



## **IEA International Computer and Information Literacy Study**

### *ICT Coordinator Questionnaire for the 2018 Main Study*

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The Australian Council for Educational Research

## *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 Communication 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 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.**

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 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)*

- <sub>1</sub> Yes, I formally serve as coordinator.
- <sub>2</sub> Yes, I informally serve as coordinator.
- <sub>3</sub> I am not the ICT coordinator, but I am answering as the school principal or his/her designee.

### Q2 Which of the following teaching duties do you have?

*(Please mark one choice in each row)*

- |  | <i>Yes</i>                            | <i>No</i>                             |
|--|---------------------------------------|---------------------------------------|
| a) I teach ICT courses to students. ....   | <input type="checkbox"/> <sub>1</sub> | <input type="checkbox"/> <sub>2</sub> |
| b) I teach other subjects (not related to learning about ICT) to students. ....            | <input type="checkbox"/> <sub>1</sub> | <input type="checkbox"/> <sub>2</sub> |
| c) I do <u>not</u> have any teaching duties for students. ....                             | <input type="checkbox"/> <sub>1</sub> | <input type="checkbox"/> <sub>2</sub> |
| d) I teach ICT courses to, or conduct workshops for, teachers and other school staff. .... | <input type="checkbox"/> <sub>1</sub> | <input type="checkbox"/> <sub>2</sub> |

### 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)*

- <sub>1</sub> Never, we do not use ICT
- <sub>2</sub> Fewer than 5 years
- <sub>3</sub> At least 5 but fewer than 10 years
- <sub>4</sub> 10 years or more

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

*(Please mark one choice in each row)*

	<i>Available to teachers <u>and</u> students</i>	<i>Available only to teachers</i>	<i>Available only to students</i>	<i>Not available</i>
a) Digital learning resources that can be accessed offline .....	<input type="checkbox"/> <sub>1</sub>	<input type="checkbox"/> <sub>2</sub>	<input type="checkbox"/> <sub>3</sub>	<input type="checkbox"/> <sub>4</sub>
b) Digital learning resources that can <u>only</u> be used online .....	<input type="checkbox"/> <sub>1</sub>	<input type="checkbox"/> <sub>2</sub>	<input type="checkbox"/> <sub>3</sub>	<input type="checkbox"/> <sub>4</sub>
c) Access to the Internet through the school network .....	<input type="checkbox"/> <sub>1</sub>	<input type="checkbox"/> <sub>2</sub>	<input type="checkbox"/> <sub>3</sub>	<input type="checkbox"/> <sub>4</sub>
d) Access to an education site or network maintained by education authorities .....	<input type="checkbox"/> <sub>1</sub>	<input type="checkbox"/> <sub>2</sub>	<input type="checkbox"/> <sub>3</sub>	<input type="checkbox"/> <sub>4</sub>
e) Email accounts for school-related use .....	<input type="checkbox"/> <sub>1</sub>	<input type="checkbox"/> <sub>2</sub>	<input type="checkbox"/> <sub>3</sub>	<input type="checkbox"/> <sub>4</sub>

