class and 31% say they will plan individual homework for pupils. However, on the issue of students’ collaborative work only 22% say they will plan for it in school, whereas more than half of them are still undecided about planning for it to be done in school, and more than half say
that they will not plan for students’ collaborative online work to be done at home.

A majority of the teachers will not use or are undecided whether to use the netbook at home to prepare lessons and homework collaboratively with other teachers online. This point is less strong as regards collaborative preparation of lessons with other teachers at school, but still 41% of teachers are undecided about this.

3.3 Italy

- 10 schools, each with one class, were selected with the help of the Italian Ministry of Education. The schools were scattered around Italy.
- The online kick-off event took place on 11 March, 2010.
- The netbooks arrived in schools in late March to early April 2010.
- The MoE organised a training session for teachers in May 2010.
- Evaluation: 86% response rate (84% female, 16% male). 74% have been teaching for 10 years or longer.
- 37% self-evaluate as having moderate ICT skills, 36% claim good or expert level.
- Half of the Italian teachers (51%) said they were willing to participate in the project after hearing about it in their school and 23% said that they informed their school head about the project. About 9% were selected for the project without consultation.

3.3.1 Added value of netbooks, as opposed to the use of ICT in general

Italian teachers believe that the use of netbooks can motivate students to learn more and can improve students’ ICT skills.

Almost all the Italian teachers (95%) think that the use of netbooks, as opposed to ICT use in general, can motivate students to learn more and 93% say netbooks can potentially improve students’ ICT skills. Moreover, 83% are convinced that these devices can improve students’ personal skills (e.g. taking initiative, persistence), and also their social skills (80%). About three quarters think that netbooks can improve performance in a given subject, and that intellectual (68%) and spatial or motor skills (68%) could be enhanced too; however, about one third remain undecided about this. They are less convinced about the improvement of critical skills (53% of the teachers agree with this).
3.3.2 Teachers’ opinions about the impact of netbooks
A vast majority of Italian teachers think that netbooks will impact positively on learning. They also think that collaborative use of netbooks can motivate students more than individual use.

90% of the Italian teachers think that netbooks will positively impact on learning and that the use of netbooks will allow for students’ personalised learning (88%). More than two thirds of the Italian respondents are positive that the use of netbooks will be relevant for preparing students for examinations.

77% of the respondents are positive about the ownership of netbooks and its impact on learning, and they think that the netbooks can help to extend learning beyond the school day (73%). However, when it comes to the fact that pupils have access to netbooks at all times, less than half of the Italian teachers think that this will have a positive impact on education.

Teachers are also very positive regarding the individual and collaborative use of netbooks; 75% of them agree that individual use provides opportunities for students’ remediation both at home and in school. Their opinion is even more positive as regards the collaborative use of these devices: for 84% of them the collaborative use of netbooks will motivate students more than using them individually.

3.3.3 Teachers’ general attitude towards the use of netbooks in class
Italian teachers are uncertain and split as to whether the school timetable will inhibit the use of netbooks in class. They think netbooks mean more work for teachers.

Italian teachers have doubts on how school timetables affect the use of netbooks in class; 35% think the timetable will not inhibit it, whereas 30% think it will. One third have not formed an opinion yet. More than half of them are positive that the curriculum supports the use of netbooks in class; however, 44% have no opinion yet on this. 56% already know how to integrate netbooks effectively into their teaching. Interestingly, 45% of Italian teachers are not sure if they need more training to support notebook use. More positively, 2/3 think that the existing content and other material they use is suitable for netbooks; however, 71% think that netbooks mean extra work for them.

3.3.4 Teachers’ concerns about netbooks in schools
About 2/3 of Italian teachers do not think that netbooks will be disruptive to teaching. The vast majority are confident that the supporting technical equipment will be available in their school. Half are confident that Internet access does not hinder the use of netbooks in class.

In general, 69% of the Italian teachers think that parents will support netbook use and 66% are positive about their school head’s support. To a lesser extent, the Italian teachers are convinced that the use of netbooks could improve teacher-parent-student communications (54%).

Only a minority (14%) think that the presence of netbooks in the classroom will be disruptive to teaching; about a quarter think that students may be distracted by doing other things because of the netbooks.

