



University of Liege
Psychology and
Education

SURVEY OF SCHOOLS: ICT IN EDUCATION

COUNTRY PROFILE: GREECE

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Table of Contents

1. Introduction.....	4
ICT in the school education system of Greece.....	4
The Survey of Schools: ICT in Education.....	5
2. ICT infrastructure.....	6
Availability of computers for educational purposes.....	6
Broadband.....	7
‘Connectedness’.....	8
3. Frequency of ICT use in class.....	10
Frequency of ICT use by teachers in class.....	10
Students’ ICT use.....	11
4. Digital confidence.....	13
Teachers.....	13
Students.....	15
5. Professional development.....	17
Time spent on training.....	17
Engagement in training.....	18
6. School support measures.....	20
ICT coordinator.....	20
Incentives.....	21
7: Clusters.....	23
The digitally supportive school.....	23
Digitally confident and supportive teachers.....	24
The digitally supportive student.....	25
The digitally equipped school.....	26
Conclusion.....	28
ANNEX.....	29
Tables.....	29
Notes.....	34

1. INTRODUCTION

ICT IN THE SCHOOL EDUCATION SYSTEM OF GREECE

In Greece the general responsibility for education lies with the Ministry of Education Lifelong Learning and Religious Affairs. The administration of all schools in the country is supervised at central level by advisory and scientific Services and Boards operating in the Central Service of the Ministry. At regional level, administrative control is exercised by the corresponding Regional Education Directorates, referring directly to the Minister. Directorates of Primary and Secondary Education, with their local Education Offices are in charge of the administrative supervision and control of Primary and Secondary Education schools. Primary and secondary education is mainly financed by the State. Policies related to digital convergence are promoted in particular regarding Information and Communication Technologies use and on-going application of new technologies and to this end, teachers receive on-going training.¹

According to Eurydice's **Key Data on Learning and Innovation through ICT at school in Europe**², in Greece there are national strategies covering training measures in all areas³, except for ICT in schools which is purely research focused, and e-learning which in addition to training includes research projects. There are central steering documents for all ICT learning objectives⁴ at both primary and secondary education, except for using mobile devices which is only at secondary level. In primary and secondary schools ICT is taught as a separate subject, and at primary is also included within technology as a subject, and is a general tool for other subjects/or as a tool for specific tasks in other subjects. At primary and secondary education level recommendations or suggestions are provided in the hardware areas⁵, computers, projectors or beamers, and mobile devices, and the software categories of office applications, communication software and digital resources. According to official steering documents students at primary and secondary level are expected to use ICT in class, and for complementary activities, in language of instruction and foreign languages, and for complementary activities in natural sciences. Teachers' use of ICT is not suggested in relation to specific subjects. There are no central recommendations on the use of ICT in student assessment. Public-private partnerships for promoting the use of ICT are encouraged in private funding for hardware and software in schools.

¹ <https://webgate.ec.europa.eu/fpfis/mwikis/eurydice/index.php?title=Home>

² http://eacea.ec.europa.eu/education/eurydice/documents/key_data_series/129EN.pdf, published in 2011, specifically the following tables and associated commentaries: A6, B6, B7, C2, C3, C4, C12 and E10

³ from the following areas: ICT in schools, e-learning, e-inclusion, digital/media literacy, e-skills development

⁴ i.e. knowledge of computer hardware and electronics, using a computer, using mobile devices, using office applications, searching for information, using multimedia, developing programming skills, and using social media

⁵ from a range of hardware and software, i.e. computers, projectors or beamers, DVDs, videos, TV, cameras, mobile devices, e-book readers, smartboards, virtual learning environments; tutorial software, office applications, multimedia applications, digital learning games, communication software, digital resources

THE SURVEY OF SCHOOLS: ICT IN EDUCATION

In 2011, the European Commission Directorate General Communications Networks, Content and Technology⁶ launched the Survey of Schools: ICT in Education, the primary goal of which is to benchmark countries' performance in terms of access, use and attitudes to ICT at grades 4, 8 and 11. The Survey of Schools is one of a series within the European Union's cross-sector benchmarking activities comparing national progress to Digital Agenda for Europe (DAE) and EU2020 goals. The Survey is funded by the European Commission Communications Networks, Content and Technology Directorate General and is a partnership between European Schoolnet and the Service d'Approches Quantitatives des faits éducatifs in the Department of Education of the University of Liège. The survey took place between January 2011 and May 2012, with data collection in autumn 2011, and covered 31 countries (the EU27, Croatia, Iceland, Norway and Turkey). In four countries (Germany, Iceland, Netherlands and the United Kingdom) the response rate was insufficient, making reliable analysis of the data impossible; therefore the findings in this report are based on data from 27 countries.

This country profile should be read in conjunction with the Report of the Survey of Schools: ICT in Education (the 'main report'). The profile presents key indicators concerning access, use and attitudes to Information and Communication Technology in primary and secondary schools derived from responses to surveys completed by head teachers, teachers and students, showing national results against the EU average and, where possible, for grade 8 only. Charts for this grade are shown but not for other grades for reasons of brevity and clarity and because results at this grade tend to be indicative of all grades (i.e. having the characteristics and revealing issues found both at grade 4 and at grade 11). The text provides information about the results and rankings at other grades and a reference to the particular chart in the main report.

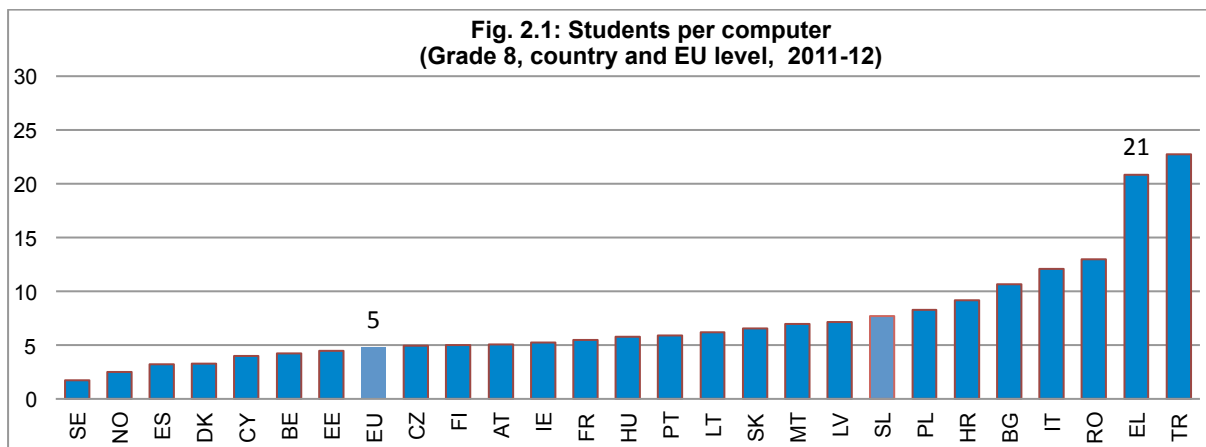
The full report, country profiles, background information, questionnaires, tables, details of the methodology and the raw data are freely available at <https://ec.europa.eu/digital-agenda/en/pillar-6-enhancing-digital-literacy-skills-and-inclusion>. The authors may be contacted at essie-eu@eun.org and information about the survey is at <http://essie.eun.org>.

⁶ www.ec.europa.eu/dgs/connect/

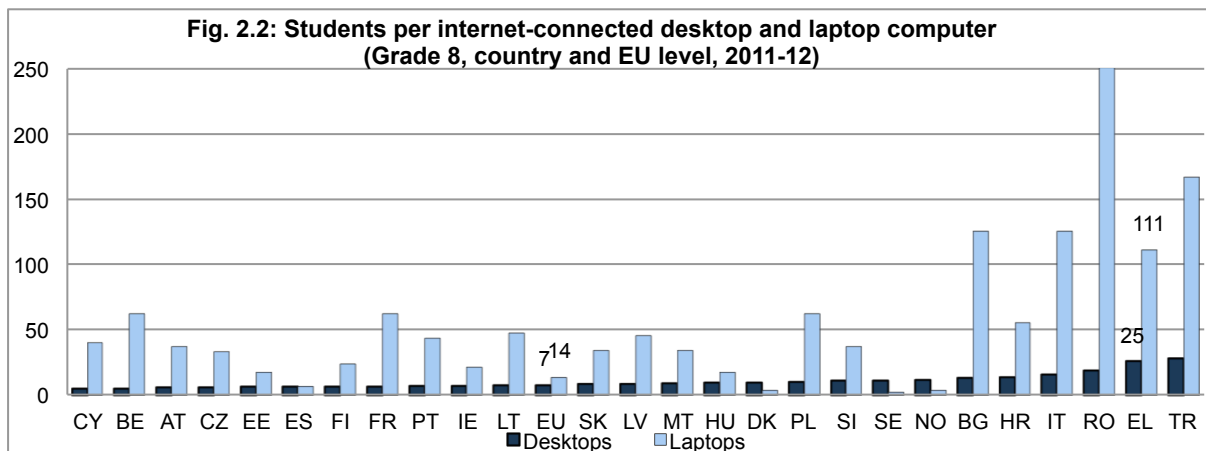
2. ICT INFRASTRUCTURE

AVAILABILITY OF COMPUTERS FOR EDUCATIONAL PURPOSES

A computer is defined as a desktop or laptop, netbook or tablet computer, whether or not connected to the internet, available for educational purposes in school. In Greece there are considerable fewer computers available for all grade students than the EU average and provision is fairly consistent at all grades. Fig. 2.1 shows that at grade 8 Greece is ranked second to last, in the bottom group of countries, with 21 students per computer. Greece is also in the bottom group of countries at grade 11, with a high student to desktop ratio at grade 11 general. However it is among the middle group of countries at grade 4 (see main report fig. 1.1).



As for computers connected to the internet in schools, in Greece desktop computers are below the EU average at all grades, and generally much lower than the average for laptop computers at all grades. In Greece most computers are desktops, ranking among the lowest percentages of internet-connected desktop computers in Europe at grade 8 (fig. 2.2). In terms of internet-connected laptop computers at grade 8 Greece is again among the bottom group of countries, and the situation is the same at grade 11 with high student to laptop ratios, but at grade 4 Greece ranks in the middle group of countries (main report, fig. 1.2).



The higher the percentage of students from low-income families in a school, the more online laptop computers tend to be available in vocational schools in Greece (main report, section 1). Computers are predominantly located in dedicated labs at all grades (over 80% at grades 8 and 11) with

exceptionally low levels of desktop computers located in classrooms at grade 11 general (main report, fig. 1.3). Greece is ranked at grade 8, eighth lowest at 62% compared to the EU average of 76 % of students, in schools where over 90% of computers are operational (main report, fig. 1.4). Fewer students have access to interactive whiteboards, among the lowest group of countries at grade 4 and at grade 11 general, but at grade 8 Greece is ranked twelfth, above the EU level, among the middle group of countries, (main report, fig. 1.5). With 85% of interactive whiteboard located in classrooms, Greece has among the highest levels of deployment of mobile IWBs.

BROADBAND

In Greece the number of students in schools without broadband is around the EU average at all grades. At all grades the percentages of students in schools with broadband speeds faster than 10mbps, is lower than the EU mean, and considerably lower at grade 11. A lower percentage of students are in schools with than 100 mbps which is available only to students at grade 8.

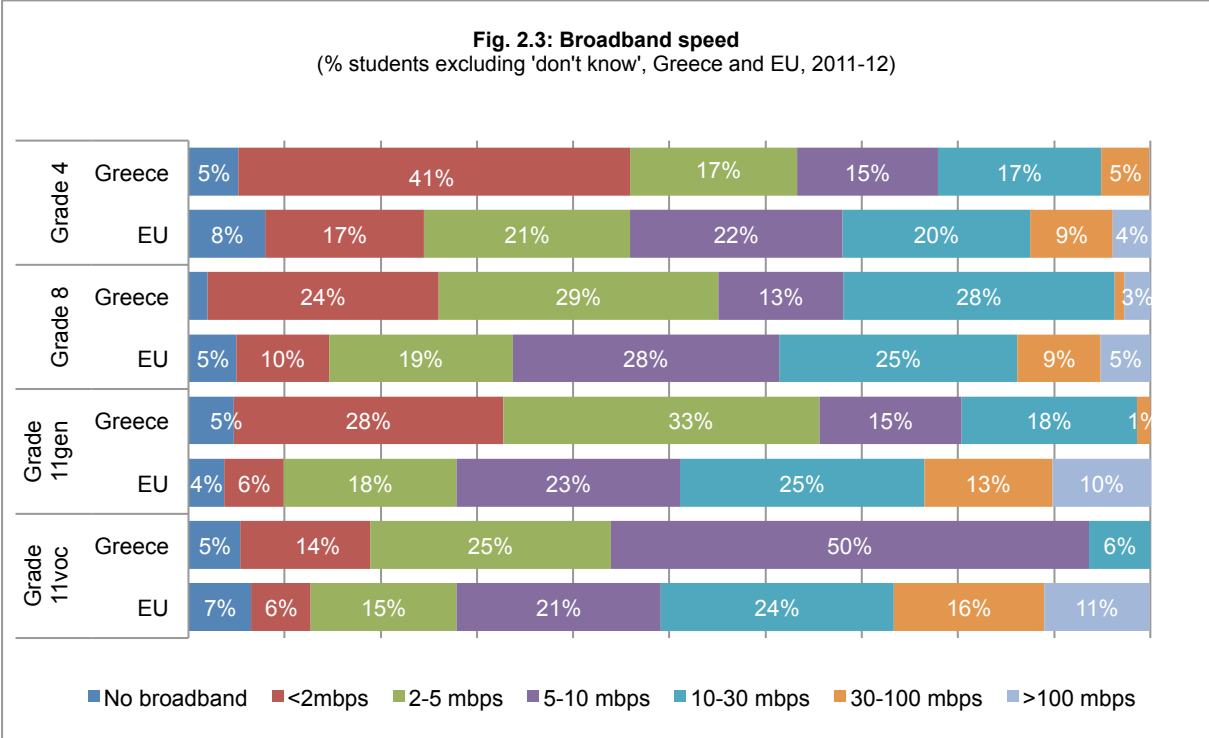
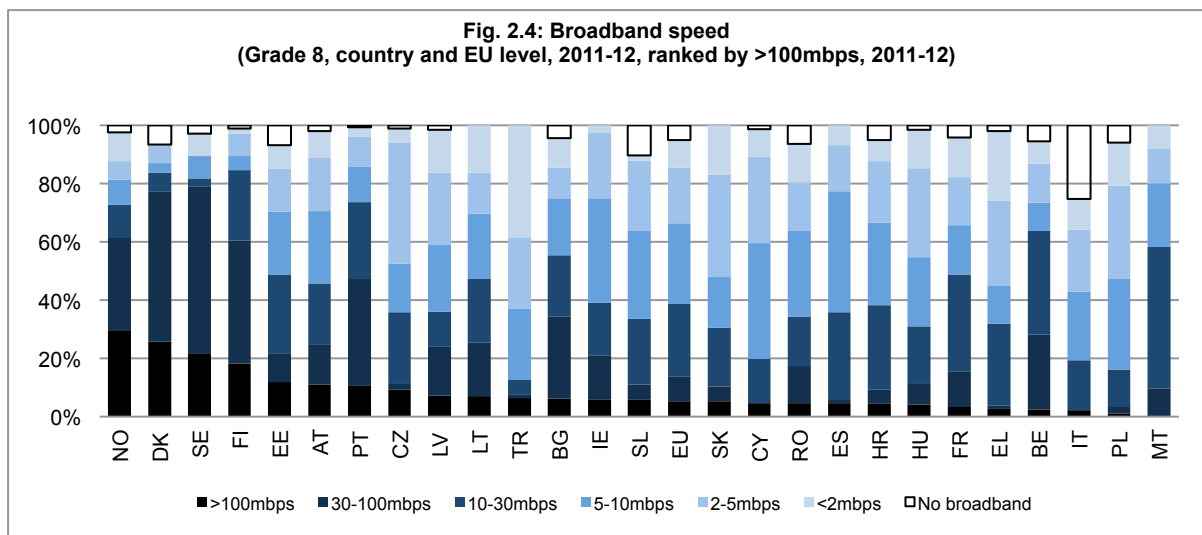


