



University of Liege
Psychology and
Education

SURVEY OF SCHOOLS: ICT IN EDUCATION

COUNTRY PROFILE: CYPRUS

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1. INTRODUCTION

ICT IN THE SCHOOL EDUCATION SYSTEM OF CYPRUS

In Cyprus¹ the education system is centrally managed by the ministry of Education and Culture. Local School Boards are responsible for the maintenance and equipment of the school buildings in collaboration with the Ministry of Education and Culture. Public education at all levels is mainly financed by the government, either directly or through allotments to local authorities or Local School Boards. At the beginning of every school year methodological instructions for the various subjects of the curriculum are usually given out to teachers as part of seminars facilitated by the inspectors of each subject. The National Curriculum for public primary schools is determined by the Council of Ministers upon suggestions by the Ministry of Education and Culture. The Curriculum Development Unit of the Pedagogical Institute of Cyprus is responsible for the preparation of books and audio-visual material that teachers and pupils use during lessons. All textbooks, materials and teaching aids are provided to schools and pupils free of charge. Public schools are not free to decide either on the content of the curriculum, the textbooks used, appointment of the teaching staff or raising and managing money for the school.

According to Eurydice's *Key Data on Learning and Innovation through ICT at school in Europe*², in Cyprus there are national strategies covering training³ measures in the areas of ICT in schools, and training and research projects in the area of digital/media literacy. There are central steering documents for ICT learning objectives⁴ at primary and secondary education level for using a computer, using office applications, and searching for information, and at secondary level only for all other areas except for using mobile devices. In primary and secondary schools ICT is taught as a separate subject, while at primary it is also included within technology as a subject, and as general tool for other subjects/or as a tool for specific tasks in other subjects. At primary and secondary education level recommendations or suggestions and support are provided on all areas of ICT software⁵ and for the ICT hardware areas, of computers, projectors or beamers, DVDs, videos, TV, cameras, and smartboards, as well as recommendations or suggestions on virtual learning environments. According to official steering documents, both students and teachers at primary and secondary level are expected to use ICT in all subjects, both in class and for complementary activities, except for in natural sciences, social sciences and the arts at primary education level, where students are only expected to use ICT in class. There are no central recommendations on the use of ICT in student assessment. Public-private partnerships for promoting the use of ICT are encouraged for providing extra-curricular activities and curriculum development.

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 ^{iv} 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

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.

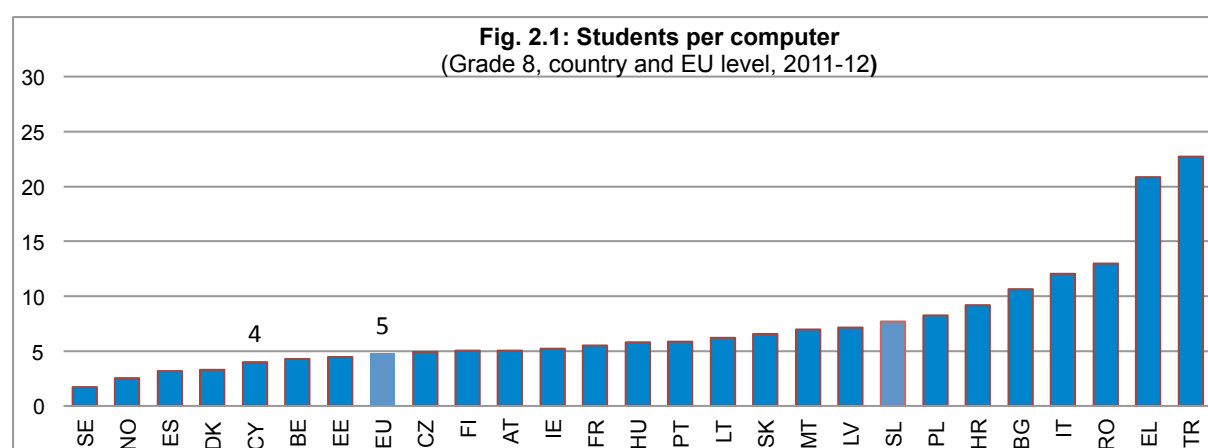
The full report, country profiles, background information, questionnaires, tables, details of the methodology and the raw data are freely available at <https://ec.europa.eu/digital-agenda/en/pillar-6-enhancing-digital-literacy-skills-and-inclusion>. The authors may be contacted at essie-eu@eun.org and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

⁶ www.ec.europa.eu/dgs/connect/

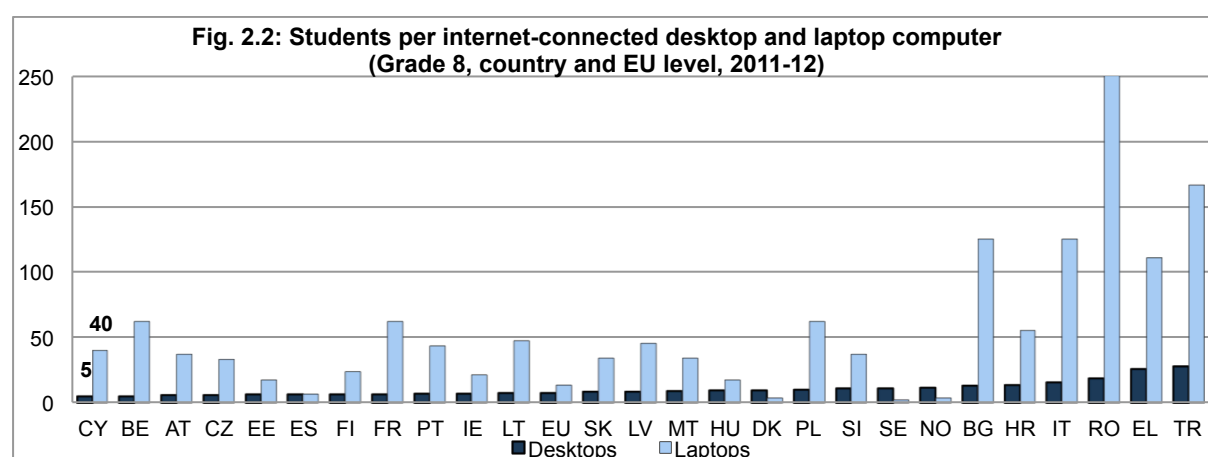
2. ICT INFRASTRUCTURE

AVAILABILITY OF COMPUTERS FOR EDUCATIONAL PURPOSES

In Cyprus there are more computers (desktop, laptop, whether or not connected to the internet) available for students at all grades than the EU average, except grade 4 which is close to the average (fig. 1.1 main report). In most countries the older the student the more the computers, and this trend is reflected in Cyprus at grade 11 vocational, where there are notably more. Fig. 2.1 shows that at grade 8 Cyprus ranks fifth on this indicator with 4 students per computer.



In Cyprus there are among the lowest ratios in Europe of students to internet-connected desktop computers at most grades and particularly at grade 11 vocational. However, the student to laptop ratio is above the EU average at all grades. At grade 8 (fig. 2.1) there are fewer students per desktop computer than in any other country but on student to laptop ratio Cyprus ranks 14th.



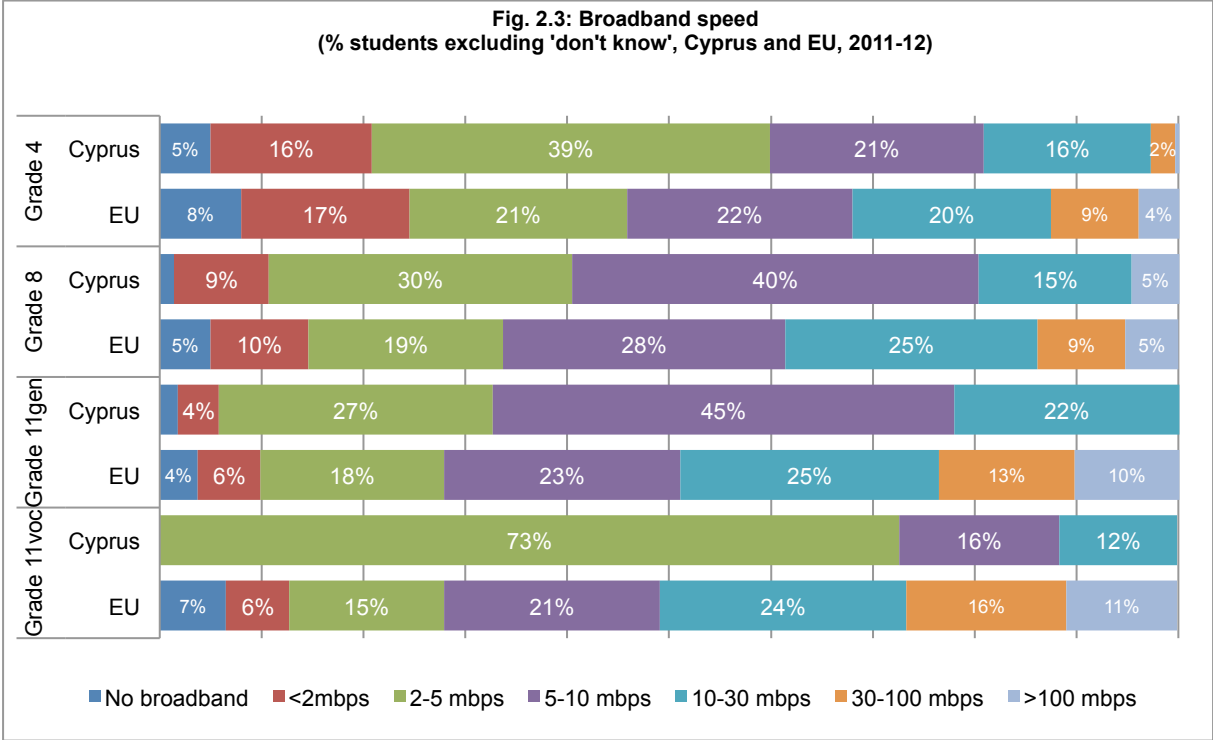
The higher the percentage of students from low-income families in a school, the more online desktop computers tend to be available in vocational schools in Cyprus (main report, section 1). Computers are divided almost equally between dedicated labs and classroom at grade 4 and 11 vocational but tend to be in labs at grade 8 and 11 general (main report, fig. 1.3). Cyprus is close to the EU average of 75 % of students in schools where over 90% of computers are operational (main report, fig. 1.4).

With on average 71 students per interactive whiteboard at grade 4, Cyprus ranks ninth, but is lower at other grades (main report, fig. 1.5). Cyprus has lowest ratio (19:1) of students per data projector of any country in Europe at grade 4, and second lowest at grade 11 vocational (13:1, main report, fig. 1.6).

Maintenance of ICT equipment is very much a task for school personnel, but there is more involvement of commercial companies than in other countries.

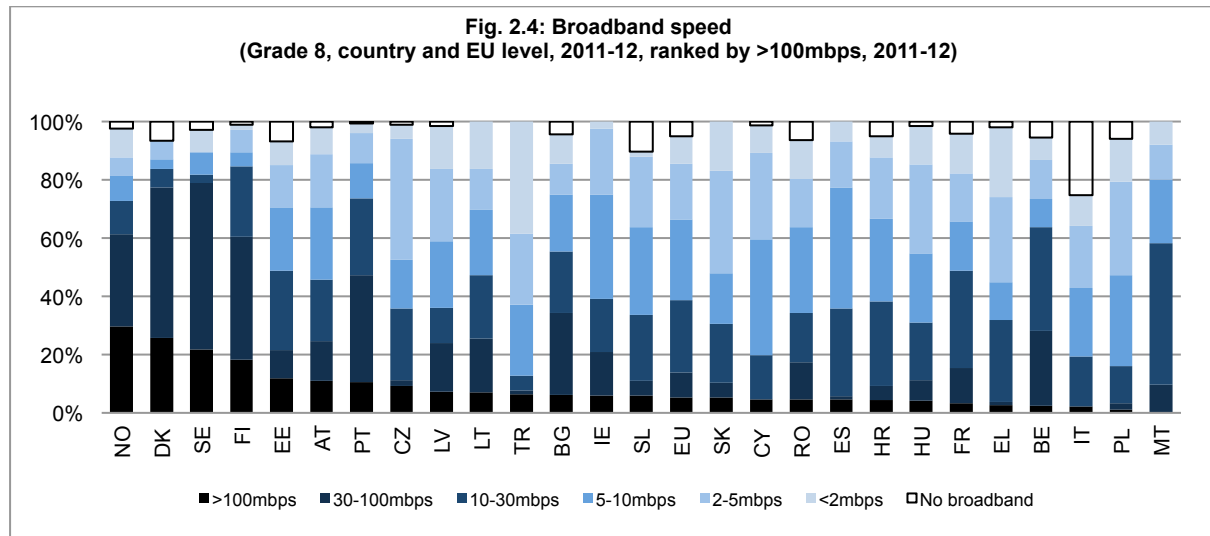
BROADBAND

In Cyprus, at all grades, the percentages of students in schools with broadband speeds faster than 10mbps is lower than the EU mean (fig. 2.3), notably at grade 11 vocational where the majority of students are in schools with speeds of less than 5mbps. Percentages of students in schools without broadband are around the EU average at all grades, with none at grade 11 vocational.