44% of the Italian teachers are concerned about technical problems with netbooks which might mean that they will need a back-up plan for a non-netbook activity. They are divided about the technical support in their school (37% are worried, 40% not); however, a large majority (90%) think that other equipment in school, such as projectors, will be available. 56% of teachers do not think that limited Internet access in school will make the use of netbooks in class difficult; 20% think it will, and 24% have not formed an opinion yet. Similarly, many (44%) have no opinion about e-safety yet.

3.3.5 Teachers’ use of notebooks
The general tendency of Italian teachers is to use notebooks on their own at home to prepare lessons and homework, and they mostly plan to use the netbooks for students’ collaborative work.

More than half of the Italian teachers (59%) plan to use notebooks on their own at home to prepare lessons and homework. A commonly shared opinion (59%) is that they will not use their notebooks in school to collaboratively prepare
lessons with other teachers, nor at home to prepare lessons with other teachers online (70%).

As for planning for students’ use of netbooks, the most common trend (43%) among Italian teachers is to plan for students’ collaborative work at school, rather than individual work (33%). There is, however, still a high level of uncertainty among Italian respondents on how to plan students’ work with notebooks; 42% are not sure about planning collaborative work at school; another 40% are not sure whether they will plan individual work to be done at home and 36% not sure about planning it to be done at school. In a separate report on an Italian teacher training event (Report, Bologna, 25-26 May, 2010) a positive motivation towards experimentation and pre-pilot was reported; however, teachers there also expressed a constant need for further training to reassure them of practical aspects of the project (e.g. technical assistance, uncertainty as regards the pedagogical use of netbooks).

3.4 Spain

- 10 schools, each with one class, were selected with the help of the Spanish Ministry of Education. The schools were scattered around Spain.
- The online kick-off event took place on 27 April 2010.
- The netbooks arrived in schools in May 2010.
- Prior to the arrival of the netbooks, the teachers had taken part in an online training course organised by the MoE.
- Evaluation: 86% response rate (51% female, 49% male). 66% have been teaching for 10 years or longer.
- 62% self-evaluate as having moderate ICT skills, 20% good or expert level.
- A majority of the Spanish teachers (73%) said they were willing to participate in the project after hearing about it in their school. 11% said they told the school head about the project.

3.4.1 Added value of netbooks, as opposed to the use of ICT in general

Most positive estimations of netbooks on ICT skills improvement, then for motivation to learn more. More than half of the teachers are also positive about other skills development, but almost half of them are still undecided about the added value of netbooks.

Almost all the Spanish teachers are convinced that the use of netbooks will improve students’ ICT skills (90%); three quarters of them think the netbooks, as opposed to the general use of ICT, will help motivate students to learn more. About 60% think they can improve students’ personal and social skills, as well as help enhance subject performance more than general use of ICT.

In other categories of skills development – the impact of netbooks in improving students’ intellectual, critical and spatial skills – about half of the teachers agree there is a positive impact, but almost half of them neither disagree nor agree with this.
3.4.2 Teachers’ opinions about the impact of netbooks

About 3/4 of Spanish teachers agree that netbooks will positively impact on learning. In particular, their specific features – ownership, anytime, anywhere access and extending learning beyond the school day – are seen as important for learning.

78% of the Spanish teachers are positive about the impact of netbook use on learning and about three quarters agree that the use of netbooks will be relevant in preparing students for examination. 60% of Spanish respondents agree that the use of netbooks will increase students’ motivation in school and learning. However, on the latter question 31% of the respondents remain undecided.

About three quarters agree that the specific characteristics of notebooks (ownership, anywhere, anytime access and extending learning beyond the school) have a positive impact on students’ learning.

63% of Spanish respondents agree that the collaborative use of netbooks will motivate students more than individual use. Only half of the Spanish teachers think notebooks can contribute to personalised learning; however, 42% say that they have not made up their minds yet. As for the use of netbooks providing opportunities for students’ informal remediation either in school or at home, less than half of the Spanish teachers agree and a similar proportion of teachers have still not made up their minds about the topic.

