Umræðufundur um PISA 2009

Námsmatsstofnun
27. september 2011

Almar Miðvík Halldórsson

■ Table VI.A ■

AN OVERVIEW OF PERFORMANCE IN DIGITAL READING, NAVIGATION AND COMPUTER USE

Higher quality or equity than OECD average
At OECD average (no statistically significant difference)
Lower quality or equity than OECD average

upprifjun

		Digital reading performance	Gender difference in digital reading scores between boys and girls	Index of number of relevant pages visited (navigation skills)	Computer use at home			Computer use at school		
					Percentage of students who use a computer at home	Percentage difference between top and bottom quarters of the PISA index of economic, social and cultural status	Difference in digital reading scores between those students who use and those who do not use a computer at home	Percentage of students who use a computer at school	Percentage difference between top and bottom quarters of the PISA index of economic, social and cultural status	Difference in digital reading scores between those students who use and those who do not use a computer at school
		Mean score	Score dif.	Mean index	%	% dif.	Score dif.	%	% dif.	Score dif.
	OECD average	499	**-24**	46.3	92.3	**16.0**	**80**	74.2	0.3	**9**
OECD	Korea	568	**-18**	52.8	87.5	**19.5**	**49**	62.7	3.5	2.1
OECD	New Zealand	537	**-40**	49.7	92.5	**20.2**	**90**	83.4	**6.4**	**20**
	Australia	537	**-28**	49.6	96.7	**7.8**	**84**	91.6	**5.6**	**42**
	Japan	519	**-23**	50.1	75.9	**38.6**	**48**	59.3	2.6	**14**
	Iceland	512	**-30**	47.5	99.1	**1.2**	**74**	79.5	**5.1**	**22**
	Sweden	510	**-26**	47.8	97.7	**4.7**	**105**	89.1	**4.7**	**28**
	Ireland	509	**-31**	47.4	93.2	**10.9**	**60**	62.9	0.4	-3
	Belgium	507	**-24**	47.7	96.9	**9**	**102**	62.8	-1.1	**9**
	Norway	500	**-35**	46.9	98.7	**2.7**	**77**	93.0	2.5	**25**
	France	494	**-20**	46.1	m	**m**	**m**	m	m	m
	Denmark	489	**-6**	47.2	98.8	**2.8**	**79**	93.0	1.8	6
	Spain	475	**-19**	44.2	92.6	**14.4**	**78**	65.5	-4.0	**11**
	Hungary	468	**-21**	41.6	91.8	**23.6**	**102**	69.3	**-8.9**	**-27**
	Poland	464	**-29**	42.0	92.1	**22.9**	**84**	60.6	**-9.1**	**-8**
	Austria	459	**-22**	43.3	98.2	**3.7**	**94**	84.1	-3.2	-6
	Chile	435	**-19**	37.7	73.2	**60.3**	**69**	56.8	-2.0	2

■ Table VI.A ■

AN OVERVIEW OF PERFORMANCE IN DIGITAL READING, NAVIGATION AND COMPUTER USE

Higher quality or equity than OECD average
At OECD average (no statistically significant difference)
Lower quality or equity than OECD average

upprifjun

		Digital reading performance	Gender difference in digital reading scores between boys and girls	Index of number of relevant pages visited (navigation skills)	Computer use at home			Computer use at school		
					Percentage of students who use a computer at home	Percentage difference between top and bottom quarters of the PISA index of economic, social and cultural status	Difference in digital reading scores between those students who use and those who do not use a computer at home	Percentage of students who use a computer at school	Percentage difference between top and bottom quarters of the PISA index of economic, social and cultural status	Difference in digital reading scores between those students who use and those who do not use a computer at school
		Mean score	Score dif.	Mean index	%	% dif.	Score dif.	%	% dif.	Score dif.
	OECD average	499	**-24**	46.3	92.3	**16.0**	**80**	74.2	0.3	**9**
Partners	Hong Kong-China	515	**-8**	48.1	96.4	**5.2**	**33**	82.6	0.2	3
Partners	Macao-China	492	**-12**	46.5	96.4	**5.2**	**61**	80.1	-1.0	4
Partners	Colombia	368	-3	31.5	m	m	m	m	m	m

PISA 2009 Results: Students On Line

DIGITAL TECHNOLOGIES AND PERFORMANCE

(VOLUME VI)

1. Context of the PISA Digital Reading Assessment
2. Student Performance in Digital and Print Reading
3. Navigation in the PISA 2009 Digital Reading Assessment

