

# **INFORMATION AND COMMUNICATION TECHNOLOGY FAMILIARITY QUESTIONNAIRE FOR PISA 2012**

Main Survey

No notes version

December 2011

**Consortium:**

Australian Council for Educational Research (ACER, Australia)

cApStAn Linguistic Quality Control (Belgium)

Deutsches Institut für Internationale Pädagogische Forschung (DIPF, Germany)

Educational Testing Service (ETS, USA)

Institutt for Lærerutdanning og Skoleutvikling (ILS, Norway)

Leibniz - Institute for Science and Mathematics Education (IPN, Germany)

National Institute for Educational Policy Research (NIER, Japan)

The Tao Initiative: CRP - Henri Tudor and Université de Luxembourg - EMACS  
(Luxembourg)

Unité d'analyse des systèmes et des pratiques d'enseignement (aSPe, Belgium)

Westat (USA)



**In the following section you will be asked questions related to computers.**

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

## SECTION <X>: AVAILABILITY OF ICT

IC01

### Q Are any of these devices available for you to use at home?

(Please tick one box in each row.)

	<i>Yes, and I use it</i>	<i>Yes, but I don't use it</i>	<i>No</i>
a) Desktop computer	<input type="checkbox"/> <sub>1</sub>	<input type="checkbox"/> <sub>2</sub>	<input type="checkbox"/> <sub>3</sub>
b) Portable laptop, or notebook	<input type="checkbox"/> <sub>1</sub>	<input type="checkbox"/> <sub>2</sub>	<input type="checkbox"/> <sub>3</sub>
c) <Tablet computer> (e.g. <iPad®>, <BlackBerry® PlayBook™>)	<input type="checkbox"/> <sub>1</sub>	<input type="checkbox"/> <sub>2</sub>	<input type="checkbox"/> <sub>3</sub>
d) Internet connection	<input type="checkbox"/> <sub>1</sub>	<input type="checkbox"/> <sub>2</sub>	<input type="checkbox"/> <sub>3</sub>
e) <Video games console>, e.g. <Sony® PlayStation® >	<input type="checkbox"/> <sub>1</sub>	<input type="checkbox"/> <sub>2</sub>	<input type="checkbox"/> <sub>3</sub>
f) <Cell phone> (without Internet access)	<input type="checkbox"/> <sub>1</sub>	<input type="checkbox"/> <sub>2</sub>	<input type="checkbox"/> <sub>3</sub>
g) <Cell phone> (with Internet access)	<input type="checkbox"/> <sub>1</sub>	<input type="checkbox"/> <sub>2</sub>	<input type="checkbox"/> <sub>3</sub>
h) Portable music player (Mp3/Mp4 player, iPod® or similar)	<input type="checkbox"/> <sub>1</sub>	<input type="checkbox"/> <sub>2</sub>	<input type="checkbox"/> <sub>3</sub>
i) Printer	<input type="checkbox"/> <sub>1</sub>	<input type="checkbox"/> <sub>2</sub>	<input type="checkbox"/> <sub>3</sub>
j) USB (memory) stick	<input type="checkbox"/> <sub>1</sub>	<input type="checkbox"/> <sub>2</sub>	<input type="checkbox"/> <sub>3</sub>
k) <ebook reader>, e.g. <Amazon® Kindle™>	<input type="checkbox"/> <sub>1</sub>	<input type="checkbox"/> <sub>2</sub>	<input type="checkbox"/> <sub>3</sub>

**Q Are any of these devices available for you to use at school?**

*(Please tick one box in each row.)*

	<i>Yes, and I use it</i>	<i>Yes, but I don't use it</i>	<i>No</i>
a) Desktop computer	<input type="checkbox"/> <sub>1</sub>	<input type="checkbox"/> <sub>2</sub>	<input type="checkbox"/> <sub>3</sub>
b) Portable laptop or notebook	<input type="checkbox"/> <sub>1</sub>	<input type="checkbox"/> <sub>2</sub>	<input type="checkbox"/> <sub>3</sub>
c) <Tablet computer> (e.g. <iPad®>, <BlackBerry® PlayBook™>)	<input type="checkbox"/> <sub>1</sub>	<input type="checkbox"/> <sub>2</sub>	<input type="checkbox"/> <sub>3</sub>
d) Internet connection	<input type="checkbox"/> <sub>1</sub>	<input type="checkbox"/> <sub>2</sub>	<input type="checkbox"/> <sub>3</sub>
e) Printer	<input type="checkbox"/> <sub>1</sub>	<input type="checkbox"/> <sub>2</sub>	<input type="checkbox"/> <sub>3</sub>
f) USB (memory) stick	<input type="checkbox"/> <sub>1</sub>	<input type="checkbox"/> <sub>2</sub>	<input type="checkbox"/> <sub>3</sub>
g) <ebook reader>, e.g. <Amazon® Kindle™>	<input type="checkbox"/> <sub>1</sub>	<input type="checkbox"/> <sub>2</sub>	<input type="checkbox"/> <sub>3</sub>

