INTERNATIONAL COMPUTER AND INFORMATION LITERACY STUDY (ICILS 2018) MAIN STUDY

OMB# 1850-0929 v.7

APPENDIX B.2

ICILS Main Study Final Questionnaires

Submitted by:

National Center for Education Statistics (NCES) Institute of Education Sciences (IES) U.S. Department of Education Washington, DC

> November 2017 Revised January 2018

APPENDIX B.2: ICILS 2018 MAIN STUDY U.S. QUESTIONNAIRES (Final)

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The International Association for the Evaluation of Education Achievement (IEA) released the final international versions of the ICILS 2018 main study questionnaires in November 2017, and has now approved the adaptations made to the U.S. versions of the main study questionnaires. This Appendix, B.2, provides the final versions of the adapted U.S. versions of the ICILS 2018 main study questionnaires to be administered in the main study. Appendix B.1 lists the changes that were made to the U.S. versions of the field test questionnaire in preparation for the U.S. main study, which will begin in spring 2018.

IEA International Computer and Information Literacy Study

Principal Questionnaire for the 2018 U.S. Main Study (Final)

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OMB No. 1850-0929, Approval Expires 12/31/2020.

INTRODUCTION TO THE SCHOOL PRINCIPAL QUESTIONNAIRE

Your school has agreed to participate in the 2018 Main Study for the International Computer and Information Literacy Study (ICILS). ICILS is an educational research project sponsored by the International Association for the Evaluation of Educational Achievement (IEA). The purpose of ICILS is to examine across different countries the extent to which young people in eighth grade have developed computer and information literacy, which is defined as the ability to use Information and Communications Technology (ICT) to investigate, create, and communicate with others at home, school, the workplace, and in society.

In this questionnaire, ICT can refer to:

- desktop computers
- notebook or laptop computers
- netbook computers
- tablet devices
- smartphones, except when being used for talk and text.

This questionnaire is addressed to school principals who are asked to provide information about their schools. Since your school has been selected as part of a nationwide sample, your responses are very important in helping to evaluate the questions as relevant to describing eighth grade education in the United States. Some of the questions may require that you look up school records, so you may wish to arrange for the assistance of another staff member to help provide this information.

In this questionnaire, you will find questions about you and your use of ICT, characteristics of your school, the application of ICT in teaching and learning at your school, and aspects of the management of ICT in your school. Since ICILS is an international study and all countries are using the same questionnaire, you may find that some of the questions seem unusual or are not entirely relevant to you or schools in the United States. Nevertheless, it is important that you do your best to answer all the questions so comparisons can be made across countries in the study. Please answer the questions with reference to your school as a whole. For some of the questions you are asked to answer referring only to eighth-grade students.

Please look at the instructions given in each of the questions.

It is estimated that you will need about 15 minutes to complete the questionnaire. We appreciate the time and effort this takes and thank you for your cooperation and contribution.

The National Center for Education Statistics (NCES) is authorized to collect information from this questionnaire by the Education Sciences Reform Act of 2002 (ESRA 2002, 20 U.S.C. §9543). You do not have to provide the information requested. However, the information you provide will help the U.S. Department of Education's ongoing efforts to understand better how the educational system in the United States compares to that in other countries. There are no penalties should you choose not to participate in this study. All of the information you provide may be used only for statistical purposes and may not be disclosed, or used, in identifiable form for any other purpose except as required by law (20 U.S.C. §9573 and 6 U.S.C. §151). Your responses will be combined with those from other participants to produce summary statistics and reports.

Thank You.

About You and Your Use of ICT

Q1	Are you female or male?					
	Female			Mal	e	
Q2	How often do you use ICT for the f	ollowing	g activit	ies?		
	(Please mark one choice in each row)	Never	Less than once a month	At least once a month but not every week	At least once a week but not every day	Every day
a)	Search for information on the Internet or a network maintained by education authorities for its schools					
b)	Provide information about an educational issue through a website					
c)	Look up records in a database (e.g., in a student information system)					
d)	Maintain, organize and analyze data (e.g., with a spreadsheet or database)					
e)	Prepare presentations					
f)	Communicate with teachers in your school					
g)	Communicate with education authorities					
h)	Communicate with principals and senior staff in other schools					
i)	Communicate with parents					
j)	Work with a learning management system (e.g., Blackboard, Edmodo, Moodle)					
k)	Use social media to communicate with the wider community about school-related activities					
I)	Management of staff (e.g., scheduling, professional development)					
m)	Preparing the curriculum					
n)	School financial management					

YOUR SCHOOL

Q3 What is the total number of boys and girls in the school as of October 1, 2017?

(Please record a whole number. Record 0 (zero), if none.)



Total number of girls

Total nur

Total number of boys

Q4 What is the total number of boys and girls in eighth grade as of October 1, 2017?

(Please record a whole number. Record 0 (zero), if none.)



Total number of girls

Total number of boys

Q5 Around the 1st of October 2017, what percentage of students at this school were eligible to receive free or reduced-price lunches through the National School Lunch Program?

(Please record a whole number. Record 0 (zero), if none.)



Percentage of students

Q6 Of the students currently enrolled in your school, what percentage has been identified as limited-English proficient (LEP)/English language learners (ELL)?

(Please record a whole number. Record 0 (zero), if none.)



Percentage of students

Q7

(a) What is the lowest (youngest) grade that is taught at your school?

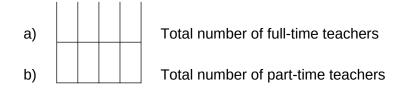
(Please mark only one choice)	
Preschool	
Kindergarten	
First grade	
Second grade	
Third grade	
Fourth grade	
Fifth grade	
Sixth grade	
Seventh grade	
Eighth grade	

(b) What is the highest (oldest) grade that is taught at your school?

(Please mark only one choice)	
Eighth grade	
Ninth grade	
Tenth grade	
Eleventh grade	
Twelfth grade	

Q8 What are the total numbers of full-time and part-time teachers in your school? A full-time teacher is employed on a regular basis as a teacher for at least 90% of full-time hours for the full school year. All other teachers should be considered part-time.

(Please record a whole number. Record 0 (zero), if none.)



Q9 Which of the following best describes where your school is located?

(Please mark only one choice)

In a community with fewer than 3,000 people In a town with at least 3,000 but less than 15,000 people In a town with at least 15,000 but less than 100,000 people In a city with at least 100,000 but less than 1,000,000 people In a city with 1,000,000 or more people

Q10 Is this school a public or a private school?

(Please mark only one choice)

A public school

(This is a school <u>managed</u> directly or indirectly by a public education authority, government agency, or governing board, appointed by government or elected by public franchise.)