3.4.3 Teachers’ general attitude towards the use of netbooks in class

The majority of Spanish teachers believe that the curriculum and school timetable supports the use of netbooks, about a half think netbooks will increase their workload.

The vast majority of Spanish teachers (83%) are positive that the school timetable and the curriculum will not inhibit the use of netbooks. They are likewise positive (80%) that they can use existing content and material for netbooks, and 69% agree that they know how they will effectively integrate netbooks into their teaching.

About half of the Spanish teachers feel they have the adequate training to support the netbook use; however, 34% are still unsure about the issue. A similar proportion of them say they do not know which software is appropriate to use on netbooks for teaching purposes.

55% of the Spanish teachers think that using netbooks will increase their workload and 44% of them do not know yet if they will have enough time to prepare for specific netbook activities.

3.4.4 Teachers’ concerns about netbooks in schools

Positive about head teachers’ and parents’ support. Some concerns with technical problems and Internet safety issues.

A vast majority of the Spanish respondents (87%) are positive about the school head’s support for experimenting with netbooks. As regards parental support, 68% of the Spanish respondents count on it; however, 30% are undecided on this topic. About a third think that the use of netbooks can improve teacher-student-parent communications and 48% remain undecided on this.

Spanish teachers are split regarding how students will react when working with netbooks in class: 34% think that students will be distracted by doing other things (such as surfing the Internet, texting, playing games), whereas 38% do not agree with the statement. 40% do not think that students will cheat when using netbooks, but 44% have not yet formed an opinion on the issue.

Concerns mainly lie with technical problems that might occur (51%), whereas one third of the Spanish respondents feel confident regarding technical problems. Similar percentages are concerned about the lack of technical support and Internet safety issues.

3.4.5 Teachers’ use of notebooks

Spanish teachers will most often use the notebook at home and at school to prepare lessons and homework.

A large majority of the Spanish teachers plan to use their notebooks at home
(80%) and at school (72%) on their own to prepare lessons and homework. As for collaborative work amongst teachers, 42% say they will collaborate with other teachers in school to prepare lessons, and almost half of the teachers say they will do the same from home using the Internet. As for planning the use of netbooks by students, 62% of the Spanish teachers agree that they will plan for students’ individual work to be done in class, whereas 33% say they will plan for students’ individual homework. 48% of the Spanish teachers plan for students’ collaborative work in class and 40% will do so sometimes. A quarter of the teachers plan for students’ collaborative homework to be done online at home.

3.5 Turkey

- 10 schools, each with one class, were selected with the help of the Turkish Ministry of National Education. All the schools were located in Ankara.
- The kick-off event took place in Ankara on 23 March, 2010.
- The netbooks arrived in schools in May 2010.
- Evaluation: 84% response rate (62% female, 38% male). 45% have been teaching for 10 years or longer.
- 54% self-evaluate as having moderate ICT skills, 34% good or expert level.
- Half of the Turkish teachers said they were willing to participate in the project after hearing about it in their school. 21% said they were selected without consultation and 19% said that they told their school head about the project.

3.5.1 Added value of netbooks, as opposed to the use of ICT in general

The majority of Turkish teachers believe that netbooks, as opposed to the general use of ICT, can improve students’ ICT skills.

The added value of netbooks is seen by the vast majority of Turkish teachers (83%) in improving students’ ICT skills. Around 75% of the Turkish respondents agree that netbooks, as opposed to the use of ICT in general, can improve performance in school subjects, improve students’ personal skills (e.g. initiative, persistence) and intellectual skills (e.g. problem solving), and motivate students to learn more. About 70% of Turkish respondents agree that the use of netbooks can enhance students’ social and critical skills.

3.5.2 Teachers’ opinions about the impact of netbooks

Two thirds of Turkish teachers are convinced of the positive impact of netbooks on various aspects of learning; however, one third have not yet formed an opinion on these issues.

75% of the Turkish respondents agree that netbooks can positively impact on learning and 74% of say they will allow for students’ personalised learning.
Two thirds of the Turkish teachers agree that netbooks extend learning beyond the school day. 69% agree that “ownership”, the fact that pupils have their own netbooks, will have a positive impact on learning; however, 29% have not formed an opinion on the issue yet. Similar results were reported on the positive impact on learning of netbooks’ availability at all times.