## SECTION <X>: GENERAL COMPUTER USE

IC03

### Q How old were you when you first used a computer?

*(Please tick only one box.)*

*6 years old or  
younger*

☐

<sub>1</sub>

*7-9 years old*

☐

<sub>2</sub>

*10-12 years old*

☐

<sub>3</sub>

*13 years old or  
older*

☐

<sub>4</sub>

*I have never  
used a  
computer*

☐

<sub>5</sub>

*If you have never used a computer, please stop here. Thank you for your participation.*

*<Instructions>*

**Q How old were you when you first accessed the Internet?**

*(Please tick only one box.)*

*6 years old or  
younger*

☐

<sub>1</sub>

*7-9 years old*

☐

<sub>2</sub>

*10-12 years old*

☐

<sub>3</sub>

*13 years old or  
older*

☐

<sub>4</sub>

*I have never  
accessed the  
Internet*

☐

<sub>5</sub>

**Q During a *typical* weekday, for how long do you use the Internet at school?**

*(Please tick only one box.)*

*No time*

☐

<sub>01</sub>

*1-30  
minutes  
per day*

☐

<sub>02</sub>

*31-60  
minutes  
per day*

☐

<sub>03</sub>

*Between 1  
hour and  
2 hours  
per day*

☐

<sub>04</sub>

*Between  
2 hours  
and 4  
hours  
per day*

☐

<sub>05</sub>

*Between  
4 hours  
and 6  
hours  
per day*

☐

<sub>06</sub>

*More than  
6 hours  
per day*

☐

<sub>07</sub>

**Q** During a *typical* weekday, for how long do you use the Internet outside of school?

(Please tick only one box.)

<i>No time</i>	<i>1-30 minutes per day</i>	<i>31-60 minutes per day</i>	<i>Between 1 hour and 2 hours per day</i>	<i>Between 2 hours and 4 hours per day</i>	<i>Between 4 hours and 6 hours per day</i>	<i>More than 6 hours per day</i>
<input type="checkbox"/> <sub>01</sub>	<input type="checkbox"/> <sub>02</sub>	<input type="checkbox"/> <sub>03</sub>	<input type="checkbox"/> <sub>04</sub>	<input type="checkbox"/> <sub>05</sub>	<input type="checkbox"/> <sub>06</sub>	<input type="checkbox"/> <sub>07</sub>

**Q** On a *typical* weekend day, for how long do you use the Internet outside of school?

(Please tick only one box.)

<i>No time</i>	<i>1-30 minutes per day</i>	<i>31-60 minutes per day</i>	<i>Between 1 hr and 2 hours per day</i>	<i>Between 2 hrs and 4 hours per day</i>	<i>Between 4 hrs and 6 hours per day</i>	<i>More than 6 hours per day</i>
<input type="checkbox"/> <sub>01</sub>	<input type="checkbox"/> <sub>02</sub>	<input type="checkbox"/> <sub>03</sub>	<input type="checkbox"/> <sub>04</sub>	<input type="checkbox"/> <sub>05</sub>	<input type="checkbox"/> <sub>06</sub>	<input type="checkbox"/> <sub>07</sub>



## SECTION <X>: USE OF ICT OUTSIDE OF SCHOOL

IC08

### Q How often do you use a computer for the following activities outside of school?

(Please tick one box in each row.)