High numbers of students are in schools with ADSL broadband connectivity in Cyprus (over 85%), but speed in most schools is relatively slow compared to other countries, most students being in schools with under 5mbps, particularly at grade 4 (main report, fig. 1.8).

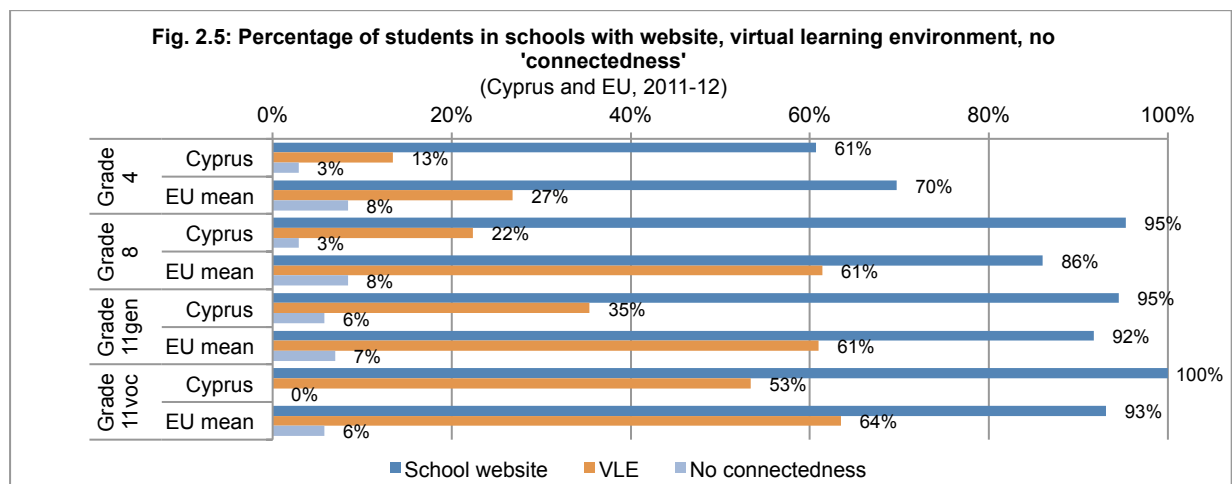
Fig. 2.4 shows how Cyprus compares with other countries at grade 8: a low percentage of students in schools with no broadband but most in schools with under 10mbps.



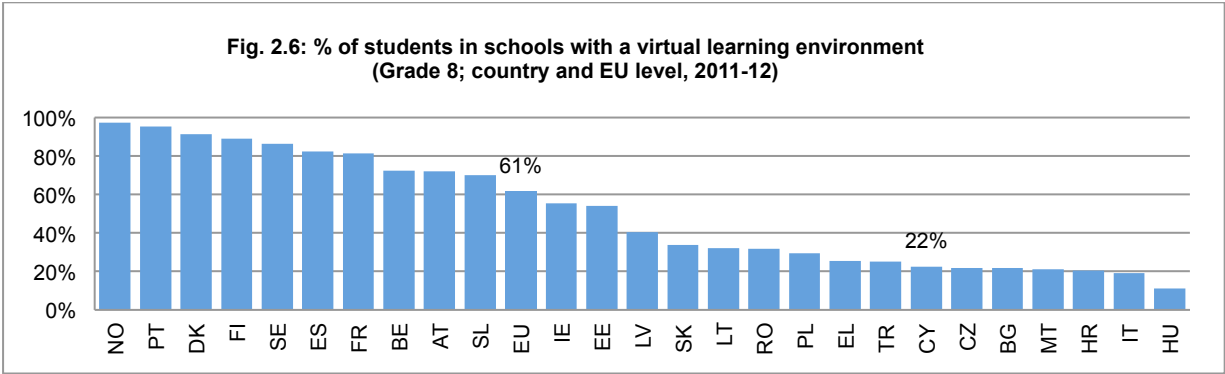
There are significant positive correlations between the population of the school's locality and broadband speed in Cyprus at grade 4 (main report, section 1), i.e. schools in urban areas tend to enjoy faster internet access.

'CONNECTEDNESS'

Percentages of students in schools that have 'connected' characteristics, e.g. having a website or a virtual learning environment (VLE), as well as those with none of these items, are shown in fig. 2.5. In Cyprus, the percentage of students in schools with a website is above the EU mean at all grades except 4. The percentage of students in schools with a virtual learning environment is notably lower at all grades. Percentages of students in 'unconnected' schools are below the EU average at all grades with none at grade 11 vocational.



Cyprus ranks well below other countries as regards virtual learning environments at grade 8, as seen in fig. 2.6.

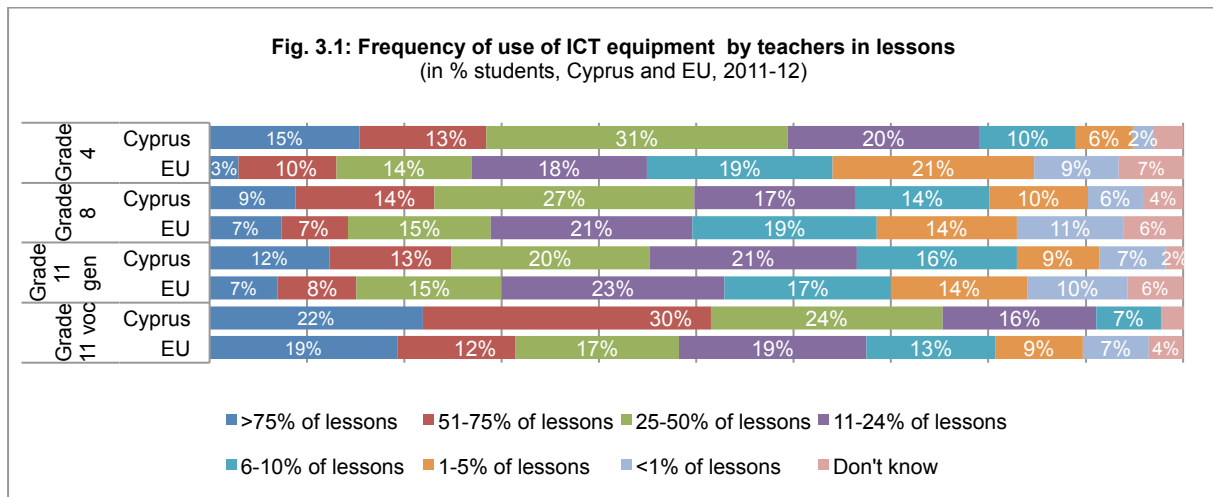


In Cyprus, large percentages of students are in schools with local area networks. Of schools with VLEs, relatively few offer external access except at grade 11 vocational level (main report section 1).

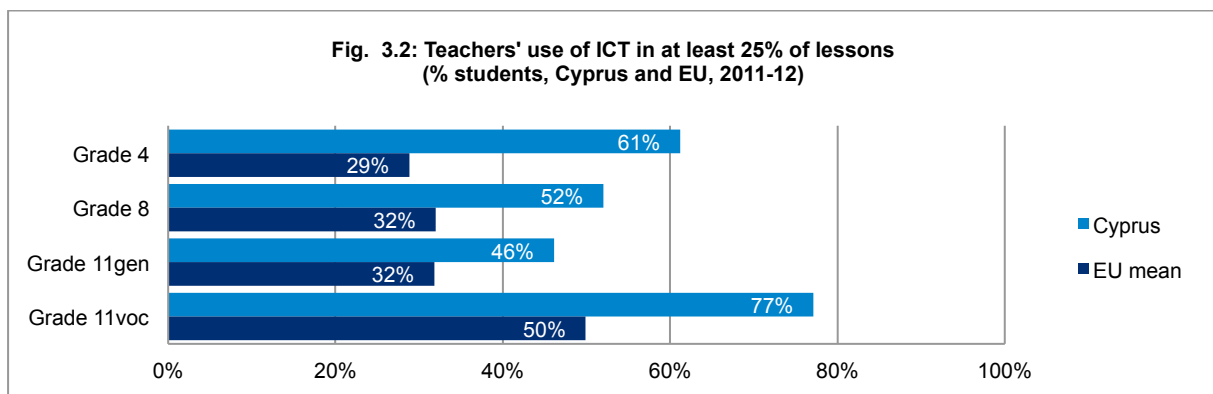
3. FREQUENCY OF ICT USE IN CLASS

FREQUENCY OF ICT USE BY TEACHERS IN CLASS

The most intense use of ICT in Cyprus is at grade 11 vocational (of the grades surveyed), where more than one in two teachers use ICT with their students in more than 50% of lessons, higher than the EU average, as seen in fig. 3.1.

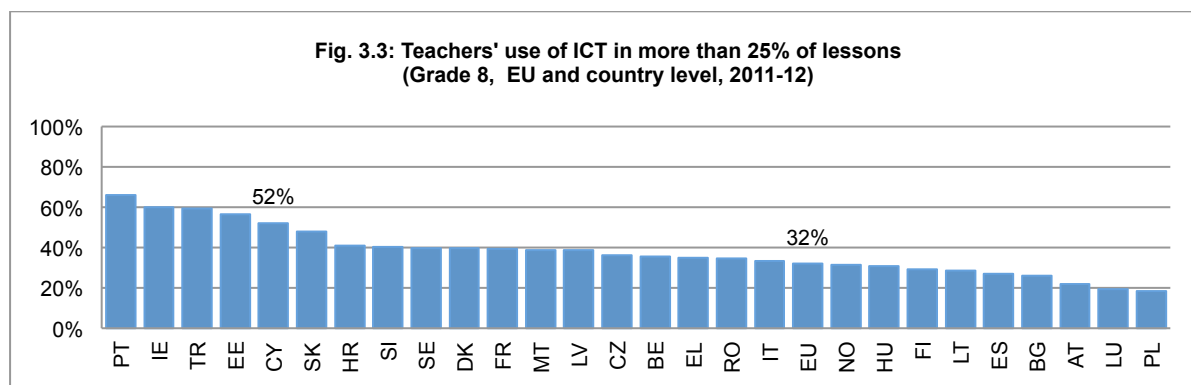


There are considerably more teachers using ICT in more than 25% of lessons than the EU average at all grades; overall around one in two teachers uses ICT in 25% or more of their lessons



Teachers in Cyprus are relatively heavy users of ICT in lessons: when considering percentages using ICT in more than one in four lessons, third at grade 4.

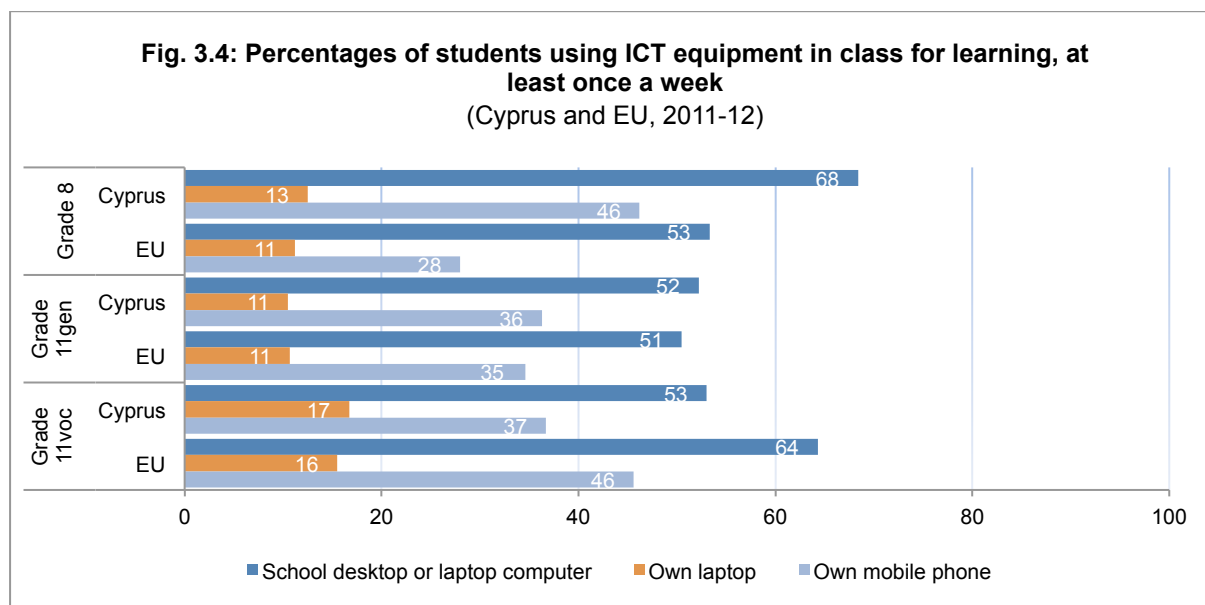
Fig 3.3 shows Cyprus ranks fifth at grade 8 (ninth at grade 11 general and third at grade 11 vocational - see main report, fig. 2.2).