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

*(Please mark one choice in each row)*

	<i>Available to teachers and students</i>	<i>Available only to teachers</i>	<i>Available only to students</i>	<i>Not available</i>
a) Practice programs or apps where teachers decide which questions are asked of students (e.g., Quizlet, Kahoot) .....	<input type="checkbox"/> <sub>1</sub>	<input type="checkbox"/> <sub>2</sub>	<input type="checkbox"/> <sub>3</sub>	<input type="checkbox"/> <sub>4</sub>
b) Single user digital learning games (e.g., Languages Online) .....	<input type="checkbox"/> <sub>1</sub>	<input type="checkbox"/> <sub>2</sub>	<input type="checkbox"/> <sub>3</sub>	<input type="checkbox"/> <sub>4</sub>
c) Multi-user digital learning games with graphics and inquiry tasks (e.g., Quest Atlantis) .....	<input type="checkbox"/> <sub>1</sub>	<input type="checkbox"/> <sub>2</sub>	<input type="checkbox"/> <sub>3</sub>	<input type="checkbox"/> <sub>4</sub>
d) Word-processor software (e.g., Microsoft Word) .....	<input type="checkbox"/> <sub>1</sub>	<input type="checkbox"/> <sub>2</sub>	<input type="checkbox"/> <sub>3</sub>	<input type="checkbox"/> <sub>4</sub>
e) Presentation software (e.g., Microsoft PowerPoint) .....	<input type="checkbox"/> <sub>1</sub>	<input type="checkbox"/> <sub>2</sub>	<input type="checkbox"/> <sub>3</sub>	<input type="checkbox"/> <sub>4</sub>
f) Video and photo software for capture and editing (e.g., Windows Movie Maker, iMovie, Adobe Photoshop) .....	<input type="checkbox"/> <sub>1</sub>	<input type="checkbox"/> <sub>2</sub>	<input type="checkbox"/> <sub>3</sub>	<input type="checkbox"/> <sub>4</sub>
g) Concept mapping software (e.g., Inspiration, Webspiration) .....	<input type="checkbox"/> <sub>1</sub>	<input type="checkbox"/> <sub>2</sub>	<input type="checkbox"/> <sub>3</sub>	<input type="checkbox"/> <sub>4</sub>
h) Data logging and monitoring tools (e.g., Logger Pro) that capture real-world data digitally for analysis (e.g., speed, temperature) .....	<input type="checkbox"/> <sub>1</sub>	<input type="checkbox"/> <sub>2</sub>	<input type="checkbox"/> <sub>3</sub>	<input type="checkbox"/> <sub>4</sub>
i) Simulations and modelling software (e.g., NetLogo) .....	<input type="checkbox"/> <sub>1</sub>	<input type="checkbox"/> <sub>2</sub>	<input type="checkbox"/> <sub>3</sub>	<input type="checkbox"/> <sub>4</sub>
j) A learning management system (e.g., Blackboard, Edmodo, Moodle) .....	<input type="checkbox"/> <sub>1</sub>	<input type="checkbox"/> <sub>2</sub>	<input type="checkbox"/> <sub>3</sub>	<input type="checkbox"/> <sub>4</sub>
k) Graphing or drawing software .....	<input type="checkbox"/> <sub>1</sub>	<input type="checkbox"/> <sub>2</sub>	<input type="checkbox"/> <sub>3</sub>	<input type="checkbox"/> <sub>4</sub>
l) e-portfolios (e.g., VoiceThread) .....	<input type="checkbox"/> <sub>1</sub>	<input type="checkbox"/> <sub>2</sub>	<input type="checkbox"/> <sub>3</sub>	<input type="checkbox"/> <sub>4</sub>
m) Digital contents linked with textbooks .....	<input type="checkbox"/> <sub>1</sub>	<input type="checkbox"/> <sub>2</sub>	<input type="checkbox"/> <sub>3</sub>	<input type="checkbox"/> <sub>4</sub>
n) Social media (e.g., Facebook, Twitter) .....	<input type="checkbox"/> <sub>1</sub>	<input type="checkbox"/> <sub>2</sub>	<input type="checkbox"/> <sub>3</sub>	<input type="checkbox"/> <sub>4</sub>

