



University of Liege  
Psychology and  
Education

## SURVEY OF SCHOOLS: ICT IN EDUCATION

### COUNTRY PROFILE: LITHUANIA

November 2012

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## 1. INTRODUCTION

### ICT IN THE SCHOOL EDUCATION SYSTEM OF LITHUANIA

In Lithuania<sup>1</sup>, the ministry of Education and Science formulates and implements the national policy on education and research although municipal institutions have significant delegated powers to implement the national education policy at a local level. The head of the school directs the drafting of the school's Strategic Plan and Annual Action Programme as well as the school education programmes, confirms them and is in charge of their implementation. Self-governance bodies of the school collectively discuss issues of school activity and funding and, within the scope of their competence, defined in the by-laws (statute of the school, adopt decisions and influence decisions of the head of the school and perform public supervision of the school's management.

According to Eurydice's **Key Data on Learning and Innovation through ICT at school in Europe**<sup>2</sup>, in Lithuania there are national strategies covering training and research measures in all areas<sup>3</sup>. There are central steering documents for all ICT learning objectives<sup>4</sup> at secondary education level except for using mobile devices, but none at primary level. In primary and secondary schools ICT is taught as a general tool for other subjects/or as a tool for specific tasks in other subjects, and in addition in secondary schools ICT is also taught as a separate subject. At primary and secondary education level recommendations or suggestions and support are provided in all ICT hardware areas, except for e-book readers, and support only is provided for computers, projectors or beamers. Recommendation or suggestions and support are provided for all ICT software categories<sup>5</sup>, except tutorial software where only support is provided and multimedia applications and digital learning games, where only recommendations or suggestions are provided. According to official steering documents, students use ICT in all subjects both in class and for complementary activities at secondary education level, and for natural sciences and social sciences at primary level, where they use ICT only in class for language of instruction, mathematics and foreign languages. Teachers at all education levels use ICT in class in all subject areas except the arts where they are only expected to use it at secondary education level. 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 private funding for hardware and software in schools, ICT training for pupils/students, providing extra-curricular activities, and developing new forms or modes of assessment.

### THE SURVEY OF SCHOOLS: ICT IN EDUCATION

In 2011, the European Commission Directorate General Communications Networks, Content and Technology<sup>6</sup> launched the Survey of Schools: ICT in Education, the primary goal of which is to

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

<sup>2</sup> [http://eacea.ec.europa.eu/education/eurydice/documents/key\\_data\\_series/129EN.pdf](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.

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

<sup>4</sup> 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

<sup>5</sup> 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

<sup>6</sup> [www.ec.europa.eu/dgs/connect/](http://www.ec.europa.eu/dgs/connect/)

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.

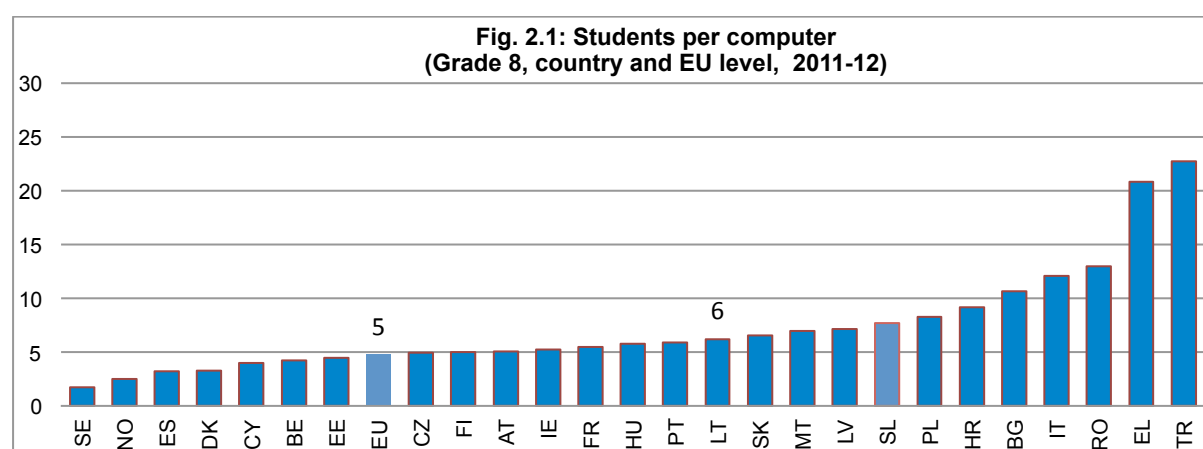
This country profile should be read in conjunction with the Report of the Survey of Schools: ICT in Education (the 'main report'). The profile presents key indicators concerning access, use and attitudes to Information and Communication Technology in primary and secondary schools derived from responses 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](mailto:essie-eu@eun.org) and information about the survey is at <http://essie.eun.org>.

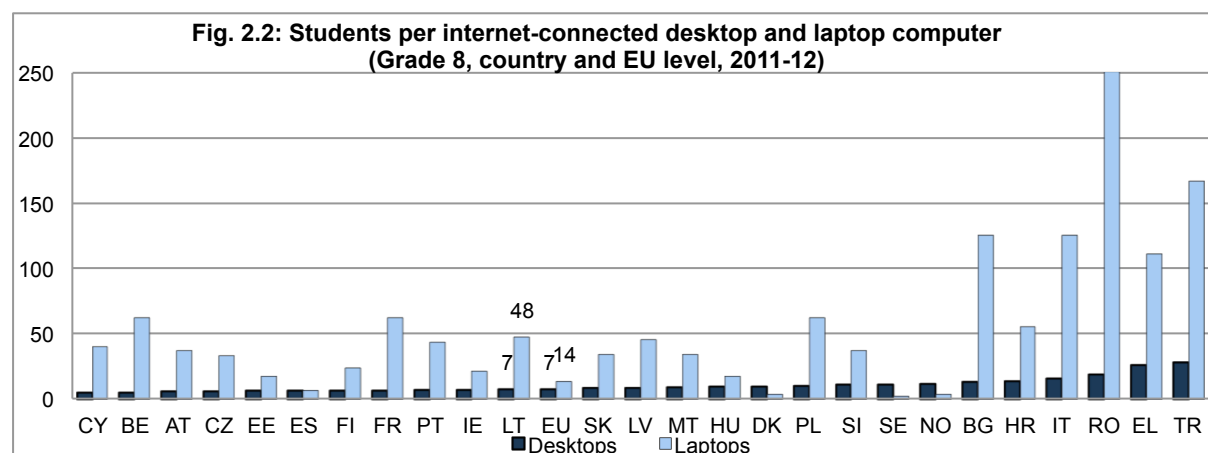
## 2. ICT INFRASTRUCTURE

### 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 Lithuania there are fewer computers for all grade students than the EU average, and provision is consistent all levels. In most countries the older the student the more the computers and this trend is also reflected in Lithuania at grade 11 vocational. Fig. 2.1 shows that at grade 8 Lithuania is among the middle group of countries on this indicator with 6 students per computer, and is ranked among the middle group of countries at all other grades, except at grade 4 where it is among the bottom group of countries (main report, fig. 1.1).



As for computers connected to the internet in schools, in Lithuania there are desktop computers close to the EU average at most grades, and above grade 11 vocational. There is below the EU average of laptop computers at all grades. At grade 8 most computers are desktops around the EU average at grade (fig. 2.2). In terms of internet-connected laptop computers at grade 8 Lithuania ranks eighteenth with a ratio of 48 students per laptops among the middle group of countries, and it also ranks at this level at grade 4 and grade 11 general, but is among the bottom group of countries at grade 11 vocational (see main report fig 1.2).



The higher the percentage of students from low-income families in a school, the more online desktop computers tend to be available in grade 8 schools in Lithuania (main report, section 1). Computers are divided almost equally between dedicated labs and classroom at all grades but more tend to be in labs

at 11 vocational (main report, fig. 1.3). Lithuania is well below the EU average of 75 % of students in schools where over 90% of computers are operational, among the bottom group of countries on this indicator (main report, fig. 1.4). With on average 167 students per interactive whiteboard at grade 8 and grade 11 general, Lithuania ranks ninth, ranks among the middle group of countries butt in the bottom group at other grades (main report, fig. 1.5). Lithuania generally has an average ratio of students per data projector and ranks among the middle group of countries at all grades, except at grade 4 where it is in the bottom group countries on this measure

Maintenance of ICT equipment is very much a task for school personnel, and Lithuania has the highest percentage in Europe of schools that rely on internal staff, compared with other forms of technical support.

## BROADBAND

In Lithuania every student at all grades is in a school with broadband, and more than the EU average are in schools with high speed broadband, particularly younger students.

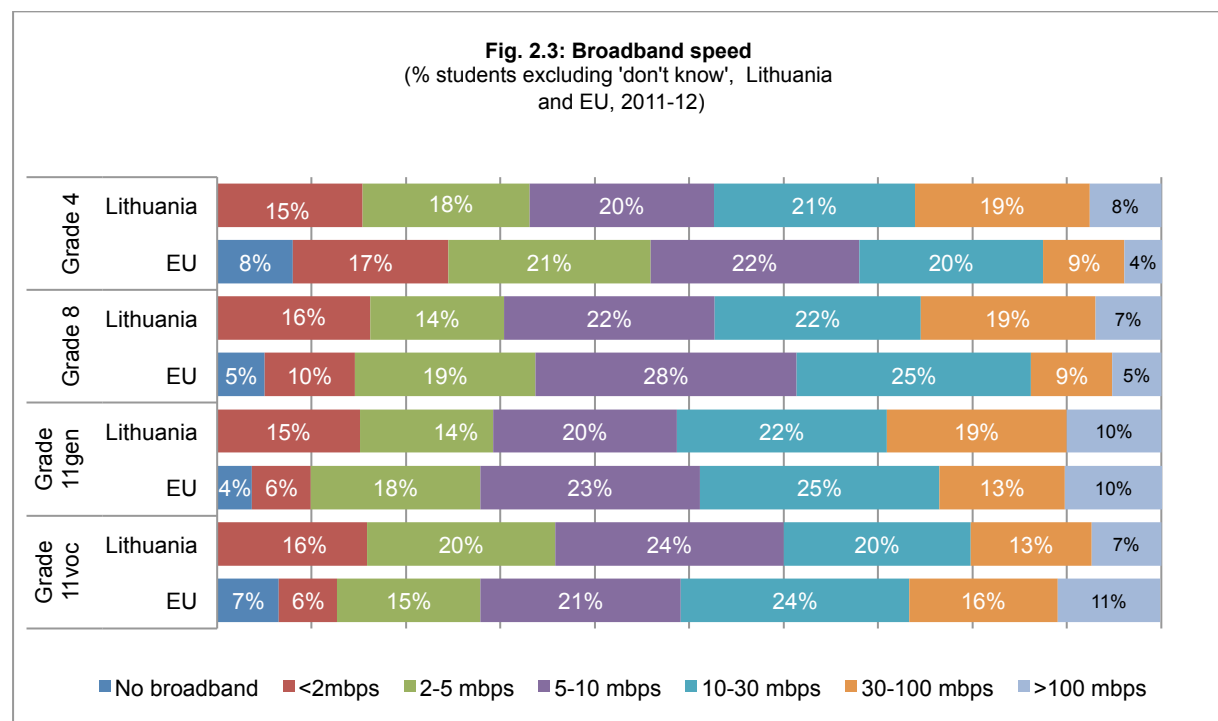
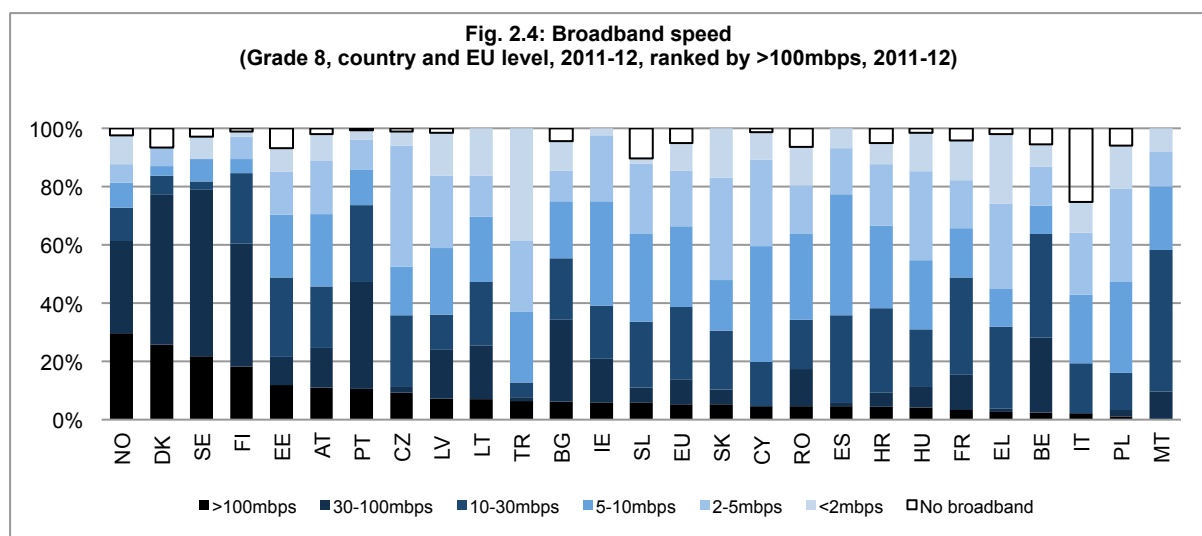
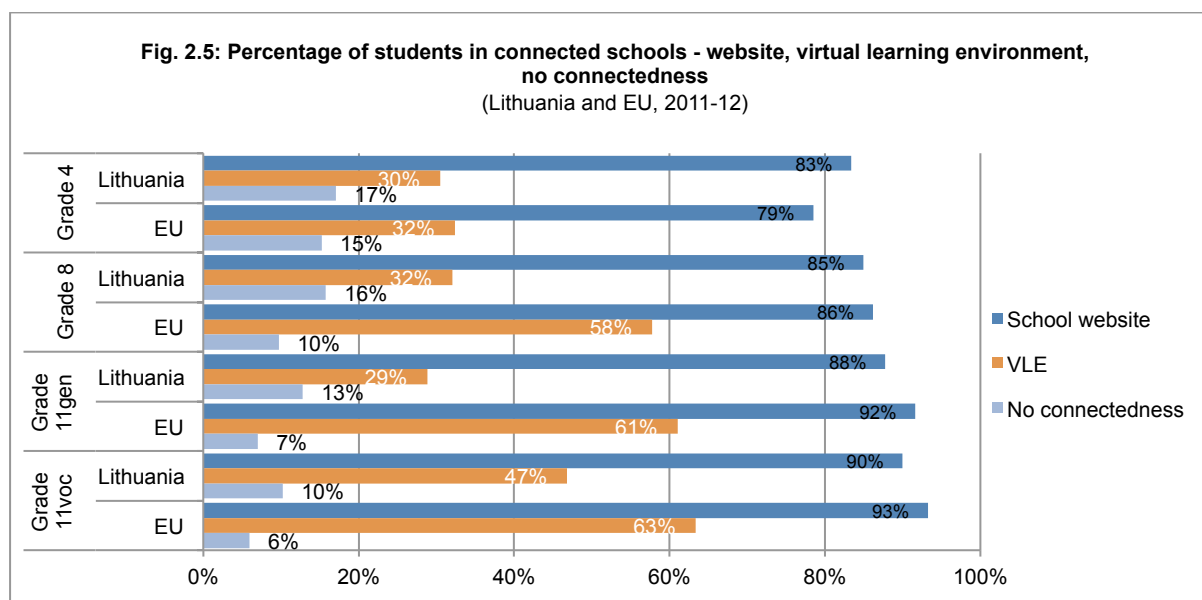