A private school

(This is a school <u>managed</u> directly or indirectly by a non-government organisation; for example, a church, trade union, business, or other private institution.)

Q10b Approximately what percentage of students in your school have the following backgrounds?

a)	Come from economically affluent homes	0 to 10%	11 to 25%	26 to 50%	More than 50%
b)	Come from economically disadvantaged homes				

ICT AND TEACHING IN YOUR SCHOOL

Q11 How important is each of the following outcomes of education in your school?

		Very important	Quite important	Somewhat important	Not important
a)	The development of students' basic computer skills (e.g., Internet use, email, word processing, presentation software)				
b)	The development of students' skills in using ICT for collaboration with others				
C)	The use of ICT for facilitating students' responsibility for their own learning				
d)	The use of ICT to augment and improve students' learning				
e)	The development of students' understanding and skills relating to safe and appropriate use of ICT				
f)	The development of students' proficiency in accessing and using information with ICT				
g)	The development of students' ability to write apps or programs				

Q12 Are there procedures in place to monitor whether teachers at this school use ICT to achieve the following learning outcomes? (Please select all that apply for each row)

		Yes, by reviewing lesson plans	Yes, through teacher self- evaluation	Yes, through observing classrooms	Yes, by other means	No, this is not monitored
a)	The development of students' basic computer skills (e.g., Internet use, email, word processing, presentation software)					
b)	The development of students' skills in using ICT for collaboration with others					
C)	The use of ICT for facilitating students' responsibility for their own learning					
d)	The use of ICT to augment and improve students' learning					
e)	The development of students' understanding and skills relating to safe and appropriate use of ICT					
f)	The development of students' proficiency in accessing and using information with ICT					
g)	The development of students' ability to write apps or programs					

Q13 Are teachers in your school expected to acquire knowledge and skills in each of the following activities?

		Expected and required	Expected but not required	Not expected
a)	Integrate Web-based learning in their instructional practice			
b)	Use ICT-based forms of student assessment			
c)	Use ICT for monitoring student progress			
d)	Collaborate with other teachers via ICT			
e)	Communicate with parents via ICT			
f)	Communicate with students via ICT			
g)	Integrate ICT into teaching and learning			
h)	Use subject-specific digital learning resources (e.g., tutorials, simulation)			
i)	Use e-portfolios for assessment			
j)	Use ICT to develop authentic (real-life) assignments for students			
k)	Assess students' computer and information literacy			

MANAGEMENT OF ICT IN YOUR SCHOOL

Q14 Who has the main responsibility for making decisions about each of the following aspects of ICT in this school?

		School district or relevant education authority	School boards/ councils	School principal or deputy	Heads of department	ICT coordinator	Information specialist or librarian	Individual teachers	No one
a)	The procurement of ICT equipment								
b)	The choice of non- digital learning materials								
C)	The choice of digital learning materials								
d)	The selection of a learning management system								
e)	The maintenance of ICT equipment								
f)	Decisions about whether ICT is used in teaching								
g)	The implementation of ICT-based approaches in teaching								
h)	The implementation of ICT-based approaches in administration								
i)	The use of ICT- based approaches to assessment								

Q14 Who has the main responsibility for making decisions about each of the following (cont.) aspects of ICT in this school?

		School							
		district or							
		relevant							
		education	School boards/	School principal	Heads	ICT	Information specialist	Individual	
		authority	councils	or deputy	of department		or librarian	teachers	No one
j)	The assessment of students' computer and information literacy								
k)	The implementation of a computer and information literacy curriculum at the school								
I)	The development of ICT-related teacher competencies								

Q15 Does your school or school system have policies with regard to the following aspects of ICT use?

		Yes	No
a)	The provision of security measures to prevent unauthorized system access or entry		
b)	Restrictions on the number of hours students are allowed to sit at a computer		
c)	Student access to school computers outside class hours (but during school hours)		
d)	Student access to school computers outside school hours		
e)	The fulfilment of intellectual property rights (e.g., software copyrights)		
f)	Prohibitions of access to inappropriate material (e.g., pornography, violence)		
g)	Student use of non-school related games on school computers		
h)	The provision of access to school computers and/or the Internet for the local community (parents and/or others)		
i)	Support for students with special needs or specific learning difficulties		
j)	Unacceptable behaviours towards other students (e.g., cyberbullying)		
k)	The provision of laptop computers and/or other mobile learning devices for student use at school and at home		
I)	Student use of their own ICT at school		

Q16 Throughout the current school year, how many teachers in this school participate in the following forms of professional development about ICT for teaching and learning?

		None or hardly any	Some of them	Most of them	All or nearly all
a)	Courses on the use of ICT in teaching provided by the school or the school system				
b)	Training by another teacher who has attended a course on ICT				
c)	Discussions about the use of ICT in education as a regular item during meetings of the teaching staff				
d)	Observations of colleagues using ICT in their teaching				
e)	Group discussions of teachers about their use of ICT in teaching				
f)	Participation in professional learning programs delivered online				
g)	Participation in courses on ICT conducted by an external agency or expert				
h)	Participation in a community of practice concerned with ICT in teaching				

Q17 At your school, what priority is given to the following ways of facilitating the use of ICT in teaching and learning?

(Please mark one choice in each row)

		High priority	Medium priority	Low priority	Not a priority
a)	Increasing the numbers of computers per student in the school				
b)	Increasing the number of computers connected to the Internet				
C)	Increasing the bandwidth of Internet access for the computers connected to the Internet				
d)	Increasing the range of digital learning resources available for teaching and learning				
e)	Establishing or enhancing an online learning support platform				
f)	Supporting participation in professional development on pedagogical use of ICT				
g)	Increasing the availability of qualified technical personnel to support the use of ICT				
h)	Providing teachers with incentives to integrate ICT use in their teaching				
i)	Providing more time for teachers to prepare lessons in which ICT is used				
j)	Increasing the professional learning resources for teachers in the use of ICT				

THANK YOU FOR YOUR TIME AND EFFORT IN COMPLETING THIS QUESTIONNAIRE

IEA International Computer and Information Literacy Study

ICT Coordinator Questionnaire for the 2018 Main Study (Final)

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INTRODUCTION TO THE QUESTIONNAIRE FOR ICT COORDINATORS

Your school has agreed to participate in the 2018 Main Study for the International Computer and Information Literacy Study (ICILS). ICILS is an educational research project sponsored by the International Association for the Evaluation of Educational Achievement (IEA). The purpose of ICILS is to examine across different countries the extent to which young people in eighth grade have developed computer and information literacy, which is defined as the ability to use Information and Communications Technology (ICT) to investigate, create, and communicate with others at home, school, the workplace, and in society. In this guestionnaire ICT can be:

i illis questionnaire ici can be

- desktop computers
- notebook or laptop computers
- netbook computers
- tablet devices
- smartphones, except when being used for talk and text.