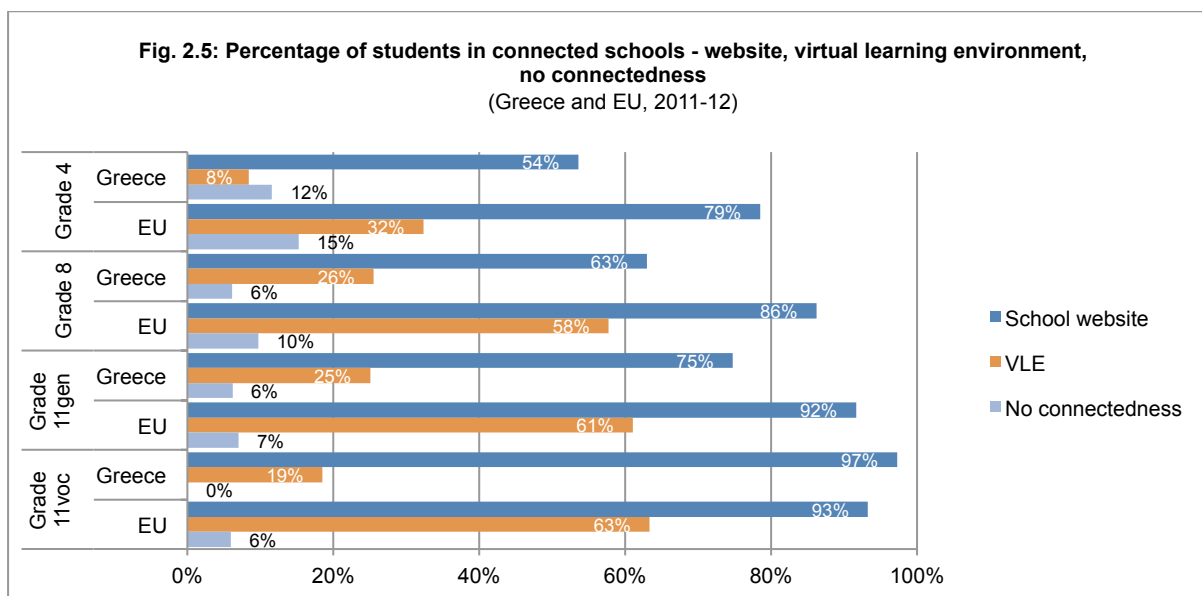
Figure 2.4 shows how Greece compares with other countries at grade 8: ranked among the bottom group of countries for the percentage of students in schools with more than 100 mbps. Few students are in schools with no broadband, and the majority in schools with under 5mbps. The situation is similar at other grades, with high levels of schools without broadband (around 5% at grade 11), although Greece ranks higher, seventh from bottom, at grade 4, on this measure (main report, fig. 1.8).



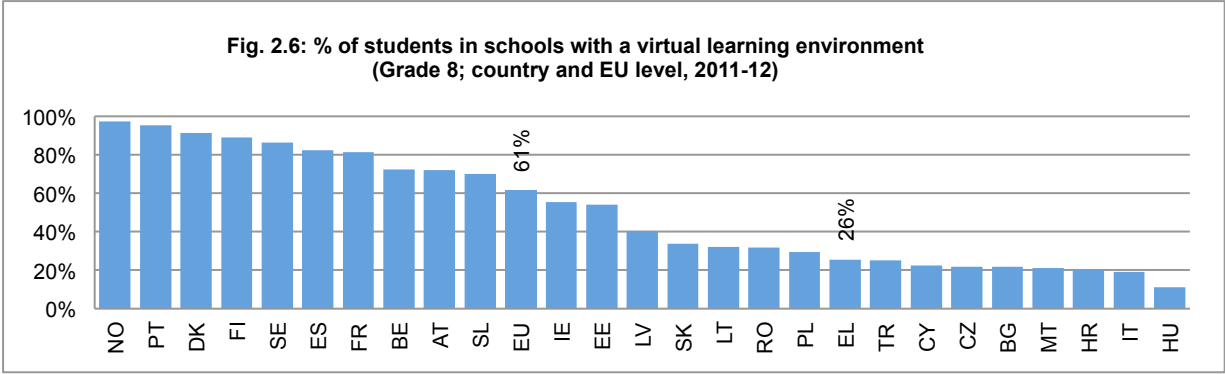
There are significant positive correlations between the population size of the school's locality and broadband speed in Greece at grade 4 (main report, section 1), meaning that rural schools tend to have slower internet connections than urban ones.

'CONNECTEDNESS'

Percentages of students in schools that have 'connected' characteristics, e.g. having a website or a virtual learning environment (VLE) are shown below, as well as those with none of these items. In Greece, the percentage of students in schools with a website is lower than the EU mean at all grades except grade 11 vocational where it is higher. There is a much lower percentage of students in schools with a virtual learning environment than the EU mean at all grades. Percentages of students in 'unconnected' schools are lower than the EU average at all grades, and all students are in connected schools at grade 11 vocational.



Greece ranks below most countries as regards virtual learning environments at grade 8, as seen in fig. 2.6, and at other grades ranks lower: among the bottom four countries (main report, fig. 1.10).



In Greece of schools with VLEs, the majority offer external access, except at grade 4 where it is around half, with Greece ranked among the lower group of countries on this measure (main report section 1). Where there is a VLE, relatively high levels of access are provided equally to teachers, students and parents – 100% of teachers at grade 11 vocational – but much fewer parents at that grade.

3. FREQUENCY OF ICT USE IN CLASS

FREQUENCY OF ICT USE BY TEACHERS IN CLASS

Teachers' frequency of use of ICT in lessons is shown in the charts below. In Greece use of ICT by teachers is higher at all grades than the EU average. There are more teachers using ICT in more than 25% of lessons, above the EU average, and is particularly high at grade 11 vocational. The most intense use is at grade 11 where nearly a third use ICT with their students in more than 75% of lessons, close to the EU average.

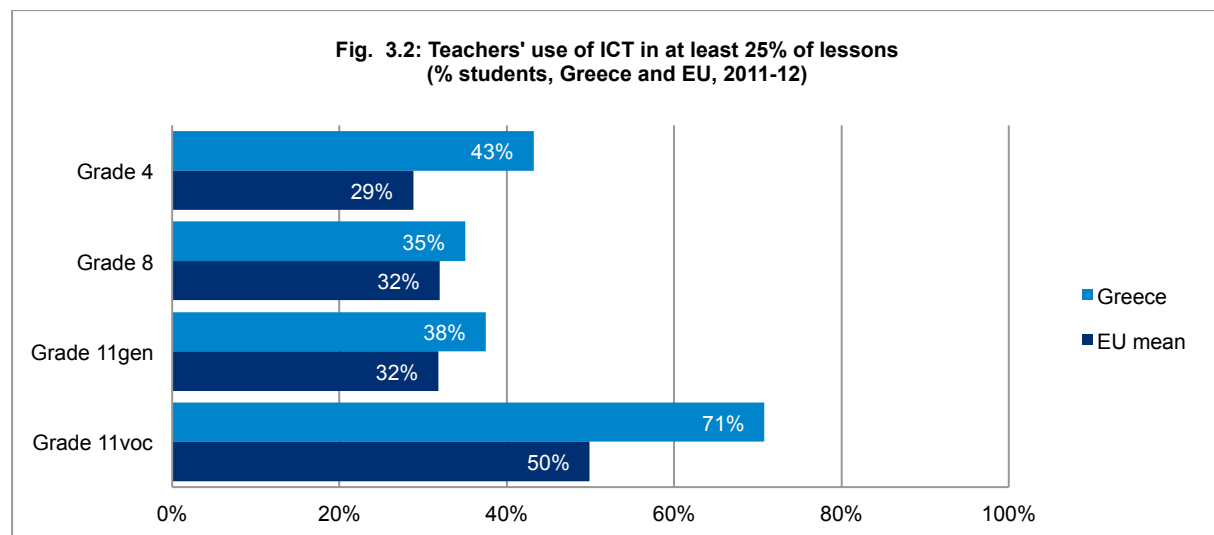
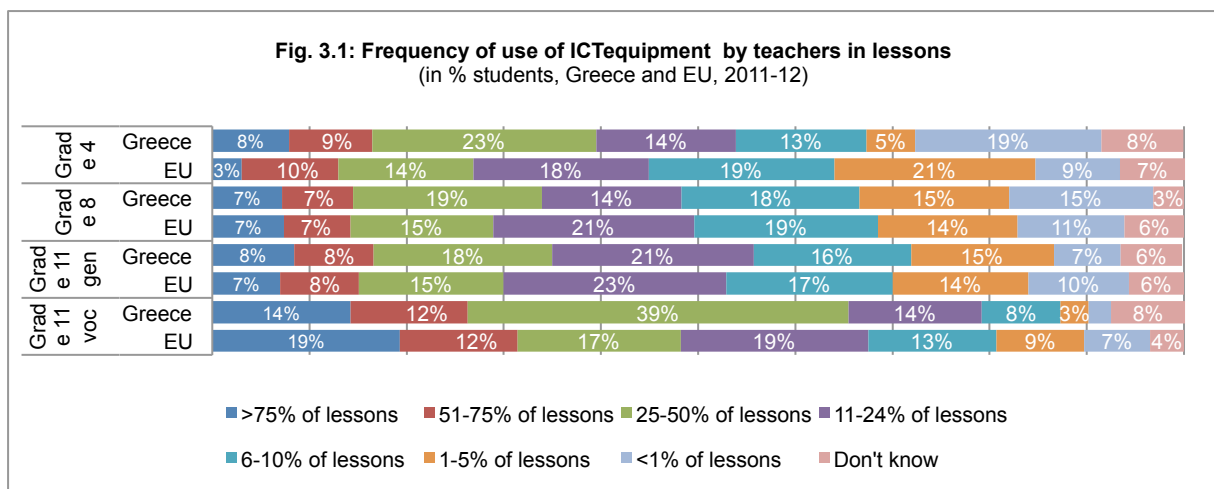
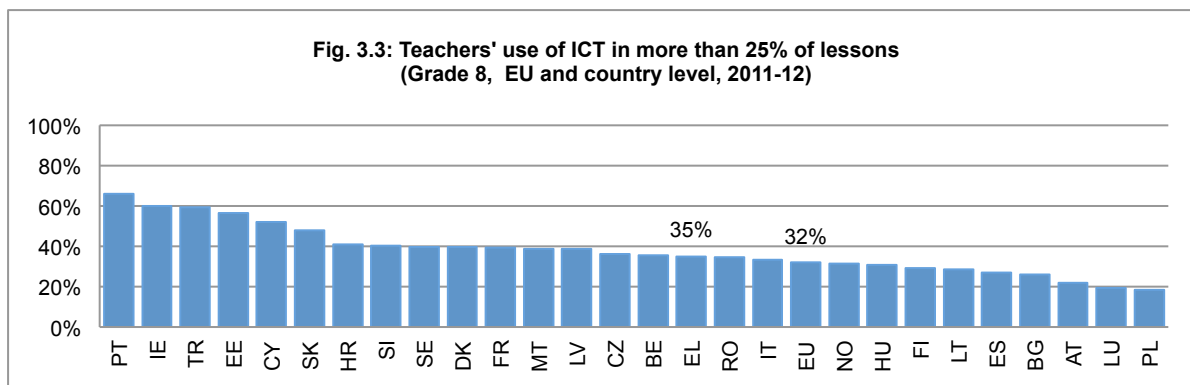


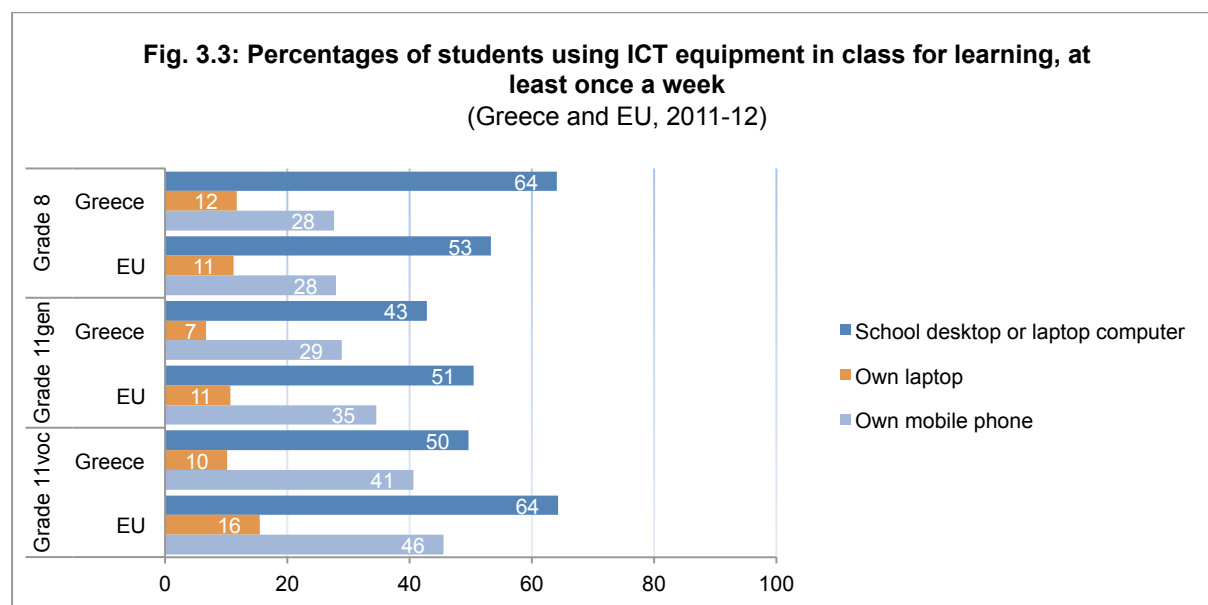
Fig 3.3 shows Greece ranks in the middle group of countries at grade 8, and also at grade 11 general (see main report, fig. 2.2), while at grade 4 and grade 11 vocational (where it is ranks sixth highest) Greece is among the leading group of countries. This is highly noteworthy given the relative scarcity of ICT equipment described above, and relates to a key finding of the main report: that factors in addition to provision of equipment influence its use.