4. Relationships between Digital Reading Performance and Student Background, Engagement and Reading Strategies

5. Students' Familiarity with Information and Communication Technologies (ICT)

6. Students' Use of Information and Communication Technologies and their Performance in Digital Reading

Demo

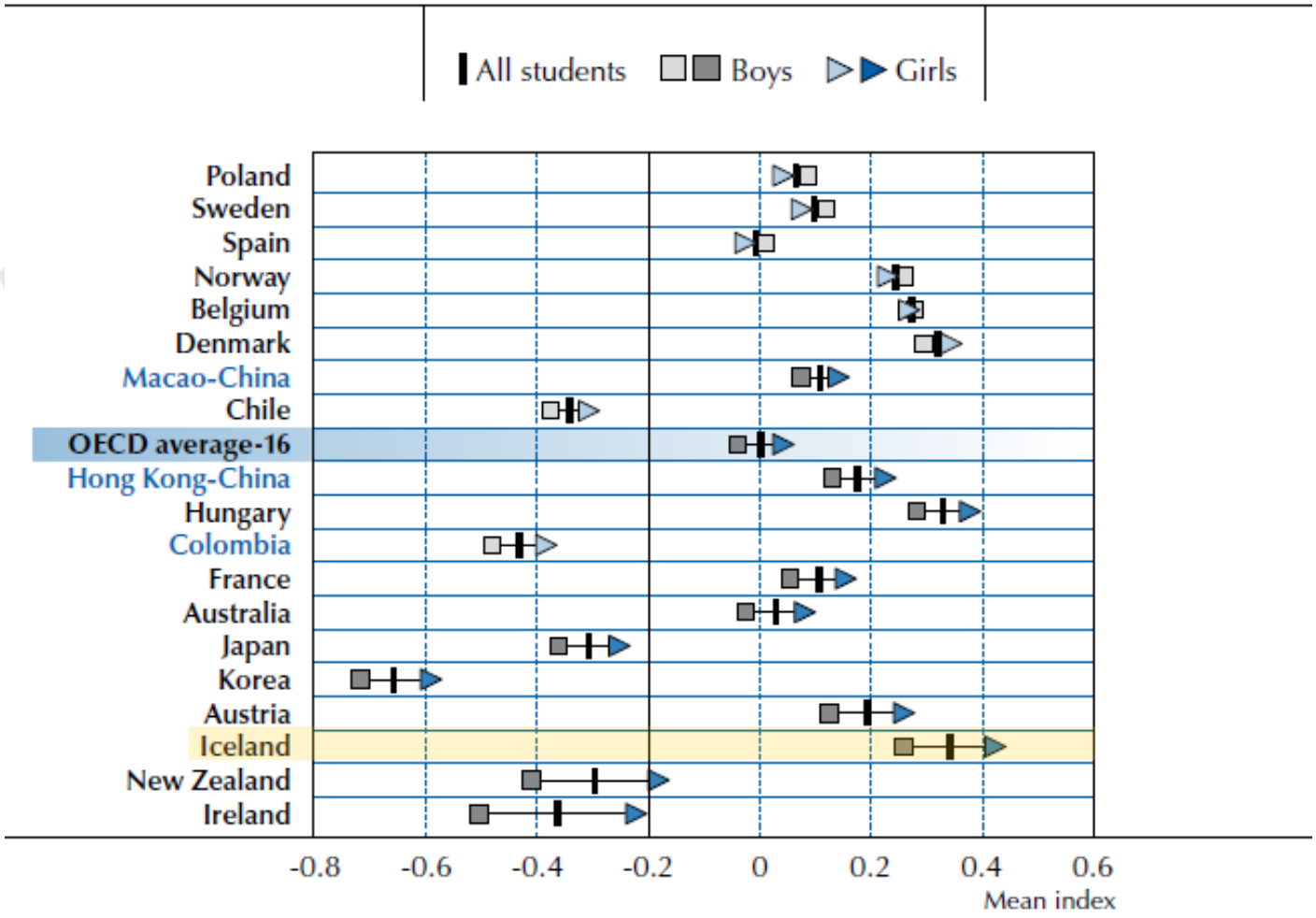
- http://erasq.acer.edu.au/

  Username: public

  Password: access

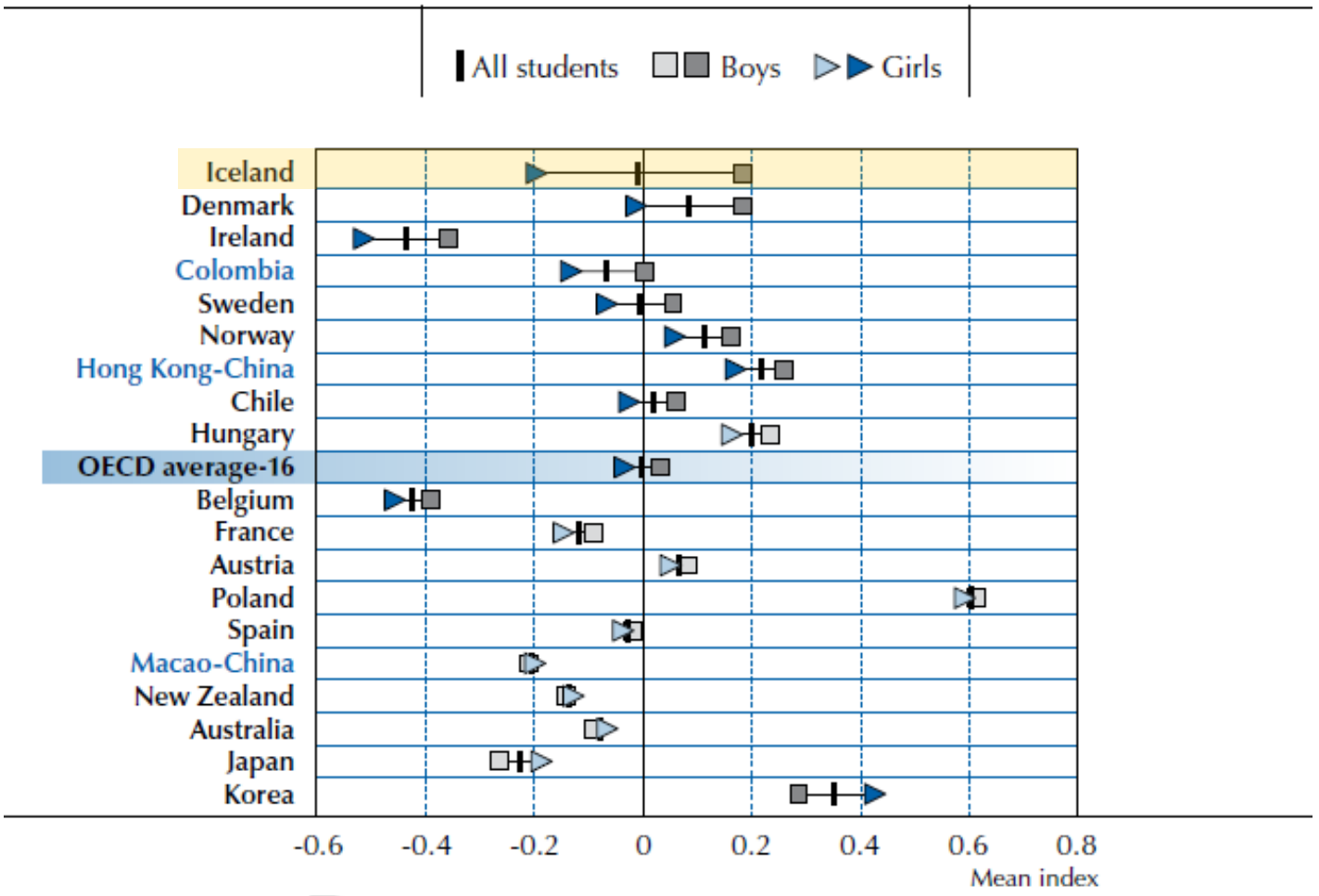
■ Figure VI.4.7 ■

Index of online social activities, by gender



■ Figure VI.4.6 ■

Index of online searching-information activities, by gender



Orðalag spurninga um netnotkun

Hve oft lest þú eða gerir eftirfarandi?

(Vinsamlega merktu aðeins í einn reit í hverri röð. Ef þú þekkir ekki til viðkomandi atriðis merktu þá við „Þekki það ekki")

	Þekki það ekki	*Aldrei eða næstum aldrei*	*Nokkrum sinnum í mánuði*	*Nokkrum sinnum í viku*	*Nokkrum sinnum á dag*
Social — a) Les tölvupóst	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5
Social — b) Spjalla á netinu (t.d. MSN®)	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5
Searching — c) Les fréttir á netinu	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5
Searching — d) Nota orðabók eða alfræðirit á netinu (t.d. Wikipedia®)	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5
Searching — e) Leita að upplýsingum á netinu til að fræðast um ákveðið efni	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5
Social — f) Tek þátt í umræðum á spjallþráðum á netinu	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5
Searching — g) Leita að hagnýtum upplýsingum á netinu (t.d. dagskrá, viðburðum, ráðleggingum, uppskriftum)	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5

(Vinsamlega merktu aðeins í einn reit í hverri röð. Ef þú þekkir ekki til viðkomandi atriðis merktu þá við „Þekki það ekki")

		Þekki það ekki	*Aldrei eða næstum aldrei*	*Nokkrum sinnum í mánuði*	*Nokkrum sinnum í viku*	*Nokkrum sinnum á dag*
a) Les tölvupóst ★	Stúlkur	1%	10%	22%	49%	18%
	Drengir	2%	12%	25%	43%	18%
b) Spjalla á netinu (t.d. MSN®) ★	Stúlkur	0%	3%	6%	24%	66%
	Drengir	1%	6%	6%	23%	64%
c) Les fréttir á netinu	Stúlkur	1%	20%	25%	36%	17%
	Drengir	2%	13%	20%	34%	31%
d) Nota orðabók eða alfræðirit á netinu (t.d. Wikipedia®)	Stúlkur	3%	21%	44%	27%	5%
	Drengir	4%	16%	34%	32%	14%
e) Leita að upplýsingum á netinu til að fræðast um ákveðið efni	Stúlkur	1%	11%	48%	35%	5%
	Drengir	2%	9%	30%	39%	20%
f) Tek þátt í umræðum á spjallþráðum á netinu ☆	Stúlkur	9%	46%	20%	18%	8%
	Drengir	7%	31%	21%	24%	17%
g) Leita að hagnýtum upplýsingum á netinu (t.d. dagskrá, viðburðum, ráðleggingum, uppskriftum)	Stúlkur	3%	19%	46%	29%	4%
	Drengir	5%	20%	35%	29%	12%

x2

(Vinsamlega merktu aðeins í einn reit í hverri röð. Ef þú þekkir ekki til viðkomandi atriðis merktu þá við „Þekki það ekki")

		Þekki það ekki	*Aldrei eða næstum aldrei*	*Nokkrum sinnum í mánuði*	*Nokkrum sinnum í viku*	*Nokkrum sinnum á dag*
a) Les tölvupóst	Stúlkur	1%	10%	22%	49%	18%
	Drengir	2%	12%	25%	43%	18%
b) Spjalla á netinu (t.d. MSN®)	Stúlkur	0%	3%	6%	24%	66%
	Drengir	1%	6%	6%	23%	64%
c) Les fréttir á netinu ★	Stúlkur	1%	20%	25%	36%	17%
	Drengir	2%	13%	20%	34%	31%
d) Nota orðabók eða alfræðirit á netinu (t.d. Wikipedia®) ★	Stúlkur	3%	21%	44%	27%	5%
	Drengir	4%	16%	34%	32%	14%
e) Leita að upplýsingum á netinu til að fræðast um ákveðið efni ★	Stúlkur	1%	11%	48%	35%	5%
	Drengir	2%	9%	30%	39%	20%
f) Tek þátt í umræðum á spjallþráðum á netinu	Stúlkur	9%	46%	20%	18%	8%
	Drengir	7%	31%	21%	24%	17%
g) Leita að hagnýtum upplýsingum á netinu (t.d. dagskrá, viðburðum, ráðleggingum, uppskriftum) ★	Stúlkur	3%	19%	46%	29%	4%
	Drengir	5%	20%	35%	29%	12%