More than three quarters of the Turkish teachers agree that the collaborative use of netbooks will motivate students more than using them individually. Around 70% think that the use of netbooks can provide opportunities for students’ remediation either in school or at home, whereas about one quarter have not made up their minds on the issue yet.

3.5.3 Teachers’ general attitude towards the use of netbooks in class

Turkish teachers are more concerned than their colleagues in other countries about the school timetable and how the curriculum can support the use of netbooks. The majority of teachers in Turkey (81%) would like to have confirmation of the educational value of netbook activities before using them; this is by far the higher proportion of all countries involved. Half of them agree with the statement that the curriculum will not support the use of netbooks, whereas 28% disagree. Similarly, the school timetable splits Turkish teachers, 48% says it will inhibit their use of netbooks in class, whereas 30% remain uncertain about this issue.

45% of the teachers think that the existing content and material they use will be suitable for netbook use; however, 28% disagree and another 28% have not formed an opinion yet. Similarly, about half are uncertain about which software is appropriate for teaching with netbooks; however, 44% think they have adequate training to support netbook use. 44% of the Turkish respondents agree that they do not know how to effectively integrate netbooks into teaching, whereas one third have not made up their minds on the topic yet.

3.5.4 Teachers’ concerns about netbooks in school

Teachers confident that school heads, parents and colleagues support the use of netbooks. Areas of concern are limited Internet access, possible technical problems and children being distracted.

Two thirds of the Turkish teachers are positive that the school head will support experimenting with netbooks; moreover, 61% think that parents will support it too. About 20% have not yet formed an opinion on these issues. 68% of the Turkish respondents agree that the use of notebooks can improve teacher-student-parent communications.

63% of the Turkish teachers do not think that netbooks will disrupt their teaching; however, almost half of them agree that students will be distracted by doing other things, such as surfing the Internet, texting and playing games. 36% of them do not think that students will cheat, whereas 45% of them are still uncertain about this issue. The main areas of concern for the Turkish teachers are the limited Internet access in school (57%) and other technical problems that might occur (47%); however, 61% are convinced that technical equipment (e.g. projector) will be available in their school. They are also positively convinced (more than in the other countries) that fellow teachers will not have negative attitudes towards netbook use. Likewise, they are not concerned that the presence of notebooks will be disruptive to their teaching.

3.5.5 Teachers’ use of notebooks

Turkish teachers plan to use their notebooks to prepare school work both at school and home, and 3/4 plan for students’ collaborative work at school.

The majority of Turkish teachers (81%) will use the notebook on their own at home to prepare lessons and homework. 74% plan to do the same while at school and 68% will use their notebook to collaborate with other teachers to prepare lessons and homework. Turkish teachers, more often than their peers in other countries, will plan for students’ collaborative use of netbooks in class. About half of them will also plan for students’ collaborative online work to be done at home, whereas the other half remains undecided about the issue. 51% agree that when preparing students’ use of netbooks, they will plan mostly for individual work to be done at home.
3.6 The United Kingdom

- 10 schools, each with one class, were selected for the pre-pilot in collaboration with Becta in the UK.
- All schools were located in England.
- The on-line kick-off event took place on 1 March, 2010.
- The netbooks arrived in schools in late April 2010.
- Evaluation: the lowest response rate, 62%. 52% of the respondents are male, 48% female. 51% have been teaching for 10 years or longer.
- 19% self-evaluate as having moderate ICT skills, 81% good or expert level, by far the highest in the Pilot.
- 68% of the UK teachers said they were willing to participate in the project after hearing about it in their school. 29% indicate “other”, giving reasons such as hearing from it through other channel (e.g. ICT coordinator, forum).

3.6.1 Added value of netbooks, as opposed to the use of ICT in general

A vast majority of the UK teachers (94%) think that netbooks, as opposed to the use of ICT in general, have added value to improve students’ ICT skills. A third of the UK teachers have not yet made up their minds about the netbooks’ added value to foster critical skills and motor skills.