This questionnaire is concerned with ICT in schools and in particular the ICT resources (including computers) as well as pedagogical practices that use ICT. The questionnaire is addressed to ICT coordinators who are asked to provide information about their schools. It is important that the person responding knows about the ICT facilities in your school and about practices regarding their use. The questionnaire should be completed by the person with designated responsibility for ICT in the school. If there is no person with designated responsibility for ICT in the school, the questionnaire should be completed by the principal or assistant principal. Since your school has been selected as part of a nationwide sample, your responses are very important in helping to evaluate the questions as relevant to describing eighth-grade education in the United States. If you do not have the information to answer particular questions, then please consult other persons in your school. In this questionnaire, you will find questions about your position as ICT coordinator, ICT resources in your school, and support for ICT use in your school.

Since ICILS is an international study and all countries are using the same questionnaire, you may find that some of the questions seem unusual or are not entirely relevant to you or schools in the United States. Nevertheless, it is important that you do your best to answer all the questions as accurately as you can so comparisons can be made across countries in the study.

It is estimated that you will need about 15 minutes to complete the questionnaire. **We appreciate the time and effort this takes and thank you for your cooperation and contribution.**

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Thank You.

ABOUT YOUR POSITION

This questionnaire asks for information about ICT resources (including computers) in your school as well as pedagogical practices that use ICT. It is important that the person responding knows about the ICT facilities in your school and about practices regarding their use.

The questionnaire should be completed by the person with designated responsibility for ICT in the school. If there is no person with designated responsibility for ICT in the school, the questionnaire should be completed by the principal or assistant-principal.

If you do not have the information to answer particular questions, then please consult other persons in your school.

Q1 Do you, at your school, hold the position of technology or computer coordinator?

(Please mark only one choice)

Yes, I formally serve as coordinator.



Yes, I informally serve as coordinator.

I am not the ICT coordinator, but I am answering as the school principal or his/her designate.

Q2	Which of the following teaching duties do you have?
	(Dianan mark and chains in each row)

I teach ICT courses to students.	Yes	No
I teach other subjects (not related to learning about ICT) to students.		
I do not have any teaching duties for students.		
I teach ICT courses to, or conduct workshops for, teachers and other school staff.		

Q3 How many years has your school been using ICT for teaching and/or learning purposes for students in eighth grade?

(Please mark only one choice)

- Never, we do not use ICT
- Fewer than 5 years
- At least 5 but fewer than 10 years
- 10 years or more

ICT RESOURCES

Q4 Please indicate the availability of the following technology resources in your school.

		Available to teachers <u>and</u> students	Available only to teachers	Available only to students	Not available
a)	Digital learning resources that can be accessed offline				
b)	Digital learning resources that can <u>only</u> be used online				
c)	Access to the Internet through the school network				
d)	Access to an education site or network maintained by education authorities				
e)	Email accounts for school-related use				

Q5 Please indicate the availability of each of the following software resources at your school.

		Available to teachers <u>and</u> students	Available only to teachers	Available only to students	Not available
a)	Practice programs or apps where teachers decide which questions are asked of students (e.g., Quizlet, Kahoot)				
b)	Single user digital learning games (e.g., Languages Online)				
c)	Multi-user digital learning games with graphics and inquiry tasks (e.g., Quest Atlantis)				
d)	Word-processor software (e.g., Microsoft Word)				
e)	Presentation software (e.g., Microsoft PowerPoint)				
f)	Video and photo software for capture and editing (e.g., Windows Movie Maker, iMovie, Adobe Photoshop)				
g)	Concept mapping software (e.g., Inspiration, Webspiration)				
h)	Data logging and monitoring tools (e.g., Logger Pro) that capture real-world data digitally for analysis (e.g., speed, temperature)				
i)	Simulations and modelling software (e.g., NetLogo)				
j)	A learning management system (e.g., Blackboard, Edmodo, Moodle)				
k)	Graphing or drawing software				
I)	e-portfolios (e.g., VoiceThread)				
m)	Digital contents linked with textbooks				
n)	Social media (e.g., Facebook, Twitter)				

APPENDIX B.2: ICILS 2018 MAIN STUDY U.S. QUESTIONNAIRES (Final) - ICT Coordinator Questionnaire

Q6 Please indicate the availability of the following technology facilities at eighth grade. (*Please mark one choice in each row*)

		Available to teachers <u>and</u> students	Available only to teachers	Available only to students	Not available
a)	Remote access to a school network				
b)	Space on a school network to store files				
C)	A school intranet with applications and workspaces				
d)	Internet-based applications for collaborative work (e.g., Google Docs, Padlet, OneNote)				
e)	A 3D printer				
f)	Robots or robotic devices				
g)	Access to a wireless LAN (Wi-fi)				
h)	A learning management system (e.g., Blackboard, Edmodo, Moodle)				

Q7a In your school, approximately how many of the following types of (school-provided) ICT devices are available?

(Please record a whole number. Record 0 (zero), if none.) For this question please:

- Count terminals (if they have a keyboard and a screen) as computers
- Exclude computers that are not in use (e.g., in storage)
- · Exclude computers that are only used as servers

	All devices in the so	chool	Devices available for studen use		
Desktop computers					
Laptops / notebooks		<u> </u>			
Tablet devices					

Approximately, what percentage of all ICT devices in the school Q7b (include all types) are connected to the Internet?

(Please record a whole number. Record 0 (zero), if none.)

%	

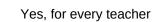
Q7c In your school, about how many (school-provided) smart boards or interactive whiteboards are available?

(Please record a whole number. Record 0 (zero), if none.)

Smart boards / Interactive white boards

Q8 Does your school or school district provide teachers with their own portable digital device?

(Please mark only one choice)





Yes, but not for all teachers

No

Q9 Approximately what percentage of students at the eighth grade have access to portable computers (laptops, netbooks or tablet devices) at school?

(Please mark one choice in each row)

		0 to 25%	26 to 50%	51 to 75%	76 to 100%
a)	Students provided with portable computers by their school for use at school only				
b)	Students provided with portable computers by their school for use at home <u>and</u> at school				
C)	Students bring portable computers which they own to use at school				

Q10 Where are school ICT devices for teaching and learning in eighth grade located?