x2 x3 x4 x3

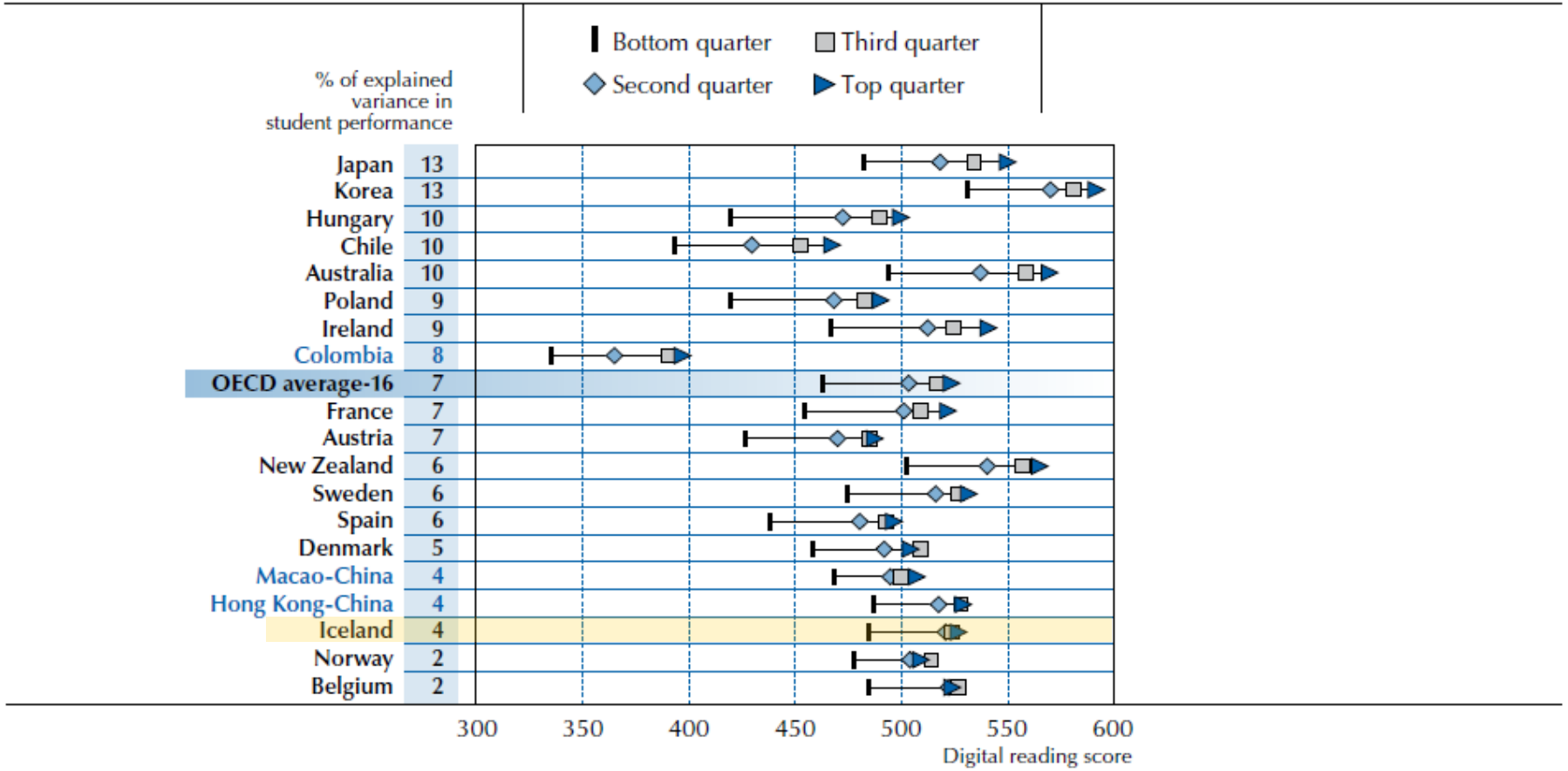
(Vinsamlega merktu aðeins í einn reit í hverri röð. Ef þú þekkir ekki til viðkomandi atriðis merktu þá við „Þekki það ekki")

		Þekki það ekki	*Aldrei eða næstum aldrei*	*Nokkrum sinnum í mánuði*	*Nokkrum sinnum í viku*	*Nokkrum sinnum á dag*	
a) Les tölvupóst ★	Stúlkur	1%	10%	22%	49%	18%	
	Drengir	2%	12%	25%	43%	18%	
b) Spjalla á netinu (t.d. MSN®) ★	Stúlkur	0%	3%	6%	24%	66%	
	Drengir	1%	6%	6%	23%	64%	
c) Les fréttir á netinu ★	Stúlkur	1%	20%	25%	36%	17%	
	Drengir	2%	13%	20%	34%	31%	x2
d) Nota orðabók eða alfræðirit á netinu (t.d. Wikipedia®) ★	Stúlkur	3%	21%	44%	27%	5%	
	Drengir	4%	16%	34%	32%	14%	x3
e) Leita að upplýsingum á netinu til að fræðast um ákveðið efni ★	Stúlkur	1%	11%	48%	35%	5%	
	Drengir	2%	9%	30%	39%	20%	x4
f) Tek þátt í umræðum á spjallþráðum á netinu ☆	Stúlkur	9%	46%	20%	18%	8%	
	Drengir	7%	31%	21%	24%	17%	x2
g) Leita að hagnýtum upplýsingum á netinu (t.d. dagskrá, viðburðum, ráðleggingum, uppskriftum) ★	Stúlkur	3%	19%	46%	29%	4%	
	Drengir	5%	20%	35%	29%	12%	x3