A very positive attitude was expressed by the majority of the UK teachers that netbooks, as opposed to the general use of ICT, can improve students’ ICT skills, can motivate them to learn more (84%) and can enhance their personal skills (e.g. initiative, persistence) (78%).

The UK respondents are slightly less convinced that netbook use, as opposed to ICT use in general, can improve students’ social skills (62%), intellectual skills (62%) and critical skills (55%). Even though many are positive about those aspects, about one quarter of them have not yet formed an opinion on the issue, especially when it comes to critical skills (35%) and spatial/motor skills (37%).

3.6.2 Teachers’ opinions about the impact of netbooks

A vast majority of the UK teachers are positive that netbooks will increase students’ involvement in school.

The vast majority of the responding UK teachers (94%) are positive about the fact that netbooks will increase students’ engagement in school and will allow for students’ personalised learning (91%). They also agree that the use of netbooks will be relevant to preparing students for examinations.

Moreover, their attitude towards the specific features of the netbook, e.g. ownership and the fact that students can access them all the time, is also very positive (both 90%). 94% also agree that netbooks will help extend learning beyond school hours.

Two thirds of the UK teachers (67%) think that collaborative use of netbooks will motivate students more than using them individually, whereas 26% of them have not yet formed an opinion on the issue. About 70% of the UK teachers are positive that individual use of netbooks will help students’ informal remediation both at home and at school; however, a quarter of the respondents have still not formed an opinion on this aspect. Likewise, three quarters of the teachers believe that the collaborative use of netbooks will provide opportunities for students’ informal remediation in school.

3.6.3 Teachers’ general attitude towards the use of netbooks in class

The overall attitude of teachers is very positive.

More than 77% of the UK teachers are positive that the curriculum will support the use of netbooks. The majority (61%) of them do not think that the school timetable will inhibit the use of netbooks in class; however, 29% of them have not yet made up their minds about the issue. Moreover, they seem convinced of the educational value of netbooks (and do not need confirmation), they know how they will effectively integrate them into their teaching (74%) and think that the existing content and material they use will be suitable for netbook use (75%). About 2/3 of teachers do not think the use of netbooks will increase their workload.
Similarly, the majority of respondents in the UK seem confident about the software to use on the netbooks; however, 23% neither agree nor disagree. As for having time to prepare for specific netbook activities, 2/3 report being confident of having time for it, whereas 23% are still uncertain.

### 3.6.4 Teachers’ concerns about netbooks in school

UK teachers are confident of technical equipment being available, and school heads’ and parents’ support. Half of them have concerns about accessing websites because of the school’s firewalls (52%), whereas only a quarter think that the limited Internet access in their school will make using netbooks in class difficult.

Almost all the teachers say that the necessary equipment is available. Moreover, the majority of teachers (94%) are confident that the school head supports experimenting with netbooks – the highest figure for this question among the pilot countries. Also, the UK teachers believe that parents will support the netbooks in schools (84%); however, just about half thinks that it can improve student-parent-teacher communications.

Only 6% of respondents think that netbooks will be disruptive to their teaching and 10% think that students will be distracted by doing other things when using their netbooks (e.g. surfing on the Internet, texting, playing games). Interestingly, regarding the latter issue, 48% of the UK respondents had not formed an opinion yet, whereas 41% said that they disagree with this statement.

45% of the UK teachers are concerned that technical problems (e.g. freezing or inability to access the Internet) will mean that they need a back-up plan for a non-netbook activity, whereas about 1/3 have not made up their minds on the issue. 58% of the UK respondents do not think that accessing the Internet in the school will make using netbooks difficult; however, half of the UK teachers (52%) are concerned that school filters or firewalls will block the websites they need. It should be noted, though, that a quarter of the UK respondents still consider the school’s Internet access a limiting factor for the use of netbooks in class.

### 3.6.5 Teachers’ use of notebooks

Teachers’ main use of notebooks will be at home to prepare lessons. More than half of the UK teachers are still uncertain about how to plan for students’ work with netbooks.

The UK teachers are counting on using their notebooks to prepare lessons and homework: 78% will use it on their own at home and 61% will use it in school for that purpose. To a lesser degree (48%), the UK teachers are also intending to use their notebooks in school to work collaboratively on preparing lessons and homework.