**Q6 Please indicate the availability of the following technology facilities in eighth grade.**

*(Please mark one choice in each row)*

	<i>Available to teachers and students</i>	<i>Available only to teachers</i>	<i>Available only to students</i>	<i>Not available</i>
a) Remote access to a school network .....	<input type="checkbox"/> <sub>1</sub>	<input type="checkbox"/> <sub>2</sub>	<input type="checkbox"/> <sub>3</sub>	<input type="checkbox"/> <sub>4</sub>
b) Space on a school network to store files .....	<input type="checkbox"/> <sub>1</sub>	<input type="checkbox"/> <sub>2</sub>	<input type="checkbox"/> <sub>3</sub>	<input type="checkbox"/> <sub>4</sub>
c) A school intranet with applications and workspaces .....	<input type="checkbox"/> <sub>1</sub>	<input type="checkbox"/> <sub>2</sub>	<input type="checkbox"/> <sub>3</sub>	<input type="checkbox"/> <sub>4</sub>
d) Internet-based applications for collaborative work (e.g., Google Docs, OneNote, Padlet) .....	<input type="checkbox"/> <sub>1</sub>	<input type="checkbox"/> <sub>2</sub>	<input type="checkbox"/> <sub>3</sub>	<input type="checkbox"/> <sub>4</sub>
e) A 3D printer .....	<input type="checkbox"/> <sub>1</sub>	<input type="checkbox"/> <sub>2</sub>	<input type="checkbox"/> <sub>3</sub>	<input type="checkbox"/> <sub>4</sub>
f) Robots or robotic devices .....	<input type="checkbox"/> <sub>1</sub>	<input type="checkbox"/> <sub>2</sub>	<input type="checkbox"/> <sub>3</sub>	<input type="checkbox"/> <sub>4</sub>
g) Access to a wireless LAN (Wi-Fi) .....	<input type="checkbox"/> <sub>1</sub>	<input type="checkbox"/> <sub>2</sub>	<input type="checkbox"/> <sub>3</sub>	<input type="checkbox"/> <sub>4</sub>
h) A learning management system (e.g., Blackboard, Edmodo, Moodle) .....	<input type="checkbox"/> <sub>1</sub>	<input type="checkbox"/> <sub>2</sub>	<input type="checkbox"/> <sub>3</sub>	<input type="checkbox"/> <sub>4</sub>

**Q7 A) 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 school	Devices available for student use
a) Desktop computers .....	_ _ _	_ _ _
b) Laptops/notebooks.....	_ _ _	_ _ _
c) Tablet devices.....	_ _ _	_ _ _

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

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

|\_|\_|\_| %

**C) 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)*

- <sub>1</sub> Yes, for every teacher
- <sub>2</sub> Yes, but not for all teachers
- <sub>3</sub> No

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

*(Please mark one choice in each row)*

	<i>0 to 25%</i>	<i>26 to 50%</i>	<i>51 to 75%</i>	<i>76 to 100%</i>
a) Students are provided with portable computers by their school for use at school only .....	<input type="checkbox"/> <sub>1</sub>	<input type="checkbox"/> <sub>2</sub>	<input type="checkbox"/> <sub>3</sub>	<input type="checkbox"/> <sub>4</sub>
b) Students are provided with portable computers by their school for use at home <u>and</u> at school .....	<input type="checkbox"/> <sub>1</sub>	<input type="checkbox"/> <sub>2</sub>	<input type="checkbox"/> <sub>3</sub>	<input type="checkbox"/> <sub>4</sub>
c) Students bring portable computers which they own to use at school .....	<input type="checkbox"/> <sub>1</sub>	<input type="checkbox"/> <sub>2</sub>	<input type="checkbox"/> <sub>3</sub>	<input type="checkbox"/> <sub>4</sub>

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

*(Please mark one choice in each row)*

	<i>Yes</i>	<i>No</i>
a) In most (80% or more) classrooms .....	<input type="checkbox"/> <sub>1</sub>	<input type="checkbox"/> <sub>2</sub>
b) In computer laboratories .....	<input type="checkbox"/> <sub>1</sub>	<input type="checkbox"/> <sub>2</sub>
c) As class sets of computers that can be moved between classrooms .....	<input type="checkbox"/> <sub>1</sub>	<input type="checkbox"/> <sub>2</sub>
d) In the library .....	<input type="checkbox"/> <sub>1</sub>	<input type="checkbox"/> <sub>2</sub>
e) In other places accessible to students (e.g., cafeteria, auditorium, study area) .....	<input type="checkbox"/> <sub>1</sub>	<input type="checkbox"/> <sub>2</sub>
f) Students bring the devices to class .....	<input type="checkbox"/> <sub>1</sub>	<input type="checkbox"/> <sub>2</sub>