Online reading practices and digital reading proficiency

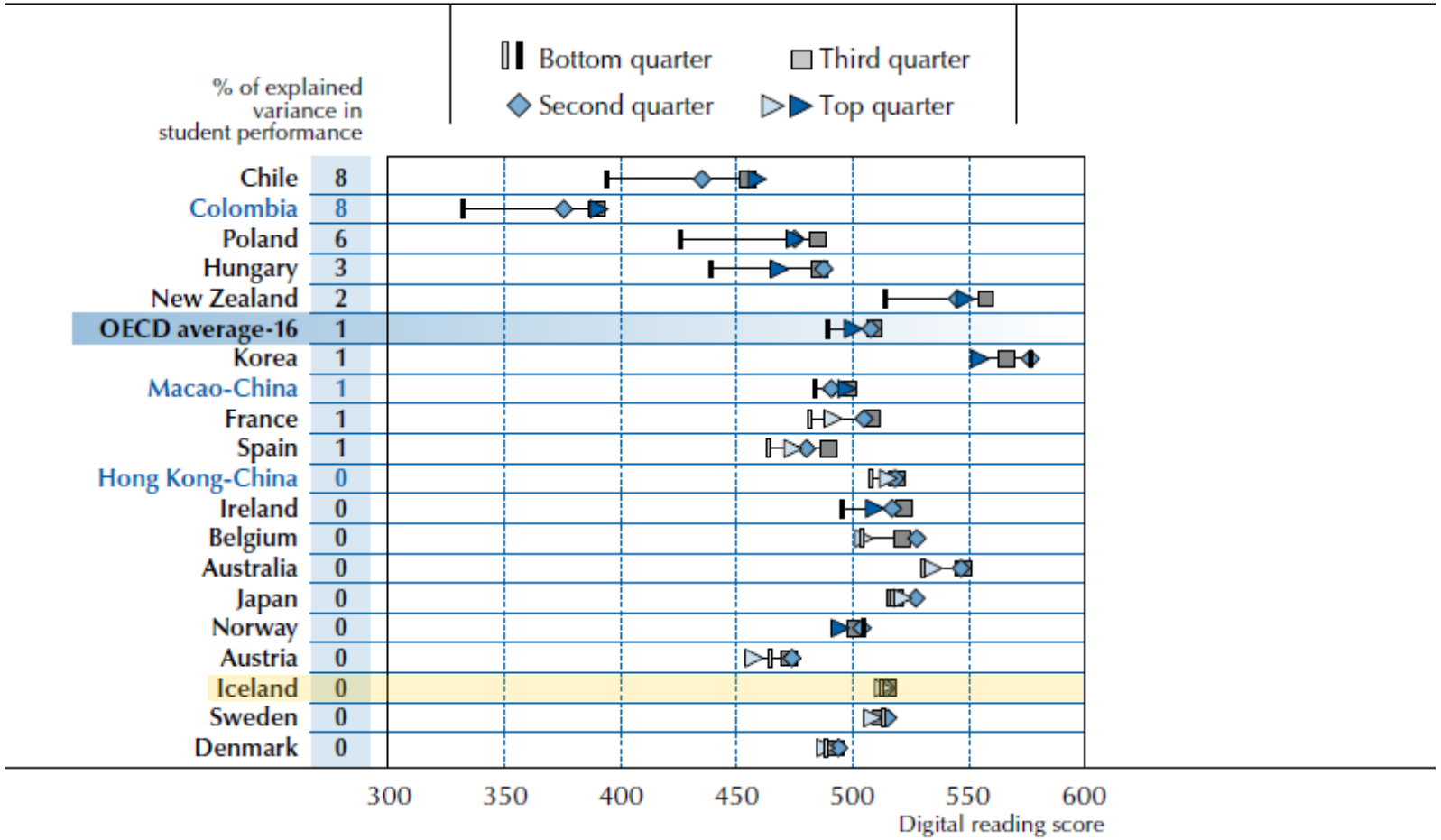
■ Figure VI.4.8 ■

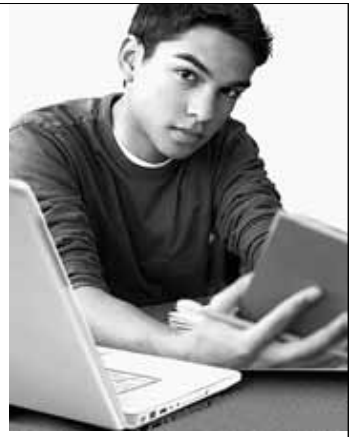
Relationship between online searching-information activities and digital reading performance



■ Figure VI.4.9 ■

Relationship between online social activities and digital reading performance

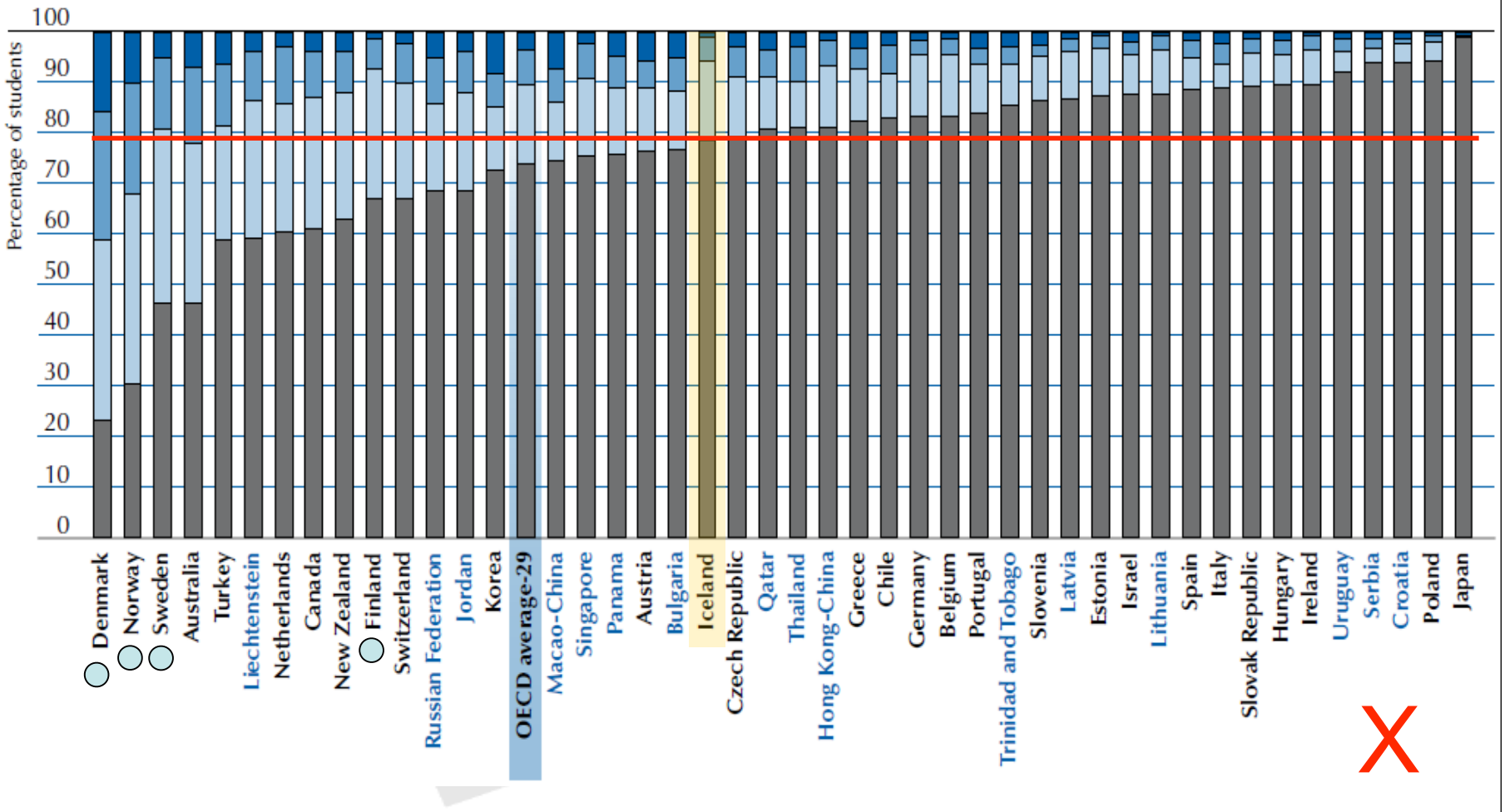




5.
Students' Familiarity with Information and

■ Figure VI.5.22 ■

Intensity of computer use during language-of-instruction lessons



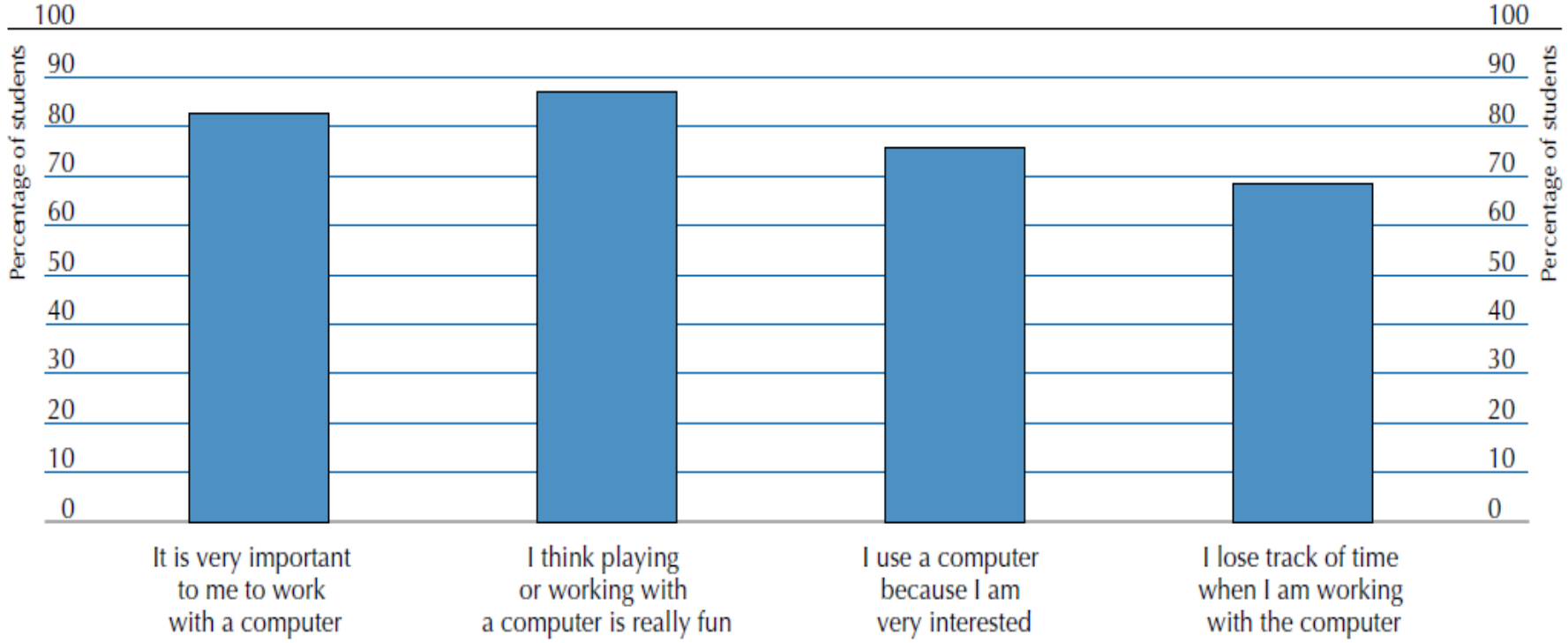
■ Figure VI.5.23 ■

Percentage of students who reported using laptops at school

■ Figure VI.5.24 ■

Percentage of students who reported positive attitudes towards computers, OECD average-28