There is least agreement and more than half of teachers still do not know if they will plan for students’ collaborative online work to be done at home or if they will plan for students’ individual work to be done at home. A third say they will plan for individual (33%) or collaborative work (33%) to be done between students in school, whereas more than half of the respondents (about 60% for either individual or collaborative work) are still open about this issue.
4. One-to-one (1:1) pedagogical scenarios
4. One-to-one (1:1) pedagogical scenarios

It is claimed that netbooks can facilitate more engaging and motivating learning, anywhere anytime. It is then reasonable to ask: do netbooks require a different type of pedagogy? How can we help successfully implement netbooks in school?

The Acer-European Schoolnet Netbook Pilot works with teachers to create 1:1 pedagogical netbook scenarios that help teachers to “orchestrate” the learning situation with netbooks and allow them to focus on the interplay between different types of activities, and between individual and social processes. 1:1 pedagogical netbook scenarios subscribe to the current trend in Computer Supported Collaborative Learning (Dillenbourg, Järvelä & Fischer, 2009). The scenarios highlight the fact that the learners have netbooks available at all times, taking advantage of a blended learning approach alternating online and offline activities, as well as individual and collaborative ones. They potentially help bridge the divide between formal and informal education, as learners use netbooks not only in the school environment, but also outside of school hours.

Figure 3. 1:1 netbook scenarios help teachers to “orchestrate” the learning situation with netbooks.

The Acer-European Schoolnet Netbook Pilot works with teachers to create 1:1 pedagogical netbook scenarios that help teachers to “orchestrate” the learning situation with netbooks and allow them to focus on the interplay between different types of activities, and between individual and social processes. 1:1 pedagogical netbook scenarios subscribe to the current trend in Computer Supported Collaborative Learning (Dillenbourg, Järvelä & Fischer, 2009). The scenarios highlight the fact that the learners have netbooks available at all times, taking advantage of a blended learning approach alternating online and offline activities, as well as individual and collaborative ones. They potentially help bridge the divide between formal and informal education, as learners use netbooks not only in the school environment, but also outside of school hours.
1:1 pedagogical netbook scenarios are intended to be inspirational, leaving room for teachers to adapt them to their own local curriculum needs. They are not necessarily subject specific and are not as detailed as lesson plans. They include:

- short sequences of alternating activities on 1:1 which can be incorporated in a larger pedagogical project,
- outline organisational prerequisites (e.g. tools available, where and how the activity takes place),

To support teachers within the Pilot, participation in an online community www.netbooks.eun.org is encouraged in order to share experiences and to learn from one another. Co-designing pedagogical 1:1 netbook scenarios takes place online.

Annex: Tables and Figures

Table 1. Expectations regarding netbooks’ value for teaching and learning.

<table>
<thead>
<tr>
<th>Country</th>
<th>These devices will positively impact on learning (% of teachers who agree and strongly agree)</th>
<th>The use of netbooks will allow for students’ personalised learning (% of teachers who agree and strongly agree)</th>
</tr>
</thead>
<tbody>
<tr>
<td>France</td>
<td>58%</td>
<td>55%</td>
</tr>
<tr>
<td>Germany</td>
<td>79%</td>
<td>84%</td>
</tr>
<tr>
<td>Italy</td>
<td>90%</td>
<td>88%</td>
</tr>
<tr>
<td>Spain</td>
<td>74%</td>
<td>71%</td>
</tr>
<tr>
<td>Turkey</td>
<td>74%</td>
<td>75%</td>
</tr>
<tr>
<td>UK</td>
<td>90%</td>
<td>91%</td>
</tr>
<tr>
<td>Average</td>
<td>78%</td>
<td>74%</td>
</tr>
</tbody>
</table>

Table 2. Educational value of netbook by country.