Figure 2.4 shows how Lithuania compares with other countries at grade 8, ranked among the leading group of countries for the percentage of students in schools with more than 100 mbps, as is the case at grade 4, while at grade 11 Lithuania ranks among the middle group of countries (main report fig 1.8)



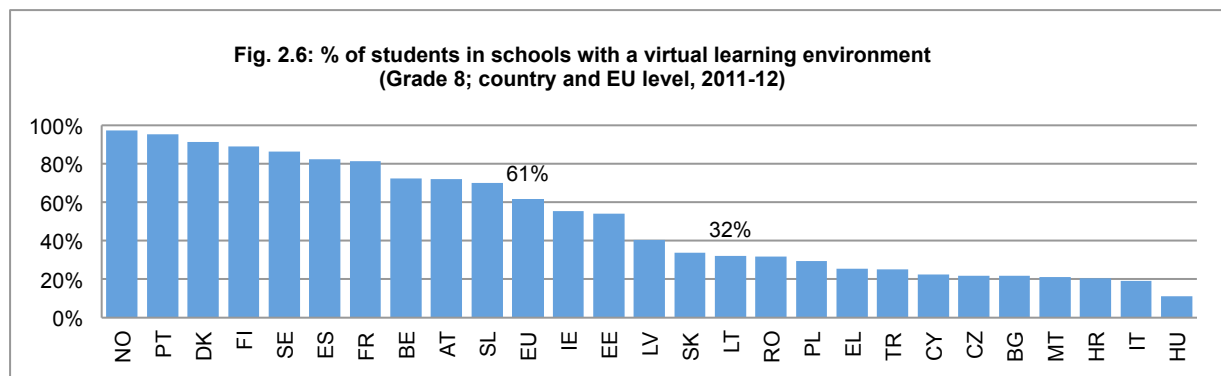
## 'CONNECTEDNESS'

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 Lithuania, despite the high broadband penetration, the percentage of students in schools with a website is close to the EU mean and the percentage with a virtual learning environment is generally lower notably at grades 8 and 11 general. 'Unconnected' schools are consistently higher at all grades, above the EU average.



Lithuania ranks well below other countries as regards virtual learning environments at grade 8, as seen in fig. 2.6, and is among the middle group of countries at this grade and also at grade 4, while at grade 11 Lithuania ranks among the lowest group of countries (main report, fig 1.10).



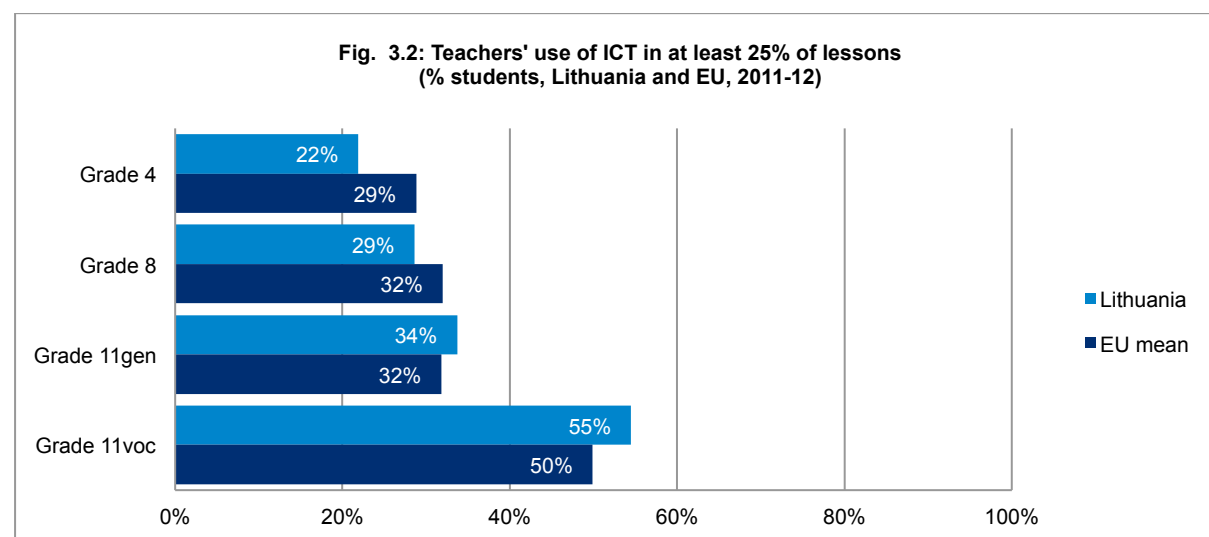
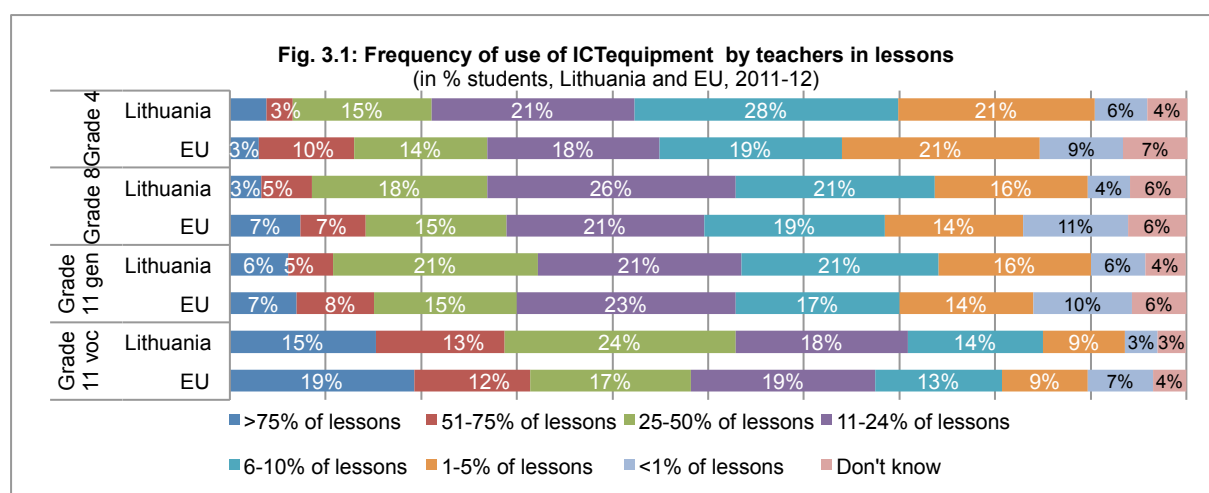


In Lithuania of schools with VLEs, the majority offer external access except. Lithuania is in the middle group of countries at all grades, offering relatively high levels of access in equal measure to teachers, students and parents, except at grade 11 vocational where less parents have access (main report section 1).

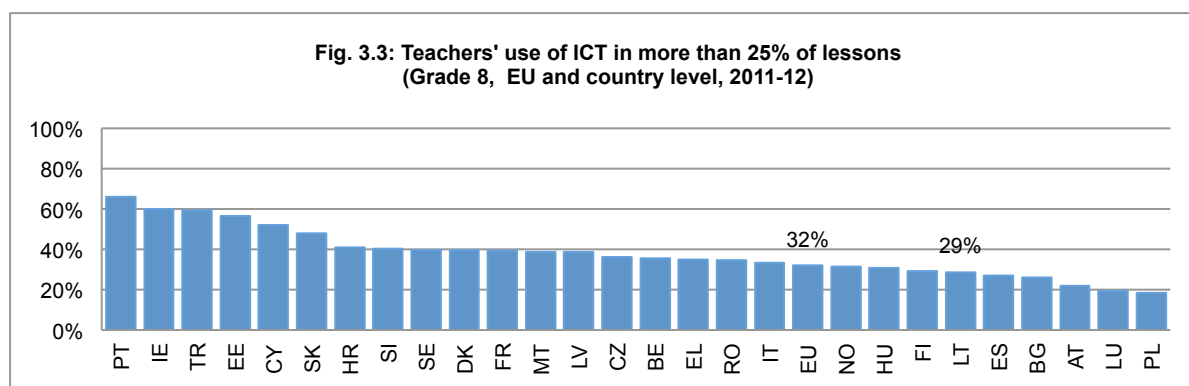
### 3. FREQUENCY OF ICT USE IN CLASS

#### FREQUENCY OF ICT USE BY TEACHERS IN CLASS

Teachers' frequency of use of ICT in lessons is shown in the charts below. In Lithuania use of ICT by teachers is generally in line at all grades with the EU average. There are more teachers using ICT in more than 25% of lessons, above the EU average, at grade 11, and slightly less at other grades. The most intense use is at grade 11 vocational where nearly a third use ICT with their students in more than 50% of lessons, slightly below the EU average.



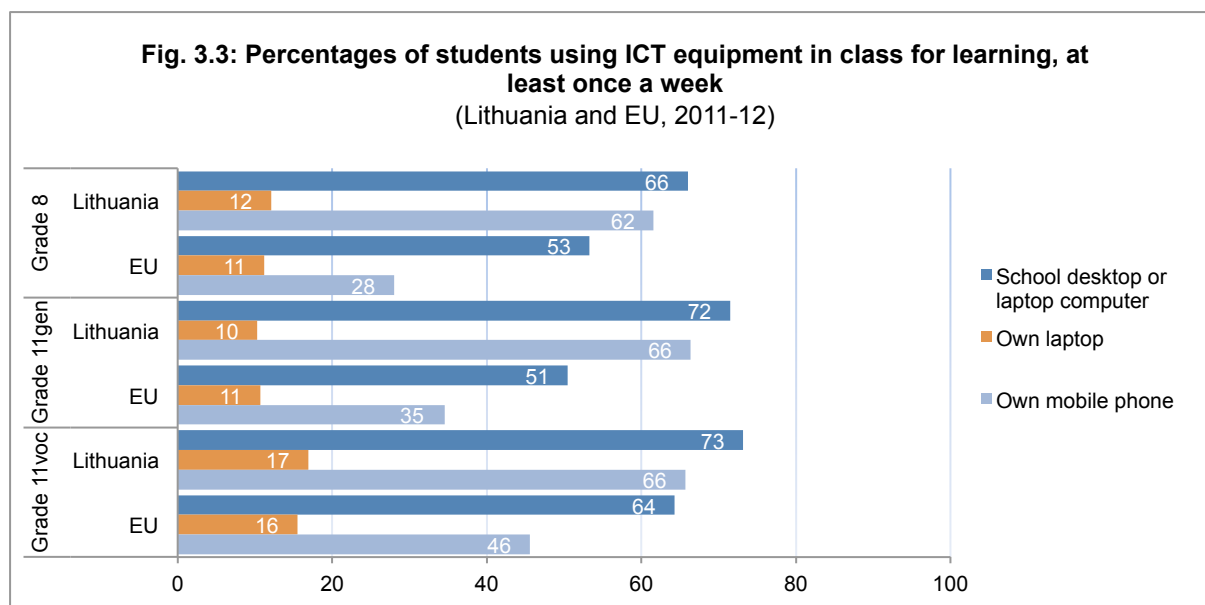
Teachers in Lithuania are below average users of ICT in lessons: when considering percentages using ICT in more than one in four lessons. Fig 3.3 shows Lithuania ranks in the bottom group of countries at grade 8, and also at grade 4, while at grade 11 there is slightly above average use compared with other countries, with Lithuania placed among the middle group of countries (see main report, fig. 2.2).