Percentage of students who agreed or strongly agreed with the following statements



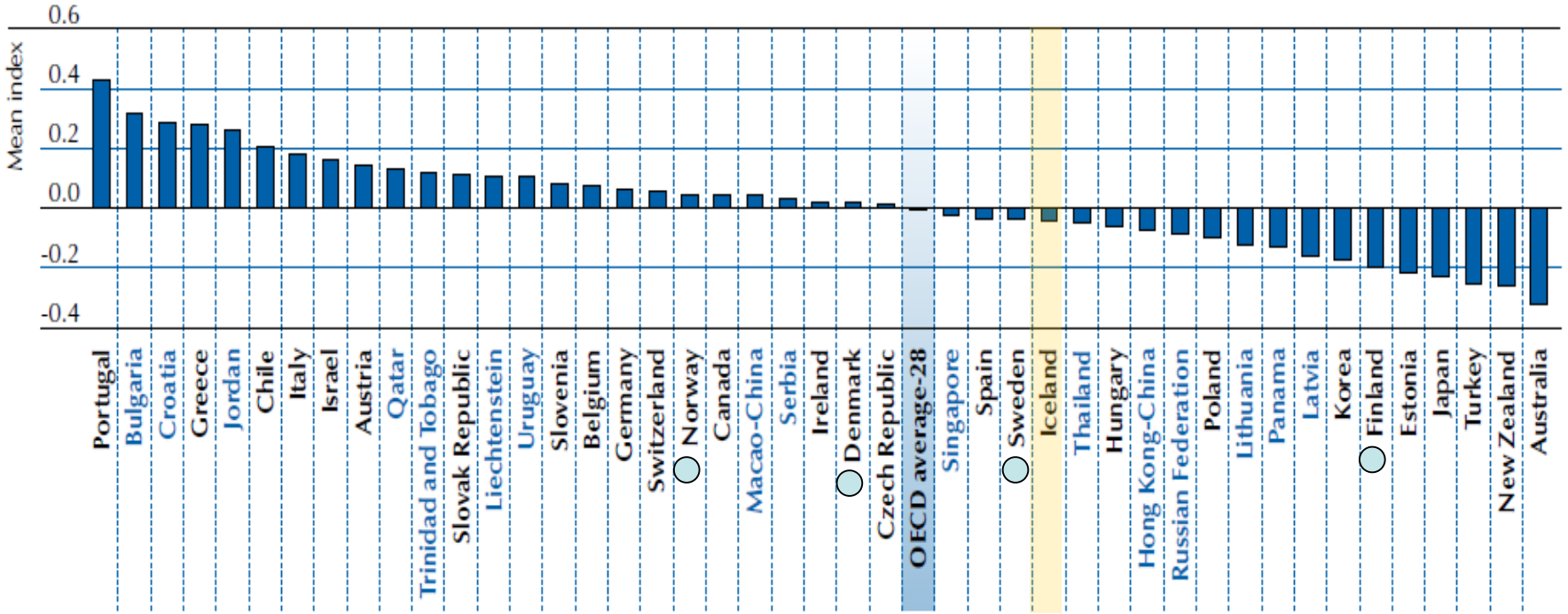
Ef þú hugleiðir reynslu þína af tölvum: **Hversu sammála ertu eftirfarandi fullyrðingum?**

(Vinsamlegast merktu aðeins í einn reit)

	Mjög ósammála	*Ósammála*	*Sammála*	*Mjög sammála*
a) Það er mjög mikilvægt fyrir mig að vinna á tölvu	☐ 1	☐ 2	☐ 3	☐ 4
b) Mér finnst mjög skemmtilegt að vinna á eða leika mér á tölvu	☐ 1	☐ 2	☐ 3	☐ 4
c) Ég nota tölvu því ég hef mikinn áhuga á tölvum	☐ 1	☐ 2	☐ 3	☐ 4
d) Ég gleymi mér þegar ég vinn á tölvu	☐ 1	☐ 2	☐ 3	☐ 4

Figure VI.5.25

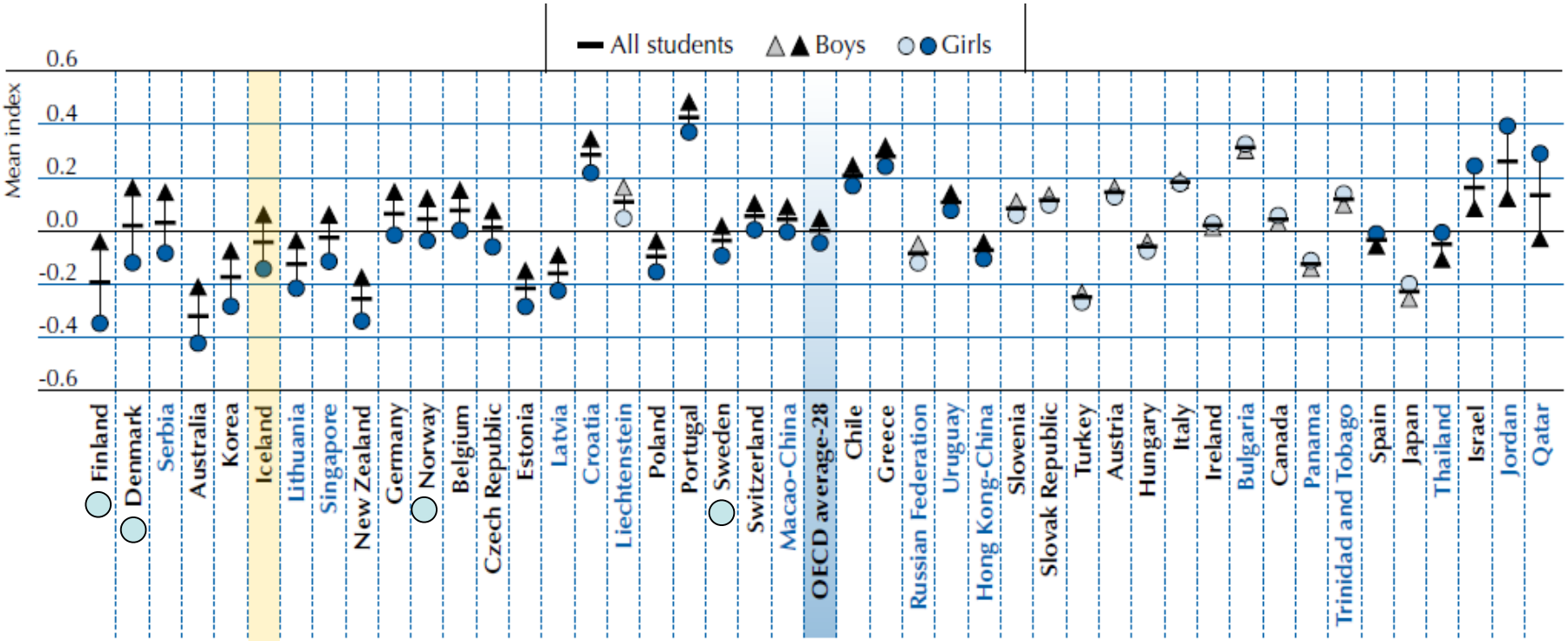
Index of attitudes towards computers, by gender and socio-economic background



Countries are ranked in descending order of the mean index of all students.