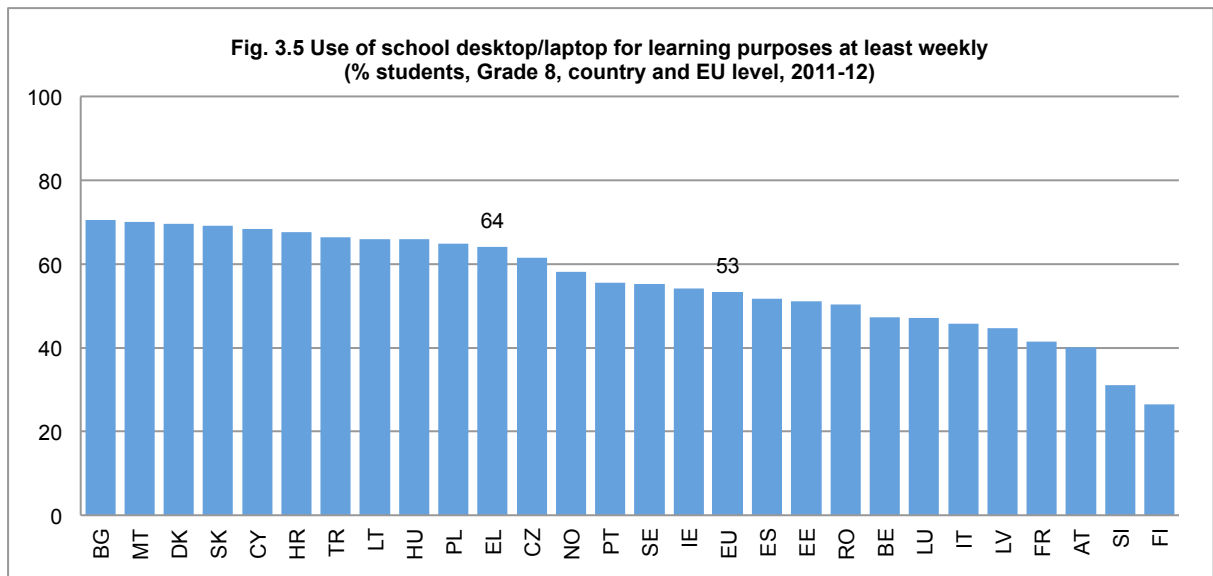
Greece ranks among the bottom group of countries at all grades as regards teachers' use of ICT for more than six years, second from last at grade 11, and last at grade 4. Greece is also among the bottom group of countries, ranked in the lowest three countries, in terms of student-centred learning at grade 4 and at grade 11 general (fig. 3.5).

STUDENTS' ICT USE

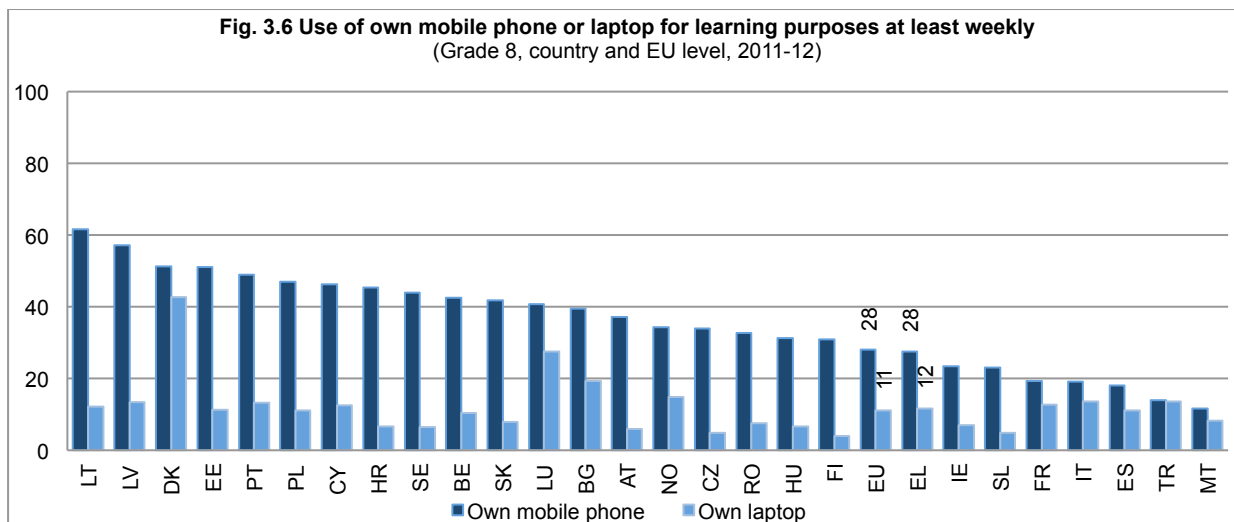
Students at grade 8 and 11 were also asked how frequently they used various items of ICT equipment in their lessons for learning purposes. The chart below shows their reported intensity of use of a school computer, and their own laptop or mobile phone. In Greece student use of computers in class is higher than the EU mean at grade 8 and lower at grade 11. Use of their own laptop is close to the EU mean at all grades. Mobile phone usage is close to the EU mean.



At grade 8 students' reported use of school computers is among the middle group of countries, ranked eleventh highest, with 64% saying they use them at least once a week (fig. 3.5), and is also among this group at grade 4, but Greece ranks among the bottom group of countries at grade 11 (main report, fig. 2.5).



Compared to other countries at grade 8 (fig.3.6), students in Greece are average users of their own mobile phone and laptop in school. At grade 11 there is less use, placing Greece among the bottom group of countries on this indicator (main report, fig. 2.5).



Students report using interactive whiteboards much less frequently than the EU average, and are ranked in the last two countries at grade 11 general, but are among the middle group of countries at grade 8 (main report, fig. 2.6). Concerning students' ICT-based activities during lessons, Greece is among the leading countries as measured by frequency of use (main report, fig. 3.8) at grade 8 but much lower in ranking at other grades.

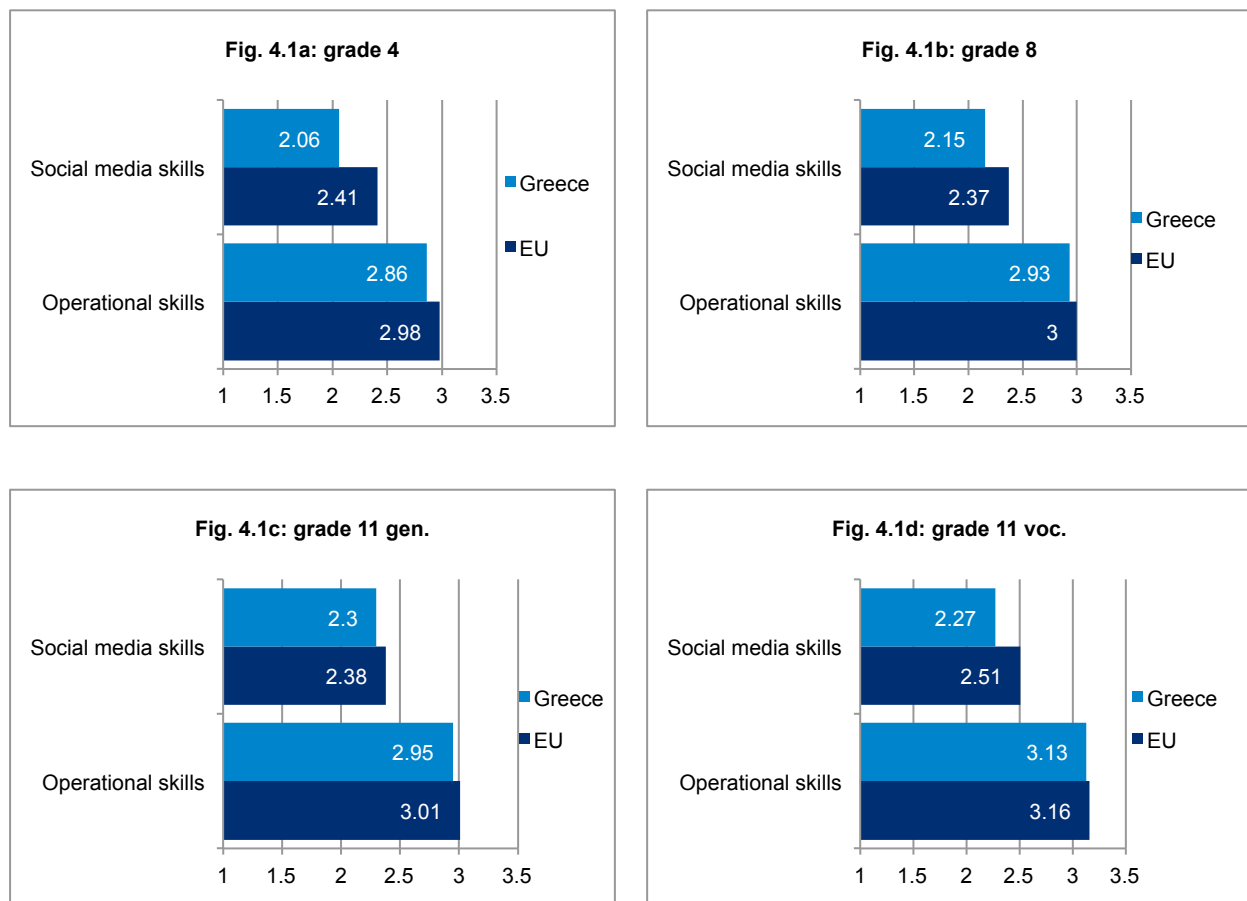
4. DIGITAL CONFIDENCE

TEACHERS

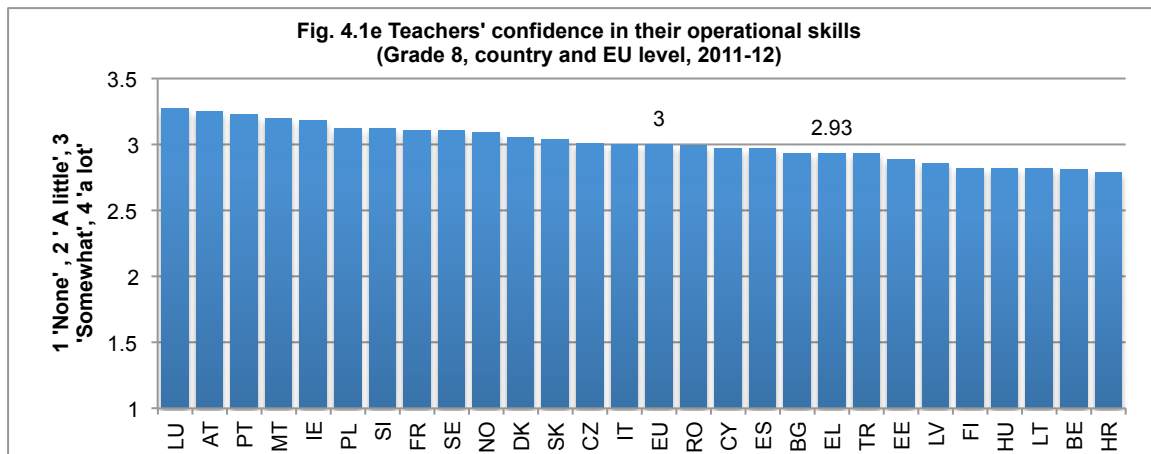
In Greece teachers' confidence in their operational skills with ICT is close to the EU mean at all grades (close to 'somewhat'). Their confidence in social media skills is lower than the EU average and all grades, notably at grade 4 where it is close to 'a little'. The mean score of students in Greece being taught by teachers declaring confidence in their operational skills is close to 3 in all grades, but below 2.4 in social media, much in line with the EU mean.