<table>
<thead>
<tr>
<th>I would like confirmation of the educational value of netbook activities before using them</th>
<th>Agree</th>
<th>No opinion yet</th>
<th>Disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>France</td>
<td>13%</td>
<td>16%</td>
<td>71%</td>
</tr>
<tr>
<td>Germany</td>
<td>24%</td>
<td>34%</td>
<td>42%</td>
</tr>
<tr>
<td>Italy</td>
<td>24%</td>
<td>24%</td>
<td>51%</td>
</tr>
<tr>
<td>Spain</td>
<td>29%</td>
<td>40%</td>
<td>31%</td>
</tr>
<tr>
<td>Turkey</td>
<td>81%</td>
<td>12%</td>
<td>7%</td>
</tr>
<tr>
<td>UK</td>
<td>12%</td>
<td>13%</td>
<td>75%</td>
</tr>
<tr>
<td>Average</td>
<td>31%</td>
<td>23%</td>
<td>46%</td>
</tr>
</tbody>
</table>

Table 3. Added value of the use of netbooks, as opposed to use of ICT in general.

<table>
<thead>
<tr>
<th>Netbooks as opposed to the use of ICT in general have added value because they can…</th>
<th>improve students’ ICT skills (e.g. use of online resources)</th>
<th>improve students’ personal skills (e.g. initiative, persistence)</th>
<th>improve students’ social skills (e.g. teamwork, communication)</th>
<th>improve students’ intellectual skills (e.g. problem solving)</th>
<th>improve students’ critical skills (e.g. evaluating a resource for bias)</th>
</tr>
</thead>
<tbody>
<tr>
<td>France</td>
<td>85%</td>
<td>72%</td>
<td>39%</td>
<td>38%</td>
<td>26%</td>
</tr>
<tr>
<td>Germany</td>
<td>87%</td>
<td>72%</td>
<td>38%</td>
<td>54%</td>
<td>39%</td>
</tr>
<tr>
<td>Italy</td>
<td>93%</td>
<td>83%</td>
<td>81%</td>
<td>68%</td>
<td>54%</td>
</tr>
<tr>
<td>Spain</td>
<td>91%</td>
<td>69%</td>
<td>60%</td>
<td>48%</td>
<td>51%</td>
</tr>
<tr>
<td>Turkey</td>
<td>83%</td>
<td>76%</td>
<td>71%</td>
<td>74%</td>
<td>68%</td>
</tr>
<tr>
<td>UK</td>
<td>94%</td>
<td>78%</td>
<td>62%</td>
<td>62%</td>
<td>55%</td>
</tr>
<tr>
<td>Average</td>
<td>89%</td>
<td>74%</td>
<td>58%</td>
<td>57%</td>
<td>49%</td>
</tr>
</tbody>
</table>
Table 4. Teachers' fears and concerns (printed in 2 parts).

<table>
<thead>
<tr>
<th>I am concerned that/ about:</th>
<th>Technical problems (e.g. freezing or inability to access the Internet)</th>
<th>The negative attitudes of other teachers</th>
<th>Parents will not support the use of netbooks in my school</th>
<th>The school head will not support the use of netbooks in my school</th>
<th>There will be a lack of technical support in my school</th>
</tr>
</thead>
<tbody>
<tr>
<td>France</td>
<td>56%</td>
<td>14%</td>
<td>0%</td>
<td>0%</td>
<td>24%</td>
</tr>
<tr>
<td>UK</td>
<td>45%</td>
<td>23%</td>
<td>0%</td>
<td>0%</td>
<td>13%</td>
</tr>
<tr>
<td>Germany</td>
<td>49%</td>
<td>6%</td>
<td>3%</td>
<td>25%</td>
<td></td>
</tr>
<tr>
<td>Italy</td>
<td>44%</td>
<td>14%</td>
<td>5%</td>
<td>4%</td>
<td>37%</td>
</tr>
<tr>
<td>Turkey</td>
<td>47%</td>
<td>21%</td>
<td>16%</td>
<td>3%</td>
<td>35%</td>
</tr>
<tr>
<td>Spain</td>
<td>51%</td>
<td>13%</td>
<td>2%</td>
<td>4%</td>
<td>56%</td>
</tr>
<tr>
<td>Average</td>
<td>49%</td>
<td>16%</td>
<td>4%</td>
<td>2%</td>
<td>32%</td>
</tr>
</tbody>
</table>

Table 5. Different netbook activities that teachers plan for students.