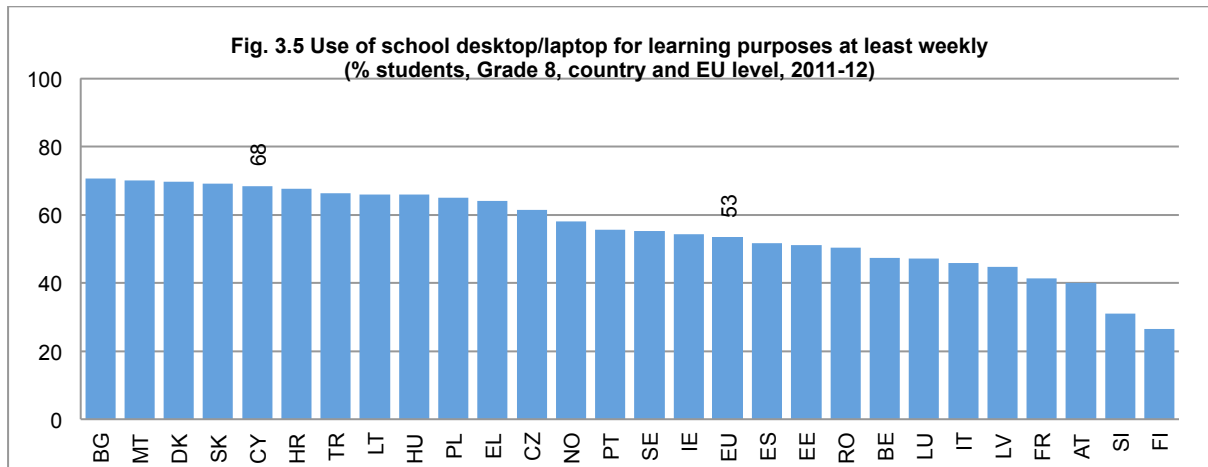
As regards teachers' use of ICT (Section 3 of the main report), few teachers in Cyprus have been using ICT in lessons for more than six years except at grade 4 (main report, fig 3.2). Cyprus is among the leading countries in terms of student-centred learning (fig. 3.5).

STUDENTS' ICT USE

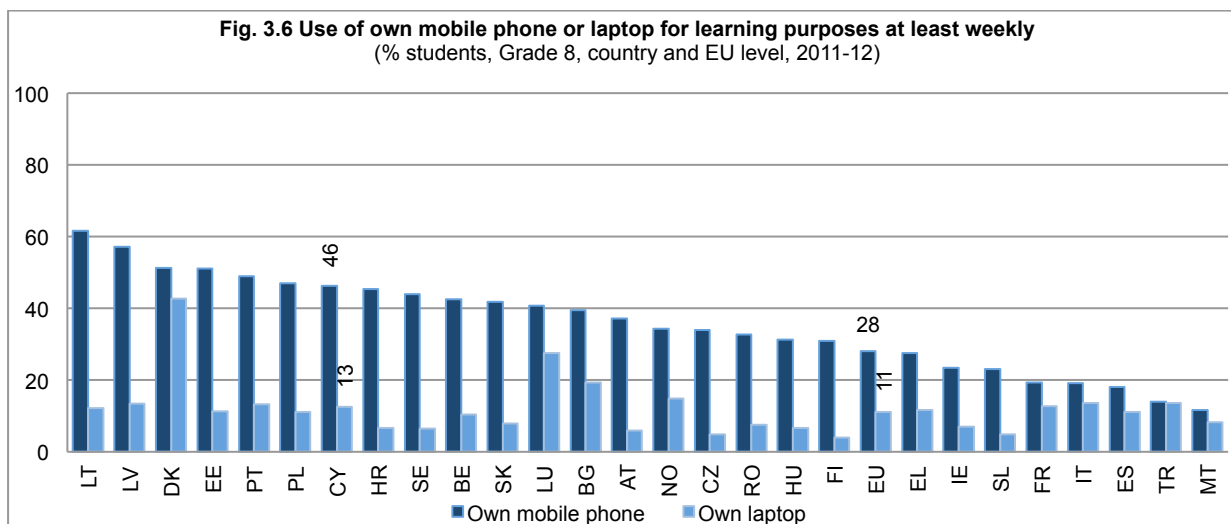
The chart below shows students' reported intensity of use of a school computer, and of their own laptop or mobile phone (in class for learning purposes). In Cyprus student use of school computers in class is above the EU mean at grade 8 and 11 general. The use of students' own laptop is close to the EU mean at all grades. Mobile phone use is above the EU mean at grade 4, close to the average at grade 11 general and below at grade 11 vocational.



At grade 8 students' reported use of computers is fifth highest in Europe, over 68% saying they use them at least once a week (fig. 3.5).



Compared to other countries at grade 8 (fig.3.6), students in Cyprus are relatively heavy users of their own mobile phone but there is less use of their own laptop in school. At other grades these figures are below the EU average.



Students report using interactive whiteboards less frequently than the EU average at all grades.

Concerning students' ICT-based activities during lessons, Cyprus is among the leading countries as measured by frequency of use (main report, fig. 3.8) at grade 8 but lower at other grades.

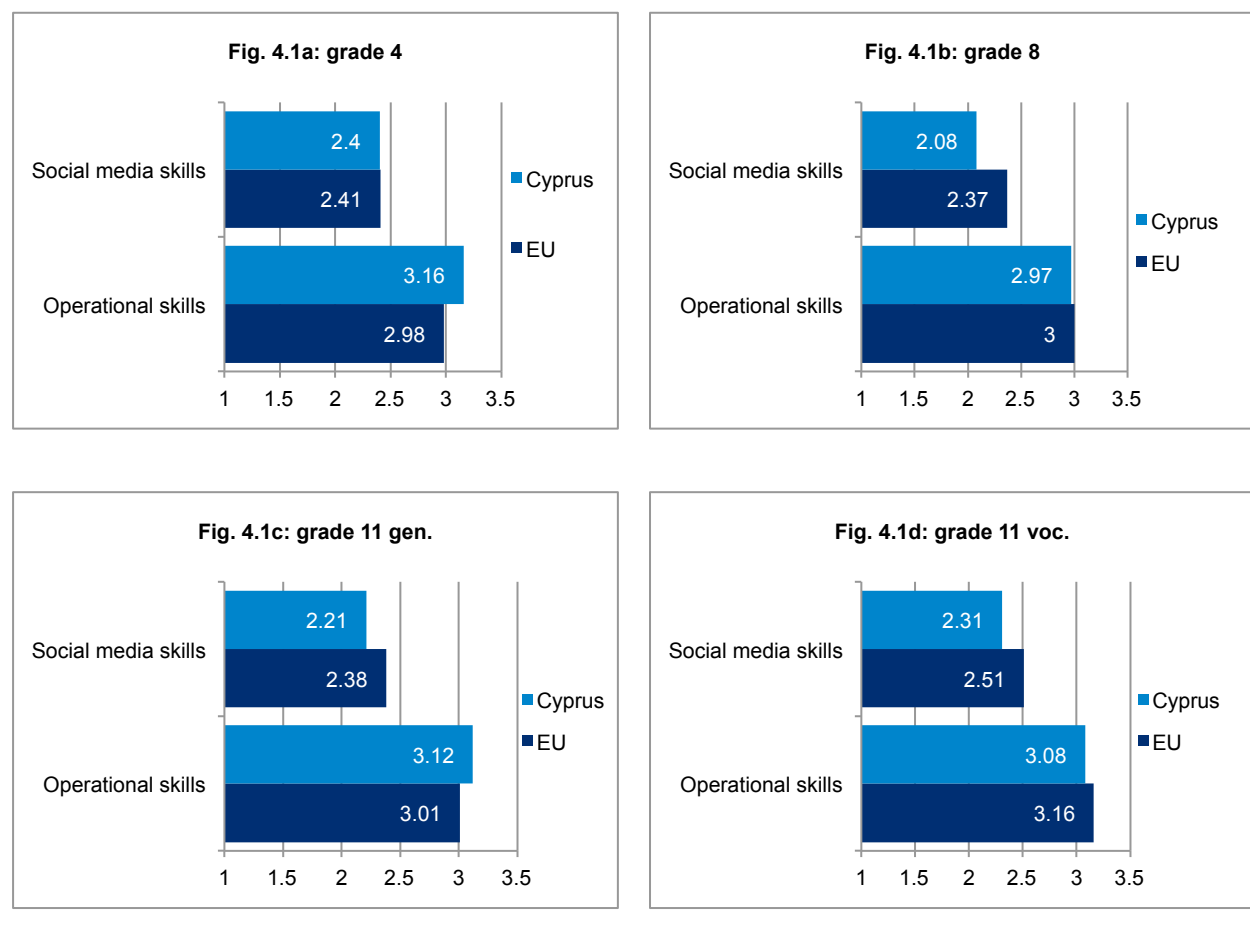
4. DIGITAL CONFIDENCE

TEACHERS

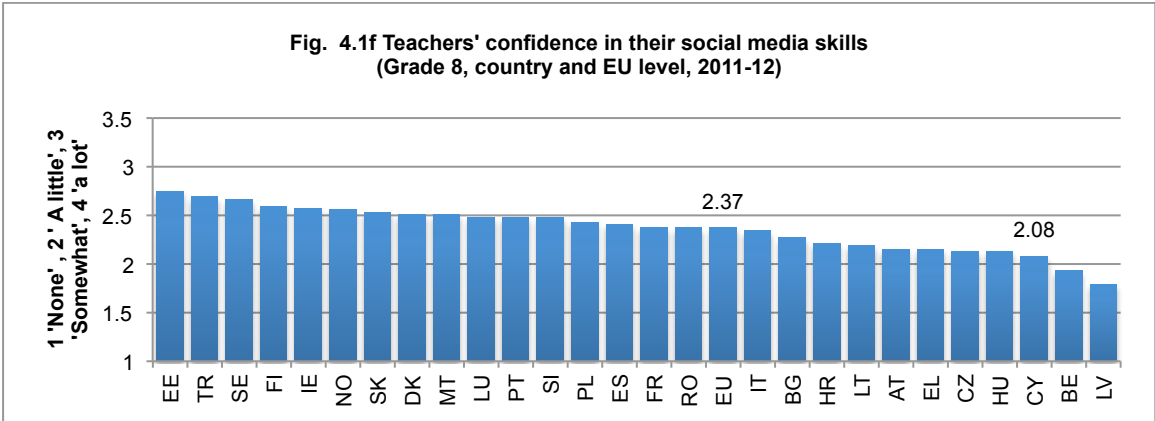
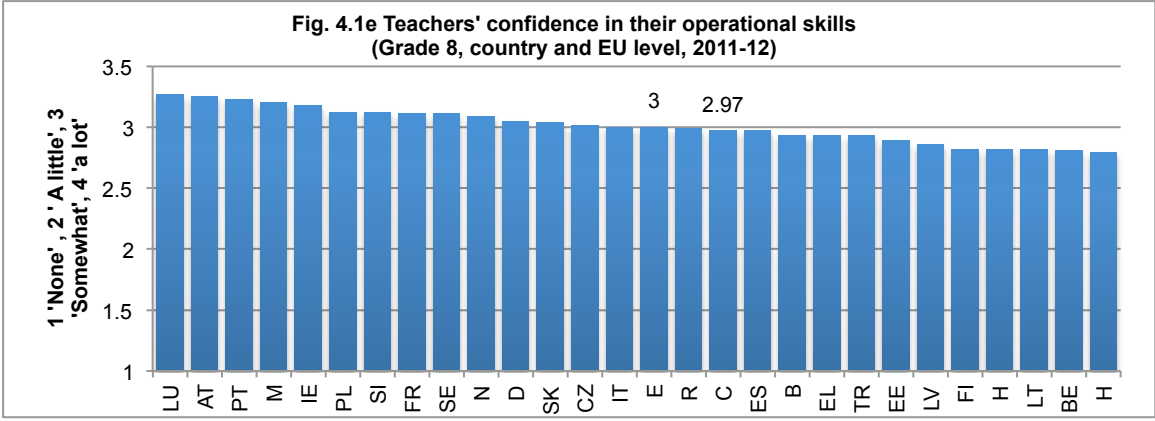
Grade 4 and 11 general teachers in Cyprus are among those with the highest levels of confidence in their operational digital competence, while those at grade 8 and 11 vocational declare below EU average confidence. At all levels their confidence in the use of social media is below the EU mean.