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

*(Please mark one choice in each row)*

	<i>Yes</i>	<i>No</i>
a) Yourself .....	<input type="checkbox"/> <sub>1</sub>	<input type="checkbox"/> <sub>2</sub>
b) A network administrator in the school (other than yourself) .....	<input type="checkbox"/> <sub>1</sub>	<input type="checkbox"/> <sub>2</sub>
c) ICT technical staff (other than yourself) at the school .....	<input type="checkbox"/> <sub>1</sub>	<input type="checkbox"/> <sub>2</sub>
d) Administrators or school staff (other than yourself) .....	<input type="checkbox"/> <sub>1</sub>	<input type="checkbox"/> <sub>2</sub>
e) Teachers (other than yourself) .....	<input type="checkbox"/> <sub>1</sub>	<input type="checkbox"/> <sub>2</sub>
f) Staff from the relevant education authority responsible for the school .....	<input type="checkbox"/> <sub>1</sub>	<input type="checkbox"/> <sub>2</sub>
g) Personnel from external companies contracted to provide maintenance .....	<input type="checkbox"/> <sub>1</sub>	<input type="checkbox"/> <sub>2</sub>
h) Students from the school .....	<input type="checkbox"/> <sub>1</sub>	<input type="checkbox"/> <sub>2</sub>

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

*(Please mark one choice in each row)*

	<i>Yes</i>	<i>No</i>
a) Yourself .....	<input type="checkbox"/> <sub>1</sub>	<input type="checkbox"/> <sub>2</sub>
b) ICT technical staff (other than yourself) at the school .....	<input type="checkbox"/> <sub>1</sub>	<input type="checkbox"/> <sub>2</sub>
c) Administrators or school staff (other than yourself) .....	<input type="checkbox"/> <sub>1</sub>	<input type="checkbox"/> <sub>2</sub>
d) Librarians, library staff, or information specialists (other than yourself) .....	<input type="checkbox"/> <sub>1</sub>	<input type="checkbox"/> <sub>2</sub>
e) Teachers (other than yourself) .....	<input type="checkbox"/> <sub>1</sub>	<input type="checkbox"/> <sub>2</sub>
f) Staff from the relevant education authority responsible for the school .....	<input type="checkbox"/> <sub>1</sub>	<input type="checkbox"/> <sub>2</sub>

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

*(Please mark one choice in each row)*

	<i>A lot</i>	<i>To some extent</i>	<i>Very little</i>	<i>Not at all</i>
a) Too few computers with an Internet connection .....	<input type="checkbox"/> <sub>1</sub>	<input type="checkbox"/> <sub>2</sub>	<input type="checkbox"/> <sub>3</sub>	<input type="checkbox"/> <sub>4</sub>
b) Insufficient Internet bandwidth or speed .....	<input type="checkbox"/> <sub>1</sub>	<input type="checkbox"/> <sub>2</sub>	<input type="checkbox"/> <sub>3</sub>	<input type="checkbox"/> <sub>4</sub>
c) Not enough computers for instruction .....	<input type="checkbox"/> <sub>1</sub>	<input type="checkbox"/> <sub>2</sub>	<input type="checkbox"/> <sub>3</sub>	<input type="checkbox"/> <sub>4</sub>
d) Lack of sufficiently powerful computers .....	<input type="checkbox"/> <sub>1</sub>	<input type="checkbox"/> <sub>2</sub>	<input type="checkbox"/> <sub>3</sub>	<input type="checkbox"/> <sub>4</sub>
e) Problems in maintaining ICT equipment .....	<input type="checkbox"/> <sub>1</sub>	<input type="checkbox"/> <sub>2</sub>	<input type="checkbox"/> <sub>3</sub>	<input type="checkbox"/> <sub>4</sub>
f) Not enough computer software .....	<input type="checkbox"/> <sub>1</sub>	<input type="checkbox"/> <sub>2</sub>	<input type="checkbox"/> <sub>3</sub>	<input type="checkbox"/> <sub>4</sub>
g) Insufficient ICT skills among teachers .....	<input type="checkbox"/> <sub>1</sub>	<input type="checkbox"/> <sub>2</sub>	<input type="checkbox"/> <sub>3</sub>	<input type="checkbox"/> <sub>4</sub>
h) Insufficient time for teachers to prepare lessons .....	<input type="checkbox"/> <sub>1</sub>	<input type="checkbox"/> <sub>2</sub>	<input type="checkbox"/> <sub>3</sub>	<input type="checkbox"/> <sub>4</sub>
i) Insufficient effective professional learning resources for teachers .....	<input type="checkbox"/> <sub>1</sub>	<input type="checkbox"/> <sub>2</sub>	<input type="checkbox"/> <sub>3</sub>	<input type="checkbox"/> <sub>4</sub>
j) Lack of an effective online learning support platform .....	<input type="checkbox"/> <sub>1</sub>	<input type="checkbox"/> <sub>2</sub>	<input type="checkbox"/> <sub>3</sub>	<input type="checkbox"/> <sub>4</sub>
k) Insufficient incentives for teachers to integrate ICT use in their teaching .....	<input type="checkbox"/> <sub>1</sub>	<input type="checkbox"/> <sub>2</sub>	<input type="checkbox"/> <sub>3</sub>	<input type="checkbox"/> <sub>4</sub>
l) Restricted access to useful Internet resources .....	<input type="checkbox"/> <sub>1</sub>	<input type="checkbox"/> <sub>2</sub>	<input type="checkbox"/> <sub>3</sub>	<input type="checkbox"/> <sub>4</sub>
m) Insufficient technical ICT support .....	<input type="checkbox"/> <sub>1</sub>	<input type="checkbox"/> <sub>2</sub>	<input type="checkbox"/> <sub>3</sub>	<input type="checkbox"/> <sub>4</sub>
n) Insufficient pedagogical support for the use of ICT .....	<input type="checkbox"/> <sub>1</sub>	<input type="checkbox"/> <sub>2</sub>	<input type="checkbox"/> <sub>3</sub>	<input type="checkbox"/> <sub>4</sub>