		Yes	No
a)	In most (80% or more) classrooms		
b)	In computer laboratories		
C)	As class sets of computers that can be moved between classrooms		
d)	In the library		
e)	In other places accessible to students (e.g., cafeteria, auditorium, study area)		
f)	Students bring the devices to class		

APPENDIX B.2: ICILS 2018 MAIN STUDY U.S. QUESTIONNAIRES (Final) - ICT Coordinator Questionnaire

ICT SUPPORT

Q11 At your school, who provides day-to-day technical ICT support?

		Yes	No
a)	Yourself		
b)	A network administrator in the school (other than yourself)		
c)	ICT technical staff (other than yourself) at the school		
d)	Administrators or school staff (other than yourself		
e)	Teachers (other than yourself)		
f)	Staff from the relevant education authority responsible for the school		
g)	Personnel from external companies contracted to provide maintenance		
h)	Students from this school		

Q12 At your school, who provides day-to-day *pedagogical* ICT support for teachers?

		Yes	No
a)	Yourself		
b)	ICT technical staff (other than yourself) at the school		
c)	Administrators or school staff (other than yourself)		
d)	Librarians, library staff or information specialists (other than yourself)		
e)	Teachers (other than yourself)		
f)	Staff from the relevant education authority responsible for the school		

Q13 To what extent is the use of ICT in teaching and learning at your school hindered by each of the following obstacles?

a)	Too few computers with an Internet connection	A lot	To some extent	Very little	Not at all
b)	Insufficient Internet bandwidth or speed				
c)	Not enough computers for instruction				
d)	Lack of sufficiently powerful computers				
e)	Problems in maintaining ICT equipment				
f)	Not enough computer software				
g)	Insufficient ICT skills among teachers				
h)	Insufficient time for teachers to prepare lessons				
i)	Insufficient effective professional learning resources for teachers				
j)	Lack of an effective online learning support platform				
k)	Insufficient incentives for teachers to integrate ICT use in their teaching				
I)	Restricted access to useful Internet resources				
m)	Insufficient technical ICT support				
n)	Insufficient pedagogical support for the use of ICT				

Q14 Is computing, computer science, information technology, informatics or similar taught as a standalone subject at the eighth grade in your school?

Yes Please continue with question 15

No Please go to the end of the questionnaire \rightarrow

Q15 In the teaching of computing, computer science, information technology, informatics, or a similar subject at the eighth grade in your school, how much emphasis is given to the following tasks?

(Please mark one choice in each row)

		Strong emphasis	Some emphasis	Little emphasis	No emphasis
a)	Develop algorithms (e.g., instructions for a program like Scratch)				
b)	Write computer programs				
c)	Evaluate computer programs				
d)	Develop applications				
e)	Refine computer code to improve efficiency				
f)	Debug computer code				
g)	Develop simulations				
h)	Test solutions to problems using simulations				
i)	Create visual displays of processes (e.g., flow charts, decision trees)				

THANK YOU FOR YOUR TIME AND EFFORT IN COMPLETING THE QUESTIONNAIRE

IEA International Computer and Information Literacy Study

Teacher Questionnaire for the 2018 Main Study (Final)

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OMB No. 1850-0929, Approval Expires 12/31/2020.

INTRODUCTION TO THE QUESTIONNAIRE FOR TEACHERS

Your school has agreed to participate in the 2018 Main Study for the International Computer and Information Literacy Study (ICILS). ICILS is an educational research project sponsored by the International Association for the Evaluation of Educational Achievement (IEA). The purpose of ICILS is to examine across different countries the extent to which young people in eighth grade have developed computer and information literacy, which is defined as the ability to use Information and Communications Technology (ICT) to investigate, create, and communicate with others at home, school, the workplace, and in society in order to improve teaching and learning worldwide.

In this questionnaire, ICT can refer to:

- desktop computers
- notebook or laptop computers
- netbook computers
- tablet devices
- smartphones, except when being used for talk and text.

This questionnaire is addressed to teachers who are asked to provide information about ICT in their schools, its use in teaching and learning, and students' development of Computer and Information Literacy (CIL). Since your school has been selected as part of a nationwide sample, your responses are very important in helping to evaluate the questions as relevant to describing eighth-grade education in the United States.

In this questionnaire, you will find questions about your background and familiarity with ICT, your use of ICT in teaching a reference eighth-grade class, the use of ICT in the school, and learning to use ICT in teaching. Some questions focus on a nominated "reference" class. This is the first eighth-grade class that you teach for a regular subject (e.g., other than home room or assembly) on or after the Tuesday following the last weekend before you first accessed this questionnaire. You may, of course, teach the class at other times during the week as well. If you did not teach an eighth-grade class on that Tuesday, please use the eighth-grade class that you taught on the first day after that Tuesday.

Since ICILS is an international study and all countries are using the same questionnaire, you may find that some of the questions seem unusual or are not entirely relevant to you or schools in the United States. Nevertheless, it is important that you do your best to answer all the questions as accurately as you can so comparisons can be made across countries in the study.

It is estimated that you will need about 30 minutes to complete the questionnaire. We appreciate the time and effort this takes and thank you for your cooperation and contribution.

The National Center for Education Statistics (NCES) is authorized to collect information from this questionnaire by the Education Sciences Reform Act of 2002 (ESRA 2002, 20 U.S.C. §9543). You do not have to provide the information requested. However, the information you provide will help the U.S. Department of Education's ongoing efforts to understand better how the educational system in the United States compares to that in other countries. There are no penalties should you choose not to participate in this study. All of the information you provide may be used only for statistical purposes and may not be disclosed, or used, in identifiable form for any other purpose except as required by law (20 U.S.C. §9573 and 6 U.S.C. §151). Your responses will be combined with those from other participants to produce summary statistics and reports.

Thank you.

Q4 What are the main subjects that you teach in this school in the current ABOUT school year?

(Please indicate the subjects that you teach in this school, indicating only those that individually account for at least four classes or two classes if block scheduling is

Q1 use your a terral one of one or more of your subjects may

not appear in the list **Fernade**h category. If it does not, please mawkate category you

think best fits the subject.)

Q2	How old are you? English Language Arts (Please mark only one choice) Spanish, or other foreign language	
	Mashanation	
	Sciences (e.g., general science and/or physics, chemistry, biology, geology,	
	g <u>art</u> ggsciences, technical science)	
	40–49 Human sciences / Humanities / Social studies (e.g., h <mark>ist</mark> ory, geography, 50–59 civics, law, economics) 60 or over	
Q3	Whativearts did you start reanbing ance, drama)	
	Information technology, computer science, or similar subject	
	Precised and yocational subjects (e.g., mechanics and repair, healthcare	
	occupations, construction trades) Other (e.g., moral/ethics, physical education, personal and social development)	

Q5 In the current school year, at how many schools do you teach eighthgrade students?