Figure VI.5.25

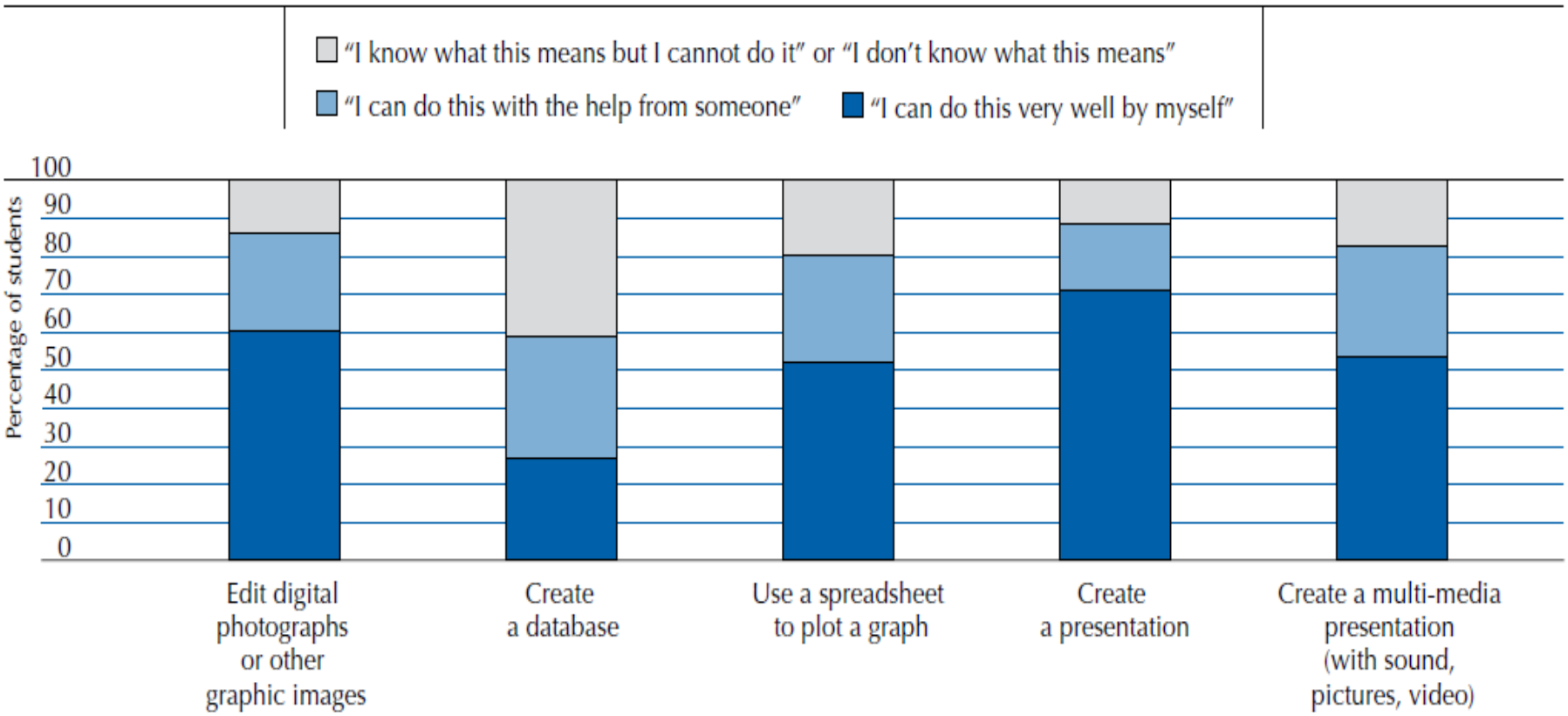
Index of attitudes towards computers, by gender and socio-economic background



Note: Countries in which gender differences are statistically significant are marked in a darker tone.
Countries are ranked in descending order of the gender differences (B – G).

■ Figure VI.5.26 ■

Percentage of students who reported being able to do each of the following tasks very well by themselves or with help from someone, OECD average-29



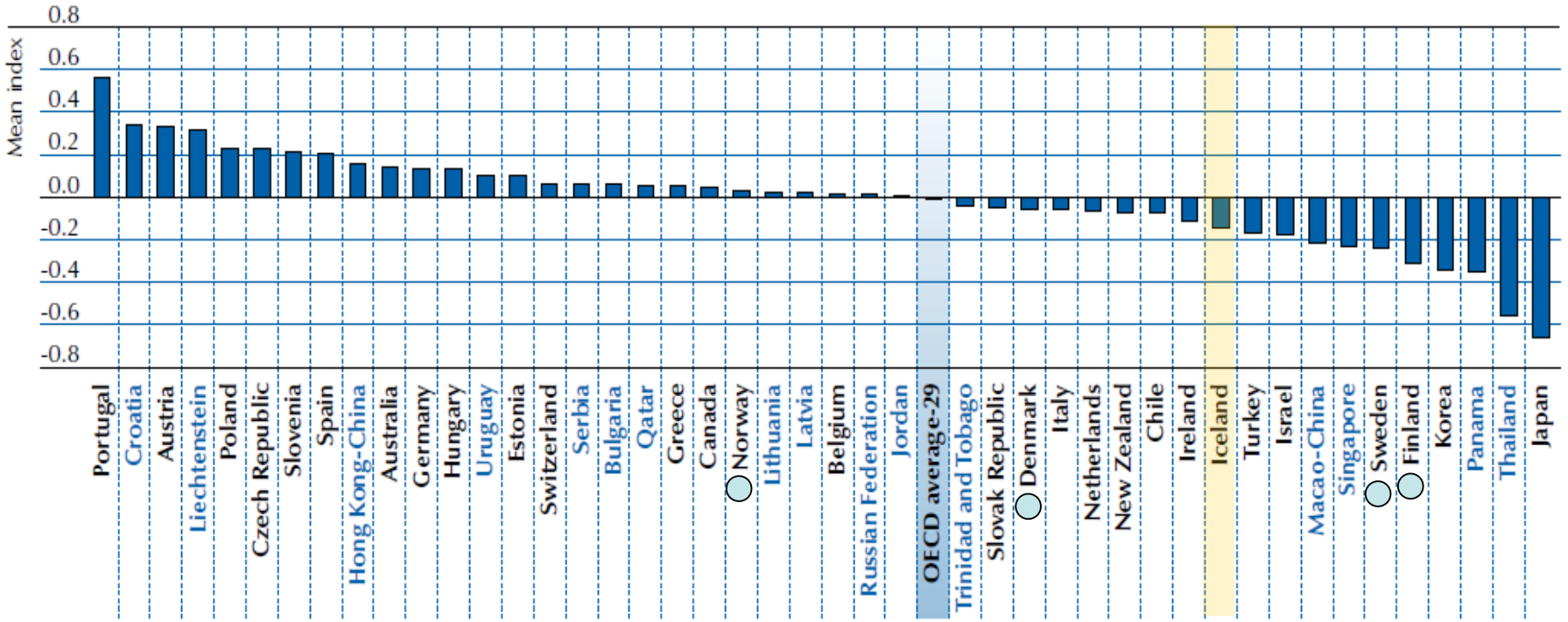
Hversu vel kanntu eftirfarandi verkefni á tölvu?

(Vinsamlegast merktu aðeins í einn reit í hverri röð)

	Ég kann þetta mjög vel sjálf(ur)	*Ég get gert þetta ef einhver hjálpar mér*	*Ég veit hvað þetta er en kann það ekki*	*Ég veit ekki hvað þetta er*
a) Vinna með stafrænar myndir og annað myndefni í tölvu	☐1	☐2	☐3	☐4
b) Búa til gagnagrunn (t.d. með Microsoft Access®)	☐1	☐2	☐3	☐4
c) Nota töflureikni til að búa til línurit	☐1	☐2	☐3	☐4
d) Búa til kynningu í tölvu (t.d. með Microsoft PowerPoint®)	☐1	☐2	☐3	☐4
e) Búa til margmiðlunarkynningu (með hljóði, myndum, myndböndum).	☐1	☐2	☐3	☐4