Fig. 4.1: Teachers' self-confidence in their operational and social media skills

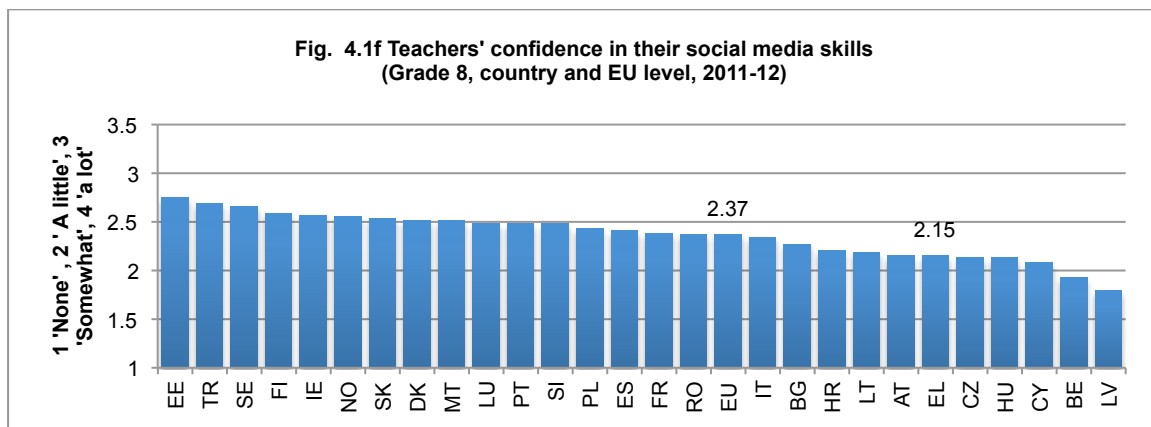
(by grade; mean score of students with 1 being 'none' and 4 being 'a lot'; Greece and EU; 2011-12)



Comparing confidence levels at grade 8, teachers' confidence in their operational skills places Greece ninth lowest, among the bottom group of countries (fig. 4.1e), and also at grade 4 and 11 general, but higher among the middle group of countries at grade 11 vocational (main report, fig. 4.13).



At grade 8 Greek teachers are sixth from last as regards social media confidence (fig. 4.1f) and ranked among the bottom group of countries at other grades, except grade 11 general where they are among the middle group of countries (main report, fig. 4.14).

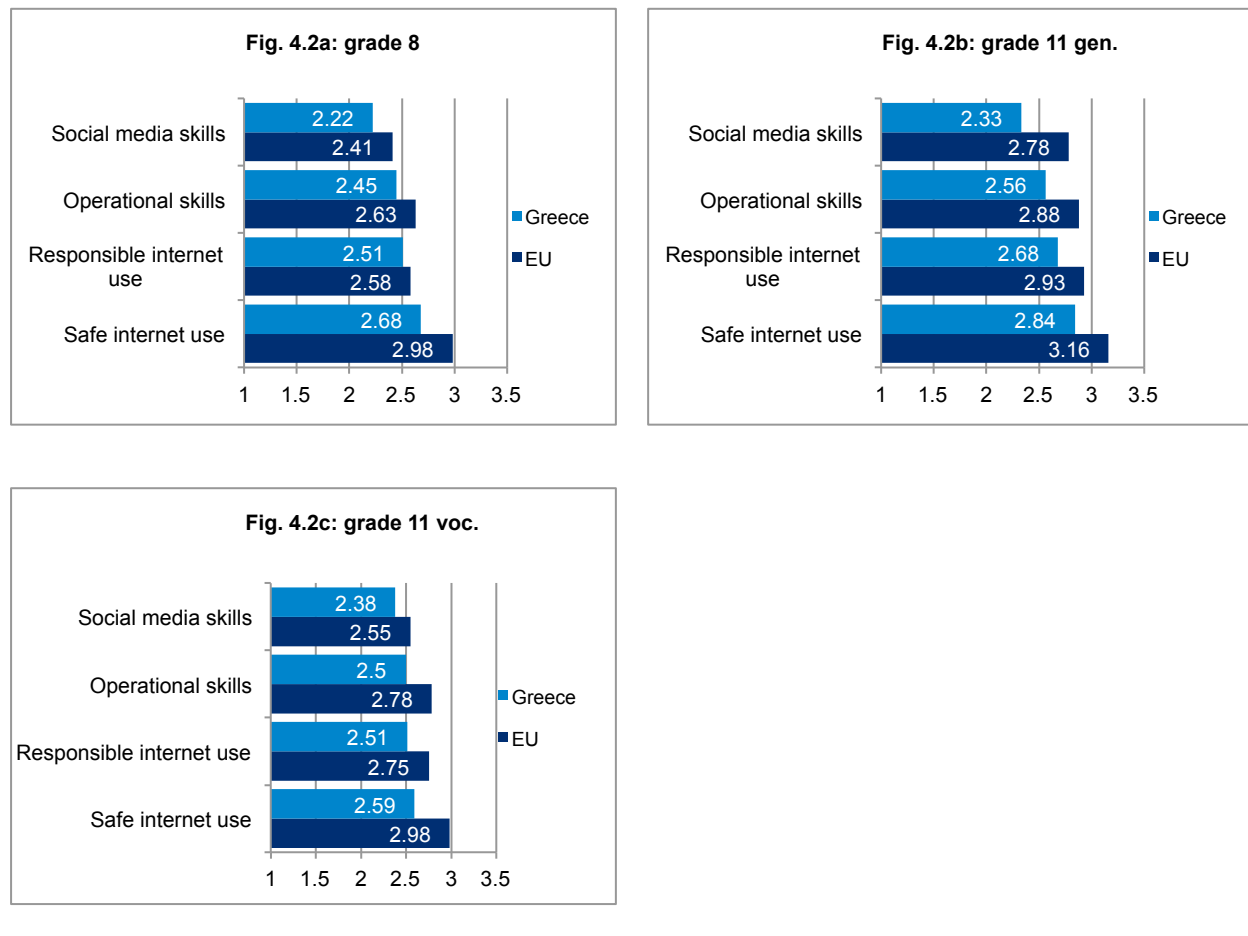


STUDENTS

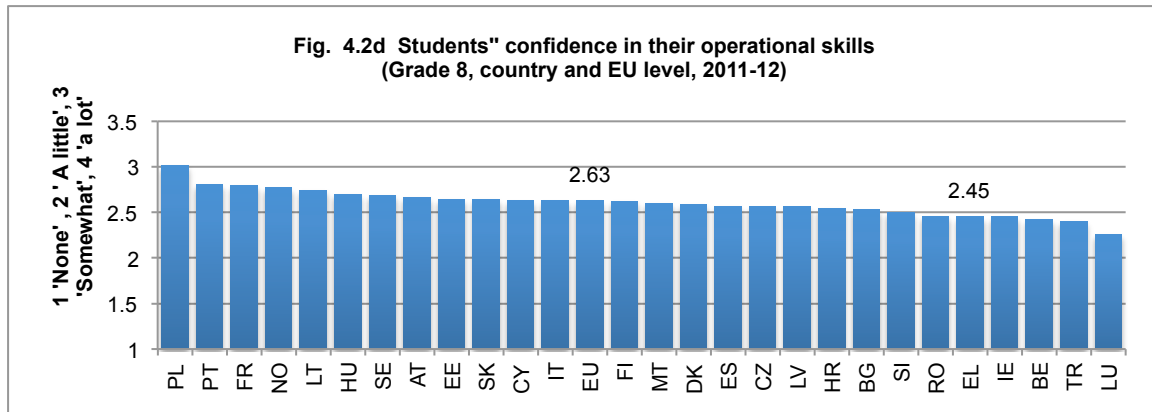
The mean score of students in Greece is 2.6, and at all grades is below the EU mean, and lower at Grade 11 general.

Fig. 4.2: Students' self-confidence in their ICT skills

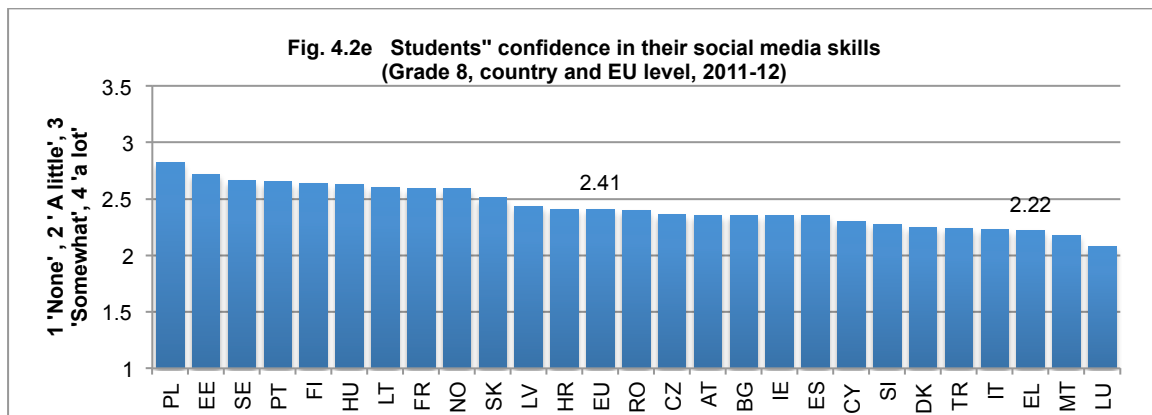
(by grade; mean score of students with 1 being 'none' and 4 being 'a lot'; Greece and EU; 2011-12)



Confidence in operational skills is lower than the EU mean amongst grade 8 students (fig. 4.2d), and at grade 11 is also among the lowest group of countries at grade 11, where it ranks in the last three (main report fig. 4.18).



Greece is among the bottom group countries for confidence in social media competence at grade 8 (fig. 4.2e) and at all other grades (main report, fig. 4.19).



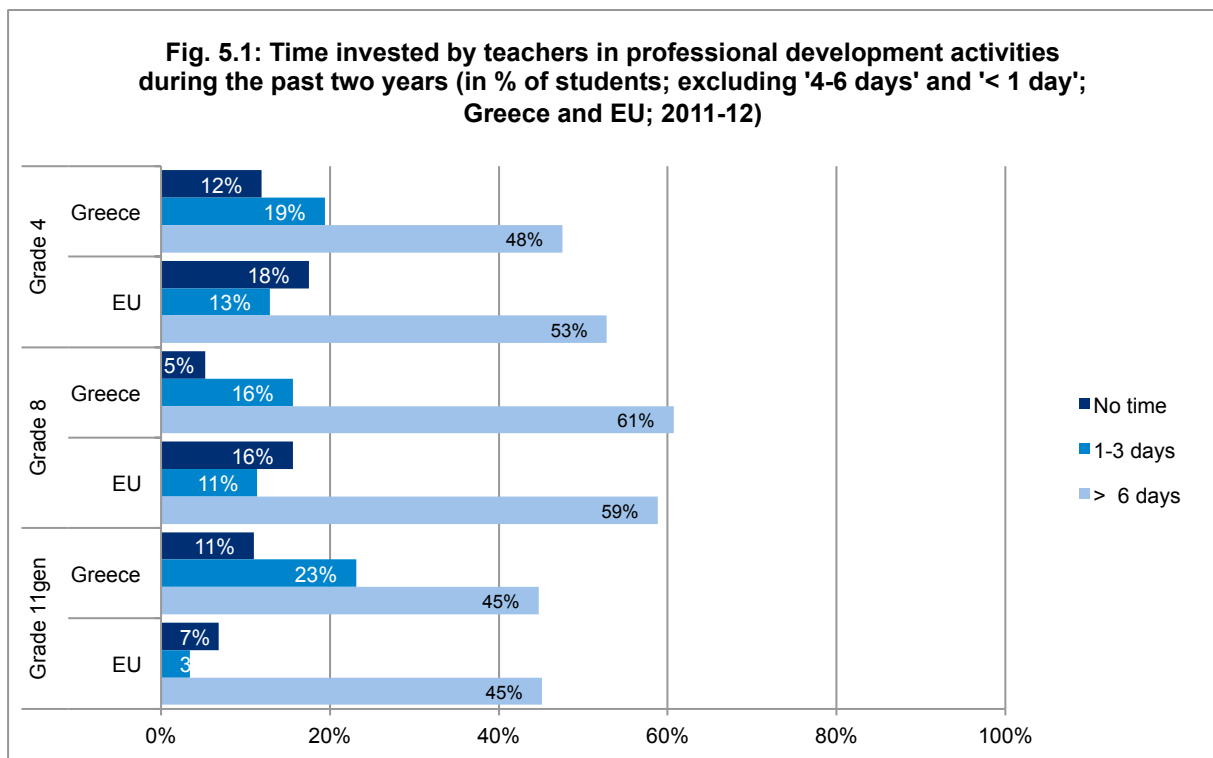
At grade 8 and grade 11 students in Greece rank among the bottom group of countries in terms of confidence to use the internet safely and to use it responsibly (main report, fig. 4.16, 4.17).

5. PROFESSIONAL DEVELOPMENT

TIME SPENT ON TRAINING

More students at grades 4 and 11 general in Greece are taught by teachers who have invested more than 6 days in professional development activities during the past two years, compared to the EU average, with other grades slightly below.

In Greece fewer students are in schools where teachers have spent between 1 and 3 days on ICT professional development activities than the EU mean at all grades. Those who have spent no time are above the EU mean at all grades except 11 vocational.



ENGAGEMENT IN TRAINING

As Fig. 5.2 below shows, in Greece considerably less than the EU average of students are in schools where teachers have recently undergone ICT training provided by school staff, at all grades except grade 11 vocational which is slightly above the EU level. Fewer students are in schools where teachers take part in training through online communities than the EU average except at grade 11 general which is at the EU average. More students are in schools where teachers have recently undergone personal learning than the EU average, except at grade 8 which is slightly below.