<table>
<thead>
<tr>
<th>I will plan mostly for students:</th>
<th>Individual work to be done in class</th>
<th>Collaborative work in class</th>
<th>Individual work at home</th>
<th>Collaborative online work at home</th>
<th>Different activities combined</th>
</tr>
</thead>
<tbody>
<tr>
<td>France</td>
<td>74%</td>
<td>67%</td>
<td>55%</td>
<td>49%</td>
<td>245%</td>
</tr>
<tr>
<td>Germany</td>
<td>57%</td>
<td>24%</td>
<td>30%</td>
<td>3%</td>
<td>114%</td>
</tr>
<tr>
<td>Italy</td>
<td>33%</td>
<td>43%</td>
<td>23%</td>
<td>18%</td>
<td>117%</td>
</tr>
<tr>
<td>Spain</td>
<td>62%</td>
<td>49%</td>
<td>33%</td>
<td>24%</td>
<td>168%</td>
</tr>
<tr>
<td>Turkey</td>
<td>53%</td>
<td>74%</td>
<td>51%</td>
<td>48%</td>
<td>226%</td>
</tr>
<tr>
<td>UK</td>
<td>33%</td>
<td>33%</td>
<td>13%</td>
<td>10%</td>
<td>89%</td>
</tr>
<tr>
<td>Total average</td>
<td>52%</td>
<td>49%</td>
<td>35%</td>
<td>25%</td>
<td>161%</td>
</tr>
</tbody>
</table>

Table 6. Teachers' self-assessment of their ICT skills.

<table>
<thead>
<tr>
<th>Expert/ good ICT skills</th>
<th>36%</th>
<th>Moderate/ beginner</th>
<th>64%</th>
</tr>
</thead>
<tbody>
<tr>
<td>France</td>
<td>36%</td>
<td>Germany</td>
<td>28%</td>
</tr>
<tr>
<td>Germany</td>
<td>37%</td>
<td>Italy</td>
<td>63%</td>
</tr>
<tr>
<td>Italy</td>
<td>20%</td>
<td>Spain</td>
<td>80%</td>
</tr>
<tr>
<td>Spain</td>
<td>34%</td>
<td>Turkey</td>
<td>66%</td>
</tr>
<tr>
<td>UK</td>
<td>81%</td>
<td>Average</td>
<td>36%</td>
</tr>
<tr>
<td>Average</td>
<td>64%</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Using netbooks will increase my workload
I would like confirmation of the educational value of netbook activities before using them
I don’t know which software to use on netbooks appropriate for my teaching
I will not have enough time to prepare for specific netbook activities
I will not have adequate training to support netbook use
I don’t know how I will effectively integrate netbooks into my teaching
The curriculum will not support the use of netbooks
Existing content and other material I use will not be suitable for netbook use
The school timetable will inhibit my use of netbooks in class
The use of netbooks will not be relevant to preparing students for examinations

Beginner ICT users
Moderate & Expert ICT skills

42% 50% 25% 36% 8% 34% 31% 21% 14% 11% 0% 10% 20% 30% 40% 50% 60% 70% 80%

Have your pupils charged their netbooks in school?
Have your pupils charged their netbook at home?
Has the battery lasted for as long as needed in school, without having to re-charge at inappropriate times?

References

About European Schoolnet
European Schoolnet (www.europeanschoolnet.org) is a network of 31 Ministries of Education in Europe and beyond. European Schoolnet was created more than 10 years ago to bring about innovation in teaching and learning for its key stakeholders: Ministries of Education, schools, teachers and researchers.

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Since its founding in 1976, Acer has achieved the goal of breaking the barriers between people and technology. Globally, Acer ranks No. 2 for total PCs and notebooks. A profitable and sustainable Channel Business Model is instrumental to the company’s continuing growth, while its multi-brand approach effectively integrates Acer, Gateway, Packard Bell, and eMachines brands in worldwide markets. Acer strives to design environmentally friendly products and establish a green supply chain through collaboration with suppliers. Acer is proud to be a Worldwide Partner of the Olympic Movement, and including the Vancouver 2010 Olympic Winter and London 2012 Olympic Games. The Acer Group employs 7,000 people worldwide. 2009 revenues reached US$17.9 billion. See www.acer-group.com for more information.