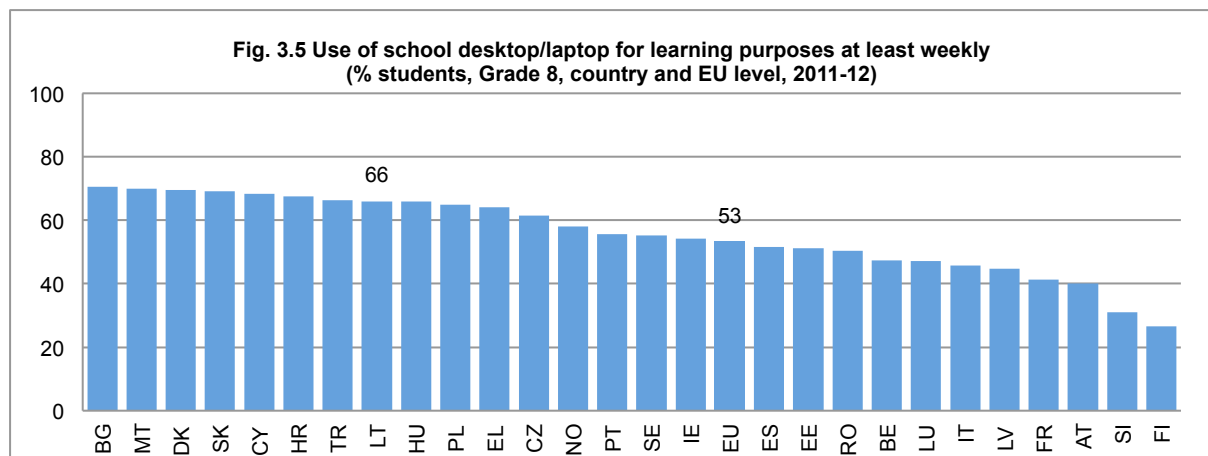
Lithuania is among the middle group of countries as regards teachers' use of ICT where teachers have been using ICT in lessons for more than six years (main report, fig 3.2), close to the EU level at all grades, except in vocational schools where it is below and Lithuania is among the bottom group of countries. Lithuania is among the leading group of countries, ranked seventh, in terms of student-centred learning at grade 11 vocational, and is among the middle group of countries at grade 11 general, however at grade 4 and grade 8 it ranks among the bottom countries on this indicator, third from last at grade 8 (main report, fig. 3.5)

## STUDENTS' ICT USE

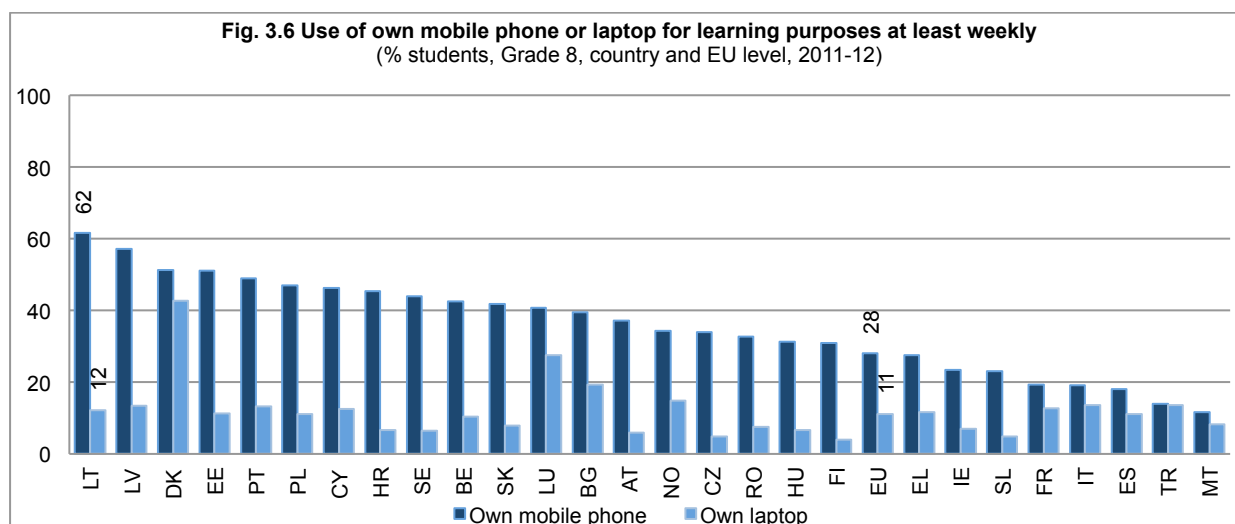
Students at grade 8 and 11 were also asked how frequently they used various items of ICT equipment in their lessons for learning purposes. The chart below shows their reported intensity of use of a school computer, and their own laptop or mobile phone. In Lithuania student use of computers in class is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



At grade 8 students' reported use of school computers is the eighth highest in the EU, with 66% saying they use them at least once a week (fig. 3.5), and at grade 11 use is higher, placing Lithuania among the top five leading countries on this measure (main report, fig. 2.5).



Compared to other countries at grade 8 (fig.3.6), students in Lithuania use their own mobile phone in school more than any other country in Europe, but with average use of their own laptop, this pattern is repeated at grade 11 (main report, fig. 2.5).



Students report using interactive whiteboards more frequently than the EU average, Lithuania among the leading group of countries at grade 11 (main report, fig. 2.6), and at grade 8 is among the middle group of countries. Concerning students' ICT-based activities during lessons, at all grades Lithuania is among the leading countries as measured by frequency of use (main report, fig. 3.8).

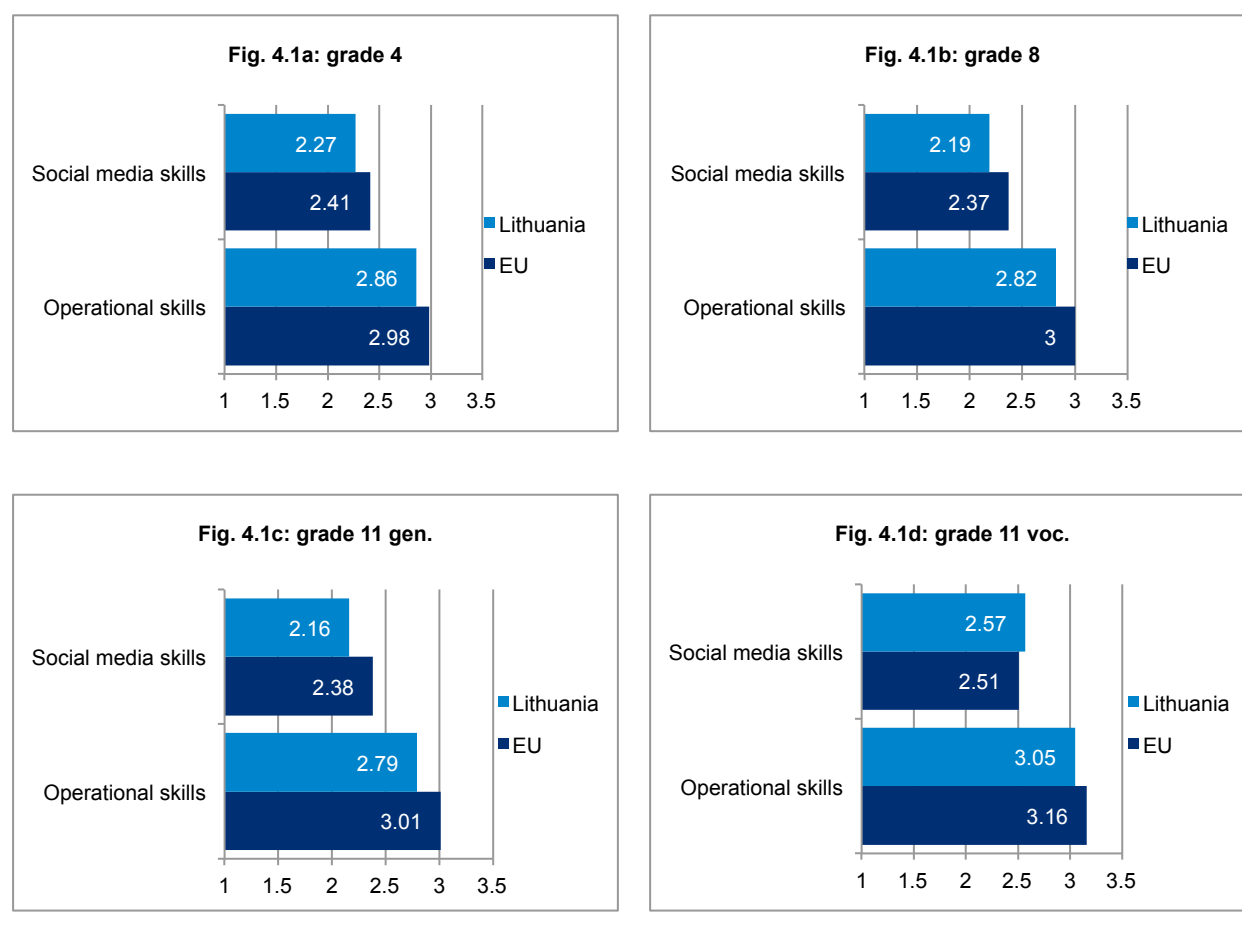
## 4. DIGITAL CONFIDENCE

### TEACHERS

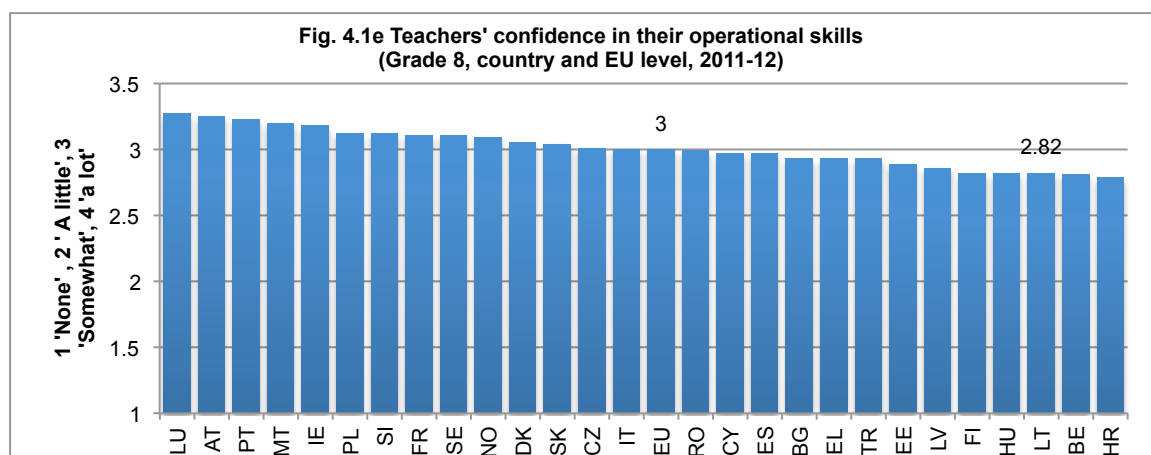
In Lithuania teachers' confidence in their operational skills with ICT is slightly lower than the EU mean at all grades (close to 'somewhat'). Their confidence in social media skills is also slightly lower than the EU mean (between 'a little' and 'somewhat'), except for grade 11 vocational where it is higher. The mean score of students in Lithuania being taught by teachers declaring confidence in their operational skills is less than 3 in all grades, and below 2.4 in social media, below the EU mean.