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'; Cyprus and EU; 2011-12)



Comparing confidence levels at grade 8, teachers' confidence in their operational skills places Cyprus close to the average (fig. 4.1e), but almost at the lowest end of the ranking as regards social media confidence (fig. 4.1f).

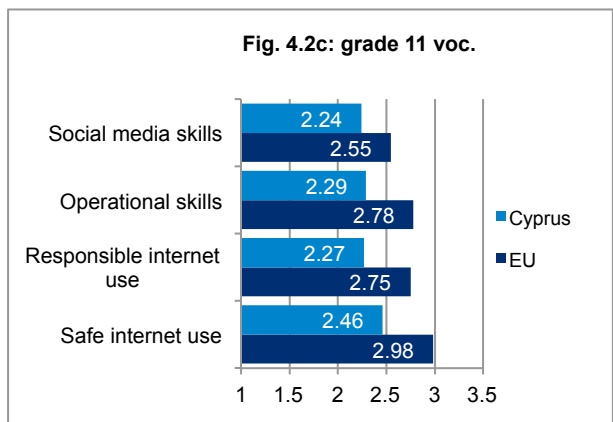
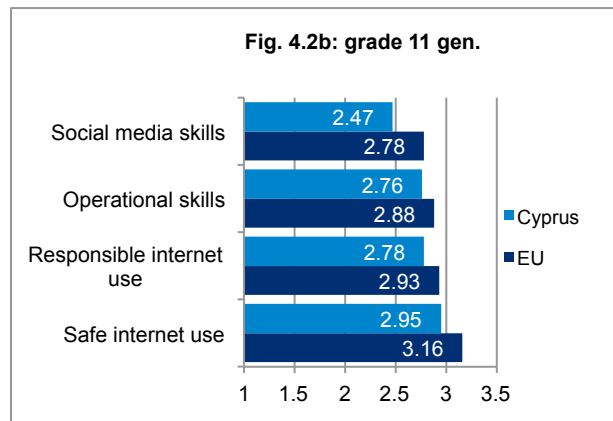
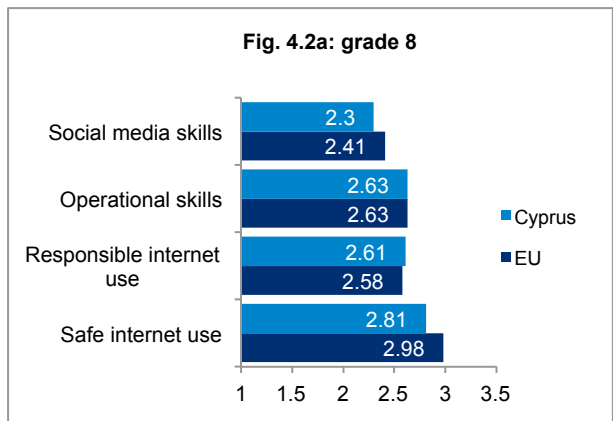


STUDENTS

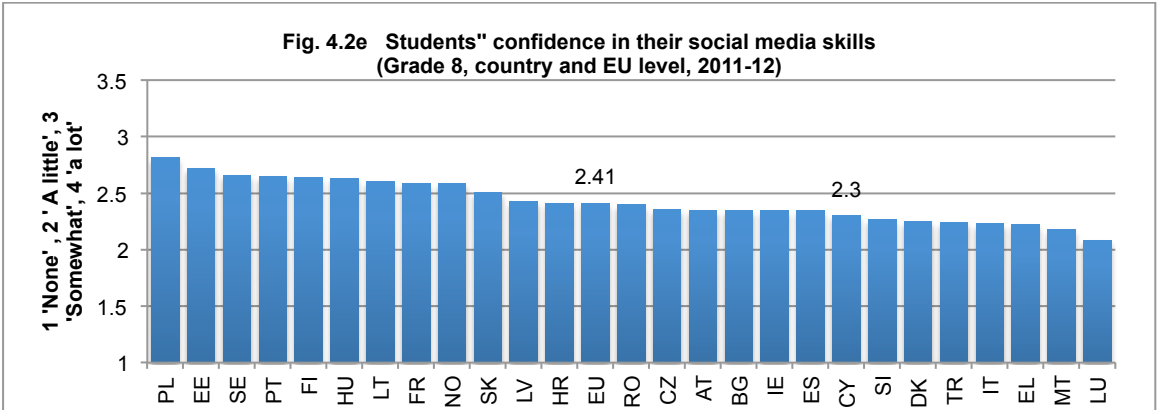
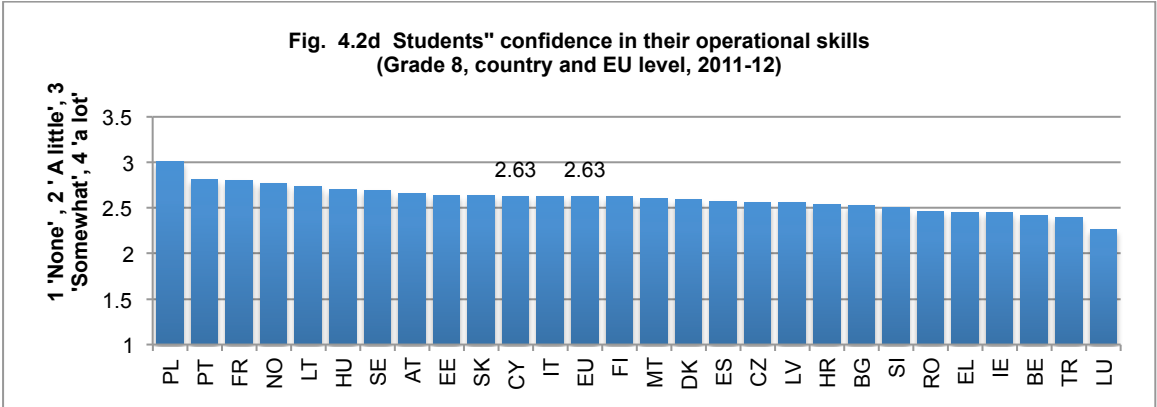
In Cyprus students' confidence in their operational ICT skills is close to or lower than the EU mean (close to 'somewhat'), notably at grade 11 vocational where it is closer to 'a little', and in their social media skills is lower in all grades.

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'; Cyprus and EU; 2011-12)



Confidence in operational skills is higher than the EU mean amongst grade 8 students (fig. 4.2d), but the lowest in Europe in vocational students, and below average in social media competences at all grades (fig. 4.2e for grade 8).



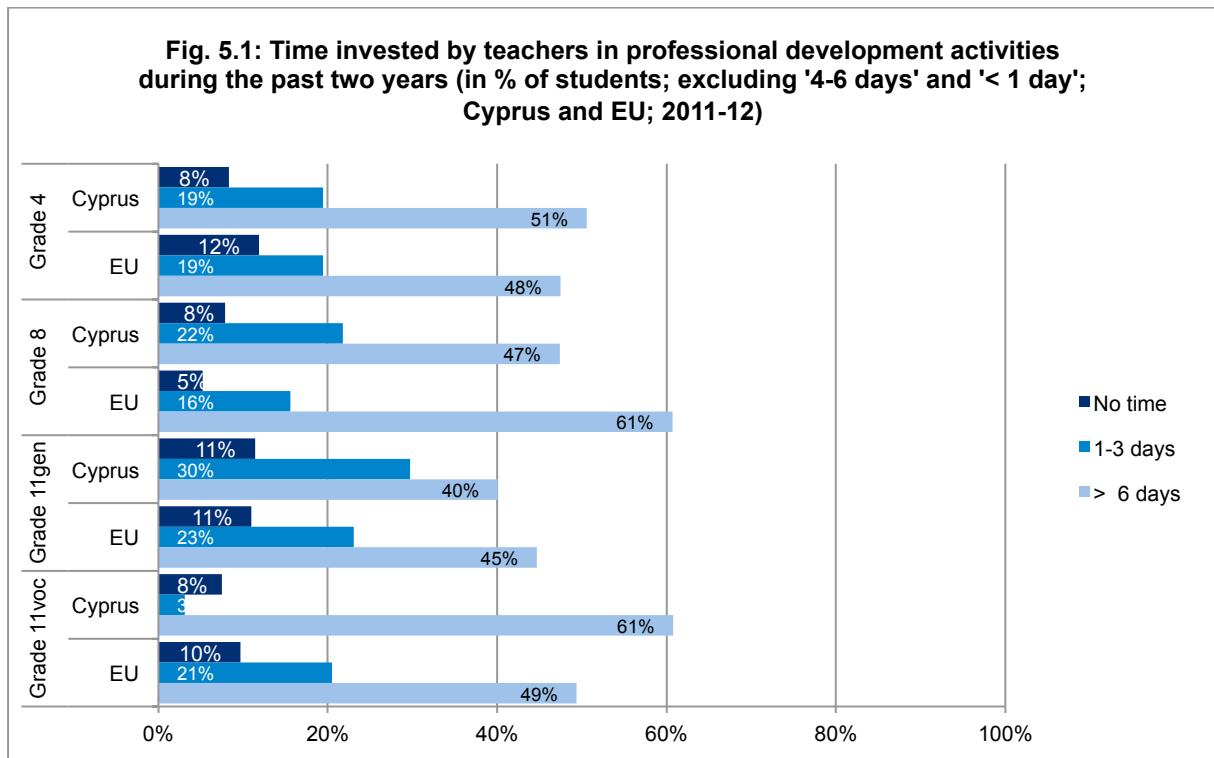
At all grades students in Cyprus are, on average, well below the EU average in terms of confidence to use the internet safely, and at grade 11 vocational in particular, to use it responsibly (main report, fig. 4.16, 4.17).

5. PROFESSIONAL DEVELOPMENT

TIME SPENT ON TRAINING

Compared to the EU average, more students at grade 4 and grade 11 vocational in Cyprus are taught by teachers who have invested more than 6 days in professional development activities during the past two years, with fewer at grade 8 and close to the average at grade 11 general.

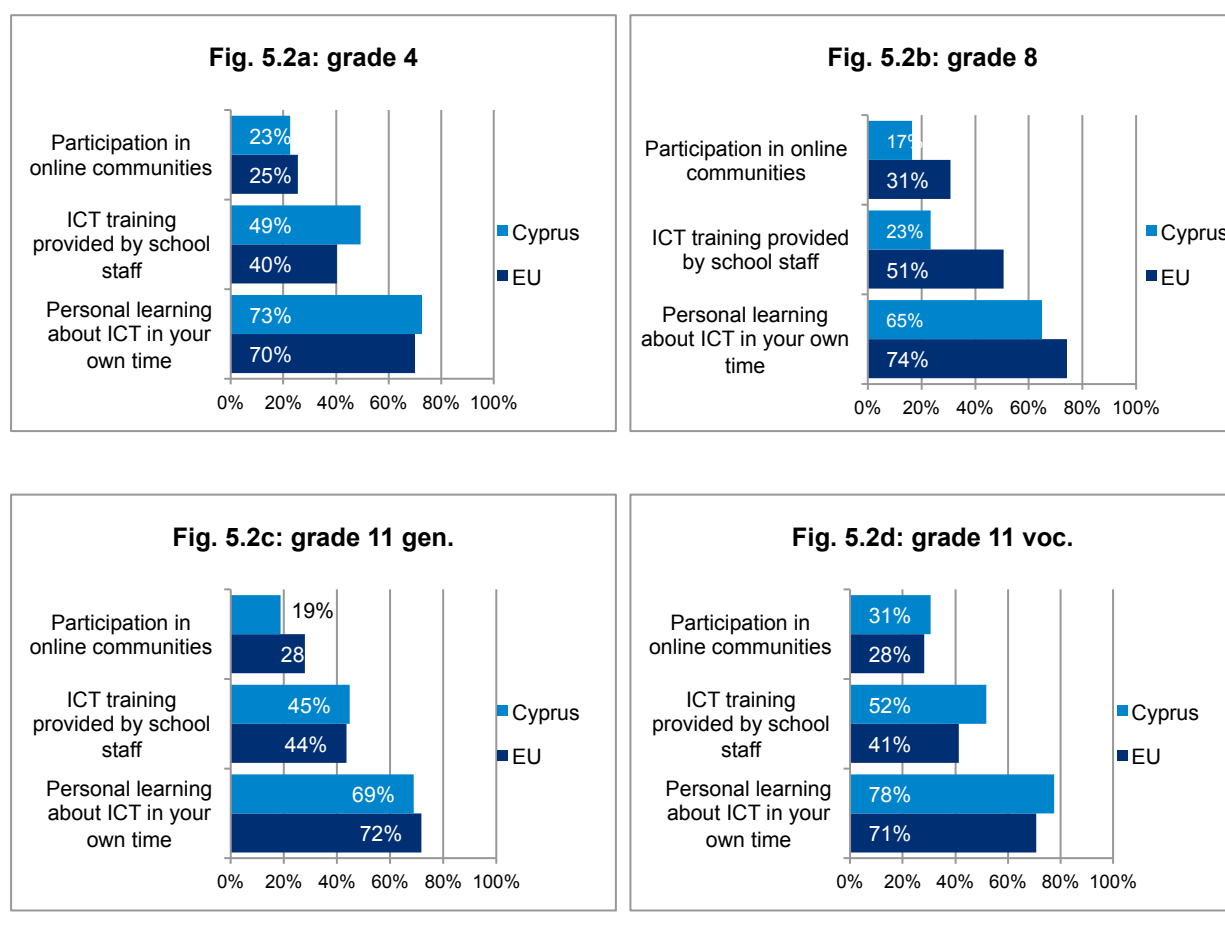
In Cyprus the percentage of students in schools where teachers have spent between 1 and 3 days on ICT professional development activities is generally close to or above the EU mean and notably lower at grade 11 vocational (reflecting the high percentage who are taught by those investing in more than 6 days professional development). Those who have spent no time are around the EU mean at most grades.