Fig. 5.2: Means through which teachers have engaged in ICT related professional development during the past two years

(by grade; in % of students; Greece and EU; 2011-12)

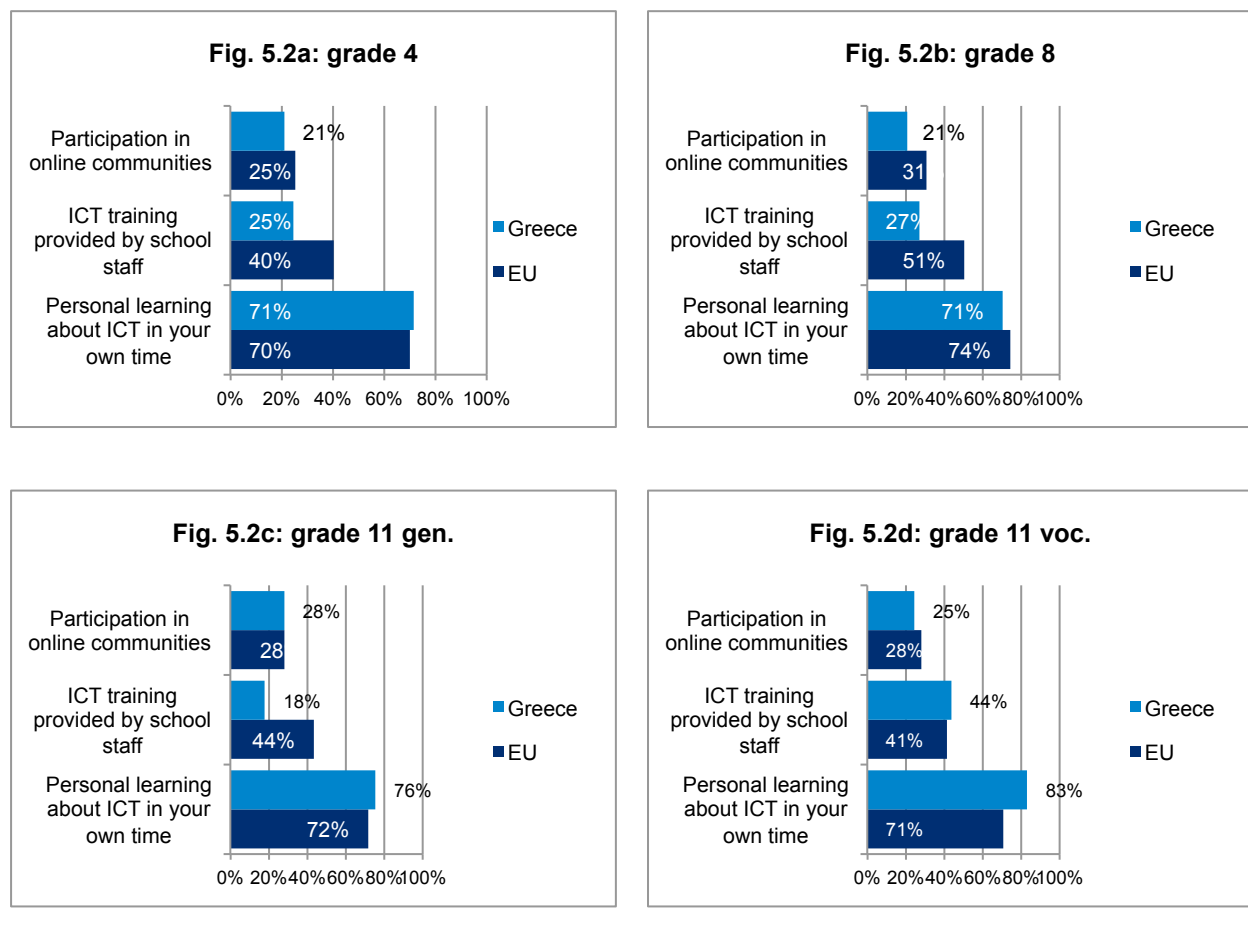
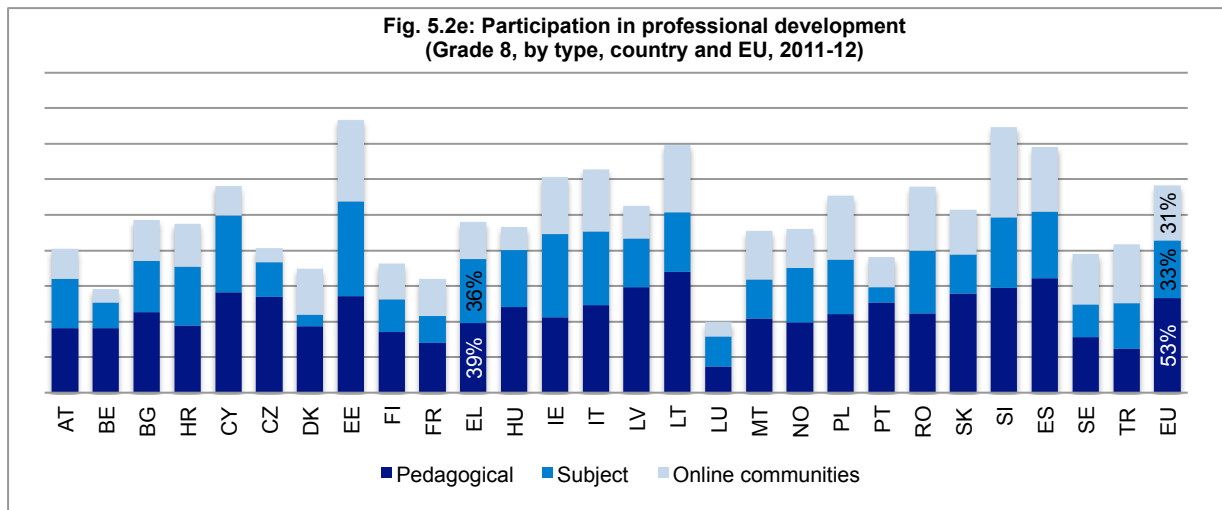


Fig. 5.2e shows that grade 8 teachers in Greece have had slightly more subject-specific ICT training than the EU average, but have taken part less in online communities or in pedagogical training than the EU mean. This pattern is repeated at all grades for each measure, Greece ranks among the middle group of countries at all grades for participation in online communities, except at grade 11 vocational where they are among the bottom group of countries, and is also in the bottom group of countries at grade 11 regarding pedagogical training, but is among the leading group of countries for subject-specific ICT training, ranked third highest at grade 11 (main report fig 4.6, 4.7, 4.8).



In Greece at grades 4 and at grade 11 general percentages of students taught by teachers for whom ICT training is compulsory are among the lowest in the EU (main report, fig. 4.2), and at other grades Greece ranks among the group of countries, although only at grade 11 general is this above the EU mean.

As regards involvement in personal learning about ICT in their own time (main report, fig. 4.4), percentages (in the range 70% to 83%) are above or close to the EU mean at all grades, with Greece among the leading group of countries at grade 11, and in the middle group at grade 4 and at grade 8.

The percentage of students taught by teachers participating in training provided by school staff is the lower group of countries at all grades, ranked in the bottom four at all grades, except at grade 11 vocational where Greece ranks among the middle group of countries (main report, fig. 4.5).

Between 7 and 18 per cent of students are taught by teachers who have not spent any time on ICT-related professional development activities during the preceding two years (main report, fig. 4.11); above the EU mean at all grades.

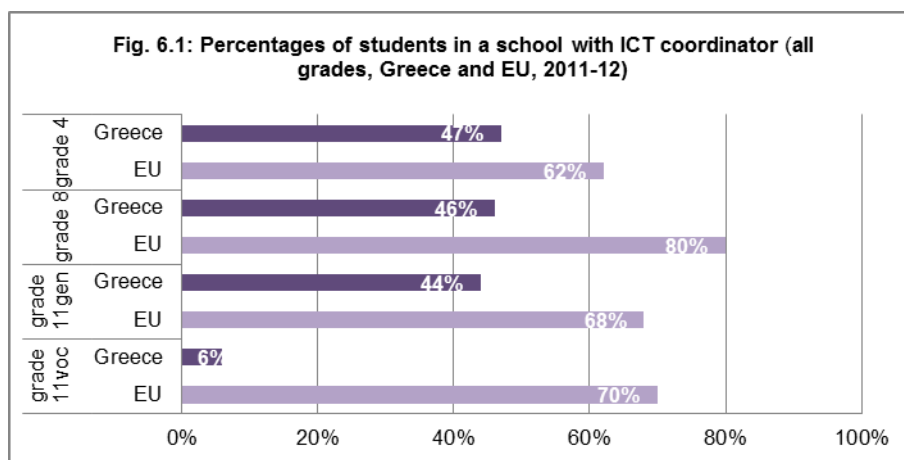
6. SCHOOL SUPPORT MEASURES

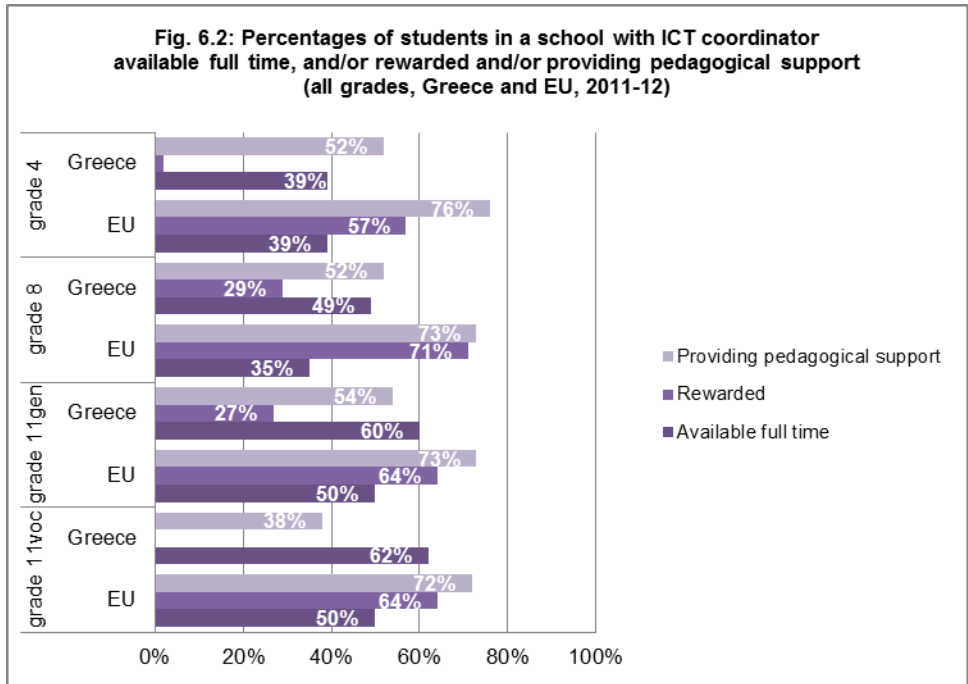
In general students in Greece are in schools where below EU averages of ICT strategies are implemented, among the bottom group of countries, but at grade 11 vocational Greece is among the leading group of countries, (main report, fig. 5.3). There are above average percentages of students in schools with strategies to support teacher collaboration at grade 4 with Greece among the leading group of countries, and among the middle group of countries at grade 8, and at grade 11 it ranks among the bottom group of countries, last at grade 11 vocational (main report, fig. 5.7). Greece is ranked among the top group of countries at grade 11 general, among the middle group of countries at grade 4 and at grade 8, and in the bottom two countries at grade 11 vocational, as regards strategies about responsible internet and social media use (main report, fig. 5.10).

Greece is among the bottom group of countries for percentages of students in schools with change management programmes at all grades (main report, fig. 5.14).

ICT COORDINATOR

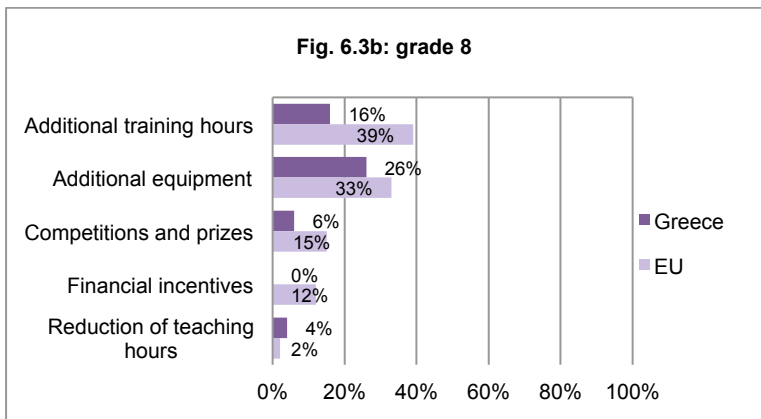
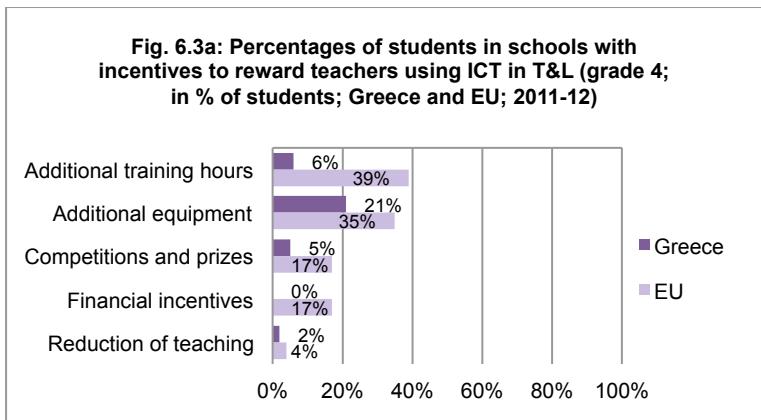
In Greece, compared to the situation at EU level (see Fig. 6.1), many more students are in schools where ICT coordinators are not provided, most notably at grade 11 vocational. Students are in schools that employ full time ICT coordinators at all grades, more than (or at grade 4 close to) the EU level. The ICT coordinators provide pedagogical support and well as ICT support but considerably below the EU level, particularly at grade 11 vocational.

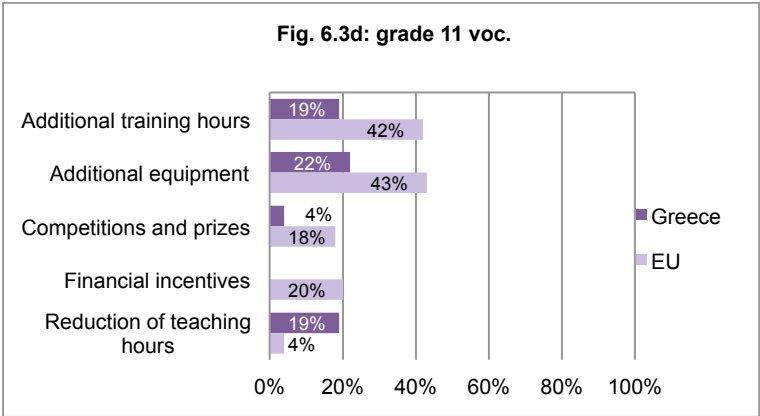
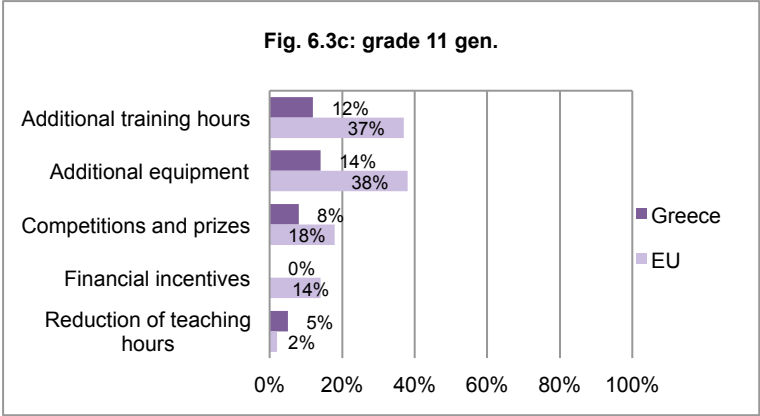




INCENTIVES

In Greece relatively few students are in schools where there is any form of incentive or reward for using ICT, least of financial, and is below the EU average at all grades, except for reduction in hours at grades 8 and 11.