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

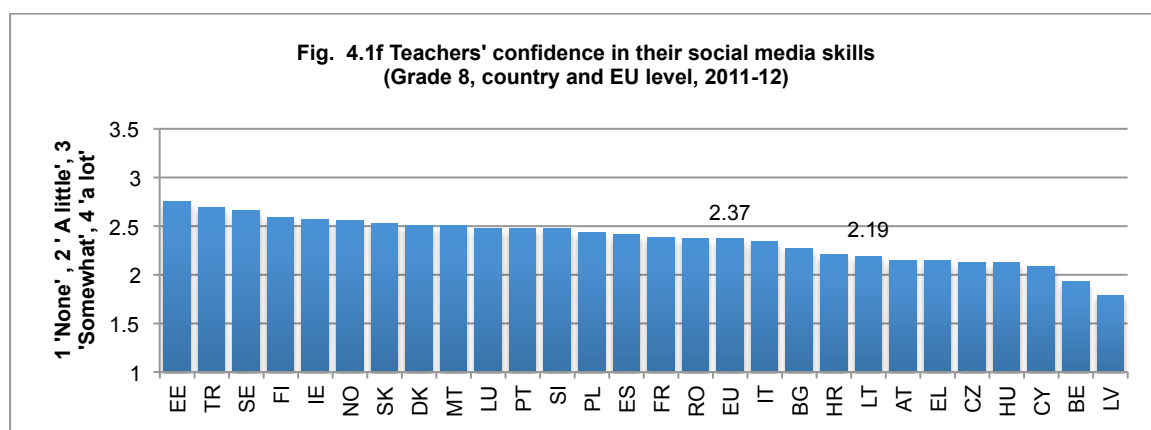
(by grade; mean score of students with 1 being 'none' and 4 being 'a lot'; Lithuania and EU; 2011-12)



Comparing confidence levels at grade 8, teachers' confidence in their operational skills places Lithuania among the bottom group of countries (fig. 4.1e), and this is also the situation at all other grades (main report, fig. 4.13).



At grade 8 Lithuanian teachers are ranked among the bottom group of countries as regards social media confidence (fig. 4.1f), and this is also the situation at grade 11 general, although Lithuania is placed higher at grade 4, and at 11 vocational among the middle group of countries (main report, fig. 4.14).



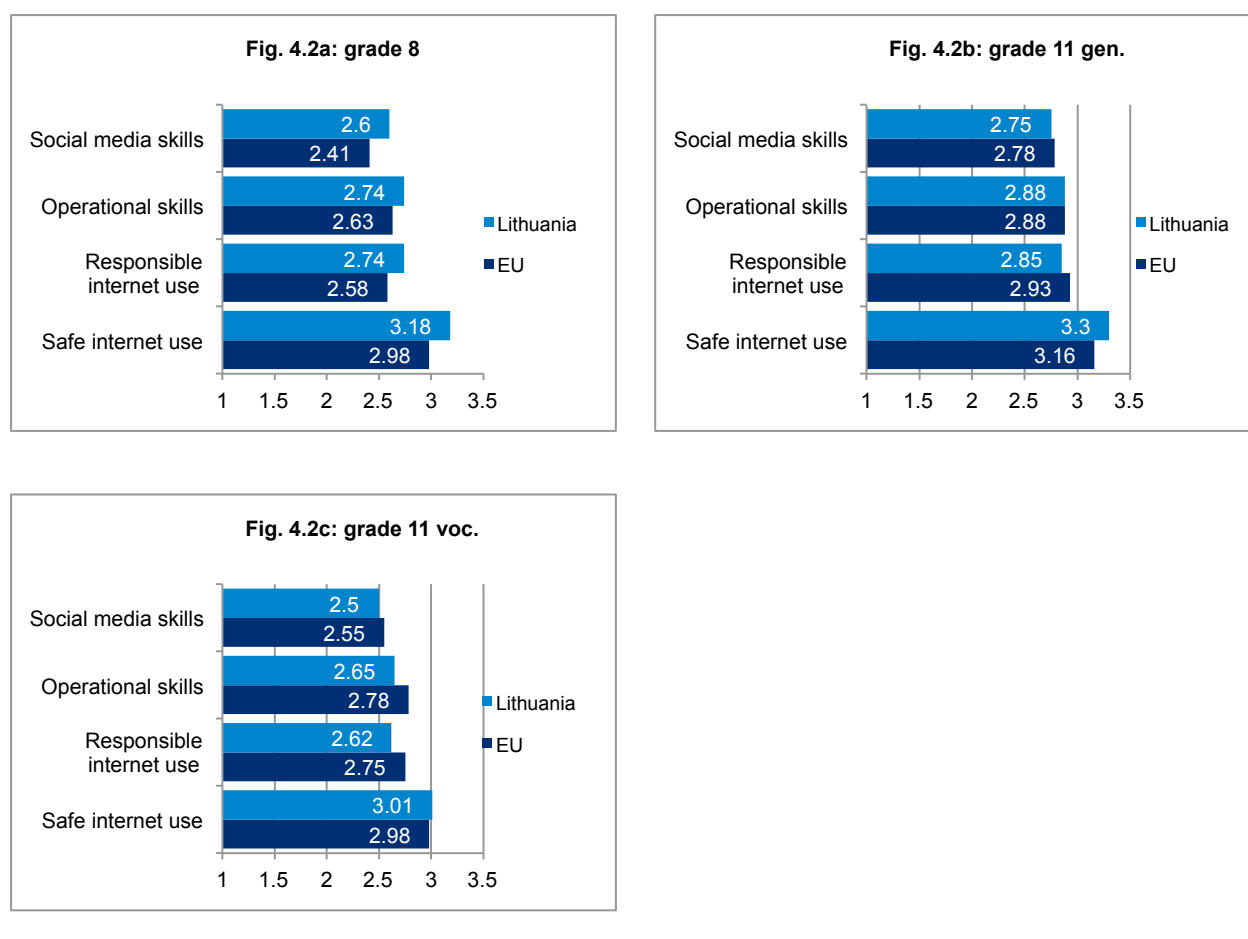
For further details please refer to Section 4 of the survey report.

## STUDENTS

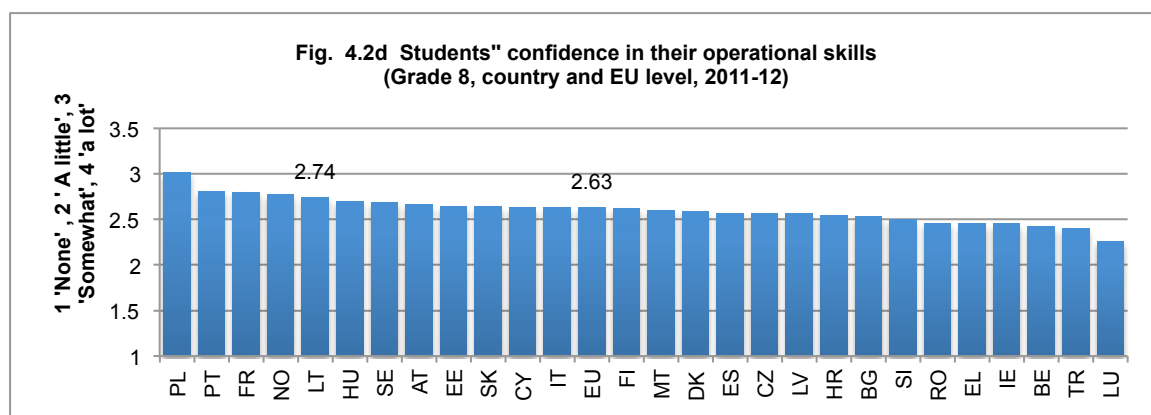
In Lithuania students' confidence in their social media and operational ICT skills is generally at the EU mean (close to 'somewhat') in all grades, and above at grade 11 vocational. The mean score of students in Lithuania is 3, close to the EU average at grade 11 and above it at grade 8.

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

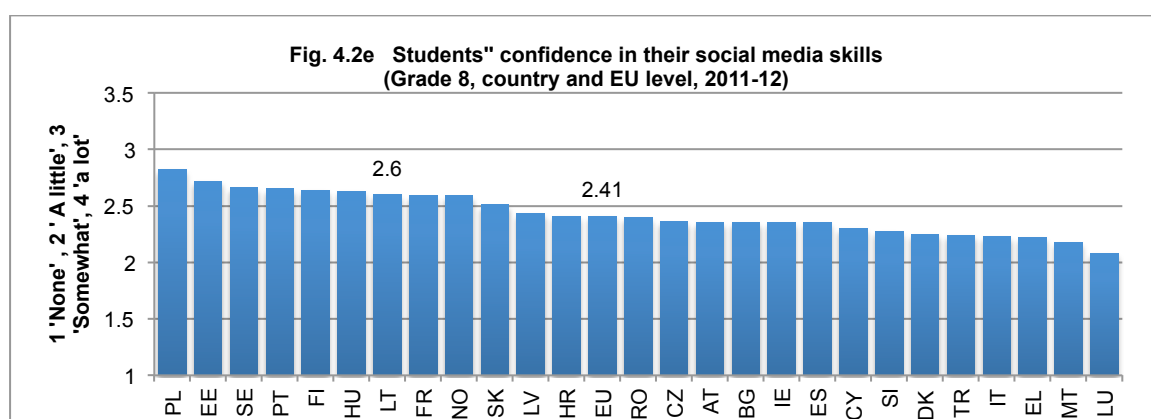
(by grade; mean score of students with 1 being 'none' and 4 being 'a lot'; Lithuania and EU; 2011-12)



Confidence in operational skills is higher than the EU mean amongst grade 8 students, with Lithuania ranked fifth highest among the leading group of countries (fig. 4.2d), but lower and at grade 11 where it ranks among the middle group of countries (main report fig. 4.18).



Lithuania is among the leading group countries for confidence in social media competence at grade 8 (fig. 4.2e), and at grade 11 ranks among the middle group of countries (main report, fig. 4.19).



At grade 8 Lithuania ranks in among the leading group of countries in terms of confidence to use the internet safely and responsibly, at grade 11 it ranks among the leading group of countries in terms of confidence to use the internet safely (main report, fig. 4.16, 4.17), and is among the middle group of countries in terms of confidence to use it responsibly.

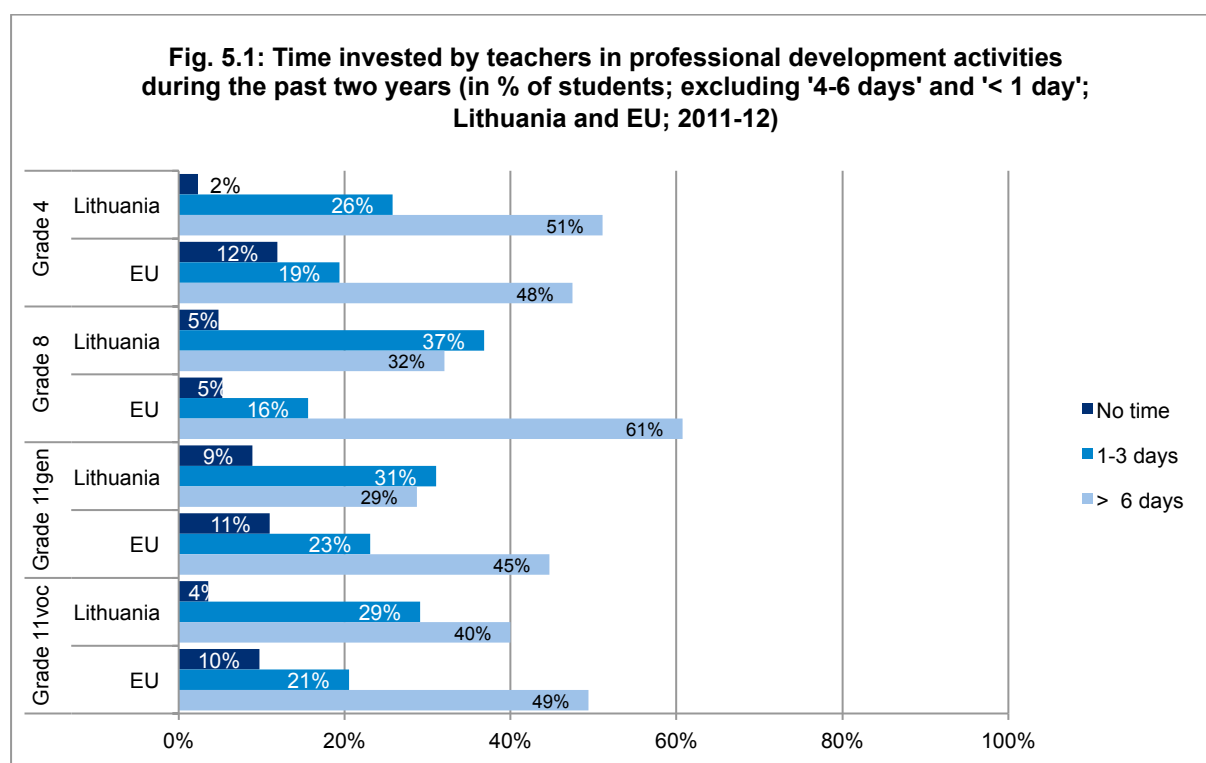


## 5. PROFESSIONAL DEVELOPMENT

### TIME SPENT ON TRAINING

Strikingly much fewer students at grade 4 and grade 8 in Lithuania 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. The same is the case for grade 11 students both in general and vocational education, albeit to a much lesser extent, especially at vocational level where the situation in Lithuania is very close to the EU average.