	<i>Never or hardly ever</i>	<i>Once or twice a month</i>	<i>Once or twice a week</i>	<i>Almost every day</i>	<i>Every day</i>
a) Playing one-player games.	<input type="checkbox"/> <sub>1</sub>	<input type="checkbox"/> <sub>2</sub>	<input type="checkbox"/> <sub>3</sub>	<input type="checkbox"/> <sub>4</sub>	<input type="checkbox"/> <sub>5</sub>
b) Playing collaborative online games.	<input type="checkbox"/> <sub>1</sub>	<input type="checkbox"/> <sub>2</sub>	<input type="checkbox"/> <sub>3</sub>	<input type="checkbox"/> <sub>4</sub>	<input type="checkbox"/> <sub>5</sub>
c) Using email.	<input type="checkbox"/> <sub>1</sub>	<input type="checkbox"/> <sub>2</sub>	<input type="checkbox"/> <sub>3</sub>	<input type="checkbox"/> <sub>4</sub>	<input type="checkbox"/> <sub>5</sub>
d) <Chatting online> (e.g. <MSN®>).	<input type="checkbox"/> <sub>1</sub>	<input type="checkbox"/> <sub>2</sub>	<input type="checkbox"/> <sub>3</sub>	<input type="checkbox"/> <sub>4</sub>	<input type="checkbox"/> <sub>5</sub>
e) Participating in social networks (e.g. <facebook>, <MySpace>).	<input type="checkbox"/> <sub>1</sub>	<input type="checkbox"/> <sub>2</sub>	<input type="checkbox"/> <sub>3</sub>	<input type="checkbox"/> <sub>4</sub>	<input type="checkbox"/> <sub>5</sub>
f) Browsing the Internet for fun (such as watching videos, e.g.<YouTube™>).	<input type="checkbox"/> <sub>1</sub>	<input type="checkbox"/> <sub>2</sub>	<input type="checkbox"/> <sub>3</sub>	<input type="checkbox"/> <sub>4</sub>	<input type="checkbox"/> <sub>5</sub>
g) Reading news on the Internet (e.g. current affairs).	<input type="checkbox"/> <sub>1</sub>	<input type="checkbox"/> <sub>2</sub>	<input type="checkbox"/> <sub>3</sub>	<input type="checkbox"/> <sub>4</sub>	<input type="checkbox"/> <sub>5</sub>
h) Obtaining practical information from the Internet (e.g. locations, dates of events).	<input type="checkbox"/> <sub>1</sub>	<input type="checkbox"/> <sub>2</sub>	<input type="checkbox"/> <sub>3</sub>	<input type="checkbox"/> <sub>4</sub>	<input type="checkbox"/> <sub>5</sub>
i) Downloading music, films, games or software from the Internet.	<input type="checkbox"/> <sub>1</sub>	<input type="checkbox"/> <sub>2</sub>	<input type="checkbox"/> <sub>3</sub>	<input type="checkbox"/> <sub>4</sub>	<input type="checkbox"/> <sub>5</sub>
j) Uploading your own created contents for sharing (e.g. music, poetry, videos, 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>	<input type="checkbox"/> <sub>5</sub>

**Q      How often do you use a computer for the following activities  
outside of school?**

*(Please tick one box in each row.)*

	<i>Never or hardly ever</i>	<i>Once or twice a month</i>	<i>Once or twice a week</i>	<i>Almost every day</i>	<i>Every day</i>
a) Browsing the Internet for schoolwork (e.g. for preparing an essay or presentation).	<input type="checkbox"/> <sub>1</sub>	<input type="checkbox"/> <sub>2</sub>	<input type="checkbox"/> <sub>3</sub>	<input type="checkbox"/> <sub>4</sub>	<input type="checkbox"/> <sub>5</sub>
b) Using email for communication with other students about schoolwork.	<input type="checkbox"/> <sub>1</sub>	<input type="checkbox"/> <sub>2</sub>	<input type="checkbox"/> <sub>3</sub>	<input type="checkbox"/> <sub>4</sub>	<input type="checkbox"/> <sub>5</sub>
c) Using email for communication with teachers and submission of homework or other schoolwork.	<input type="checkbox"/> <sub>1</sub>	<input type="checkbox"/> <sub>2</sub>	<input type="checkbox"/> <sub>3</sub>	<input type="checkbox"/> <sub>4</sub>	<input type="checkbox"/> <sub>5</sub>
d) Downloading, upload or browse material from my school's website (e.g. time table or course materials).	<input type="checkbox"/> <sub>1</sub>	<input type="checkbox"/> <sub>2</sub>	<input type="checkbox"/> <sub>3</sub>	<input type="checkbox"/> <sub>4</sub>	<input type="checkbox"/> <sub>5</sub>
e) Checking the school's website for announcements, e.g. absence of 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>	<input type="checkbox"/> <sub>5</sub>
f) Doing homework on the computer.	<input type="checkbox"/> <sub>1</sub>	<input type="checkbox"/> <sub>2</sub>	<input type="checkbox"/> <sub>3</sub>	<input type="checkbox"/> <sub>4</sub>	<input type="checkbox"/> <sub>5</sub>
g) Sharing school related materials with other students.	<input type="checkbox"/> <sub>1</sub>	<input type="checkbox"/> <sub>2</sub>	<input type="checkbox"/> <sub>3</sub>	<input type="checkbox"/> <sub>4</sub>	<input type="checkbox"/> <sub>5</sub>

## SECTION <X>: USE OF ICT AT SCHOOL

IC10

### Q How often do you use a computer for the following activities at school?

(Please tick one box in each row.)