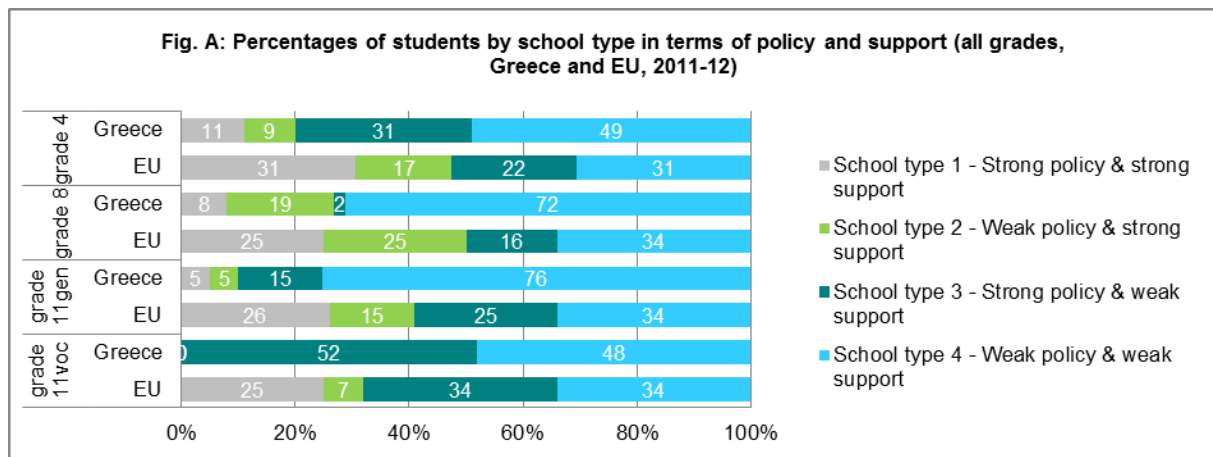
For further details please refer to Section 5 of the survey report.

7: CLUSTERS

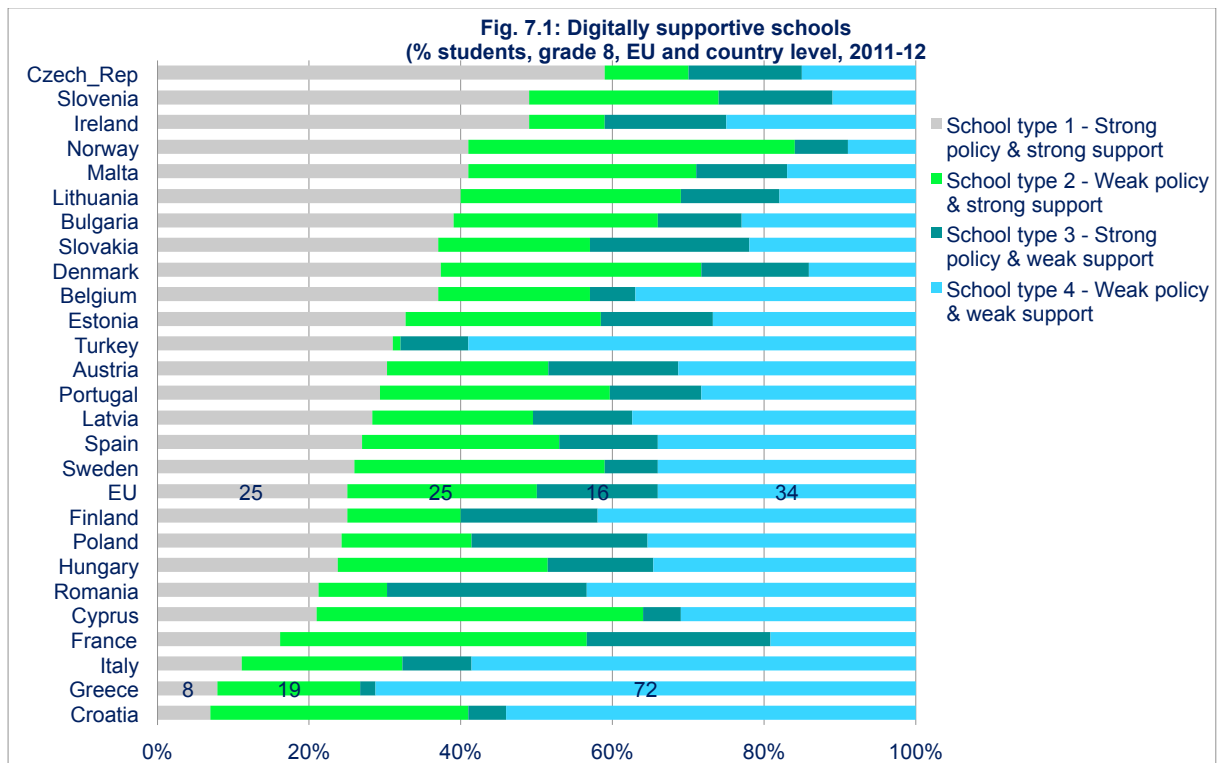
THE DIGITALLY SUPPORTIVE SCHOOL

Results from the Survey of Schools: ICT and Education suggest that a 'digitally supportive school' develops strong concrete support measures for teachers to use ICT in teaching and learning (ICT coordinator, teacher training, etc.), whether or not associated with strong policies (written statement about introducing ICT in teaching and learning and/or in subject, etc.).

In Greece, percentages of students in schools with strong support are well below EU averages.

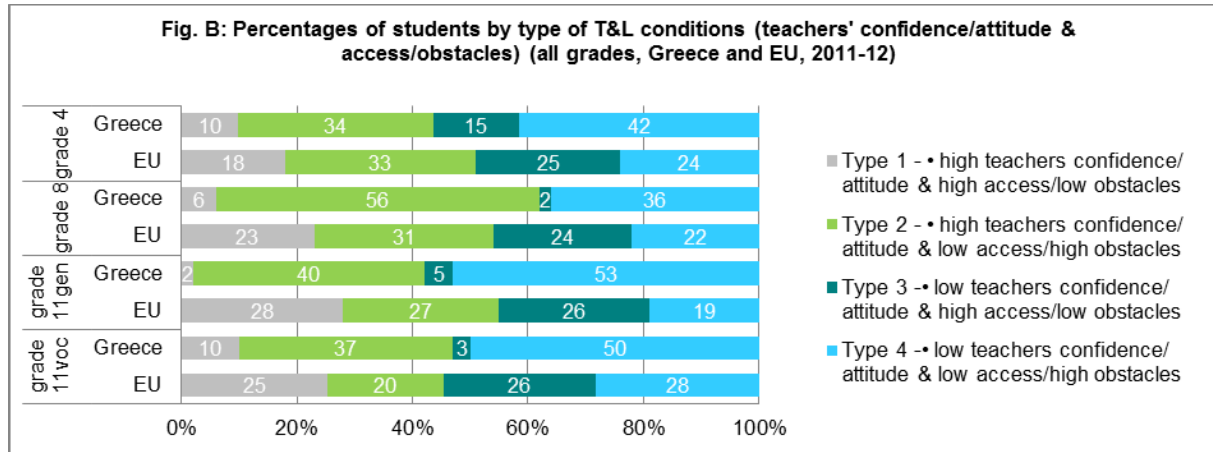


Greece ranks low compared to other countries considering schools with strong policy and strong support (type 1) and at all grades is among the bottom three countries on this measure significantly so at grade 11 vocational where this applies to all schools. (main report, fig. 8.1).

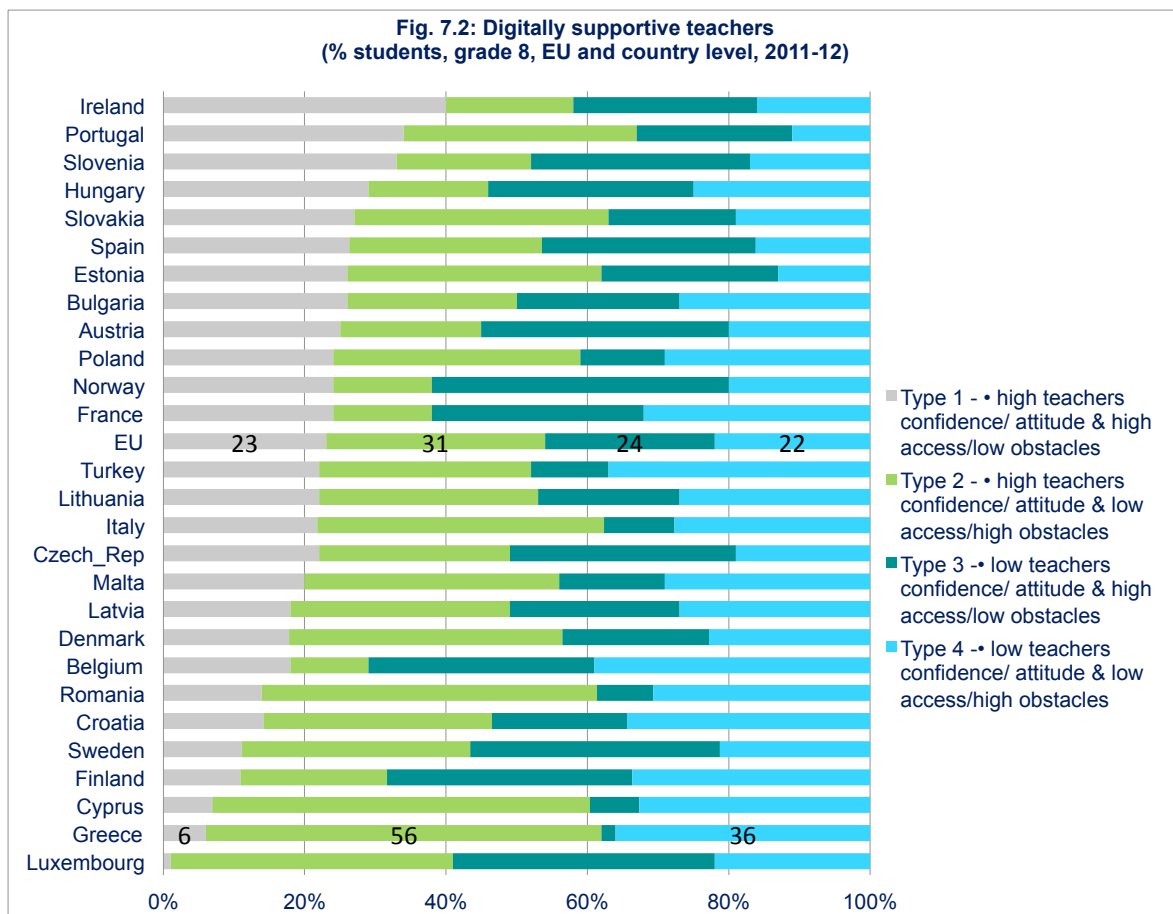


DIGITALLY CONFIDENT AND SUPPORTIVE TEACHERS

The concept of the 'digitally supportive teacher' also emerged from a close analysis of the data. Such teachers have high confidence in and a positive attitude towards ICT and high access to ICT and low obstacles to using it. Teachers having high confidence in and a positive attitude towards ICT even seem to be able to overcome low access to ICT and high obstacles. Percentages of students taught by *digitally supportive teachers* in Greece are also below EU averages, particularly at grade 11 general.

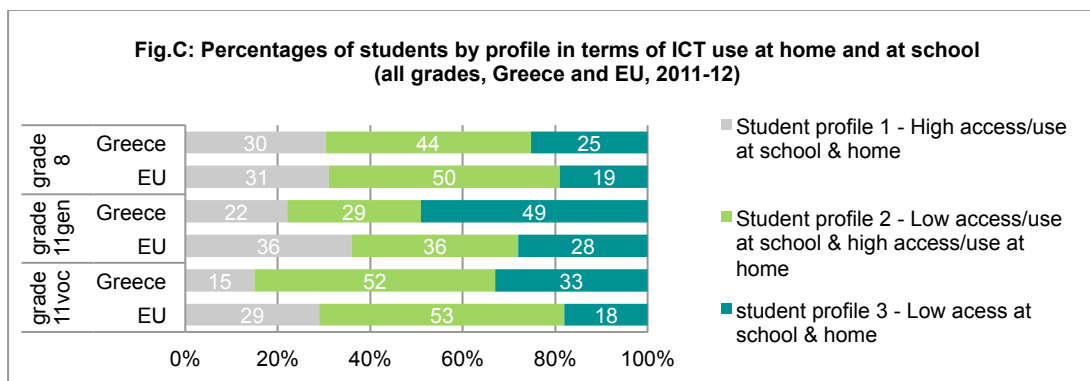


A low percentage of students at grade 8 compared to other countries is in schools with type 1 teachers (fig. 7.2), places Greece in the lowest group of countries on this indicator, however it has the highest percentage for type 2 teachers, placing Greece among the leading group of countries for high teacher confidence (i.e. type 1 and type 2). At all grades Greece ranks among the bottom group of countries regarding type 1 teachers, but has also some of the highest percentages compared to other countries of type 2 and type 4 teachers, ranking it among the leading group of countries with weak support/high obstacles (main report, fig. 8.3).