(Please mark only one choice)

Only in this school

- In this and another school
- In this and in two other schools
- In this and in three or more other schools

YOUR USE OF ICT

Q6 Approximately how long have you been using ICT for *teaching* purposes?

	(Please mark only one choice in each row)	Never	Less than two years	Between two and five years	More than five years
a)	During lessons				
b)	Preparing lessons				

Q7 How often do you use ICT in these settings?

		Never	Less than once a month	At least once a month but not every week	At least once a week but not every day	Every day
a)	At school when teaching					
b)	At school for other work-related purposes					
C)	Outside school for work-related purposes					
d)	Outside school for non-work- related purposes					

Q8 How well can you do these tasks using ICT?

·		l know how to do this	I haven't done this but I could find out how	I do not think I could do this
a)	Find useful teaching resources on the Internet			
b)	Contribute to a discussion forum / user group on the Internet (e.g., a wiki or blog)			
c)	Produce presentations (e.g., Microsoft PowerPoint or a similar program), with simple animation functions			
d)	Use the Internet for online purchases and payments			
e)	Prepare lessons that involve the use of ICT by students			
f)	Use a spreadsheet program (e.g., Microsoft Excel) for keeping records or analyzing data			
g)	Assess student learning			
h)	Collaborate with others using shared resources (e.g., Google Docs, Padlet, OneNote)			
i)	Use a learning management system (e.g., Moodle, Blackboard, Edmodo)			

YOUR USE OF ICT IN TEACHING

In this section of the questionnaire please focus your responses on your teaching practices in a 'reference' class.

This is the first eighth-grade class that you teach for a regular subject (i.e. other than home room, assembly) on or after Tuesday following the last weekend before you first accessed this questionnaire. You may, of course, teach the class at other times during the week as well. If you did not teach an eighth-grade class on that Tuesday, please use the eighth-grade class that you taught on the first day after that Tuesday.

Q9 Which of the following best describes the subject for this reference class?

(Please mark only one choice)	
English Language Arts	
Spanish, or other foreign language	
Mathematics	
Sciences (e.g., general science and/or physics, chemistry, biology, geology, earth sciences, technical science)	
Human sciences / Humanities / Social studies (e.g., history, geography, civics, law, economics)	
Creative arts (e.g., visual arts, music, dance, drama)	
Information technology, computer science or similar subject	
Practical and vocational subjects (e.g., mechanics and repair, healthcare	
occupations, construction trades)	
Other (e.g., moral/ethics, physical education, personal and social development)	

Q10 In your teaching of the reference class in this school year, how much emphasis have you given to developing the following ICT-based capabilities in your students?

		Strong emphasis	Some emphasis	Little emphasis	No emphasis
a)	To access information efficiently				
b)	To display information for a given audience/purpose				
c)	To evaluate the credibility of digital information				
d)	To share digital information with others				
e)	To use computer software to construct digital work products (e.g., presentations, documents, images, and diagrams)				
f)	To provide digital feedback on the work of others (such as classmates)				
g)	To explore a range of digital resources when searching for information				
h)	To provide references for digital information sources				
i)	To understand the consequences of making information publically available online				

Q11 How often do <u>students</u> in your reference class use ICT for the following activities?

	(Please mark one choice in each row)	They do not engage in this activity	They never use ICT in this activity	They sometimes use ICT in this activity	They often use ICT in this activity	They always use ICT in this activity
a)	Work on extended projects (i.e. lasting over a week)					
b)	Work on short assignments (i.e. within one week)					
c)	Explain and discuss ideas with other students					
d)	Submit completed work for assessment					
e)	Work individually on learning materials at their own pace					
f)	Undertake open-ended investigations or field work					
g)	Reflect on their learning experiences (e.g., by using a learning log)					
h)	Communicate with other students on projects					
i)	Plan a sequence of learning activities for themselves					
j)	Analyze data					
k)	Evaluate information resulting from a search					
I)	Collect data for a project					
m)	Create visual products or videos					
n)	Share products with other students					

Q12 How often do you use ICT with the following practices when teaching your reference class?

(Please mark one choice in each row)

		I do not use this practice with the reference class	I never use ICT with this practice	I sometimes use ICT with this practice	l often use ICT with this practice	I always use ICT with this practice
a)	The presentation of information through direct class instruction					
b)	The provision of remedial or enrichment support to individual students or small groups of students					
c)	The support of student-led whole- class discussions and presentations					
d)	The assessment of students' learning through tests					
e)	The provision of feedback to students on their work					
f)	The reinforcement of learning of skills through repetition of examples					
g)	The support of collaboration among students					
h)	The mediation of communication between students and experts or external mentors					
i)	The communication with parents or guardians about students' learning					
j)	The support of inquiry learning					

Q13 How often did <u>you</u> use the following tools in <u>your</u> teaching of the reference class this school year?

	(Please mark one choice in each row)	Never	In some lessons	In most lessons	almost every
a)	Practice programs or apps where you ask students questions (e.g., Quizlet, Kahoot)				lesson
b)	Digital learning games				

In every or

APPEND	APPENDIX B.2: ICILS 2018 MAIN STUDY U.S. QUESTIONNAIRES (Final) – Teacher Questionnaire				
Q13	How often did <u>you</u> use the following t	ools in y	<u>our</u> teach	ning of th	e
	reference class this school year?				
C)	Word-processor software (e.g., Microsoft Word)				
d)	Presentation software (e.g., Microsoft PowerPoint)				
e)	Spreadsheets (e.g., Microsoft Excel)				
f)	Video and photo software for capture and editing (e.g., Windows Movie Maker, iMovie, Adobe Photoshop)				
g)	Concept mapping software (e.g., Inspiration, Webspiration)				
h)	Simulations and modelling software (e.g., NetLogo)				
i)	A learning management system (e.g., Edmodo, Blackboard)				
j)	Communication software (e.g., email, direct messaging, Skype)				
k)	Collaborative software (e.g., Google Docs, Onenote, Padlet)				
I)	Computer-based information resources (e.g., topic-related websites, wikis, encyclopedia)				
m)	Interactive digital learning resources (e.g.,				

	learning objects)	
n)	Graphing or drawing software	

o) e-portfolios (e.g., VoiceThread)

- q) Social media (e.g., Facebook, Twitter)
- Q14 In your teaching of the reference class this school year, how much emphasis have you given to teaching the following skills?