In Lithuania the majority of students are in schools where teachers have spent between 1 and 3 days on ICT professional development activities are above the EU mean at all grades, most notably at grade 8. Those who have spent no time are below to the EU mean at all grades.



## ENGAGEMENT IN TRAINING

As Fig. 5.2 below shows, in Lithuania more than the EU average of students are in schools where teachers have recently undergone ICT training provided by school staff, at all grades with considerable more at grade 11 vocational. More are in schools where teachers take part in training through online communities, above the EU average. More students than the EU average are in schools where teachers have recently undergone personalised learning training, most notably at grades 4 and 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; Lithuania and EU; 2011-12)

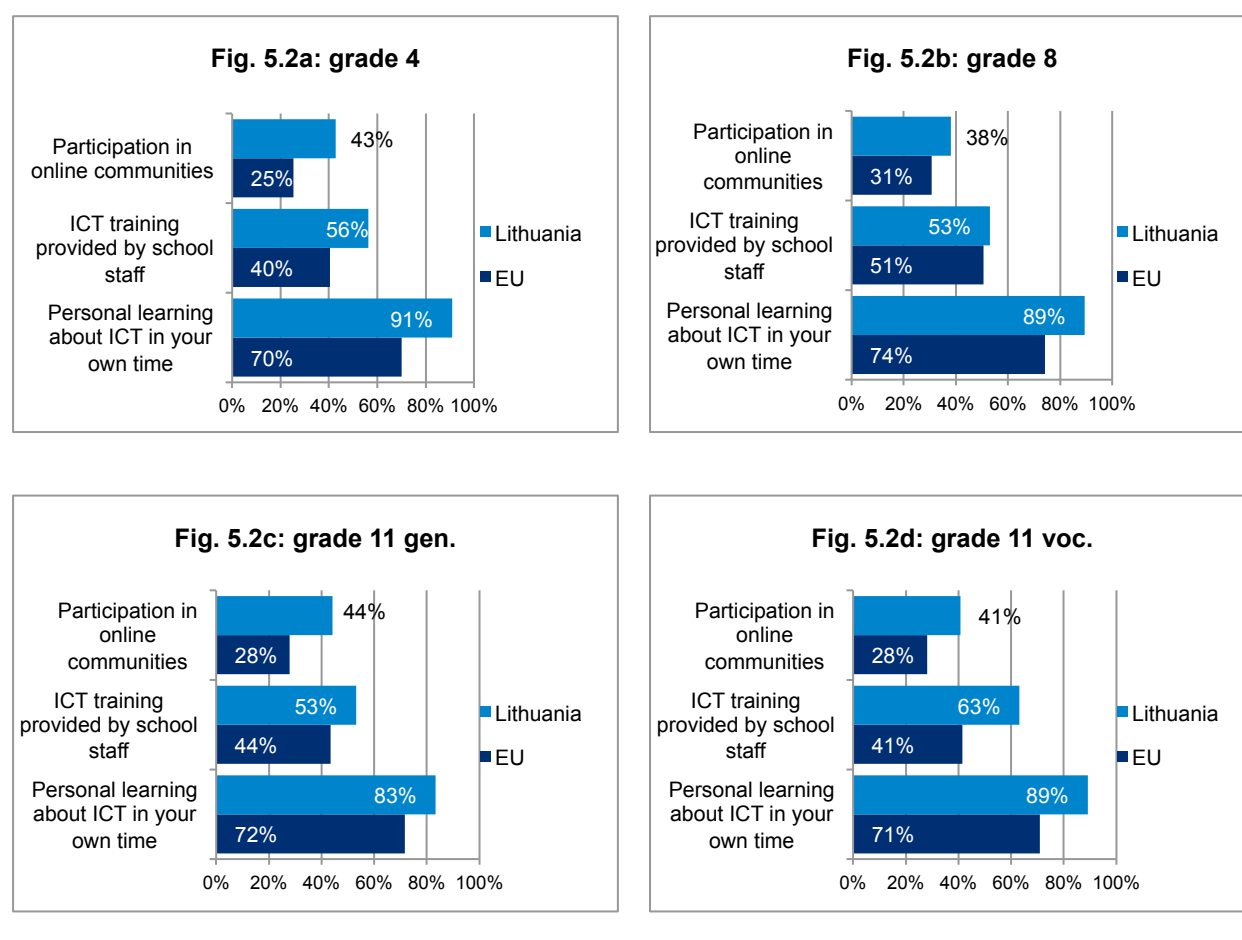
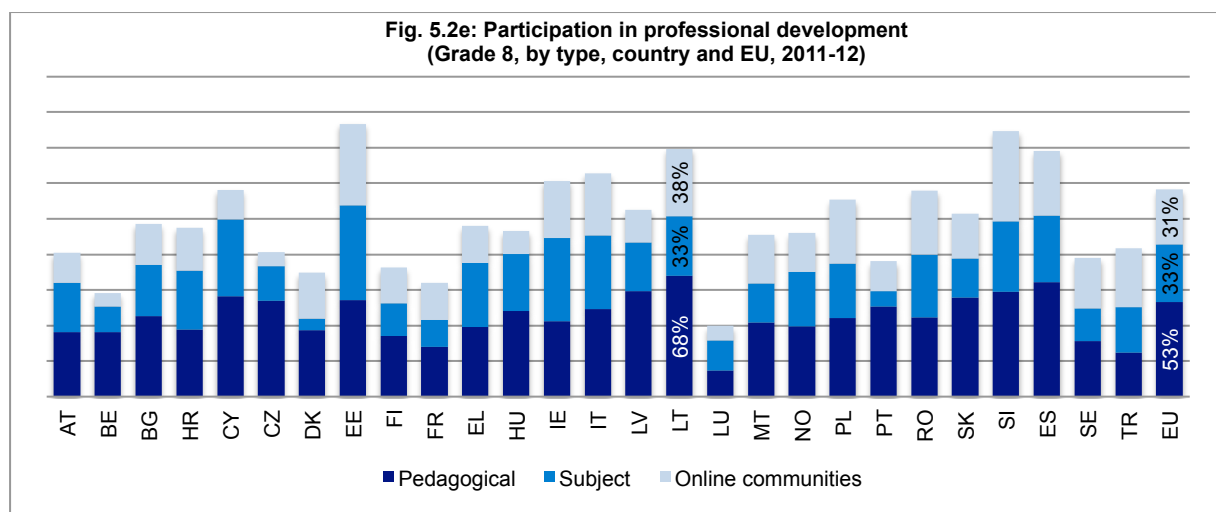


Fig. 5.2e shows that grade 8 teachers in Lithuania have taken part extensively in professional development in the preceding two years, at the EU average in subject-specific ICT training but have taken part more in online communities or in pedagogical training than the EU mean.

Lithuania ranks first among the leading group of countries at all grades, except grade 11 general where it ranks third, regarding pedagogical training, and is among the leading group of countries for subject-specific ICT training at all grades. Regarding participation in online communities Lithuania ranks third highest among the leading group of countries for at all grades, except grade 11 vocational where it ranks fifth highest (main report, fig. 4.6, 4.7, 4.8).



In Lithuania at all grades percentages of students taught by teachers for whom ICT training is compulsory is much higher than the average, at it ranks first among the leading group of countries, (main report, fig. 4.2). As regards involvement in personal learning about ICT in their own time (main report, fig. 4.4), percentages (in the range 83% to 91%) above the EU mean at all grades, with Lithuania ranks among the leading group of countries, first at grade 4 and in the top two countries at grade 8 and grade 11 vocational. The percentage of students taught by teachers participating in training provided by school staff is among the leading group of countries at all grades, except at grade 11 general where Lithuania ranks among the middle group of countries (main report, fig. 4.5).

Between 2 and 9 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); less than the EU mean at all grades.

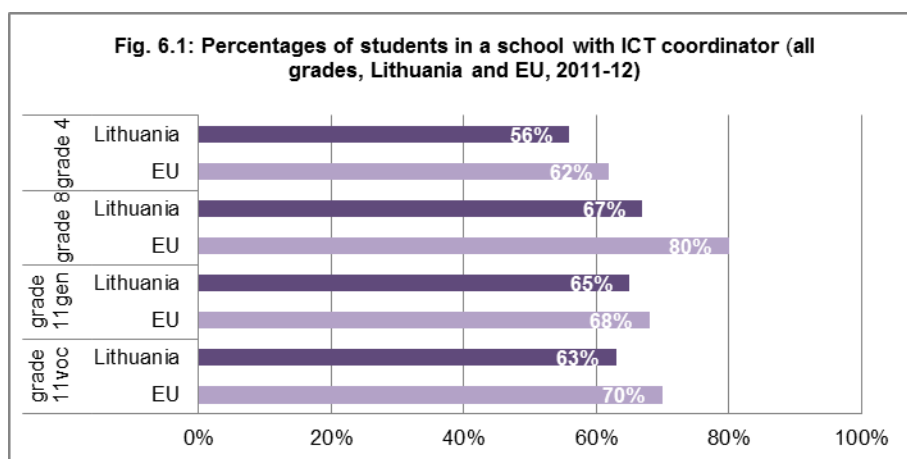
## 6. SCHOOL SUPPORT MEASURES

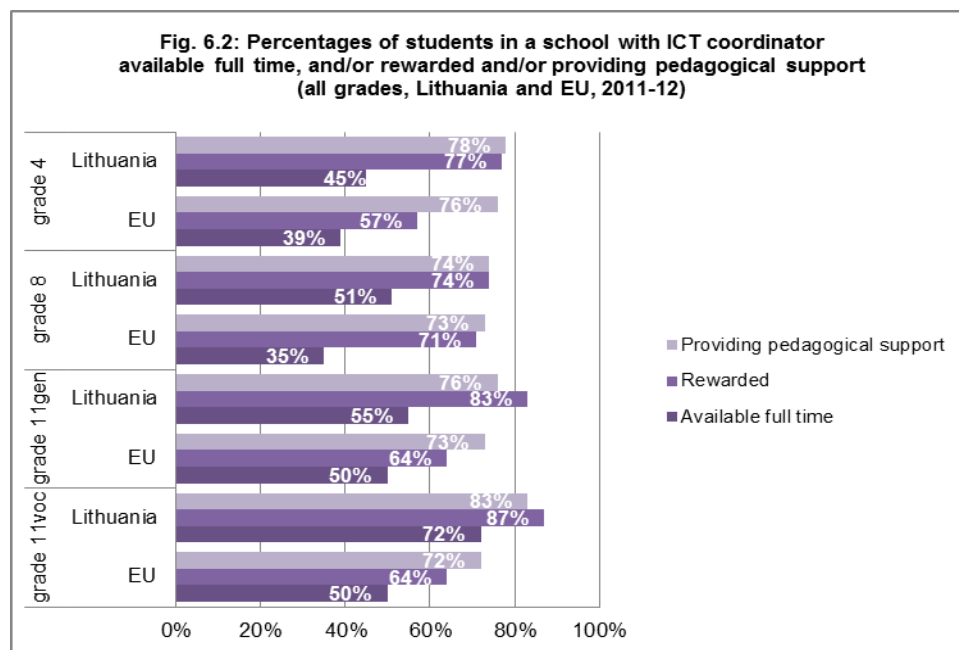
Students in Lithuania are in schools where above EU averages of ICT strategies are implemented at all grades, ranked among the leading group of countries, except at grade 11 general where it is among the lowest middle of countries, (main report, fig. 5.3). There are above below average percentages of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

Lithuania ranks among the leading group of countries for percentages of students in schools with change management programmes at grade 11 vocational but among the middle group of countries at all other grades (main report, fig. 5.14).