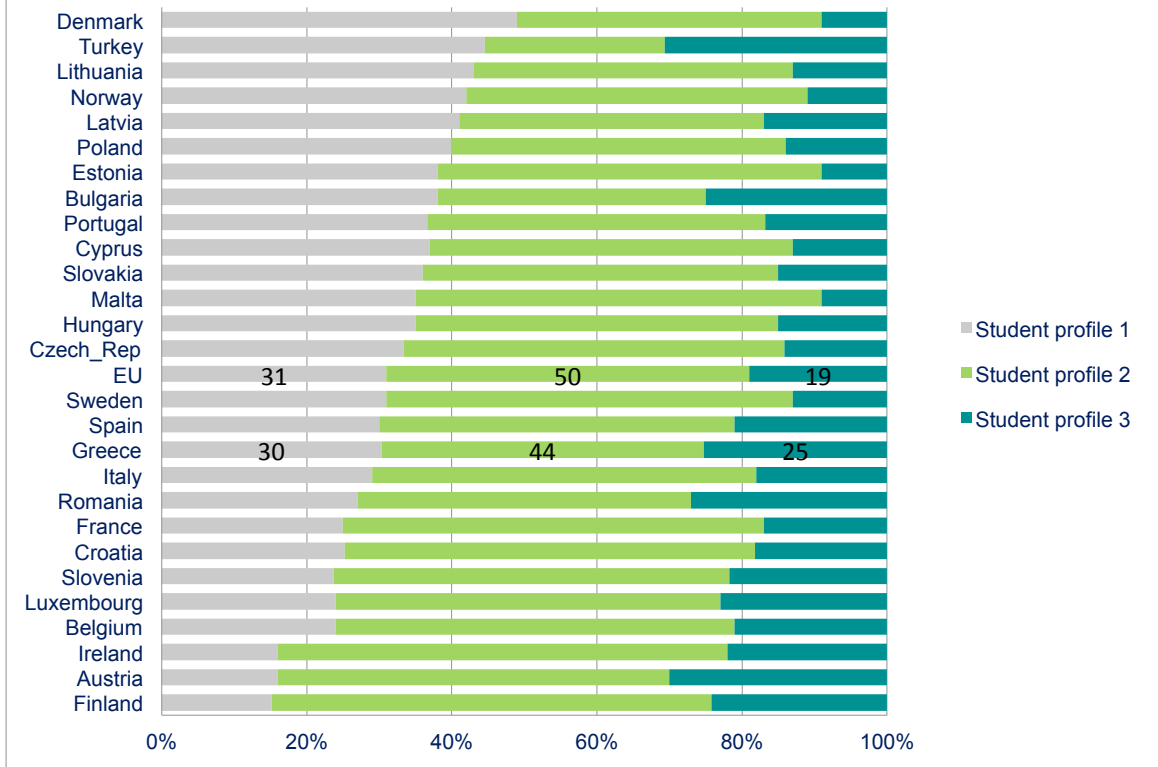
THE DIGITALLY SUPPORTIVE STUDENT

A *digitally supportive student* being defined as having high ICT access and use at school and at home, the percentages of such students in Greece at grade 8 is close to the EU average, but almost half of grade 11 general students are profile 3.



On this measure, percentages of type 1 grade 8 students are close to the average in Europe (fig. 7.3), but at grade 11 Greece is among the bottom group of countries of type one students, second from last (main report, fig. 8.5).

Fig.7.3: Digitally supportive students
 (% students, grade 8, EU and country level, 2011-12)



THE DIGITALLY EQUIPPED SCHOOL

A *digitally equipped school* is well equipped, has fast broadband (above 10mbps) and is ‘connected’ (i.e. has at least one of these: a website, email for teachers and students, a local area network, a virtual learning environment). Analysis of the data revealed three clusters of schools according to these measures:

- Type 1: Highly digitally equipped schools, characterised by relatively high equipment levels, fast broadband and relatively high connectedness
- Type 2: Partially digitally equipped schools, with lower than type 1 equipment levels, slow (less than 10mbps) or no broadband, and some connectedness
- Type 3: As type 2 but with no connectedness

In Greece, only 7 percent of grade 8 students are in type 1 schools, although the percentage is higher (but still below EU averages) at other grades.

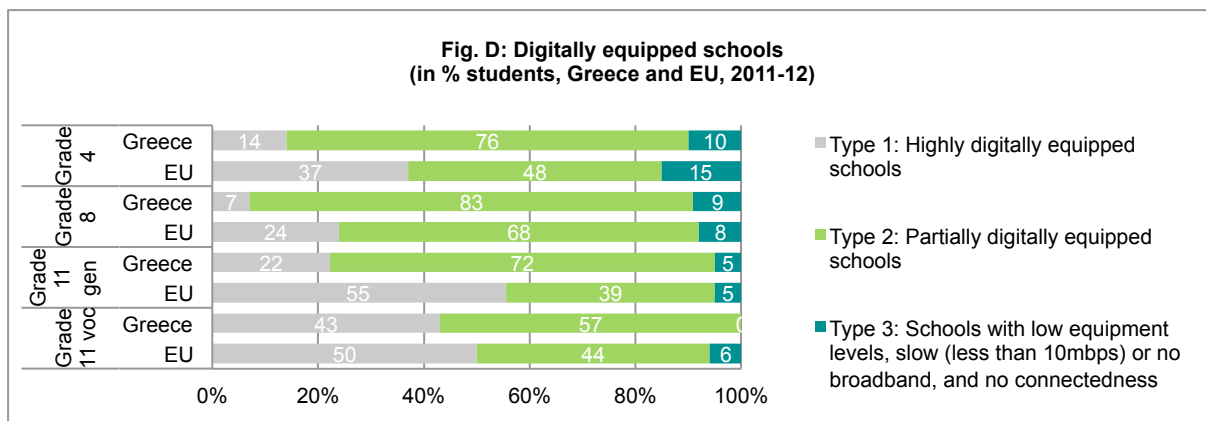
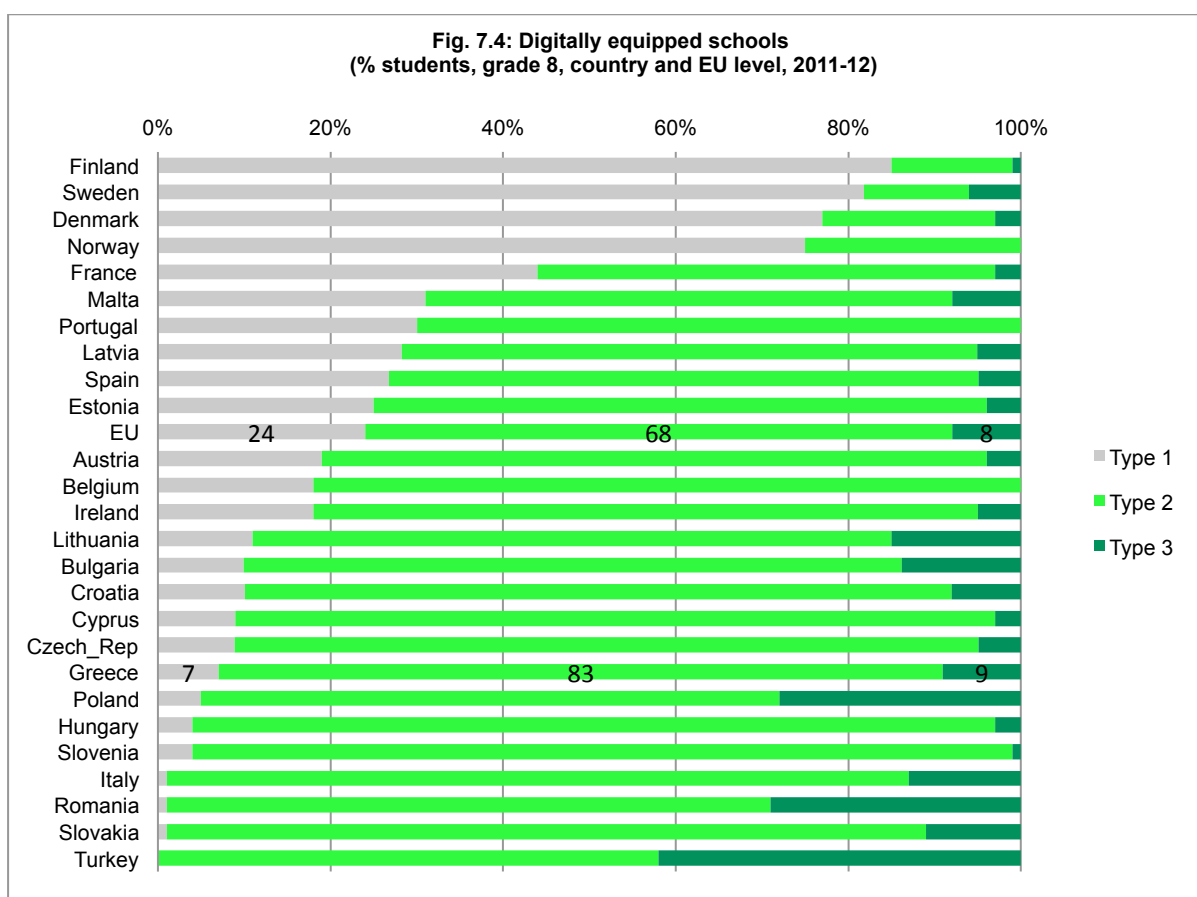


Fig. 7.4 shows how Greece compares against other countries at grade 8 on this measure, ranking among the bottom group of countries, with many students in type 2 schools compared to other countries. At other grades the situation is similar (main report, fig. 1.13), and at grade 11 vocational there is a higher percentage of students in type 1 schools and none in type 3 schools.



CONCLUSION

Students in Greece have relatively low levels of access to computers compared to other countries (unusually it is at grade 4 that the student to computer ratios are lowest). More positively, broadband provision and 'connectedness' are almost universal (bandwidth is generally lower than the EU average). Despite the infrastructure obstacles, encouragingly high percentages of students are in schools where teachers and students frequently use ICT. Both teachers' and students' confidence in their ICT skills is below EU means, and professional development in ICT is patchy, as is the presence of an ICT coordinator in school.

Analysis of the data in the *Survey of Schools: ICT and education* suggests a '5C approach' to addressing issues identified in the survey:

- **Capacity building**, through sustained investment in teachers' professional development
- **Concrete support measures**, accompanying specific policies at school level
- **Combined policies and actions**, in different policy areas within a systemic approach
- **Country-specific support**, addressing large differences and degrees of ICT provision and implementation
- **Competence development**: these four actions directed at increasing effectively and dramatically young people's digital competence and the key competences described in the European framework.

ANNEX

TABLES

Note: For reasons of space, only selected country-EU data tables are shown here; those for all-country charts (e.g. fig. 2.2) are available online. SE = Standard Error.

Fig. 2.1
Computers per 100 students

COUNTRY	Grade4	SE1	Grade8	SE2	Grade11gen	SE3	Grade11voc	SE4
Greece	6.2	(0.5)	4.8	(0.4)	5.8	(0.5)	5.9	(2.2)
EU	14.5	(0.7)	21.1	(1.2)	23.2	(7.7)	33.6	(10.6)

Fig. 2.3
Broadband speed

Level	COUNTRY	NoBroadband	SE1	LessThan2	SE2	From2to5	SE3	From5to10	SE4	From10to30
1. Grade4	Greece	5.2%	(2.7)	40.7%	(5.7)	17.4%	(4.1)	14.6%	(4.1)	17.0%
	EU	8.0%	(1.3)	16.5%	(2.3)	21.4%	(2.4)	22.1%	(2.2)	19.5%
2. Grade8	Greece	2.0%	(1.4)	24.0%	(4.9)	29.1%	(5.5)	13.0%	(3.9)	28.2%
	EU	5.0%	(0.8)	9.6%	(1.3)	19.1%	(2.3)	27.7%	(2.4)	24.8%
3. Grade11gen	Greece	4.7%	(2.0)	28.0%	(4.5)	32.9%	(4.8)	14.8%	(3.5)	18.2%
	EU	3.7%	(1.3)	6.2%	(0.8)	18.0%	(2.8)	23.2%	(3.0)	25.4%
4. Grade11voc	Greece	5.4%	(2.4)	13.5%	(9.5)	25.0%	(13.2)	49.7%	(22.8)	6.4%
	EU	6.5%	(1.8)	6.2%	(1.3)	15.2%	(3.0)	21.2%	(2.6)	24.2%

SE5	From30to100	SE6	MoreThan100	SE7
(4.5)	5.0%	(2.7)	0.0%	(0.0)
(2.2)	8.6%	(1.4)	4.0%	(1.3)
(5.3)	1.0%	(0.1)	2.7%	(2.0)
(2.3)	8.6%	(1.6)	5.2%	(1.2)
(3.9)	1.4%	(1.0)	0.0%	(0.0)
(3.9)	13.3%	(2.6)	10.3%	(8.0)
(5.4)	0.0%	(0.0)	0.0%	(0.0)
(4.6)	15.7%	(7.1)	10.9%	(5.3)

Fig. 2.5
Connectedness

Level	COUNTRY	SchWebsite	SE1	VLE	SE2	NoConnect	SE3
1. Grade4	Greece	53.6%	(5.8)	8.4%	(3.5)	11.6%	(3.8)
	EU	69.7%	(3.6)	26.8%	(2.0)	15.9%	(2.2)
2. Grade8	Greece	63.0%	(5.9)	25.5%	(5.5)	6.2%	(3.1)

Level	COUNTRY	SchWebsite	SE1	VLE	SE2	NoConnect	SE3
	EU	86.0%	(1.6)	61.4%	(3.0)	8.4%	(1.2)
3. Grade11gen	Greece	74.7%	(4.3)	25.0%	(4.7)	6.2%	(2.8)
	EU	91.7%	(3.1)	61.0%	(7.9)	7.0%	(2.9)
4. Grade11voc	Greece	97.3%	(3.1)	18.5%	(13.0)	0.0%	(0.0)
	EU	93.1%	(1.8)	63.5%	(4.7)	5.8%	(1.6)