(Please mark one choice in each row)

		5	Little emphasis	
a)	To display information in different ways			

APPENDIX B.2: ICILS 2018 MAIN STUDY U.S. QUESTIONNAIRES (Final) - Teacher Questionnaire

b)	To break a complex process into smaller parts		
c)	To understand diagrams that describe or show real-world problems		
d)	To plan tasks by setting out the steps needed to complete them		
e)	To use tools to make diagrams that help solve problems		
f)	To use simulations to help understand or solve real-world problems		
g)	To make flow diagrams to show the different parts of a process		
h)	To record and evaluate data to understand and solve a problem		
i)	To use real-world data to review and revise solutions to problems		

IN YOUR SCHOOL

Q15 To what extent do you agree or disagree with the following statements about the use of ICT in teaching at your school?

		Strongly agree	Agree	Disagree	Strongly disagree
a)	ICT is considered a priority for use in teaching.				
b)	My school has sufficient ICT equipment (e.g., computers).				
C)	The computer equipment in my school is up-to-date.				
d)	My school has access to sufficient digital learning resources (e.g., learning software or apps).				
e)	My school has good connectivity (e.g., fast speed and stable) to the Internet.				
f)	There is enough time to prepare lessons that incorporate ICT.				
g)	There is sufficient opportunity for me to develop expertise in ICT.				
h)	There is sufficient technical support to maintain ICT resources.				

Q16 To what extent do you agree or disagree with the following statements about your use of ICT in teaching and learning at your school?

		Strongly agree	Agree	Disagree	Strongly disagree
a)	I work together with other teachers on improving the use of ICT in classroom teaching.				
b)	I collaborate with colleagues to develop ICT- based lessons.				
C)	I observe how other teachers use ICT in teaching.				
d)	I discuss with other teachers how to use ICT in teaching topics.				
e)	I share ICT-based resources with other teachers in my school.				

LEARNING TO USE ICT IN TEACHING

Q17 Did your bachelor's degree include the following elements?

		Yes	No
a)	Learning how to use ICT		
b)	Learning how to use ICT in teaching		

Q18 How often have you participated in any of the following professional learning activities in the past two years?

		Not at all	Once only	More than once
a)	A course on ICT applications (e.g., word processing, presentations, Internet use, spreadsheets, databases)			
b)	A course or webinar on integrating ICT into teaching and learning			
C)	Training on subject-specific digital teaching and learning resources			
d)	Observations of other teachers using ICT in teaching			
e)	An ICT-mediated discussion or forum on teaching and learning			
f)	The sharing of digital teaching and learning resources with others through a collaborative workspace			
g)	Use of a collaborative workspace to jointly evaluate student work			
h)	A course on use of ICT for students with special needs or specific learning difficulties			
i)	A course on how to use ICT to support personalized learning by students			

APPROACHES TO TEACHING

Q19 To what extent do you agree or disagree with the following statements about using ICT in teaching and learning at school?

(Please mark one choice in each row)

	Using ICT at school	Strongly agree	Agree	Disagree	Strongly disagree
a)	impedes concept formation by students.				
b)	helps students develop greater interest in learning.				
c)	helps students to work at a level appropriate to their learning needs.				
d)	results in students copying material from Internet sources.				
e)	helps students develop problem solving skills.				
f)	distracts students from learning.				
g)	results in poorer written expression among students.				
h)	results in poorer calculation and estimation skills among students.				
i)	limits the amount of personal communication among students.				
j)	enables students to collaborate more effectively.				
k)	helps students develop skills in planning and self-regulation of their work.				
I)	improves academic performance of students.				
m)	enables students to access better sources of information.				

THANK YOU FOR YOUR TIME AND EFFORT IN COMPLETING THE QUESTIONNAIRE

IEA International Computer and Information Literacy Study

Student Questionnaire for the 2018 U.S. Main Study (Final)

Confidential to ICILS 2018 Do not cite or quote

The National Center for Education Statistics (NCES), within the U.S. Department of Education, conducts ICILS in the United States as authorized by the Education Sciences Reform Act of 2002 (ESRA 2002, 20 U.S.C. §9543). All of the information you provide may be used only for statistical purposes and may not be disclosed, or used, in identifiable form for any other purpose except as required by law (20 U.S.C. §9573 and 6 U.S.C. §151).

According to the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless such collection displays a valid OMB control number. The valid OMB control number for this voluntary information collection is 1850-0929. The time required to complete this information collection is estimated to average 30 minutes per student, including the time to review instructions, search existing data resources, gather the data needed, and complete and review the information collection. If you have any comments or concerns regarding the accuracy of the time estimate(s), suggestions for improving the form, or questions about the status of your individual submission of this form, write directly to: International Computer and Information Literacy Study (ICILS), National Center for Education Statistics, Potomac Center Plaza (PCP), 550 12th St., SW, 4th floor, Washington, DC 20202.

OMB No. 1850-0929, Approval Expires 12/31/2020.

INTRODUCTION TO THE QUESTIONNAIRE FOR STUDENTS

This questionnaire is about Information and Communication Technology (ICT). In this questionnaire, ICT can refer to:

- desktop computers
- notebook or laptop computers
- netbook computers
- tablet devices
- smartphones, except when being used for talk and text.

In this questionnaire, you will find questions about:

- You, your home, and your family
- Where and how often you use ICT
- What you use ICT for
- Your views about the use of ICT.

Please read each question carefully and answer as accurately as you can. In this questionnaire, you will mostly answer by clicking on a button. You can change your responses at any time until you have clicked on 'I've finished' at the end of the questionnaire.

There are also a few questions where you will need to write a short response.

In this questionnaire, there are no right or wrong answers. Your answers should be the ones that apply to you.

You may ask for help if you do not understand something or if you are not sure how to answer a question.

The National Center for Education Statistics (NCES) is authorized to collect information from this questionnaire by the Education Sciences Reform Act of 2002 (ESRA 2002, 20 U.S.C. §9543). You do not have to provide the information requested. However, the information you provide will help the U.S. Department of Education's ongoing efforts to understand better how the educational system in the United States compares to that in other countries. There are no penalties should you choose not to participate in this study. All of the information you provide may be used only for statistical purposes and may not be disclosed, or used, in identifiable form for any other purpose except as required by law (20 U.S.C. §9573 and 6 U.S.C. §151). Your responses will be combined with those from other participants to produce summary statistics and reports.

Thank you.

When were you born?

ABOUT YOU

Q1

	(Scroll down to answer b January - December (Month)	oth parts to	this question)
	1997 – 2008 (Year)			
Q2	Are you a girl or a boy?			
	Girl Boy			
Q3	Are you Hispanic or Lati	no?		
ųυ	(Please mark only one choi	ce)		
	Yes, I am Hispanic or Lati	no		
	No, I am not Hispanic or L	atino		
Q4	Which of the following I describes you? (Please mark all choices			
	White			
	Black or African America	า		
	Asian	N 1 (*		
	American Indian or Alask			
	Native Hawaiian or other Islander	Pacilic		

Q5 What is the highest level of education you expect to complete?