### ICT COORDINATOR

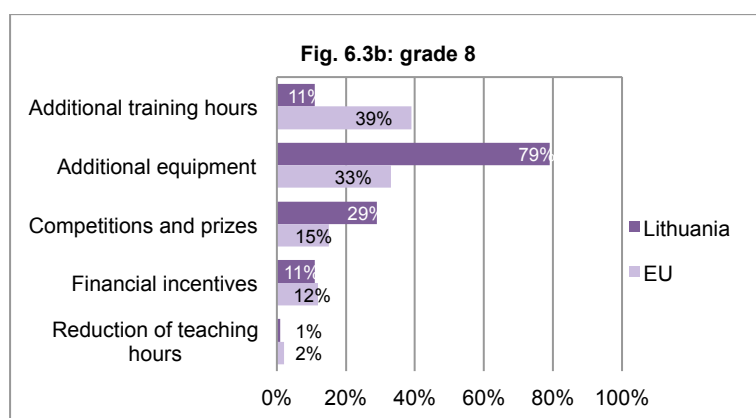
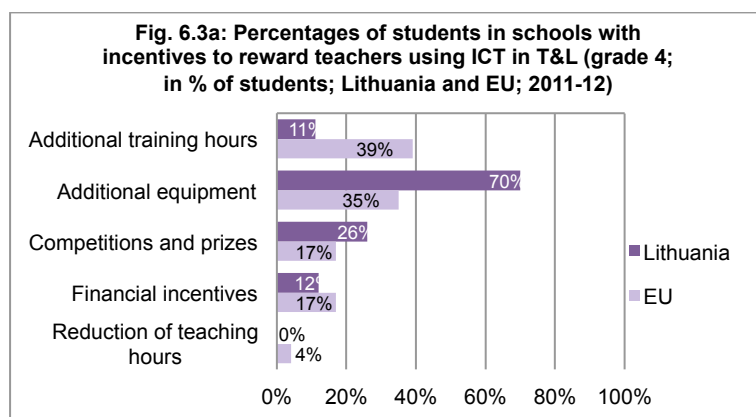
In Lithuania, compared to the situation at EU level (see fig. 6.1), fewer students are in schools where ICT coordinators are provided at all grades. All students are in schools that employ full time ICT coordinators at all grades who provide pedagogical and well as ICT support, above the EU mean, most notably at grade 11 vocational.

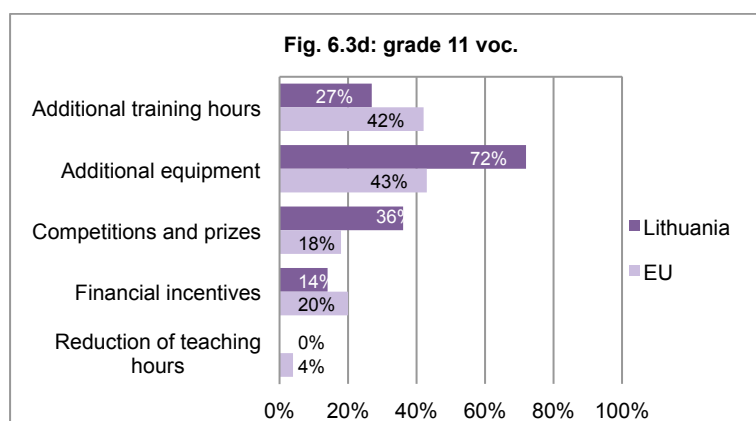
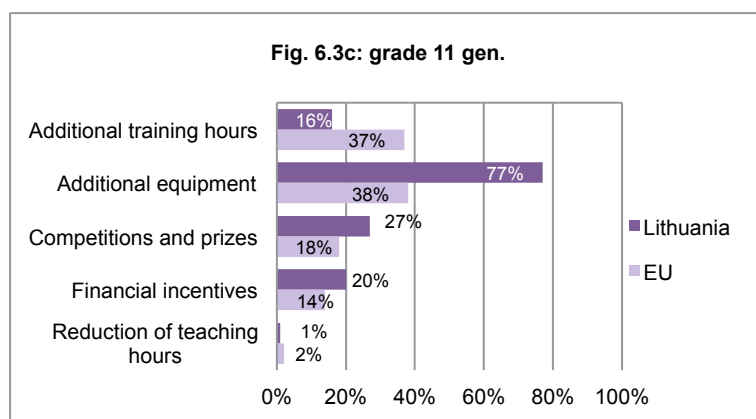




## INCENTIVES

In Lithuania many students are in schools where equipment and competitions are used as an incentive or reward for using ICT, considerably above the EU average at all grades.



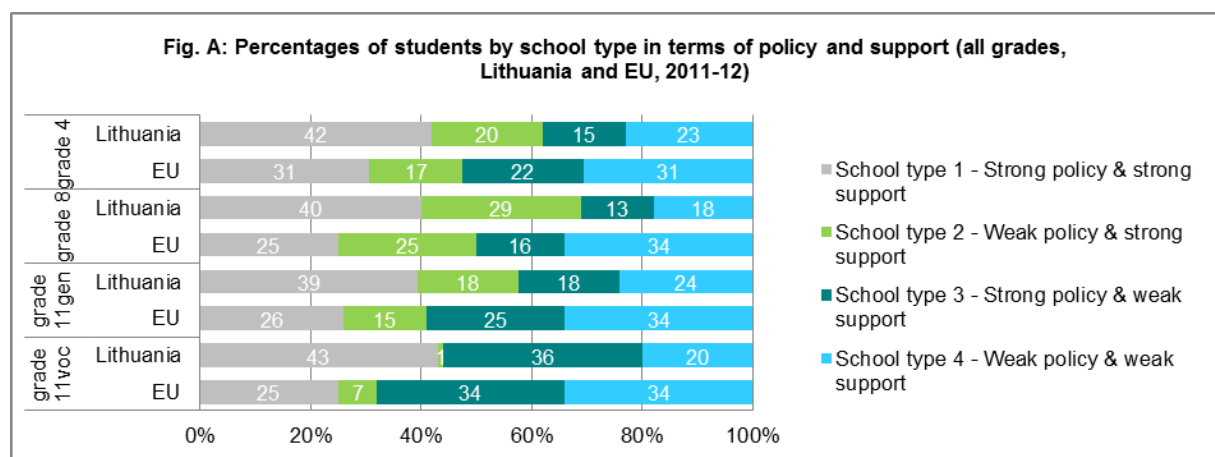


For further details please refer to Section 5 of the survey report.

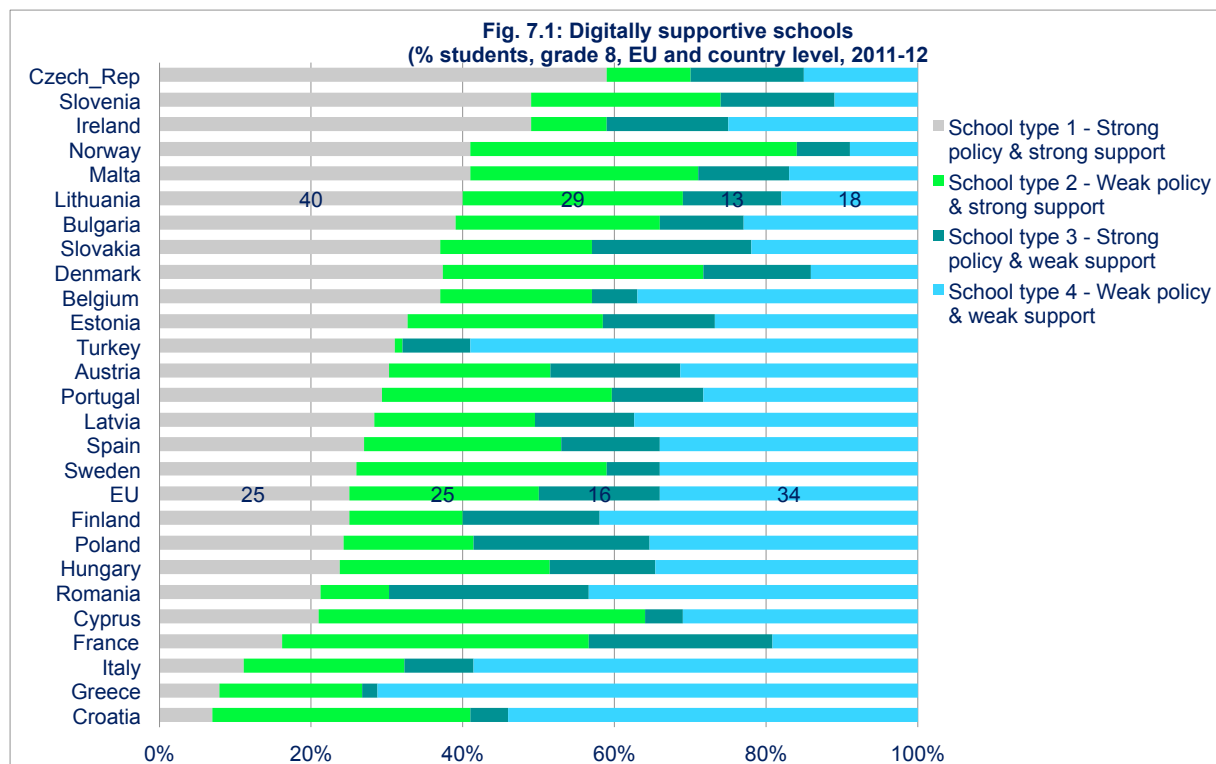
## 7: CLUSTERS

### 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 Lithuania, higher percentages than the EU mean are in type 1 schools, and in schools with strong support (over half at all grades except vocational).



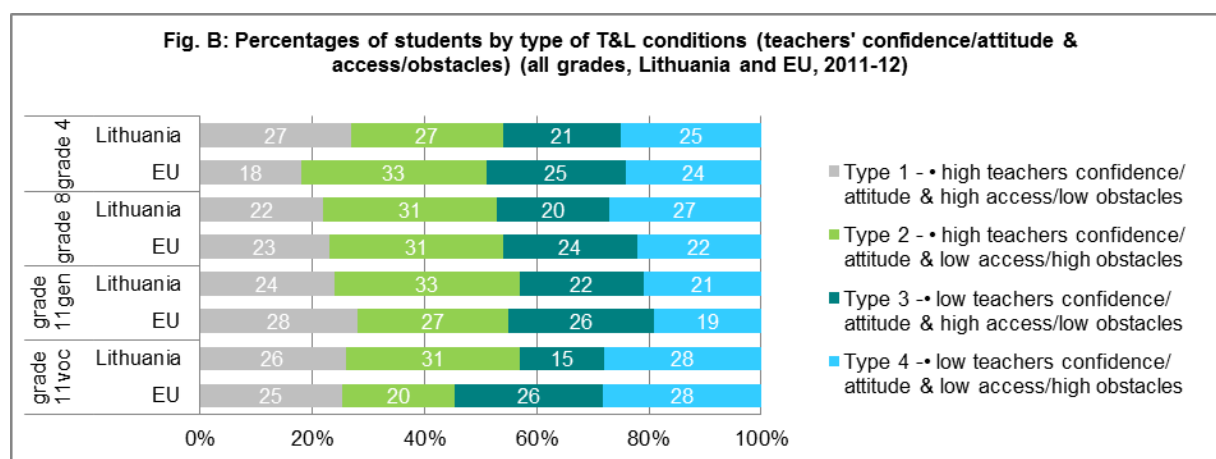
Lithuania ranks high compared to other countries considering schools with strong policy and strong support (type 1) among the leading group of countries at grade 8 (fig. 7.1), as is the case at grade 11 general. Lithuania ranking third highest at grade 11 vocational but with more than half of students in schools with weak support (type 3 and type 4), and at grade 4 it ranks in the middle group of countries (main report, fig. 8.1).



## DIGITALLY CONFIDENT AND SUPPORTIVE TEACHERS

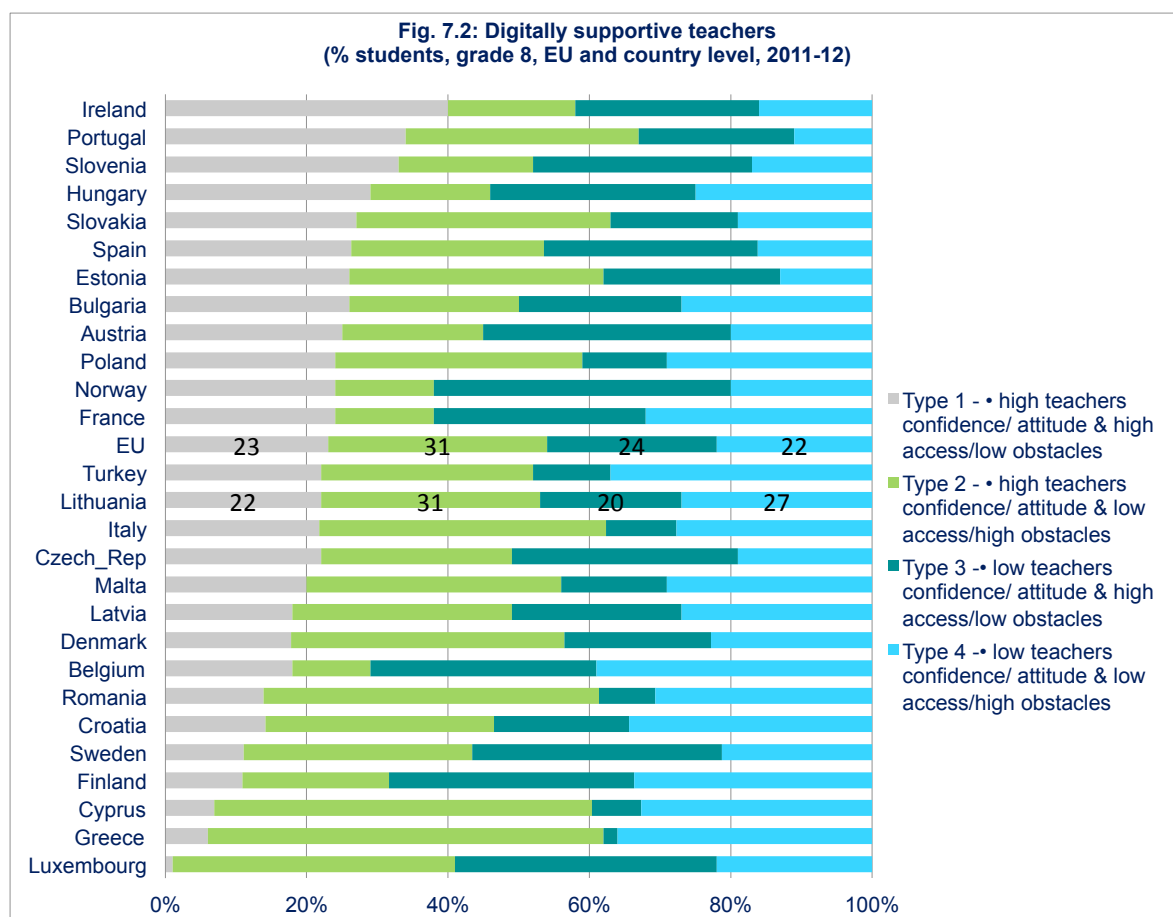
The concept of the 'digitally supportive teacher' also emerged from a close analysis of the data. Such teachers have high confidence in and a positive attitude towards ICT and high access to ICT and low obstacles to using it. Teachers having high confidence in and a positive attitude towards ICT even seem to be able to overcome low access to ICT and high obstacles.