As Fig. 5.2 below shows, in Cyprus, more than the EU average of students are in schools where teachers have recently undergone ICT training provided by school staff, at all grades except for grade 8 which is notably lower. Generally less are in schools where teachers take part in training through online communities below the EU average, except at grade 11 vocational where it is above. The percentage students in schools where teachers have recently undertaken personal learning are generally around the EU average, although higher at 11 vocational.

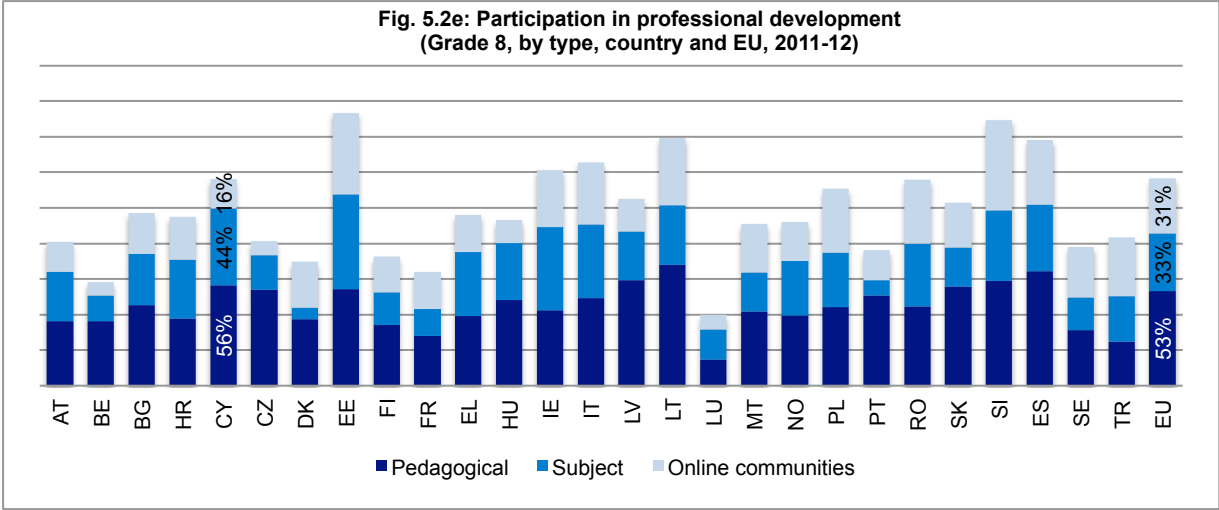
Fig. 5.2: Means through which teachers have engaged in ICT related professional development during the past two years

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



At all grades teachers have had more subject-specific ICT training than the EU average. Students at grade 11 vocational are more likely to be in schools where teachers take part in online communities than on average, but at other grades they are less likely to. Apart from grade 4, students are more likely than the EU mean to be in schools where teachers have taken part in pedagogical ICT training.

Fig. 5.2e shows that grade 8 teachers in Cyprus have taken part extensively in professional development in the preceding two years, although a lower percentage takes part in online communities.



In Cyprus at most grades percentages of students taught by teachers for whom ICT training is compulsory are among the lowest in the EU (main report, fig. 4.2), except at grade 11 vocational where for 53% training is compulsory. As regards involvement in personal learning about ICT in their own time (main report, fig. 4.4), percentages (in the range 65% to 78%) are close to the EU mean at all grades. The percentage of students taught by teachers participating in training provided by school staff is the second lowest (23%) at grade 8 but close the mean at other grades (main report, fig.4.5).

Between 7 and 11 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); these figures are close to the EU mean.

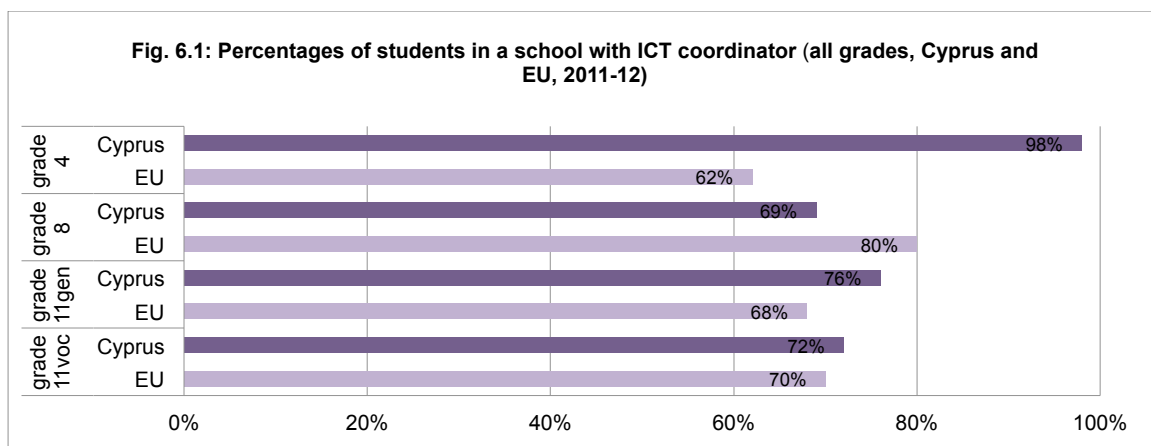
6. SCHOOL SUPPORT MEASURES

In general students in Cyprus are in schools where below EU averages of ICT strategies are implemented (main report, fig. 5.3), around 20% being in such schools. On the other hand at all grades, particularly grade 8 (62%, ranked third), there are high percentages of students in schools with strategies to support teacher collaboration (main report, fig. 5.7). A similar pattern emerges as regards strategies about responsible internet and social media use, except at grade 11 vocational where only 12% of students are in schools where they are in place, among the bottom three countries on this measure.

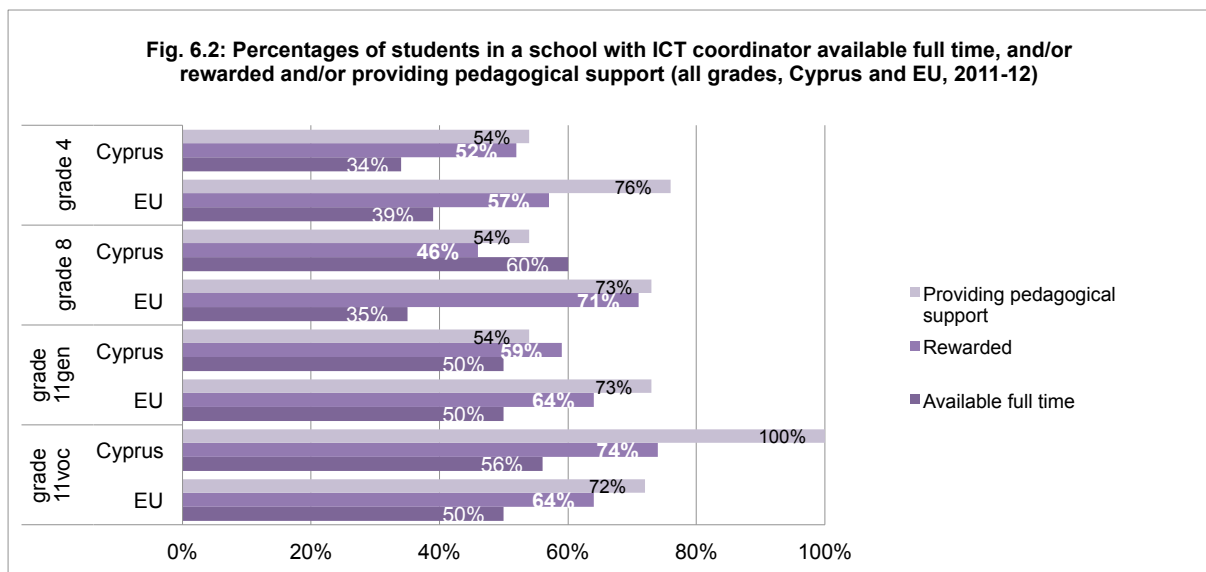
Above average percentages of students in Cyprus are in schools with change management programmes at all grades (main report, fig. 5.14).

ICT COORDINATOR

In Cyprus, compared to the situation at EU level (see Fig. 6.1), more students are in schools where ICT coordinators are provided, with almost all students in such schools at grade 4.



Cyprus has above EU average levels of full-time ICT coordinators at grade 4 and 8, but only at grade 11 vocational are there more than the EU average of students in schools with ICT coordinators providing pedagogical support (fig. 6.2) as well as ICT support.



INCENTIVES

Incentives for teachers to undertake professional development in ICT are among the lowest reported in the EU, except for the offer of additional equipment. Few students are in schools where there are forms of incentive or reward for using ICT, generally below the EU average at all grades, except for equipment and reduction in hours, which are above the EU levels at grade 4, 8 and 11 general.