**Q14 Is Computing, Computer science, Information technology, Informatics, or a similar topic taught as a standalone subject in eighth grade at your school?**

- <sub>1</sub> Yes - Please continue with question 15
- <sub>2</sub> No - Please go to the end of the questionnaire

**Q15 In the teaching of Computing, Computer science, Information technology, Informatics, or a similar subject in eighth grade at your school, how much emphasis is given to the following tasks?**

*(Please mark one choice in each row)*

	<i>Strong emphasis</i>	<i>Some emphasis</i>	<i>Little emphasis</i>	<i>No emphasis</i>
a) Developing algorithms (e.g., instructions for a program like Scratch) .....	<input type="checkbox"/> <sub>1</sub>	<input type="checkbox"/> <sub>2</sub>	<input type="checkbox"/> <sub>3</sub>	<input type="checkbox"/> <sub>4</sub>
b) Writing computer programs .....	<input type="checkbox"/> <sub>1</sub>	<input type="checkbox"/> <sub>2</sub>	<input type="checkbox"/> <sub>3</sub>	<input type="checkbox"/> <sub>4</sub>
c) Evaluating computer programs .....	<input type="checkbox"/> <sub>1</sub>	<input type="checkbox"/> <sub>2</sub>	<input type="checkbox"/> <sub>3</sub>	<input type="checkbox"/> <sub>4</sub>
d) Developing applications .....	<input type="checkbox"/> <sub>1</sub>	<input type="checkbox"/> <sub>2</sub>	<input type="checkbox"/> <sub>3</sub>	<input type="checkbox"/> <sub>4</sub>
e) Refining computer code to improve efficiency .....	<input type="checkbox"/> <sub>1</sub>	<input type="checkbox"/> <sub>2</sub>	<input type="checkbox"/> <sub>3</sub>	<input type="checkbox"/> <sub>4</sub>
f) Debugging computer code .....	<input type="checkbox"/> <sub>1</sub>	<input type="checkbox"/> <sub>2</sub>	<input type="checkbox"/> <sub>3</sub>	<input type="checkbox"/> <sub>4</sub>
g) Developing simulations .....	<input type="checkbox"/> <sub>1</sub>	<input type="checkbox"/> <sub>2</sub>	<input type="checkbox"/> <sub>3</sub>	<input type="checkbox"/> <sub>4</sub>
h) Testing solutions to problems using simulations .....	<input type="checkbox"/> <sub>1</sub>	<input type="checkbox"/> <sub>2</sub>	<input type="checkbox"/> <sub>3</sub>	<input type="checkbox"/> <sub>4</sub>
i) Creating visual displays of processes (e.g., flow charts, decision trees) .....	<input type="checkbox"/> <sub>1</sub>	<input type="checkbox"/> <sub>2</sub>	<input type="checkbox"/> <sub>3</sub>	<input type="checkbox"/> <sub>4</sub>

**THANK YOU FOR YOUR TIME AND EFFORT IN COMPLETING THE QUESTIONNAIRE**