Percentages of students taught by *digitally supportive teachers* in Lithuania are generally close to EU averages, but above at grade 4.



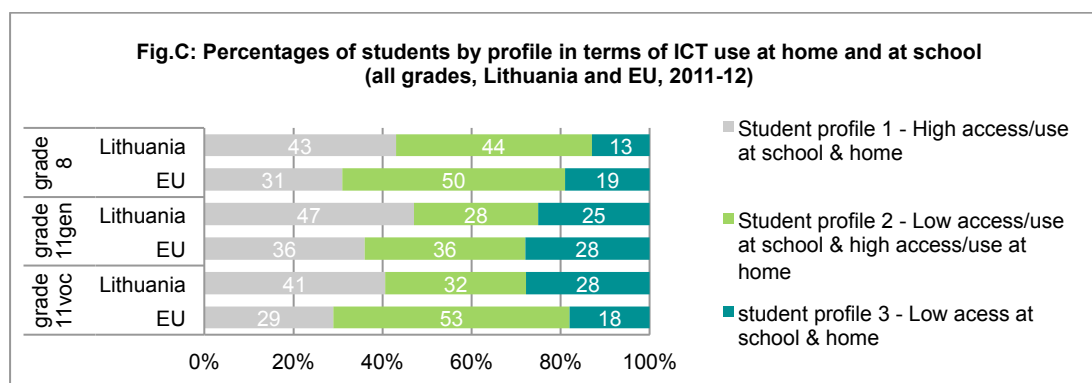
A slightly lower percentage of students at grade 8 compared to other countries is in schools with type 1 teachers (fig. 7.2), ranking Lithuania among the middle group of countries in this respect, as is the situation at grade 11, while at grade 4 Lithuania ranks among the leading group of countries



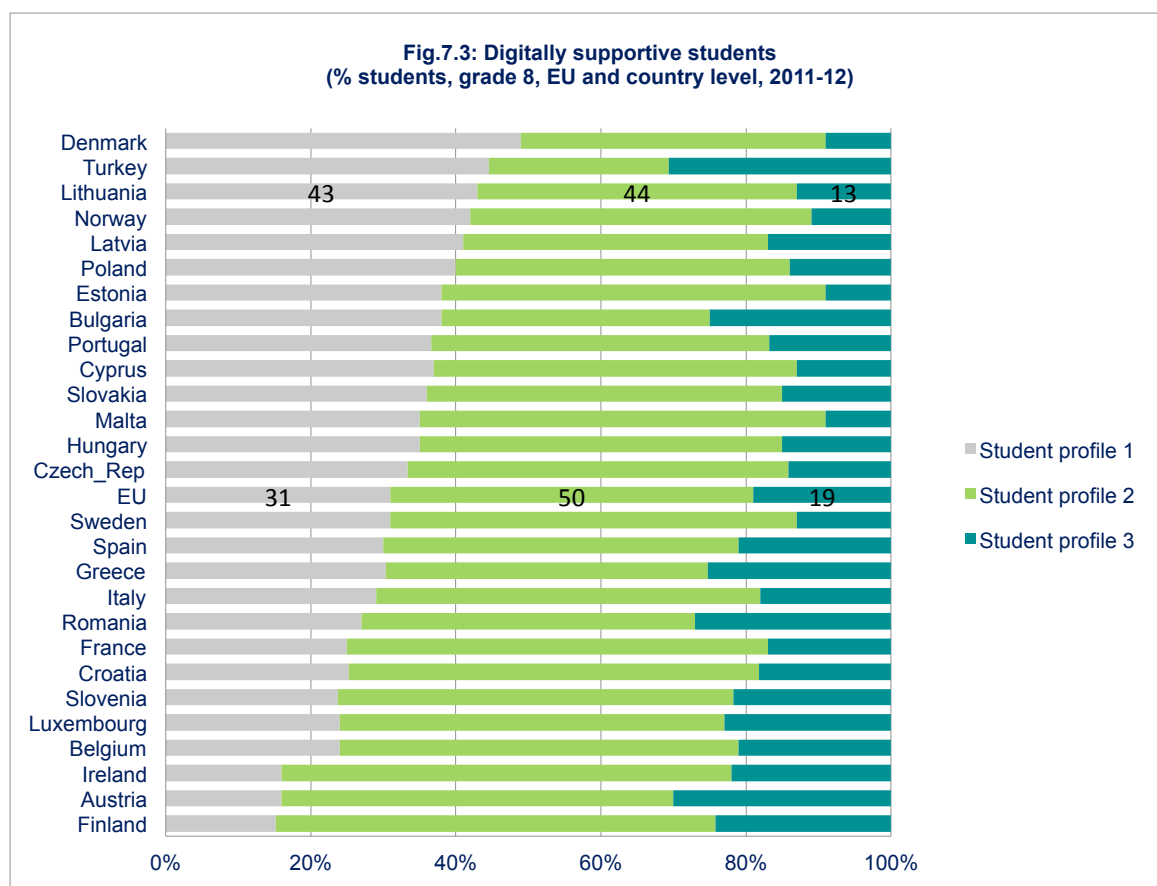


## THE DIGITALLY SUPPORTIVE STUDENT

A *digitally supportive student* being defined as having high ICT access and use at school and at home, the percentages of such students in Lithuania are well above EU means at all grades.



On this measure, percentages of type 1 grade 8 students are among the highest in Europe ranked among the leading group of countries (fig. 7.3), and also at grade 11 Lithuania is among the leading group of countries (main report, fig. 8.5).



## THE DIGITALLY EQUIPPED SCHOOL

The 'digitally equipped school' emerges from analysis of the data as having relatively high equipment levels, fast broadband (10mbps or more) and high connectedness (e.g. with a website, virtual learning environment). High levels of such elements could be regarded as indicating a '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 Lithuania, only at grade 11 vocational is a higher percentage of students in type 1 schools; at other grades it is below the EU mean.

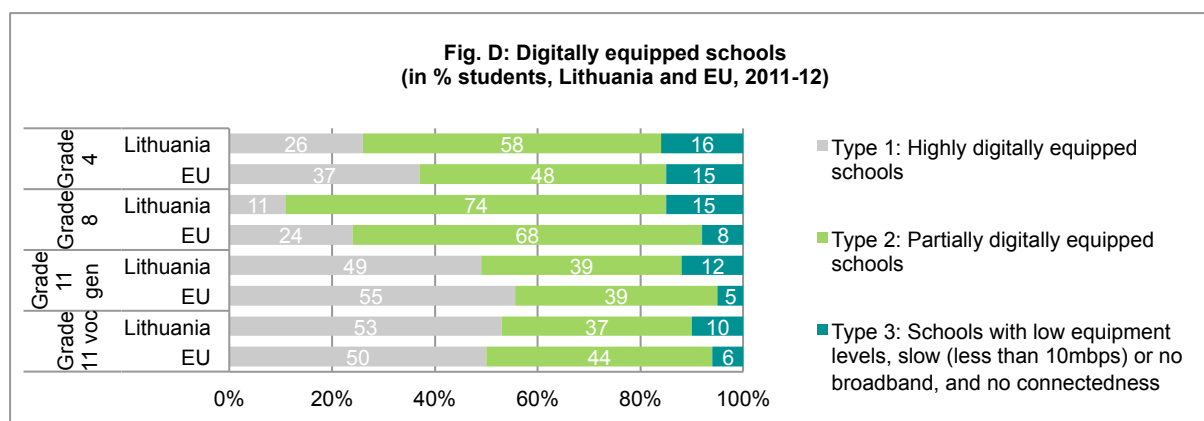
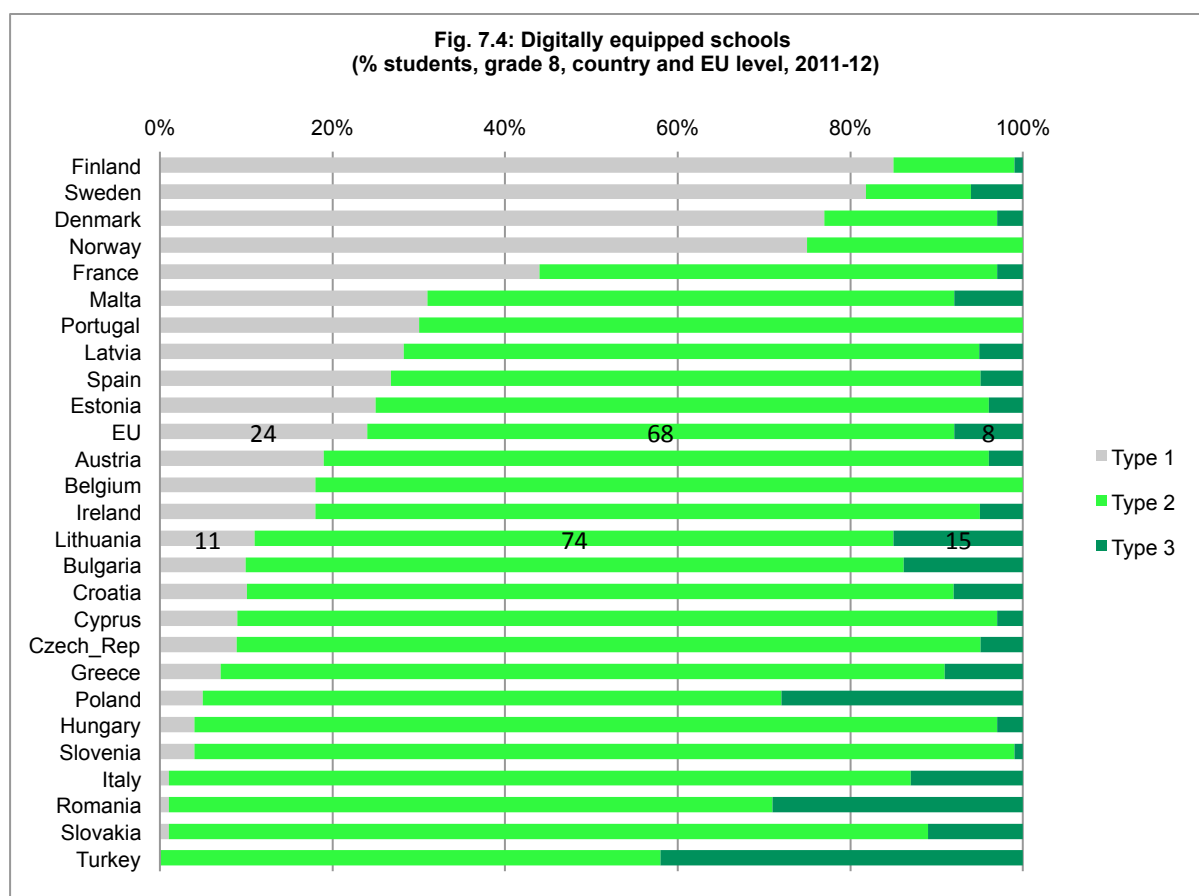


Fig. 7.4 shows how Lithuania compares against other countries at grade 8 on this measure, ranking among the middle group of countries in terms of type 1 schools, with also some of the highest percentages of type 3 schools. At all other grades the situation is similar (main report, fig. 1.13).