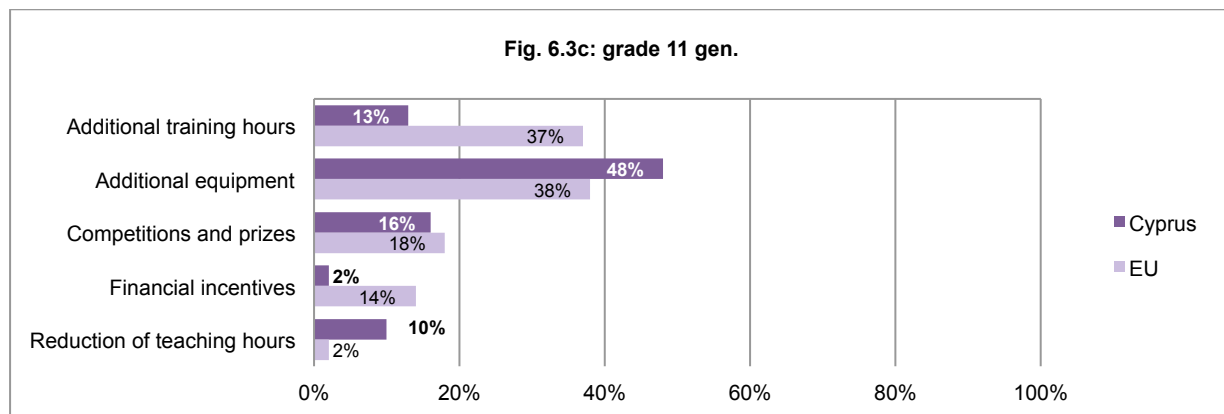
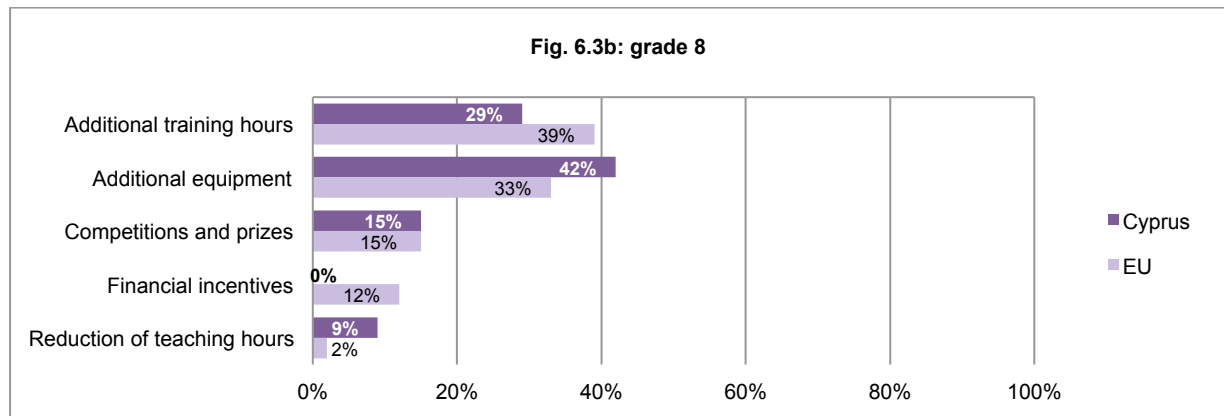
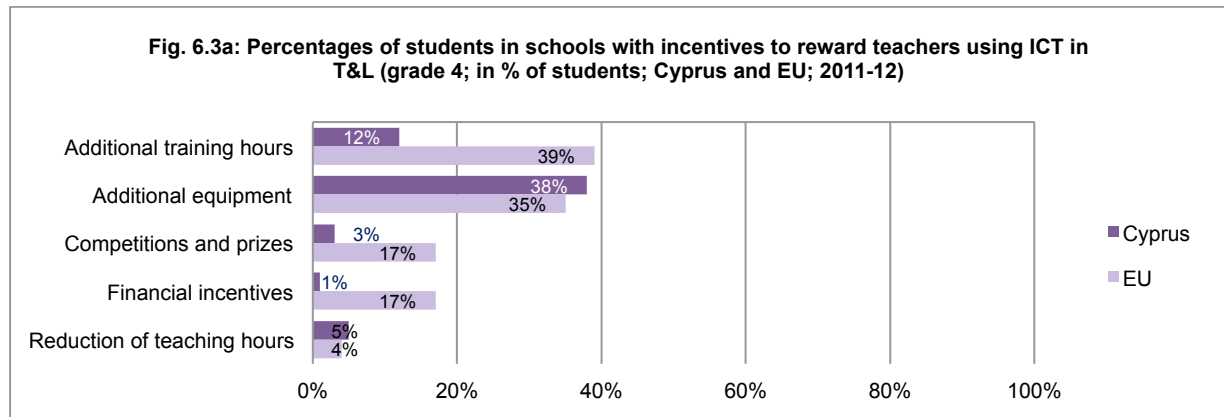
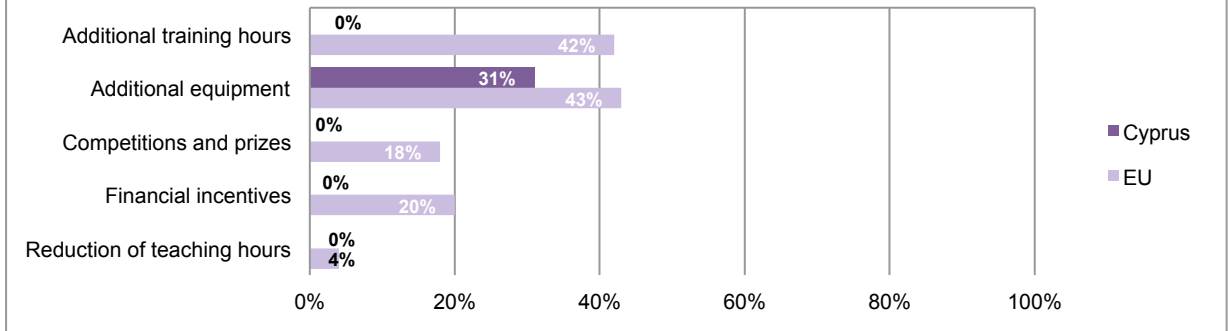


Fig. 6.3d: grade 11 voc.

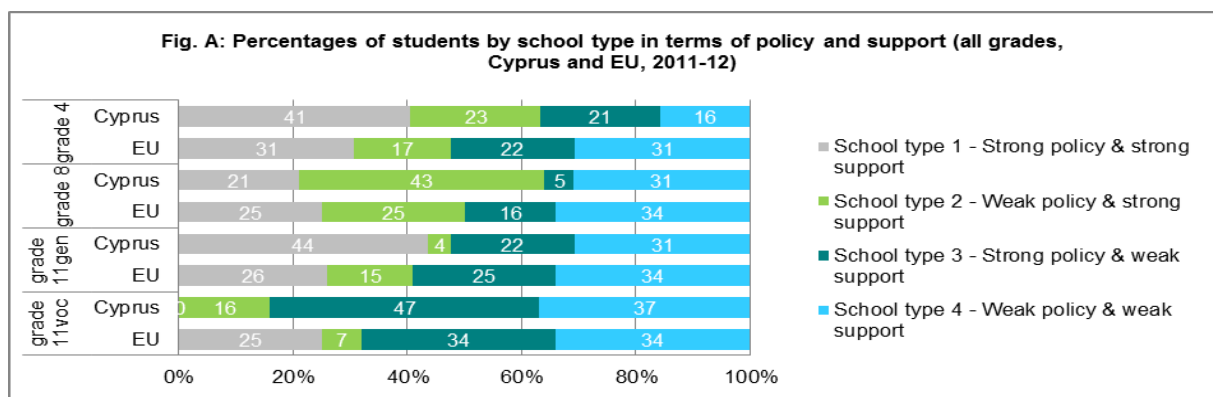


7: CLUSTERS

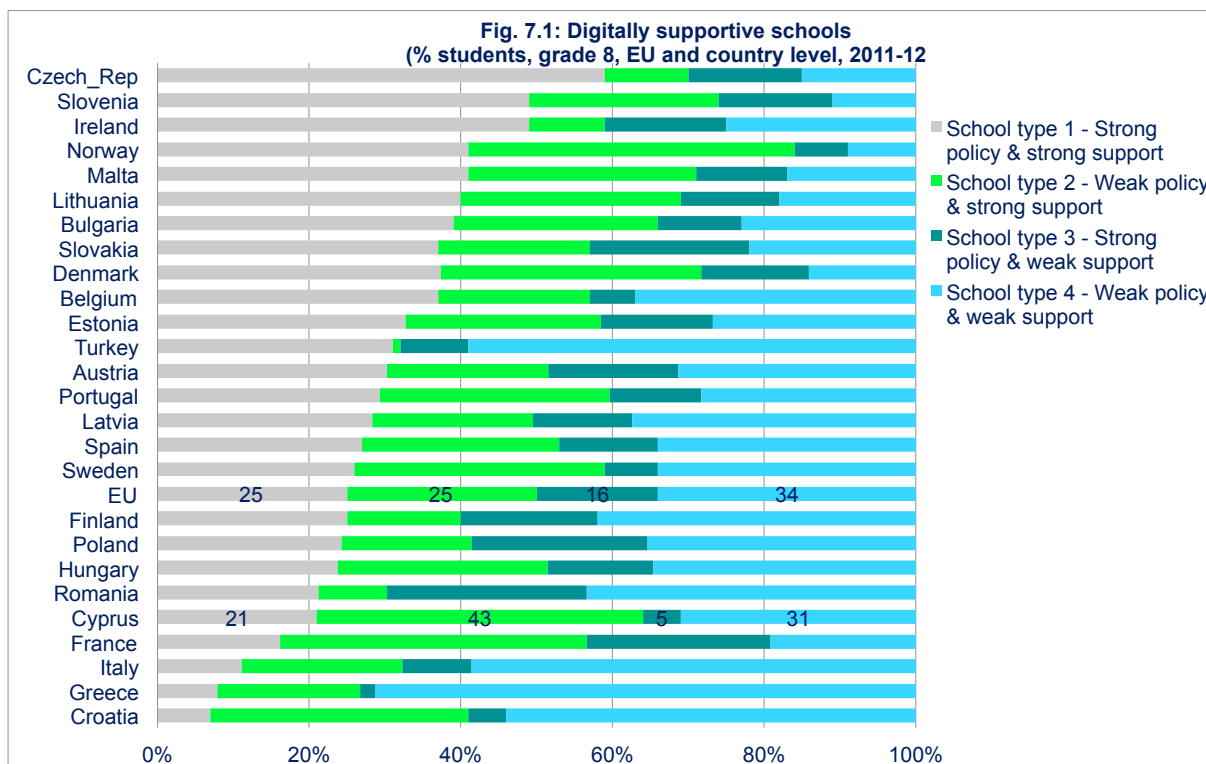
THE DIGITALLY SUPPORTIVE SCHOOL

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 Cyprus, above EU average percentages of students (particularly at grade 4 and 11 general – ranked 6th in the main report, fig. 8.1c) are in schools with strong support for ICT use. However at grade 11 vocational Cyprus is ranked last.

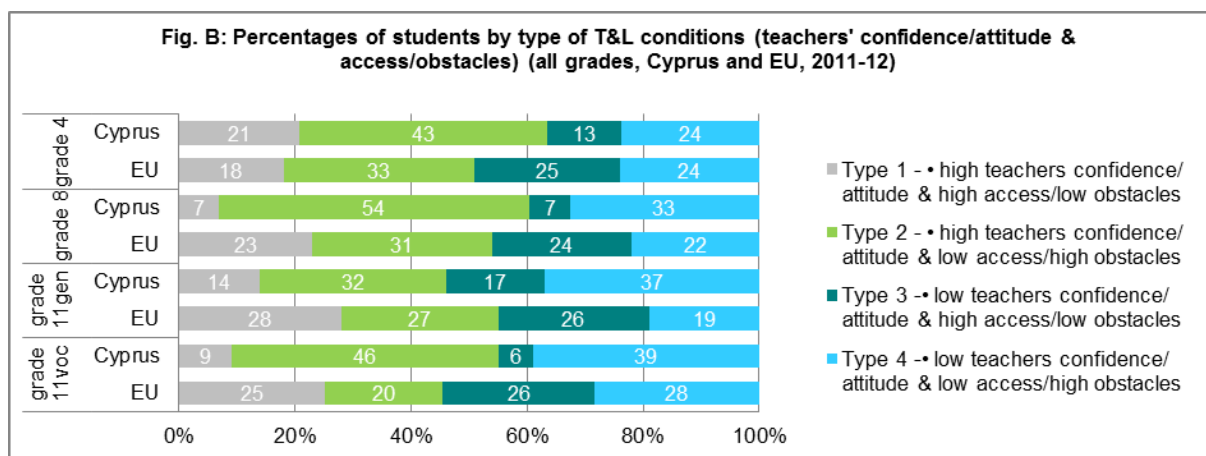


At grade 8 Cyprus ranks low compared to other countries considering schools with strong policy and strong support (type 1) but almost two thirds of students are in schools with strong support (type 1 and type 2).

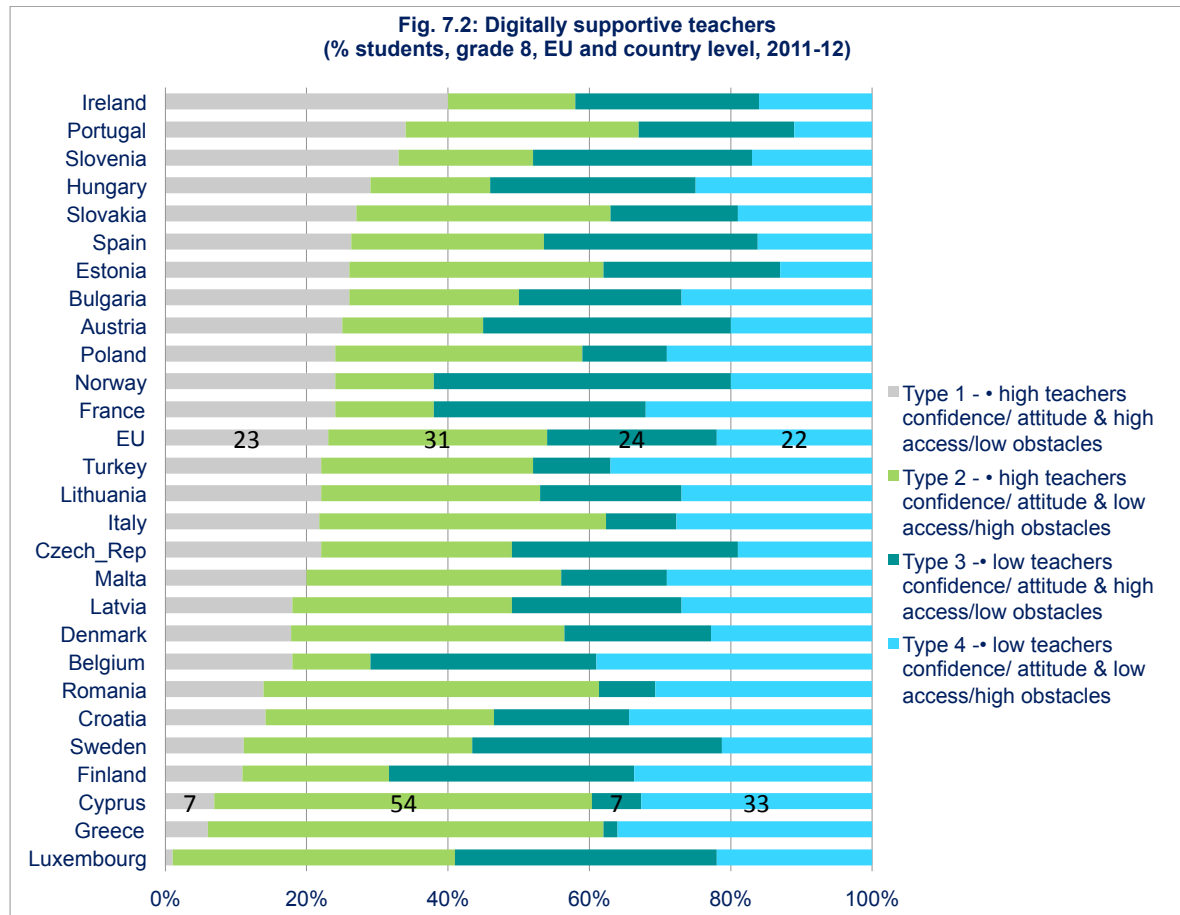


DIGITALLY CONFIDENT AND SUPPORTIVE TEACHERS

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 confident and supportive teachers* in Cyprus (fig. B, main report fig 8.3) are highest at grade 4, but among the lowest at other grades. At grade 11 vocational 39% of students are in schools with weak policy and weak support, ranking Cyprus the fifth highest (main report, fig. 8.3) .