Fig. 3.1
ICT equip use by teachers

Level	COUNTRY	MoreThan75	SE1	From51to75	SE2	From25to50	SE3	From11to24	SE4	From6to10	SE5
1. Grade4	Greece	7.9%	(3.1)	8.6%	(3.2)	23.0%	(5.1)	14.4%	(3.8)	13.4%	(3.8)
	EU	3.0%	(0.4)	10.0%	(2.4)	13.9%	(1.4)	18.0%	(1.8)	19.1%	(2.1)
2. Grade8	Greece	7.2%	(1.7)	7.3%	(1.6)	19.4%	(2.8)	14.4%	(2.3)	18.3%	(3.7)
	EU	7.4%	(1.0)	6.8%	(0.8)	14.7%	(0.9)	20.7%	(1.2)	18.9%	(1.4)
3. Grade11gen	Greece	8.4%	(1.9)	8.2%	(1.8)	18.4%	(2.4)	20.7%	(2.5)	16.2%	(2.2)
	EU	7.0%	(1.0)	8.1%	(1.4)	14.9%	(1.4)	22.9%	(3.8)	17.1%	(1.8)
4. Grade11voc	Greece	14.2%	(7.0)	12.1%	(7.2)	39.2%	(19.8)	13.7%	(6.4)	8.1%	(6.3)
	EU	19.3%	(1.4)	12.1%	(1.2)	16.8%	(1.0)	19.3%	(2.8)	13.2%	(1.3)

From1to5	SE6	LessThan1	SE7	DontKnow	SE8
5.0%	(2.2)	19.2%	(4.7)	8.4%	(3.1)
20.7%	(2.7)	8.7%	(1.4)	6.7%	(1.4)
15.4%	(3.7)	14.8%	(2.7)	3.2%	(1.2)
14.4%	(1.0)	11.0%	(1.0)	6.1%	(0.8)
14.7%	(2.5)	6.9%	(1.4)	6.3%	(1.8)
14.0%	(1.5)	10.3%	(1.4)	5.7%	(0.9)
2.9%	(2.0)	2.3%	(1.9)	7.6%	(7.1)
9.0%	(1.5)	6.8%	(1.1)	3.5%	(0.5)

Fig. 3.2
Frequency of ICT use by teachers

COUNTRY	Grade4	SE1	Grade8	SE2	Grade11gen	SE3	Grade11voc	SE4
Greece	43.2%	(6.0)	35.0%	(3.8)	37.5%	(2.9)	70.8%	(13.8)
EU	28.8%	(2.6)	32.0%	(1.6)	31.8%	(1.8)	49.9%	(2.1)

Fig. 3.3
Using ICT equipment

Level	Country	OwnMobPhone	SE1	OwnLaptop	SE2	SchoolComputer	SE3
1. Grade8	Greece	27.6	(1.8)	11.7	(1.6)	64.1	(2.2)
	EU	28.0	(0.8)	11.2	(0.7)	53.3	(1.1)
2. Grade11gen	Greece	28.9	(1.3)	6.7	(0.7)	42.8	(1.5)

Level	Country	OwnMobPhone	SE1	OwnLaptop	SE2	SchoolComputer	SE3
	EU	34.6	(1.3)	10.7	(1.1)	50.5	(1.5)
3. Grade11voc	Greece	40.6	(8.6)	10.2	(2.3)	49.6	(11.8)
	EU	45.6	(1.3)	15.5	(0.7)	64.3	(1.5)

Fig. 3.4
Scale Use of ICT activities

Country	Grade8	SE1	Grade11gen	SE2	Grade11voc	SE3
Greece	1.63	(0.02)	1.51	(0.02)	1.45	(0.05)
EU	1.63	(0.01)	1.65	(0.03)	1.62	(0.04)

Fig. 4.1
Scales Teachers ICT skills

Level	COUNTRY	SocialMediaSkills	SE1	OperatSkills	SE2
1. Grade4	Greece	2.05	(0.11)	2.86	(0.08)
	EU	2.41	(0.03)	2.98	(0.02)
2. Grade8	Greece	2.15	(0.09)	2.93	(0.06)
	EU	2.37	(0.04)	3.00	(0.03)
3. Grade11gen	Greece	2.30	(0.06)	2.95	(0.05)
	EU	2.38	(0.07)	3.01	(0.03)
4. Grade11voc	Greece	2.27	(0.34)	3.13	(0.14)
	EU	2.51	(0.03)	3.16	(0.02)

Fig. 4.2
Scales Students ICT skills

Level	country	SocialMediaSkills	SE1	OperatSkills	SE2	RespInternUse	SE3	SafelInternUse	SE4
1. Grade8	Greece	2.22	(0.04)	2.45	(0.04)	2.51	(0.04)	2.67	(0.04)
	EU	2.41	(0.02)	2.63	(0.02)	2.58	(0.02)	2.98	(0.02)
2. Grade11gen	Greece	2.33	(0.03)	2.56	(0.02)	2.67	(0.03)	2.84	(0.03)
	EU	2.78	(0.02)	2.88	(0.01)	2.93	(0.03)	3.16	(0.02)
3. Grade11voc	Greece	2.37	(0.14)	2.50	(0.09)	2.51	(0.08)	2.58	(0.07)
	EU	2.55	(0.02)	2.78	(0.02)	2.75	(0.02)	2.98	(0.02)

Fig. 5.1
Time in professional development

Level	COUNTRY	MoreThan6	SE1	From1to3	SE2	NoTime	SE3
1. Grade4	Greece	65.8%	(5.3)	8.0%	(3.0)	14.2%	(3.9)
	EU	47.5%	(4.2)	19.4%	(3.0)	11.9%	(2.4)
2. Grade8	Greece	52.8%	(4.2)	12.9%	(2.2)	17.5%	(2.9)
	EU	60.7%	(1.6)	15.6%	(1.0)	5.2%	(0.5)
3. Grade11gen	Greece	58.8%	(2.9)	11.4%	(2.1)	15.6%	(2.2)
	EU	44.7%	(5.2)	23.1%	(3.4)	11.0%	(1.6)
4. Grade11voc	Greece	45.1%	(15.8)	3.4%	(2.9)	6.8%	(4.5)

Level	COUNTRY	MoreThan6	SE1	From1to3	SE2	NoTime	SE3
	EU	49.4%	(3.2)	20.5%	(3.0)	9.7%	(1.6)

Fig. 5.2
Type of training

Level	COUNTRY	OnlineComm	SE1	ICTtraining	SE2	PersonalLearning	SE3
1. Grade4	Greece	21.0%	(4.6)	24.5%	(5.0)	71.4%	(5.1)
	EU	25.4%	(2.5)	40.3%	(3.2)	70.0%	(2.8)
2. Grade8	Greece	20.9%	(2.9)	27.0%	(4.5)	70.5%	(3.8)
	EU	30.8%	(1.6)	50.5%	(1.7)	74.2%	(1.3)
3. Grade11gen	Greece	28.0%	(2.8)	17.9%	(2.6)	75.5%	(2.9)
	EU	28.0%	(2.4)	43.5%	(2.2)	71.7%	(2.2)
4. Grade11voc	Greece	24.5%	(10.3)	43.8%	(21.6)	83.1%	(8.7)
	EU	28.2%	(1.5)	41.4%	(3.6)	70.8%	(1.5)

Fig. 6.1
ICT Coordinator

COUNTRY	Grade4	SE1	Grade8	SE2	Grade11gen	SE3	Grade11voc	SE4
Greece	46.6%	(5.7)	46.2%	(5.9)	43.5%	(4.9)	6.3%	(5.4)
EU	62.0%	(3.6)	79.6%	(1.9)	67.7%	(4.8)	69.7%	(3.5)

Fig. 6.2
Type of ICT coordinator

Level	COUNTRY	AvailFullTime	SE1	Rewarded	SE2	ProvPedSupport	SE3
1. Grade4	Greece	38.5%	(8.3)	1.6%	(0.3)	52.1%	(8.9)
	EU	39.3%	(3.0)	56.5%	(3.0)	75.9%	(2.3)
2. Grade8	Greece	48.7%	(9.0)	28.5%	(8.0)	51.5%	(8.7)
	EU	34.8%	(2.9)	70.6%	(2.4)	72.5%	(2.5)
3. Grade11gen	Greece	60.1%	(7.5)	27.3%	(6.8)	54.1%	(7.5)
	EU	49.6%	(6.9)	63.6%	(7.7)	73.4%	(4.2)
4. Grade11voc	Greece	62.1%	(39.0)	0.0%	(0.0)	37.9%	(63.9)
	EU	49.7%	(3.3)	63.6%	(4.6)	71.5%	(3.9)

Fig. 6.3
Incentives

Level	COUNTRY	TrainingHours	SE1	Equipment	SE2	Competitions	SE3	FinancialInc	SE4	ReductionHours	SE5	Other	SE6
1. Grade4	Greece	5.6%	(3.0)	20.8%	(4.7)	5.4%	(2.3)	0.0%	(0.0)	2.1%	(1.3)	11.4%	(4.5)
	EU	30.1%	(4.5)	26.6%	(3.8)	12.9%	(2.4)	13.0%	(2.1)	2.9%	(0.6)	12.8%	(2.3)
2. Grade8	Greece	16.1%	(4.5)	26.3%	(5.3)	5.7%	(2.4)	0.0%	(0.0)	4.4%	(2.2)	15.7%	(4.9)
	EU	34.1%	(2.6)	33.6%	(1.9)	13.3%	(1.6)	10.0%	(1.0)	1.5%	(0.4)	14.8%	(1.8)
3. Grade11gen	Greece	12.3%	(3.3)	14.2%	(3.4)	7.6%	(2.4)	0.0%	(0.0)	4.6%	(2.1)	6.5%	(2.9)
	EU	36.9%	(9.1)	37.7%	(3.5)	17.6%	(4.4)	14.3%	(2.8)	1.7%	(0.7)	15.3%	(5.0)
4. Grade11voc	Greece	18.6%	(7.2)	22.1%	(20.4)	3.9%	(1.8)	0.0%	(0.0)	18.6%	(7.2)	5.5%	(2.0)

Level	COUNTRY	TrainingHours	SE1	Equipment	SE2	Competitions	SE3	FinancialInc	SE4	ReductionHours	SE5	Other	SE6
	EU	41.6%	(8.1)	43.4%	(7.7)	17.8%	(4.2)	19.4%	(4.9)	4.3%	(1.3)	18.7%	(4.5)

Fig. A
Digitally supportive schools

Level	COUNTRY	Type1	SE1	Type2	SE2	Type3	SE3	Type4	SE4
1. Grade4	Greece	11	(3.54)	9	(2.73)	31	(5.57)	49	(5.68)
	EU	31	(2.70)	17	(3.17)	22	(2.53)	31	(2.98)
2. Grade8	Greece	8	(3.00)	19	(4.45)	2	(1.30)	72	(5.16)
	EU	25	(1.91)	25	(2.20)	16	(1.83)	34	(2.15)
3. Grade11gen	Greece	5	(2.21)	5	(1.92)	15	(3.61)	76	(4.29)
	EU	26	(2.28)	15	(8.69)	25	(3.74)	34	(5.30)
4. Grade11voc	Greece	0	(0.0)	0	(0.0)	52	(22.05)	48	(22.05)
	EU	25	(3.12)	7	(2.21)	34	(7.50)	34	(8.58)

Fig. B
Digitally supportive teachers

Level	COUNTRY	Type1	SE1	Type2	SE2	Type3	SE3	Type4	SE4
1. Grade4	Greece	10	(3.37)	34	(5.44)	15	(4.36)	42	(5.63)
	EU	18	(2.02)	33	(2.95)	25	(2.33)	24	(2.64)
2. Grade8	Greece	6	(1.86)	56	(3.87)	2	(0.89)	36	(3.78)
	EU	23	(1.43)	31	(1.27)	24	(1.52)	22	(1.17)
3. Grade11gen	Greece	2	(0.74)	40	(3.16)	5	(1.43)	53	(3.15)
	EU	28	(2.41)	27	(2.68)	26	(1.65)	19	(1.67)
4. Grade11voc	Greece	10	(6.85)	37	(13.93)	3	(1.25)	50	(19.54)
	EU	25	(1.49)	20	(2.69)	26	(2.83)	28	(1.67)

Fig. C
Digitally supportive students

Level	COUNTRY	Type1	SE1	Type2	SE2	Type3	SE3
1. Grade8	Greece	30	(2.83)	44	(2.16)	25	(1.84)
	EU	31	(1.00)	50	(0.85)	19	(0.67)
2. Grade11gen	Greece	22	(1.23)	29	(1.38)	49	(1.65)
	EU	36	(1.18)	36	(1.00)	28	(1.47)
3. Grade11voc	Greece	15	(2.47)	52	(5.41)	33	(5.31)
	EU	29	(1.60)	53	(1.03)	18	(1.37)

Fig. D
Digitally equipped Schools

Level	COUNTRY	Type1	SE1	Type2	SE2	Type3	SE3
1. Grade4	Greece	14	(4.02)	76	(4.77)	10	(3.12)
	EU	37	(4.43)	48	(4.15)	15	(2.12)

Level	COUNTRY	Type1	SE1	Type2	SE2	Type3	SE3
2. Grade8	Greece	83	(4.51)	7	(2.63)	9	(3.93)
	EU	68	(2.87)	24	(3.31)	8	(1.16)
3. Grade11gen	Greece	22	(4.12)	72	(4.48)	5	(2.42)
	EU	55	(12.27)	39	(10.34)	5	(2.06)
4. Grade11voc	Greece	0	(0.0)	43	(21.87)	57	(21.87)
	EU	6	(1.88)	50	(13.83)	44	(12.07)

NOTES

EU mean. In this report, 'EU mean' refers to the weighted average for the 27 countries in the survey (EU27 without Germany, Netherlands and the United Kingdom, Croatia, Norway and Turkey).

Confidence. Teachers and students were asked to rate their level of confidence in their ability to perform ICT related tasks according to a scale ranging from 'not at all' to 'a lot'. By subjecting the data to factor analysis four scales emerged from the list of items. These included operational skills and social media skills and two additional scales related to students' ability to use the internet safely and responsibly. For a detailed definition of these skills, please refer to section 4 of the survey report.

Participation. For the Survey of Schools: ICT and Education, 300 schools in Greece were selected at random at each of four levels (grade 4, 8, 11 general and 11 vocational) and invited to participate in the survey. Fig. 8.1 shows the percentage of those schools in which at least one survey questionnaire was submitted, the EU average ranging from 35 to 40 percent depending on the grade. In Greece participation levels are well above the 20% threshold except at grade 11 vocational; therefore at this grade the results should be interpreted with caution.