■ Figure VI.5.27 ■

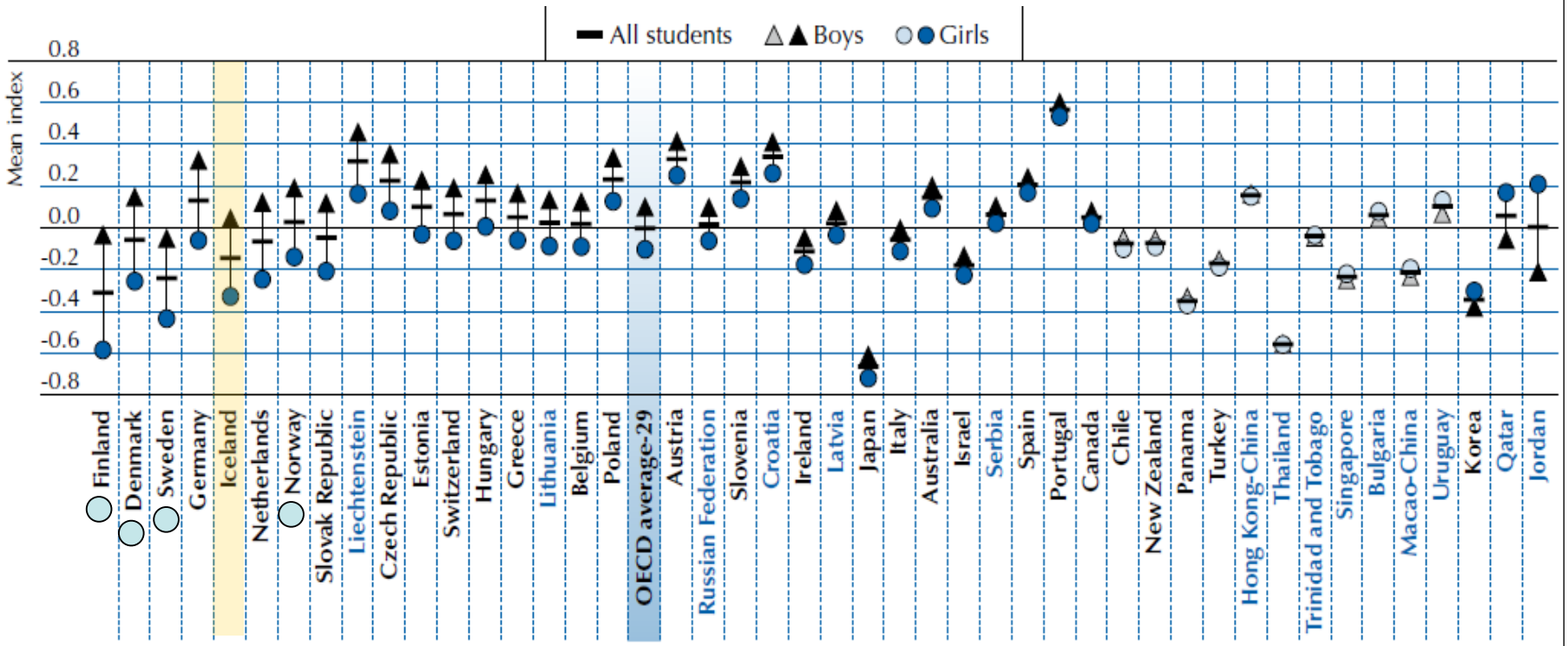
Index of self-confidence in ICT high-level tasks, by gender and socio-economic background



Countries are ranked in descending order of the mean index of all students.

■ Figure VI.5.27 ■

Index of self-confidence in ICT high-level tasks, by gender and socio-economic background



Note: Countries in which gender differences are statistically significant are marked in a darker tone.
Countries are ranked in descending order of the gender differences (B – G).

■ Figure VI.5.28 ■

Percentage of students who reported being able to create a multi-media presentation

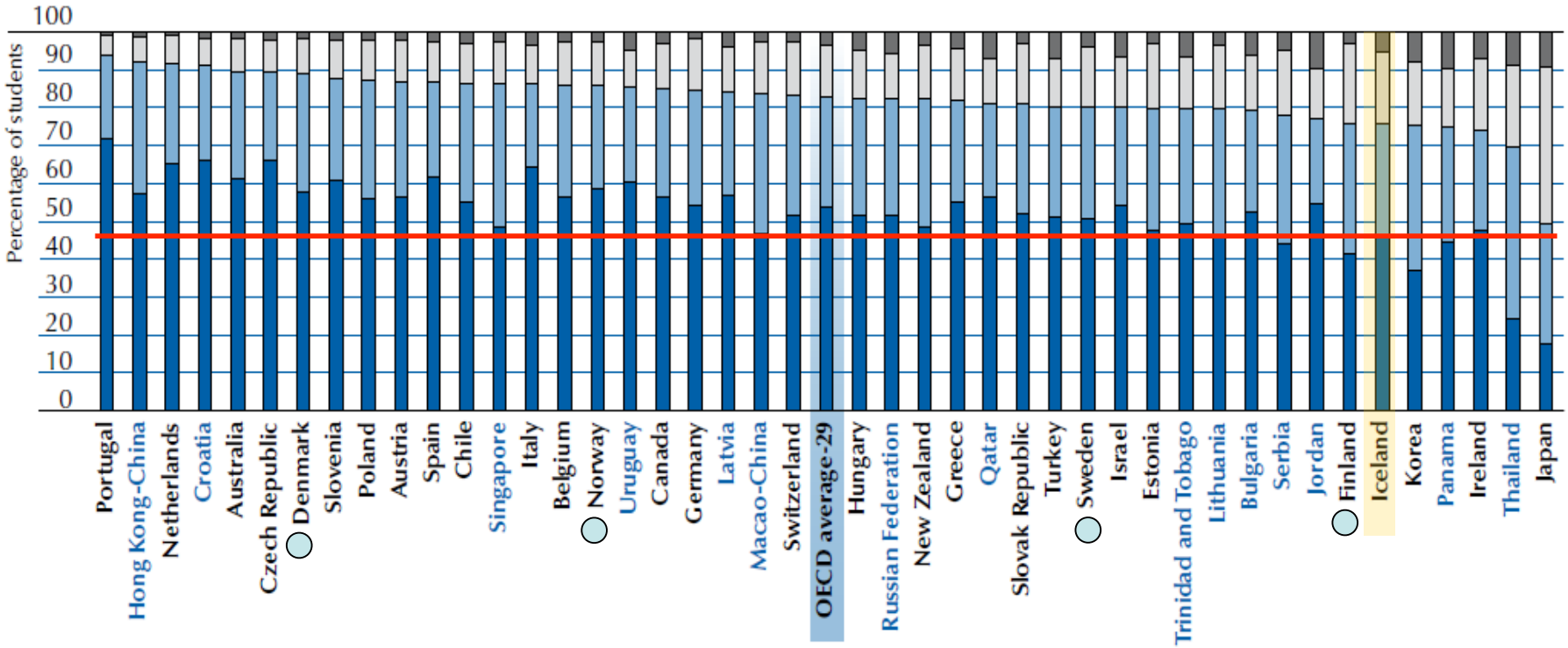
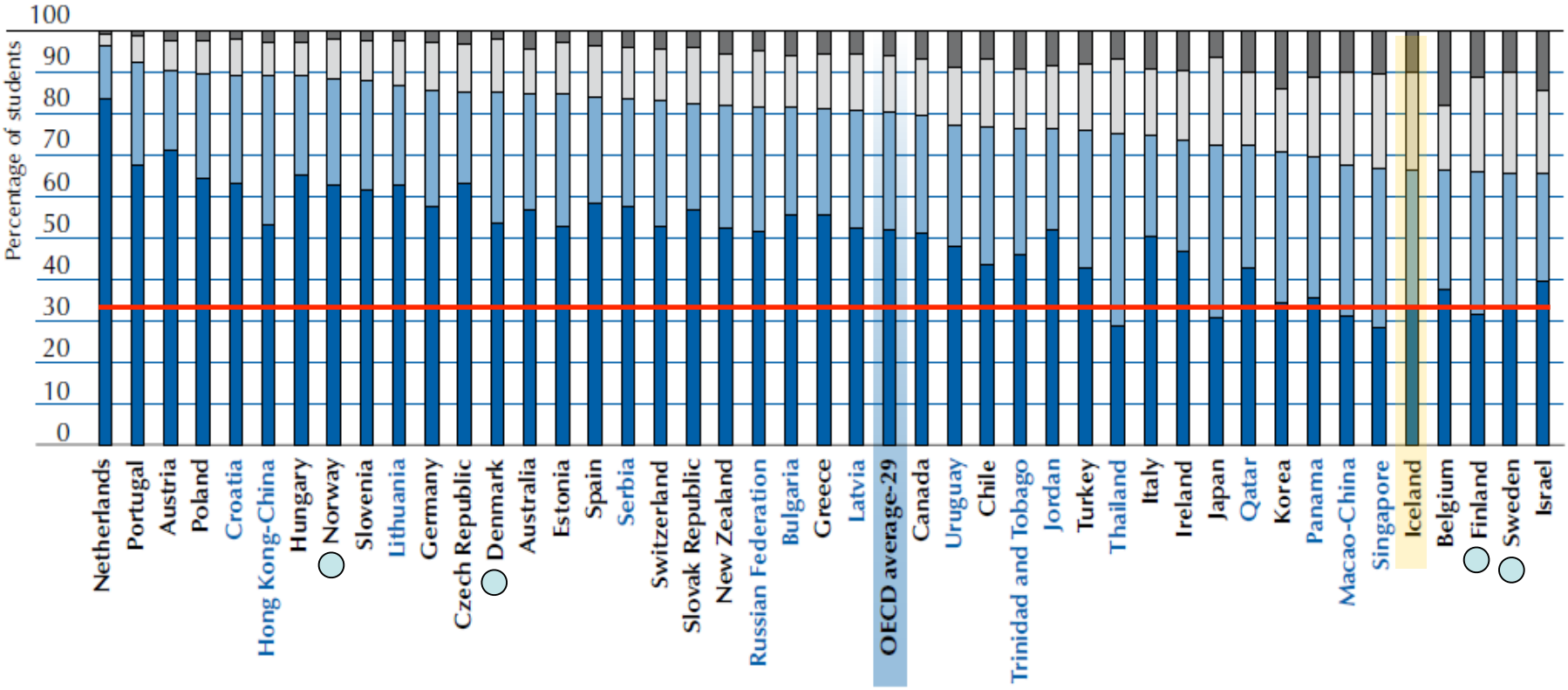