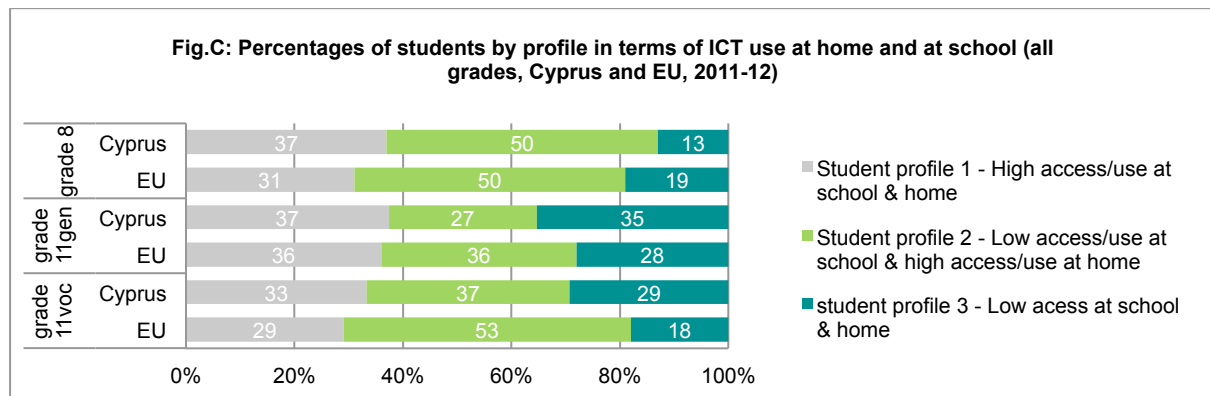


A low percentage of students at grade 8 compared to other countries is in schools with type 1 teachers (fig. 7.2).



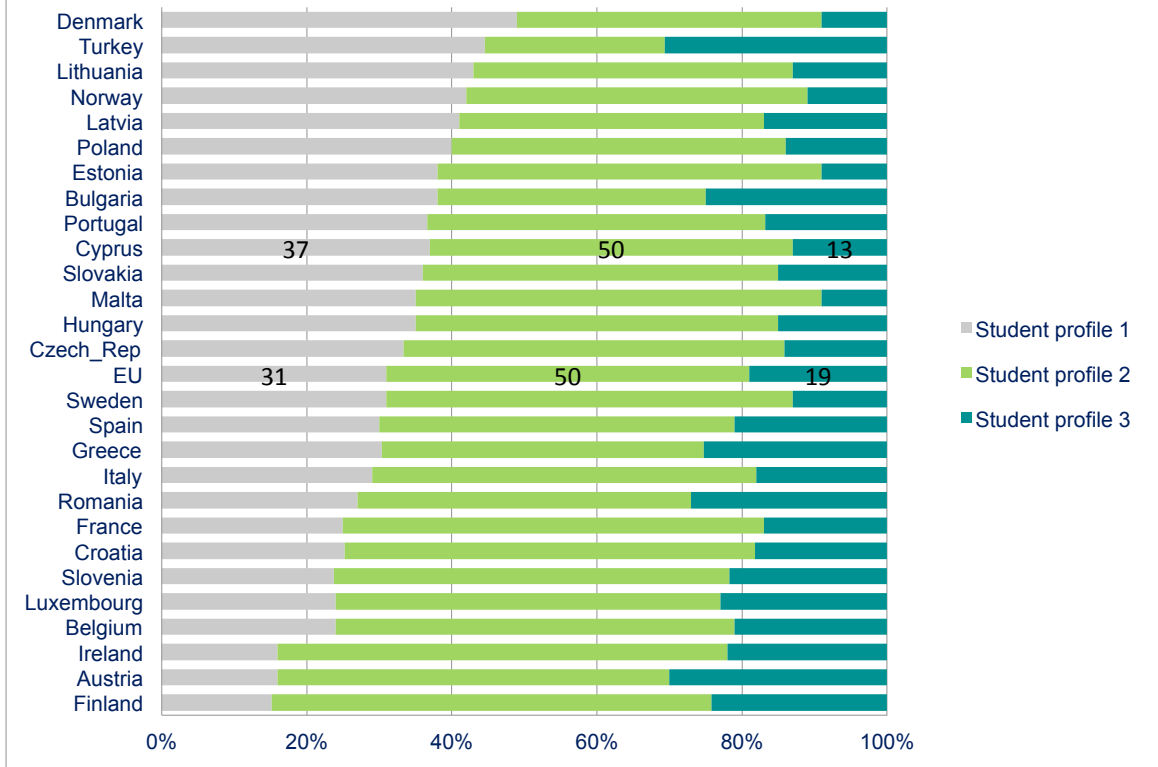
THE DIGITALLY SUPPORTIVE STUDENT

A *digitally supportive student* being defined as having high ICT access and use at school and at home, the percentages of such students in Cyprus are above EU means, but at grade 11 a considerable proportion have low access both at home and at school.



On this measure, percentages of type 1 grade 8 students are among the highest in Europe (fig. 7.3).

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

Cyprus is above the EU average (fig. D) for having type 1 digitally equipped schools (high equipment levels, fast broadband and high connectedness) at grade 4 but below at other grades; at all grades there are relatively few students in schools of type 3 (low equipment levels, no or slow broadband, little connectedness).

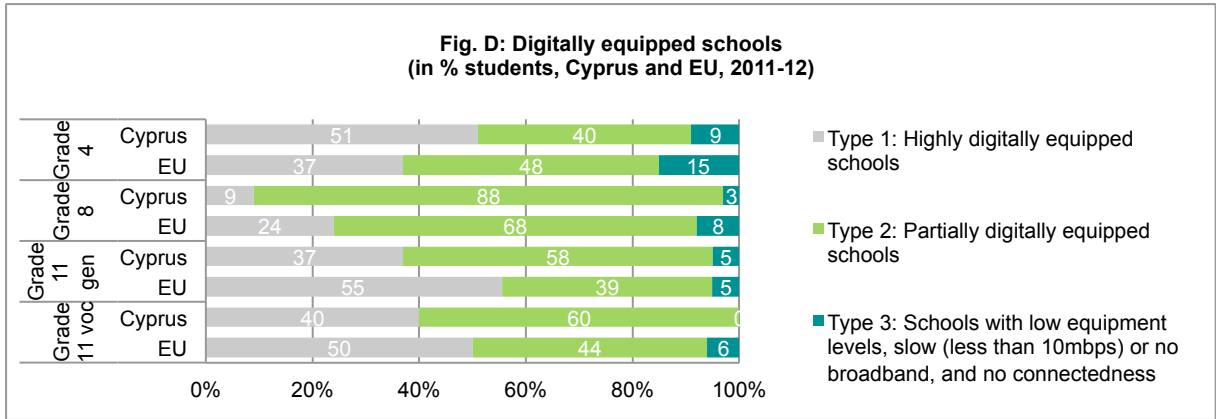
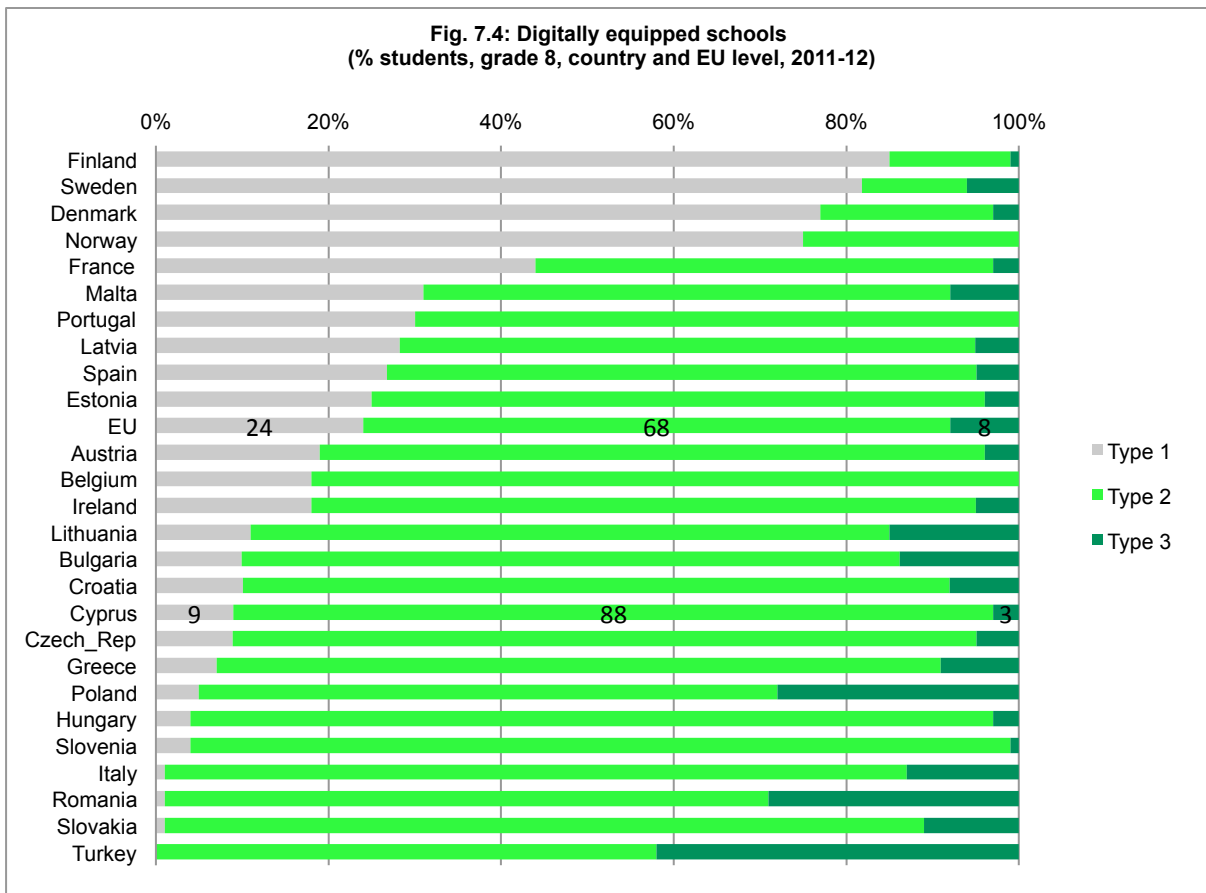


Fig. 7.4 shows how Cyprus compares with other countries at grade 8 on this measure. Very few students are in type 3 schools compared to other countries and large numbers are in type 2 relative to other countries.



CONCLUSION

Students in Cyprus enjoy higher than average levels of computer availability than their peers elsewhere in Europe (particularly at grade 11 vocational), almost universal broadband (but generally at lower speeds) and are almost all in 'connected' schools. They are in schools with up to twice the percentage of teachers using ICT frequently than the EU mean, and student use of computers is above other countries (except at grade 11 vocational). Teacher confidence in operational uses of ICT is at or above EU averages and in social media at or below EU means, and students' confidence in social media use tends to be lower than in operational uses of ICT, which are close to the EU average (except at grade 11 vocational where they are lower). High levels of professional development and in-school support characterise ICT in schools in Cyprus, no doubt reflected in the high ICT use levels noted.

Students in Cyprus at grade 4 and grade 11 general are above the EU average in being in digitally supportive schools, i.e. with strong policy and support, but below at other grades. At grade 4, Cyprus is above the EU average in terms of digitally supportive teachers, i.e. having high confidence and positive attitudes to ICT and high access and low obstacles to ICT, but below at other grades, particularly grade 8 and 11 vocational. At all grades, students are above the EU mean in terms of the digitally supportive student, i.e. having high levels of access and use of ICT at school and at home.