	<i>Never or hardly ever</i>	<i>Once or twice a month</i>	<i>Once or twice a week</i>	<i>Almost every day</i>	<i>Every day</i>
a) <Chatting on line> 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>	<input type="checkbox"/> <sub>5</sub>
b) Using email 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>	<input type="checkbox"/> <sub>5</sub>
c) Browsing the Internet for schoolwork.	<input type="checkbox"/> <sub>1</sub>	<input type="checkbox"/> <sub>2</sub>	<input type="checkbox"/> <sub>3</sub>	<input type="checkbox"/> <sub>4</sub>	<input type="checkbox"/> <sub>5</sub>
d) Downloading, uploading or browsing material from the school's website (e.g. <intranet>).	<input type="checkbox"/> <sub>1</sub>	<input type="checkbox"/> <sub>2</sub>	<input type="checkbox"/> <sub>3</sub>	<input type="checkbox"/> <sub>4</sub>	<input type="checkbox"/> <sub>5</sub>
e) Posting my work on the school's website.	<input type="checkbox"/> <sub>1</sub>	<input type="checkbox"/> <sub>2</sub>	<input type="checkbox"/> <sub>3</sub>	<input type="checkbox"/> <sub>4</sub>	<input type="checkbox"/> <sub>5</sub>
f) Playing simulations 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>	<input type="checkbox"/> <sub>5</sub>
g) Practicing and drilling, such as for foreign language learning or mathematics.	<input type="checkbox"/> <sub>1</sub>	<input type="checkbox"/> <sub>2</sub>	<input type="checkbox"/> <sub>3</sub>	<input type="checkbox"/> <sub>4</sub>	<input type="checkbox"/> <sub>5</sub>
h) Doing homework on a school computer.	<input type="checkbox"/> <sub>1</sub>	<input type="checkbox"/> <sub>2</sub>	<input type="checkbox"/> <sub>3</sub>	<input type="checkbox"/> <sub>4</sub>	<input type="checkbox"/> <sub>5</sub>
i) Using school computers for group work and communication with other students.	<input type="checkbox"/> <sub>1</sub>	<input type="checkbox"/> <sub>2</sub>	<input type="checkbox"/> <sub>3</sub>	<input type="checkbox"/> <sub>4</sub>	<input type="checkbox"/> <sub>5</sub>

**Q Within the last month, has a computer ever been used for the following purposes in your mathematics lessons?**

*(Please tick one box in each row.)*

	<i>Yes, students did this</i>	<i>Yes, but only the teacher demonstrated this</i>	<i>No</i>
a) Drawing the graph of a function (such as $y = 4x+6$ ).	<input type="checkbox"/> <sub>1</sub>	<input type="checkbox"/> <sub>2</sub>	<input type="checkbox"/> <sub>3</sub>
b) Calculating with numbers (such as calculating $5 \cdot 233/8$ ).	<input type="checkbox"/> <sub>1</sub>	<input type="checkbox"/> <sub>2</sub>	<input type="checkbox"/> <sub>3</sub>
c) Constructing geometric figures (e.g. an equilateral triangle with given side lengths).	<input type="checkbox"/> <sub>1</sub>	<input type="checkbox"/> <sub>2</sub>	<input type="checkbox"/> <sub>3</sub>
d) Entering data in a spreadsheet (e.g. in <Excel <sup>TM</sup> >).	<input type="checkbox"/> <sub>1</sub>	<input type="checkbox"/> <sub>2</sub>	<input type="checkbox"/> <sub>3</sub>
e) Rewriting algebraic expressions and solving equations (such as $a^2+2ab+b^2$ ).	<input type="checkbox"/> <sub>1</sub>	<input type="checkbox"/> <sub>2</sub>	<input type="checkbox"/> <sub>3</sub>
f) Drawing histograms (a graph that shows the distribution of frequencies of data).	<input type="checkbox"/> <sub>1</sub>	<input type="checkbox"/> <sub>2</sub>	<input type="checkbox"/> <sub>3</sub>
g) Finding out how the graph of a function like $y=ax^2$ changes depending on $a$ .	<input type="checkbox"/> <sub>1</sub>	<input type="checkbox"/> <sub>2</sub>	<input type="checkbox"/> <sub>3</sub>

## SECTION <X>: ATTITUDES TOWARD COMPUTERS

IC22

**Q**      ***Thinking about your experience with computers: to what extent do you agree with the following statements?***

*(Please tick one box in each row.)*

	<i>Strongly agree</i>	<i>Agree</i>	<i>Disagree</i>	<i>Strongly disagree</i>
a) The computer is a very useful tool for my schoolwork.	<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) Doing my homework using a computer makes it more fun.	<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) The Internet is a great resource for obtaining information I can use for my school work.	<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) Using the computer for learning is troublesome.	<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) Since anyone can upload information to the internet, it is in general not suitable to use it for schoolwork.	<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) Information obtained from the internet is generally too unreliable to be used for school assignments.	<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 very much for your co-operation in  
completing this questionnaire!***