(Please mark only one choice)

Bachelor's degree (4-year college program) OR Master's degree or professional degree (MD, DDS, lawyer, minister) OR Doctorate (Ph.D. or EdD)	
Associate's degree (2-year college program)	
High school graduate	
Some high school	
Less than high school	

YOUR HOME AND YOUR FAMILY

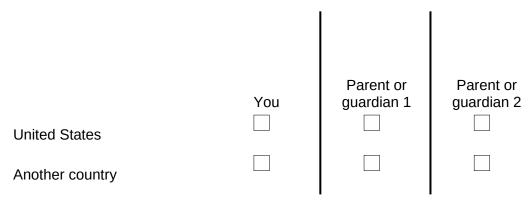
In this section you will be asked some questions about your family and your home.

Some of these questions will be about home and your parents or guardians who look after you — for example, step-parents or foster-parents. Select one parent or guardian as parent or guardian 1 and the other as parent or guardian 2.

If you share your time with more than one set of parents or guardians, please answer the following questions for those parents/guardians with whom you spend the most time. <u>If you share your time</u> only with one parent, please answer only the following questions for this parent.

Q6 In what country were you and your parents born?

(Please mark only one choice in each <u>column</u>)



Q7	What language do you speak at home most of the time?			
	(Please mark only one choice)			

English	
Spanish	
Another language	

Q8 Does your parent or guardian 1 work in a paid job?

Yes	(Note: Student will be directed to Q10a and Q11a)
No	(Note: Student will be directed to Q10b and Q11b)

Q9a What is your parent or guardian 1's main job? (for example, school teacher, cook, sales manager) (Please write in the job title)

Q10a What does your parent or guardian 1 do in his/her main job? (for example, teaches high school students, helps prepare meals in a restaurant, manages a sales team) (Please use a sentence to describe the kind of work he/she does in that job)

Q9bWhat was your parent or guardian 1's last main job?
(for example, school teacher, cook, sales manager)
Please tell us his/her last main job. If he/she has never had a paid job,
please write what he/she is currently doing.

(Please write in the job title)

Q10b What did your parent or guardian 1 do in his/her last main job? (for example, taught high school students, helped prepare meals in a restaurant, managed a sales team)

(Please use a sentence to describe the kind of work he/she did in that job or what he/she is currently doing if he/she has never had a paid job)

Q11 What is the highest level of education completed by your parent or guardian 1?

If you are not sure which box to choose, please ask the test administrator for help.

(Please mark only one choice)

Bachelor's degree (4-year college program) OR Master's degree or professional degree (MD, DDS, lawyer, minister) OR Doctorate (Ph.D., or EdD)	
Associate's degree (2-year college program)	
High school graduate	
Some high school	
Less than high school	

Q12 Does your parent or guardian 2 work in a paid job?

Yes	(Note: Student will be directed to Q14a and Q15a)
No	(Note: Student will be directed to Q14b and Q15b)

- Q13a What is your parent or guardian 2's main job? (for example, school teacher, cook, sales manager) (Please write in the job title)
- Q14a What does your parent or guardian 2 do in his/her main job? (for example, teaches high school students, helps prepare meals in a restaurant, manages a sales team) (Please use a sentence to describe the kind of work he/she does in that job)

Q13b What was your parent or guardian 2's last main job? (for example, school teacher, cook, sales manager) Please tell us his/her last main job. If he/she has never had a paid job, please write what he/she is currently doing.

(Please write in the job title)

Q14b What did your parent or guardian 2 do in his/her last main job? (for example, taught high school students, helped prepare meals in a restaurant, managed a sales team)

> (Please use a sentence to describe the kind of work he/she did in that job or what he/she is currently doing if he/she has never had a paid job)

Q15 What is the highest level of education completed by your parent or guardian 2?

If you are not sure which box to choose, please ask the test administrator for help.

(Please mark only one choice)

Bachelor's degree (4-year college program) OR Master's degree or professional degree (MD, DDS, lawyer, minister) OR Doctorate (Ph.D. or EdD)	
Associate's degree (2-year college program)	
High school graduate	
Some high school	
Less than high school	

Q16 About how many books are there in your home?

Do not count magazines, newspapers, comic books or your schoolbooks.

(Please mark only one choice)

None or very few (0–10 books)	
Enough to fill one shelf (11–25 books)	
Enough to fill one bookcase (26–100 books)	
Enough to fill two bookcases (101–200 books)	
Enough to fill three or more bookcases (more than 200 books)	

Q17 How many of the following ICT devices are currently used in your home?

		None	One	Two	Three or more
a)	Desktop or laptop computers				
b)	Tablet devices or e-readers (e.g., iPad, Surface Pro, Kindle)				

YOUR USE OF ICT

Q18 How long have you been using each of the following types of ICT devices?

		Never or less than one year	At least one year but less than three years	At least three years but less than five years	At least five years but less than seven years	Seven years or more
a)	Desktop or laptop computers					
b)	Tablet devices or e- readers (e.g., iPad, Surface Pro, Kindle)					
c)	Smartphones except for using text and calling					

Q19 Who mainly taught you how to do the following activities?

	My teachers	My family	My friends	l taught myself	l have never learned this
a) Communicate over the Internet					
b) Create or edit digital documents					
c) Create or edit digital presentations					
d) Change settings on an ICT device					
e) Find information on the Internet					
f) Use programs and files in a computer network					

Q20 How often do you use ICT in these places?

Please do not count the use of smartphones when making phone calls or writing text messages.

		Never	Less than once a month	At least once a month but not every week	At least once a week but not every day	Every day
a)	At school for school-related purposes					
b)	At school for other purposes					
c)	Outside of school for school-related purposes					
d)	Outside of school for other purposes					

Q21 How often do you use ICT for each of the following activities?

		Never	Less than once a month	At least once a month but not every week	At least once a week but not every day	Every day
a)	Write or edit documents					
b)	Use a spreadsheet to do calculations, store data or plot graphs e.g., using Microsoft Excel)					
c)	Create a simple "slideshow" presentation (e.g., using Microsoft PowerPoint)					
d)	Record or edit videos					
e)	Write computer programs, scripts or apps (e.g., using Scratch, Logo, VBA, Java)					
f)	Use drawing, painting or graphics software or apps					
g)	Produce or edit music					
h)	Build or edit a webpage					

Q22 How often do you use ICT to do each of the following communication activities?