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.

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
Cyprus	14.3	(1.7)	25.1	(2.4)	29.9	(2.5)	56.7	(11.7)
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	Cyprus	5.0%	(1.9)	15.8%	(3.8)	39.1%	(6.8)	21.0%	(10.1)	16.4%
	EU	8.0%	(1.3)	16.5%	(2.3)	21.4%	(2.4)	22.1%	(2.2)	19.5%
2. Grade8	Cyprus	1.4%	(0.2)	9.3%	(3.6)	29.8%	(6.2)	39.9%	(7.3)	15.0%
	EU	5.0%	(0.8)	9.6%	(1.3)	19.1%	(2.3)	27.7%	(2.4)	24.8%
3. Grade11gen	Cyprus	1.8%	(0.3)	4.0%	(2.6)	26.9%	(7.1)	45.3%	(7.9)	22.1%
	EU	3.7%	(1.3)	6.2%	(0.8)	18.0%	(2.8)	23.2%	(3.0)	25.4%
4. Grade11voc	Cyprus	0.0%	(0.0)	0.0%	(0.0)	72.6%	(21.2)	15.7%	(6.9)	11.6%
	EU	6.5%	(1.8)	6.2%	(1.3)	15.2%	(3.0)	21.2%	(2.6)	24.2%

SE5	From30to100	SE6	MoreThan100	SE7
(7.4)	2.4%	(1.1)	0.4%	(0.1)
(2.2)	8.6%	(1.4)	4.0%	(1.3)
(6.3)	0.0%	(0.0)	4.7%	(2.7)
(2.3)	8.6%	(1.6)	5.2%	(1.2)
(7.3)	0.0%	(0.0)	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	Cyprus	60.7%	(6.7)	13.4%	(3.7)	9.9%	(2.8)
	EU	69.7%	(3.6)	26.8%	(2.0)	15.9%	(2.2)
2. Grade8	Cyprus	95.3%	(2.8)	22.4%	(7.0)	2.9%	(2.1)

Level	COUNTRY	SchWebsite	SE1	VLE	SE2	NoConnect	SE3
	EU	86.0%	(1.6)	61.4%	(3.0)	8.4%	(1.2)
3. Grade11gen	Cyprus	94.5%	(3.2)	35.4%	(7.7)	5.8%	(3.4)
	EU	91.7%	(3.1)	61.0%	(7.9)	7.0%	(2.9)
4. Grade11voc	Cyprus	100.0%	(0.0)	53.4%	(26.5)	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	Cyprus	15.4%	(5.4)	13.0%	(2.2)	31.0%	(3.3)	19.7%	(2.6)	9.9%	(1.8)
	EU	3.0%	(0.4)	10.0%	(2.4)	13.9%	(1.4)	18.0%	(1.8)	19.1%	(2.1)
2. Grade8	Cyprus	8.8%	(2.0)	14.3%	(2.8)	26.7%	(3.7)	16.5%	(2.6)	13.8%	(2.5)
	EU	7.4%	(1.0)	6.8%	(0.8)	14.7%	(0.9)	20.7%	(1.2)	18.9%	(1.4)
3. Grade11gen	Cyprus	12.3%	(2.5)	12.5%	(2.5)	20.4%	(3.3)	21.3%	(3.0)	16.4%	(2.6)
	EU	7.0%	(1.0)	8.1%	(1.4)	14.9%	(1.4)	22.9%	(3.8)	17.1%	(1.8)
4. Grade11voc	Cyprus	21.9%	(7.8)	29.6%	(16.7)	23.8%	(7.0)	15.8%	(8.8)	6.6%	(5.0)
	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
5.8%	(1.4)	2.2%	(1.2)	3.0%	(1.1)
20.7%	(2.7)	8.7%	(1.4)	6.7%	(1.4)
10.1%	(2.8)	5.7%	(1.5)	4.1%	(1.5)
14.4%	(1.0)	11.0%	(1.0)	6.1%	(0.8)
8.5%	(2.4)	6.8%	(2.5)	1.9%	(0.9)
14.0%	(1.5)	10.3%	(1.4)	5.7%	(0.9)
0.0%	(0.0)	0.0%	(0.0)	2.4%	(1.2)
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
Cyprus	61.2%	(3.7)	52.0%	(3.6)	46.1%	(3.6)	77.1%	(13.0)
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	Cyprus	46.2	(1.9)	12.5	(1.1)	68.4	(1.8)
	EU	28.0	(0.8)	11.2	(0.7)	53.3	(1.1)
2. Grade11gen	Cyprus	36.3	(2.0)	10.5	(1.3)	52.2	(2.4)
	EU	34.6	(1.3)	10.7	(1.1)	50.5	(1.5)

Level	Country	OwnMobPhone	SE1	OwnLaptop	SE2	SchoolComputer	SE3
3. Grade11voc	Cyprus	36.7	(7.0)	16.7	(5.4)	53.0	(4.5)
	EU	45.6	(1.3)	15.5	(0.7)	64.3	(1.5)

Fig. 4.1
Scales Teachers ICT skills

Level	COUNTRY	SocialMediaSkills	SE1	OperatSkills	SE2
1. Grade4	Cyprus	2.40	(0.08)	3.16	(0.05)
	EU	2.41	(0.03)	2.98	(0.02)
2. Grade8	Cyprus	2.08	(0.07)	2.97	(0.07)
	EU	2.37	(0.04)	3.00	(0.03)
3. Grade11gen	Cyprus	2.21	(0.08)	3.12	(0.06)
	EU	2.38	(0.07)	3.01	(0.03)
4. Grade11voc	Cyprus	2.31	(0.28)	3.08	(0.31)
	EU	2.51	(0.03)	3.16	(0.02)

Fig. 4.2
Scales Students ICT skills

Level	country	SocialMediaSkills	SE1	OperatSkills	SE2	RespInternUse	SE3	SafeInternUse	SE4
1. Grade8	Cyprus	2.30	(0.03)	2.63	(0.03)	2.61	(0.03)	2.81	(0.04)
	EU	2.41	(0.02)	2.63	(0.02)	2.58	(0.02)	2.98	(0.02)
2. Grade11gen	Cyprus	2.47	(0.04)	2.76	(0.04)	2.78	(0.04)	2.95	(0.04)
	EU	2.78	(0.02)	2.88	(0.01)	2.93	(0.03)	3.16	(0.02)
3. Grade11voc	Cyprus	2.24	(0.14)	2.29	(0.15)	2.27	(0.12)	2.46	(0.16)
	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	Cyprus	50.6%	(4.2)	19.4%	(2.6)	8.3%	(1.7)
	EU	47.5%	(4.2)	19.4%	(3.0)	11.9%	(2.4)
2. Grade8	Cyprus	47.4%	(5.3)	21.8%	(4.1)	7.9%	(1.5)
	EU	60.7%	(1.6)	15.6%	(1.0)	5.2%	(0.5)
3. Grade11gen	Cyprus	40.1%	(4.3)	29.7%	(3.3)	11.4%	(2.6)
	EU	44.7%	(5.2)	23.1%	(3.4)	11.0%	(1.6)
4. Grade11voc	Cyprus	60.8%	(8.2)	3.1%	(1.4)	7.5%	(6.3)
	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	Cyprus	22.5%	(3.2)	49.4%	(4.3)	72.7%	(3.3)

Level	COUNTRY	OnlineComm	SE1	ICTtraining	SE2	PersonalLearning	SE3
	EU	25.4%	(2.5)	40.3%	(3.2)	70.0%	(2.8)
2. Grade8	Cyprus	16.5%	(4.0)	23.4%	(5.4)	65.0%	(4.1)
	EU	30.8%	(1.6)	50.5%	(1.7)	74.2%	(1.3)
3. Grade11gen	Cyprus	18.7%	(3.0)	44.8%	(4.4)	68.9%	(3.7)
	EU	28.0%	(2.4)	43.5%	(2.2)	71.7%	(2.2)
4. Grade11voc	Cyprus	30.5%	(7.4)	51.9%	(16.0)	77.5%	(14.2)
	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
Cyprus	98.3%	(1.0)	68.5%	(6.4)	75.9%	(6.8)	71.9%	(21.5)
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	Cyprus	34.1%	(9.8)	51.5%	(8.2)	53.9%	(8.5)
	EU	39.3%	(3.0)	56.5%	(3.0)	75.9%	(2.3)
2. Grade8	Cyprus	60.2%	(9.5)	46.2%	(9.8)	54.1%	(9.8)
	EU	34.8%	(2.9)	70.6%	(2.4)	72.5%	(2.5)
3. Grade11gen	Cyprus	49.8%	(9.1)	59.3%	(8.7)	54.4%	(9.2)
	EU	49.6%	(6.9)	63.6%	(7.7)	73.4%	(4.2)
4. Grade11voc	Cyprus	56.3%	(30.8)	73.9%	(32.5)	100.0%	(0.0)
	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	Cyprus	12.2%	(6.9)	38.1%	(9.1)	3.0%	(1.7)	0.7%	(0.1)	5.4%	(2.0)	16.0%	(8.1)
	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	Cyprus	28.5%	(6.3)	41.8%	(7.0)	15.4%	(5.1)	0.4%	(0.1)	9.2%	(4.2)	24.9%	(7.4)
	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	Cyprus	13.1%	(4.9)	48.0%	(8.0)	15.8%	(7.3)	1.9%	(0.3)	10.3%	(5.6)	33.8%	(8.6)
	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	Cyprus	0.0%	(0.0)	31.5%	(23.1)	0.0%	(0.0)	0.0%	(0.0)	0.0%	(0.0)	41.4%	(30.1)
	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	Cyprus	41	(7.47)	23	(4.52)	21	(9.59)	16	(3.43)
	EU	31	(2.70)	17	(3.17)	22	(2.53)	31	(2.98)

Level	COUNTRY	Type1	SE1	Type2	SE2	Type3	SE3	Type4	SE4
2. Grade8	Cyprus	21	(5.60)	43	(7.61)	5	(3.23)	31	(6.27)
	EU	25	(1.91)	25	(2.20)	16	(1.83)	34	(2.15)
3. Grade11gen	Cyprus	44	(8.09)	4	(2.61)	22	(6.04)	31	(7.26)
	EU	26	(2.28)	15	(8.69)	25	(3.74)	34	(5.30)
4. Grade11voc	Cyprus	0	(0.0)	16	(6.89)	47	(24.21)	37	(22.37)
	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	Cyprus	21	(5.25)	43	(4.02)	13	(2.52)	24	(2.99)
	EU	18	(2.02)	33	(2.95)	25	(2.33)	24	(2.64)
2. Grade8	Cyprus	7	(2.61)	54	(3.64)	7	(2.05)	33	(4.43)
	EU	23	(1.43)	31	(1.27)	24	(1.52)	22	(1.17)
3. Grade11gen	Cyprus	14	(3.26)	32	(3.16)	17	(2.65)	37	(4.13)
	EU	28	(2.41)	27	(2.68)	26	(1.65)	19	(1.67)
4. Grade11voc	Cyprus	9	(7.00)	46	(10.86)	6	(3.01)	39	(14.50)
	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	Cyprus	37	(1.90)	50	(2.05)	13	(1.14)
	EU	31	(1.00)	50	(0.85)	19	(0.67)
2. Grade11gen	Cyprus	37	(1.83)	27	(1.41)	35	(1.76)
	EU	36	(1.18)	36	(1.00)	28	(1.47)
3. Grade11voc	Cyprus	33	(5.16)	37	(8.55)	29	(8.56)
	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	Cyprus	51	(7.87)	40	(8.40)	9	(2.64)
	EU	37	(4.43)	48	(4.15)	15	(2.12)
2. Grade8	Cyprus	88	(4.03)	9	(3.56)	3	(1.99)
	EU	68	(2.87)	24	(3.31)	8	(1.16)
3. Grade11gen	Cyprus	37	(7.89)	58	(7.89)	5	(3.17)
	EU	55	(12.27)	39	(10.34)	5	(2.06)
4. Grade11voc	Cyprus	0	(0.0)	40	(23.23)	60	(23.23)
	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).

Computer ratios. Any slight discrepancy between values in the two tables in each section is explained by the slightly different method of calculation used. For further information please refer to the Technical Report.

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 factorial 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, all schools in Cyprus were selected at each of four levels (grade 4, 8, 11 general and 11 vocational) and invited to participate in the survey. Fig. 1.1 shows the percentage of those schools in which at least one survey questionnaire was submitted, the EU average ranging from 35 to 40 per cent depending on the grade. In Cyprus the overall average participation level was 69% (326 schools), the second highest of any country. 'EU mean' here refers to all 31 countries in the survey.