## CONCLUSION

Students in Lithuania are well provided for in terms of broadband speeds and penetration but less so for computers and 'connectedness'. Although low use of ICT by teachers is unusual, overall it is close to the EU average. On the other hand, student use of computers is generally higher, particularly of their own mobile phone. Confidence in ICT seems rather higher among students than teachers. Teachers are well supported in terms of professional development opportunities and the presence of an ICT coordinator in schools providing pedagogical as well as technical support.

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
Lithuania	10.0	(0.5)	16.1	(0.7)	17.2	(0.7)	24.9	(3.4)
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	SE5
1. Grade4	Lithuania	0.0%	(0.0)	15.4%	(3.0)	17.7%	(3.1)	19.5%	(3.2)	21.3%	(3.3)
	EU	8.0%	(1.3)	16.5%	(2.3)	21.4%	(2.4)	22.1%	(2.2)	19.5%	(2.2)
2. Grade8	Lithuania	0.0%	(0.0)	16.2%	(2.8)	14.2%	(2.7)	22.3%	(3.2)	21.8%	(3.1)
	EU	5.0%	(0.8)	9.6%	(1.3)	19.1%	(2.3)	27.7%	(2.4)	24.8%	(2.3)
3. Grade11gen	Lithuania	0.0%	(0.0)	15.1%	(3.0)	14.1%	(2.9)	19.5%	(3.2)	22.2%	(3.4)
	EU	3.7%	(1.3)	6.2%	(0.8)	18.0%	(2.8)	23.2%	(3.0)	25.4%	(3.9)
4. Grade11voc	Lithuania	0.0%	(0.0)	15.9%	(5.7)	19.9%	(6.1)	24.2%	(6.9)	19.8%	(6.2)
	EU	6.5%	(1.8)	6.2%	(1.3)	15.2%	(3.0)	21.2%	(2.6)	24.2%	(4.6)

From30to100	SE6	MoreThan100	SE7
18.5%	(3.3)	7.6%	(2.2)
8.6%	(1.4)	4.0%	(1.3)
18.5%	(3.0)	7.0%	(2.0)
8.6%	(1.6)	5.2%	(1.2)
19.1%	(3.3)	10.0%	(2.4)
13.3%	(2.6)	10.3%	(8.0)
12.8%	(5.5)	7.4%	(4.3)
15.7%	(7.1)	10.9%	(5.3)

**Fig. 2.5**  
**Connectedness**

Level	COUNTRY	SchWebsite	SE1	VLE	SE2	NoConnect	SE3
1. Grade4	Lithuania	83.4%	(3.1)	30.5%	(3.9)	17.1%	(3.2)

Level	COUNTRY	SchWebsite	SE1	VLE	SE2	NoConnect	SE3
	EU	69.7%	(3.6)	26.8%	(2.0)	15.9%	(2.2)
2. Grade8	Lithuania	85.0%	(2.7)	32.0%	(3.6)	15.8%	(2.8)
	EU	86.0%	(1.6)	61.4%	(3.0)	8.4%	(1.2)
3. Grade11gen	Lithuania	87.8%	(2.7)	28.8%	(3.8)	12.8%	(2.8)
	EU	91.7%	(3.1)	61.0%	(7.9)	7.0%	(2.9)
4. Grade11voc	Lithuania	90.0%	(4.6)	46.8%	(8.1)	10.2%	(4.7)
	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	Lithuania	3.8%	(1.5)	2.8%	(1.2)	14.5%	(2.6)	21.2%	(3.1)	27.6%	(3.4)
	EU	3.0%	(0.4)	10.0%	(2.4)	13.9%	(1.4)	18.0%	(1.8)	19.1%	(2.1)
2. Grade8	Lithuania	3.3%	(0.8)	5.3%	(1.0)	18.3%	(1.9)	26.0%	(2.1)	20.8%	(1.9)
	EU	7.4%	(1.0)	6.8%	(0.8)	14.7%	(0.9)	20.7%	(1.2)	18.9%	(1.4)
3. Grade11gen	Lithuania	6.1%	(1.4)	4.7%	(1.0)	21.4%	(2.4)	21.3%	(2.0)	20.6%	(1.9)
	EU	7.0%	(1.0)	8.1%	(1.4)	14.9%	(1.4)	22.9%	(3.8)	17.1%	(1.8)
4. Grade11voc	Lithuania	15.3%	(3.9)	13.4%	(3.1)	24.2%	(4.0)	18.0%	(3.4)	14.1%	(3.3)
	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
20.5%	(3.1)	5.5%	(1.7)	4.2%	(1.5)
20.7%	(2.7)	8.7%	(1.4)	6.7%	(1.4)
16.0%	(1.6)	4.4%	(0.9)	5.9%	(1.2)
14.4%	(1.0)	11.0%	(1.0)	6.1%	(0.8)
15.9%	(1.9)	5.7%	(1.2)	4.2%	(1.2)
14.0%	(1.5)	10.3%	(1.4)	5.7%	(0.9)
8.6%	(2.3)	3.4%	(2.1)	2.9%	(1.7)
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
Lithuania	21.9%	(3.2)	28.6%	(2.1)	33.7%	(2.7)	54.5%	(4.9)
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	Lithuania	61.6	(1.2)	12.1	(0.7)	66.0	(1.2)

Level	Country	OwnMobPhone	SE1	OwnLaptop	SE2	SchoolComputer	SE3
	EU	28.0	(0.8)	11.2	(0.7)	53.3	(1.1)
2. Grade11gen	Lithuania	66.4	(1.1)	10.3	(0.9)	71.5	(1.1)
	EU	34.6	(1.3)	10.7	(1.1)	50.5	(1.5)
3. Grade11voc	Lithuania	65.7	(2.0)	16.9	(2.2)	73.2	(2.2)
	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
Lithuania	1.81	(0.02)	1.79	(0.02)	1.82	(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	Lithuania	2.27	(0.07)	2.86	(0.05)
	EU	2.41	(0.03)	2.98	(0.02)
2. Grade8	Lithuania	2.19	(0.04)	2.81	(0.03)
	EU	2.37	(0.04)	3.00	(0.03)
3. Grade11gen	Lithuania	2.16	(0.05)	2.79	(0.04)
	EU	2.38	(0.07)	3.01	(0.03)
4. Grade11voc	Lithuania	2.57	(0.10)	3.05	(0.07)
	EU	2.51	(0.03)	3.16	(0.02)

**Fig. 4.2**  
**Scales Students ICT skills**

Level	country	SocialMediaSkills	SE1	OperatSkills	SE2	ResplnInternUse	SE3	SafelInternUse	SE4
1. Grade8	Lithuania	2.61	(0.02)	2.74	(0.02)	2.74	(0.02)	3.18	(0.02)
	EU	2.41	(0.02)	2.63	(0.02)	2.58	(0.02)	2.98	(0.02)
2. Grade11gen	Lithuania	2.75	(0.02)	2.88	(0.02)	2.85	(0.02)	3.31	(0.02)
	EU	2.78	(0.02)	2.88	(0.01)	2.93	(0.03)	3.16	(0.02)
3. Grade11voc	Lithuania	2.50	(0.05)	2.65	(0.04)	2.62	(0.04)	3.01	(0.04)
	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	Lithuania	51.1%	(3.8)	25.8%	(3.3)	2.3%	(1.1)
	EU	47.5%	(4.2)	19.4%	(3.0)	11.9%	(2.4)
2. Grade8	Lithuania	32.0%	(2.4)	36.8%	(2.4)	4.8%	(1.0)
	EU	60.7%	(1.6)	15.6%	(1.0)	5.2%	(0.5)

Level	COUNTRY	MoreThan6	SE1	From1to3	SE2	NoTime	SE3
3. Grade11gen	Lithuania	28.7%	(2.5)	31.0%	(2.4)	8.9%	(1.8)
	EU	44.7%	(5.2)	23.1%	(3.4)	11.0%	(1.6)
4. Grade11voc	Lithuania	40.0%	(5.5)	29.1%	(5.2)	3.6%	(1.8)
	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	Lithuania	42.8%	(3.8)	56.2%	(3.8)	90.8%	(2.2)
	EU	25.4%	(2.5)	40.3%	(3.2)	70.0%	(2.8)
2. Grade8	Lithuania	38.0%	(2.5)	53.1%	(2.6)	89.4%	(1.4)
	EU	30.8%	(1.6)	50.5%	(1.7)	74.2%	(1.3)
3. Grade11gen	Lithuania	44.1%	(2.8)	53.2%	(2.8)	83.4%	(2.0)
	EU	28.0%	(2.4)	43.5%	(2.2)	71.7%	(2.2)
4. Grade11voc	Lithuania	40.7%	(4.8)	63.2%	(6.0)	89.1%	(2.9)
	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
Lithuania	55.5%	(4.1)	66.6%	(3.6)	64.8%	(3.9)	62.6%	(7.6)
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	Lithuania	45.1%	(5.7)	77.0%	(4.9)	78.0%	(4.6)
	EU	39.3%	(3.0)	56.5%	(3.0)	75.9%	(2.3)
2. Grade8	Lithuania	50.6%	(4.7)	74.3%	(4.2)	74.1%	(4.2)
	EU	34.8%	(2.9)	70.6%	(2.4)	72.5%	(2.5)
3. Grade11gen	Lithuania	54.5%	(5.1)	82.5%	(3.9)	75.5%	(4.4)
	EU	49.6%	(6.9)	63.6%	(7.7)	73.4%	(4.2)
4. Grade11voc	Lithuania	71.8%	(8.8)	87.0%	(6.7)	82.9%	(6.9)
	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	Lithuania	11.3%	(2.7)	70.3%	(3.7)	25.7%	(3.6)	12.3%	(2.8)	0.0%	(0.0)	49.3%	(4.8)
	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	Lithuania	11.4%	(2.4)	79.4%	(3.0)	29.0%	(3.4)	11.2%	(2.4)	1.1%	(0.8)	45.5%	(4.5)



Level	COUNTRY	TrainingHours	SE1	Equipment	SE2	Competitions	SE3	FinancialInc	SE4	ReductionHours	SE5	Other	SE6
	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	Lithuania	15.9%	(3.1)	77.4%	(3.4)	26.9%	(3.7)	20.1%	(3.3)	0.6%	(0.1)	57.2%	(4.9)
	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	Lithuania	27.1%	(7.2)	72.2%	(7.4)	36.0%	(7.6)	13.6%	(5.5)	0.0%	(0.0)	60.4%	(9.1)
	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	Lithuania	42	(4.04)	20	(3.26)	15	(3.04)	23	(3.44)
	EU	31	(2.70)	17	(3.17)	22	(2.53)	31	(2.98)
2. Grade8	Lithuania	40	(3.69)	29	(3.43)	13	(2.59)	18	(2.91)
	EU	25	(1.91)	25	(2.20)	16	(1.83)	34	(2.15)
3. Grade11gen	Lithuania	39	(3.99)	18	(3.16)	18	(3.13)	24	(3.49)
	EU	26	(2.28)	15	(8.69)	25	(3.74)	34	(5.30)
4. Grade11voc	Lithuania	43	(7.87)	1	(0.17)	36	(7.48)	20	(6.55)
	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	Lithuania	27	(3.39)	27	(3.36)	21	(3.07)	25	(3.27)
	EU	18	(2.02)	33	(2.95)	25	(2.33)	24	(2.64)
2. Grade8	Lithuania	22	(2.01)	31	(2.16)	20	(1.97)	27	(2.11)
	EU	23	(1.43)	31	(1.27)	24	(1.52)	22	(1.17)
3. Grade11gen	Lithuania	24	(2.32)	33	(2.62)	22	(2.41)	21	(2.31)
	EU	28	(2.41)	27	(2.68)	26	(1.65)	19	(1.67)
4. Grade11voc	Lithuania	26	(4.99)	31	(4.08)	15	(3.22)	28	(4.77)
	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	Lithuania	43	(1.25)	44	(1.24)	13	(0.86)
	EU	31	(1.00)	50	(0.85)	19	(0.67)
2. Grade11gen	Lithuania	47	(1.28)	28	(1.05)	25	(1.06)
	EU	36	(1.18)	36	(1.00)	28	(1.47)
3. Grade11voc	Lithuania	41	(2.85)	32	(2.46)	28	(2.21)
	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	Lithuania	26	(3.56)	58	(4.04)	16	(3.02)
	EU	37	(4.43)	48	(4.15)	15	(2.12)
2. Grade8	Lithuania	74	(3.30)	11	(2.35)	15	(2.69)
	EU	68	(2.87)	24	(3.31)	8	(1.16)
3. Grade11gen	Lithuania	49	(4.06)	39	(3.98)	12	(2.68)
	EU	55	(12.27)	39	(10.34)	5	(2.06)
4. Grade11voc	Lithuania	10	(4.50)	53	(7.81)	37	(7.60)
	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 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, 300 schools in Lithuania 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 Lithuania participation levels are high at all grades, at 68% on average (a total of 645 schools) the third highest of the 31 countries.