		Never	Less than once a month	At least once a month but not every week	At least once a week but not every day	Every day
a)	Share news about current events on social media					
b)	Communicate with friends, family, or other people using instant messaging, voice or video chat (e.g., Skype, FaceTime, WhatsApp, Viber)					
c)	Send texts or instant messages to friends, family, or other people					
d)	Write posts and updates about what happens in your life on social media					
e)	Ask questions on forums or Q&A, question and answer websites					
f)	Answer other peoples' questions on forums or Q&A, question and answer websites					
g)	Write posts for your own blog (e.g., WordPress, Tumblr, Blogger)					
h)	Post images or video in social networks or online communities (e.g., Facebook, Instagram or YouTube)					
i)	Watch videos or images that other people have posted online					
j)	Send or forward information about events or activities to other people					

Q23 How often do you use ICT to do each of the following leisure activities?

		Never	Less than once a month	At least once a month but not every week	At least once a week but not every day	Every day
a)	Search the Internet to find information about places to go or activities to do					
b)	Read reviews on the Internet of things you might want to buy					
c)	Read news stories on the Internet					
d)	Search for online information about things you are interested in					
e)	Use websites, forums, or online videos to find out how to do something					
f)	Play games					
g)	Listen to downloaded or streamed music					
h)	Watch downloaded or streamed TV shows or movies					

USING ICT FOR SCHOOL

Q24 How <u>often</u> do you use ICT for the following school-related purposes?

		Never	Less than once a month	At least once a month but not every week	At least once a week but not every school day	Every school day
a)	Prepare reports or essays					
b)	Prepare presentations					
c)	Work online with other students					
d)	Complete worksheets or exercises					
e)	Organize your time and work					
f)	Take tests					
g)	Use software or applications to learn skills or a subject (e.g., mathematics tutoring software, language learning software)					
h)	Use the Internet to do research					
i)	Use coding software to complete assignments (e.g., in Scratch, Logo, VBA, Java)					
j)	Make video or audio productions					

Q25 At school, how <u>often</u> do you use ICT during lessons in the following subjects or subject areas?

a)	English Language Arts	I don't study this subject / these subjects	Never	In some lessons	In most lessons	In every or almost every lesson
b)	Spanish or other foreign language					
c)	Mathematics					
d)	Sciences (general science and/or physics, chemistry, biology, geology, earth sciences)					
e)	Human sciences/Humanities /Social studies (e.g., history, geography, civics, law, economics)					
f)	Creative arts (e.g., visual arts, music, dance, drama)					
g)	Information technology, computer science or similar subject					
h)	Practical or vocational (e.g., mechanics and repair, healthcare occupations, construction trades)					
i)	Other (e.g., moral/ethics, physical education, personal and social development)					

Q26 When studying throughout this school year, how often did you use the following tools during class?

		Never	In some lessons	In most lessons	In every or almost every lesson
a)	Tutorial software or practice programs				
b)	Word-processing software (e.g., Microsoft Word)				
c)	Presentation software (e.g., Microsoft PowerPoint)				
d)	Spreadsheets (e.g., Microsoft Excel)				
e)	Multimedia production tools (e.g., media capture and editing, web production)				
f)	Concept mapping software (e.g., Inspiration, Webspiration)				
g)	Tools that capture real-world data (e.g., speed, temperature) digitally for analysis				
h)	Simulations and modelling software				
i)	Computer-based information resources (e.g., websites, wikis, encyclopedia)				
j)	Interactive digital learning resources (e.g., learning games or applications)				
k)	Graphing or drawing software				

Q27 At school, to what extent have you learned how to do the following tasks?

(Please mark one choice in each row)

		To a large extent	To a moderate extent	To a small extent	Not at all
a)	Provide references to Internet sources				
b)	Search for information using ICT				
c)	Present information for a given audience or purpose using ICT				
d)	Work out whether to trust information from the Internet				
e)	Decide what information obtained from the Internet is relevant to include in school work				
f)	Organize information obtained from Internet sources				
g)	Decide where to look for information on the Internet about an unfamiliar topic				
h)	Use ICT to collaborate with others				

Q28 At school, have you learned about the importance of the following topics?

	Yes	No
 a) To change passwords regularly (e.g., network account, email, soci media) 	al 🗌	
b) To check the origin of emails before opening attachments		
c) To log out of a shared computer at the end of a session		
d) To share information on social media responsibly		

YOUR THOUGHTS ABOUT USING AND LEARNING ABOUT ICT

Q29 How well can you do each of these tasks when using ICT?

		l know how to do this	I have never done this but I could work out how to do this	I do not think I could do this
a)	Edit digital photographs or other graphic images			
b)	Create a database (e.g., using Microsoft Access)			
c)	Write or edit text for a school assignment			
d)	Search for and find relevant information for a school project on the Internet			
e)	Build or edit a webpage			
f)	Change the settings on your device to improve the way it operates			
g)	Create a computer program, macro, or app (e.g., in Scratch, Logo, VBA, Java)			
h)	Set up a local area network of computers or other ICT			
i)	Create a multi-media presentation (with sound, pictures, or video)			
j)	Upload text, images, or video to an online profile			
k)	Insert an image into a document or message			
I)	Install a program or app			
m)	Judge whether you can trust information you find on the Internet			

Q30 How much do you agree or disagree with the following statements about ICT?

		Strongly agree	Agree	Disagree	Strongly disagree
a)	Advances in ICT usually improve people's living conditions.				
b)	ICT helps us to understand the world better.				
c)	Using ICT makes people more isolated in society.				
d)	With more ICT there will be fewer jobs.				
e)	People spend far too much time using ICT.				
f)	ICT is valuable to society.				
g)	Advances in ICT bring many social benefits.				
h)	Using ICT may be dangerous for people's health.				
i)	I would like to study subjects related to ICT after high school				
j)	I hope to find a job that involves advanced ICT				
k)	Learning how to use ICT applications will help me to do the work I am interested in				

Q31 When studying during the current school year, to what extent have you been taught how to do the following tasks?

(Please mark one choice in each row)

		To a large extent	To a moderate extent	To a small extent	Not at all	
a)	To display information in different ways					
b)	To break a complex process into smaller parts					
c)	To understand diagrams that describe or show real-world problems					
d)	To plan tasks by setting out the steps needed to complete them					
e)	To use tools to make diagrams that help solve problems					
f)	To use simulations to help understand or solve real world problems					
g)	To make flow diagrams to show the different parts of a process					
h)	To record and evaluate data to understand and solve a problem					
i)	To use real-world data to review and revise solutions to problems					
						
Q32 Do you study computing, computer science, information technology, informatics or similar in the current school year?						
	Yes					
	No					

THANK YOU FOR YOUR TIME AND EFFORT IN COMPLETING THE QUESTIONNAIRE