Figure VI.5.29

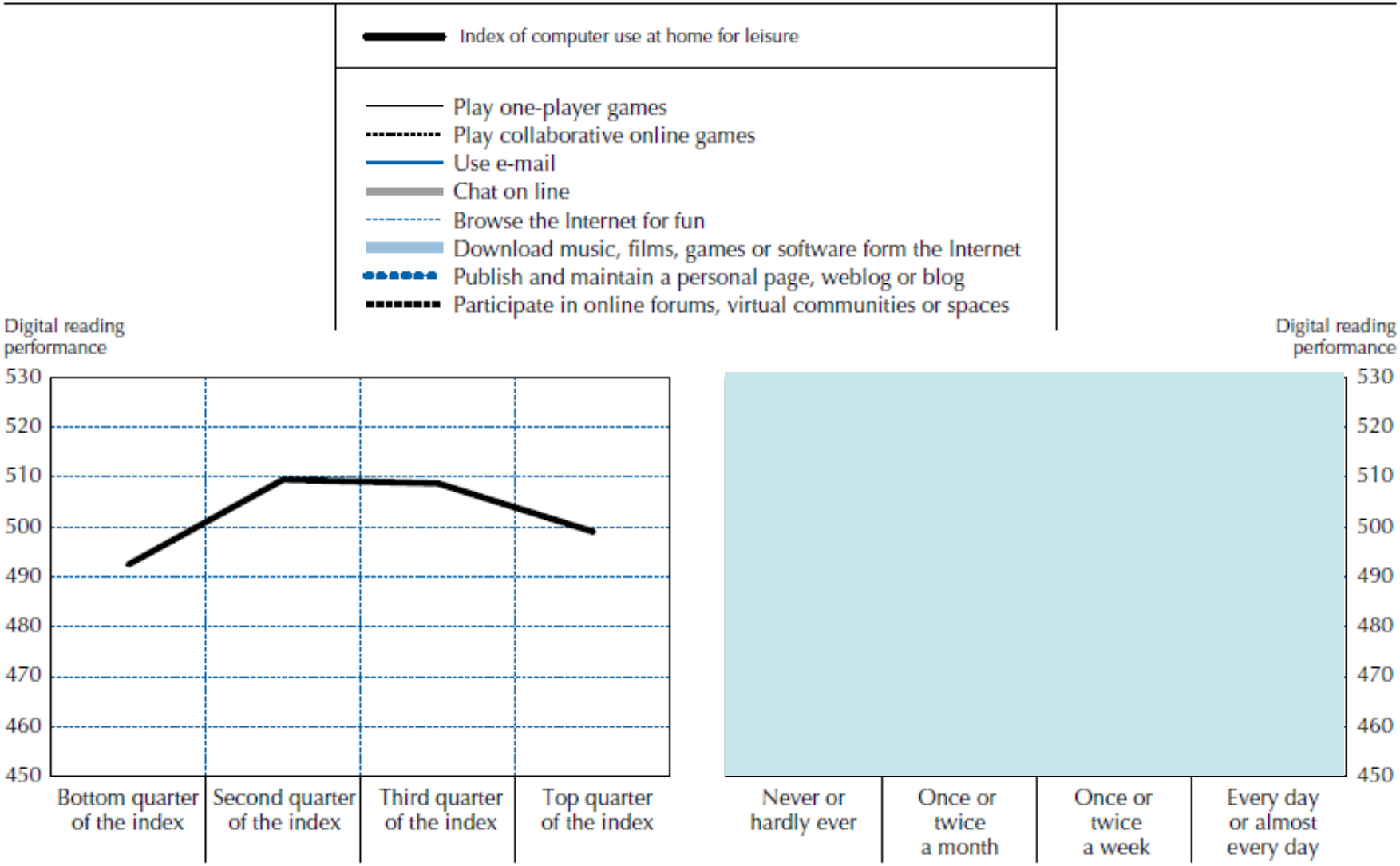
Percentage of students who reported being able to use a spreadsheet to plot a graph



6.
Students' Use of Information and Communication Technologies and their Performance

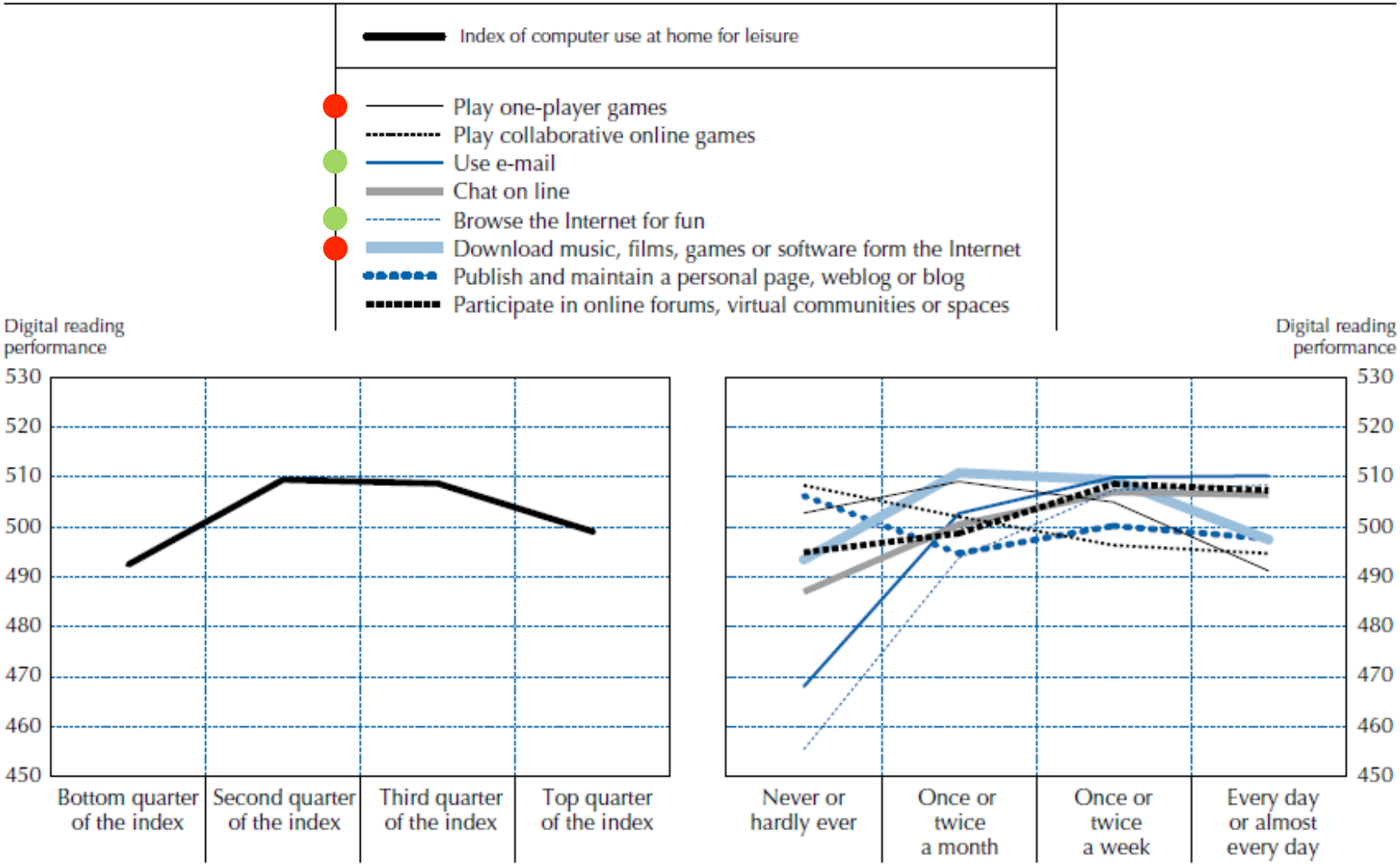
■ Figure VI.6.3 ■

Computer use at home for leisure, and digital reading performance, OECD average-15



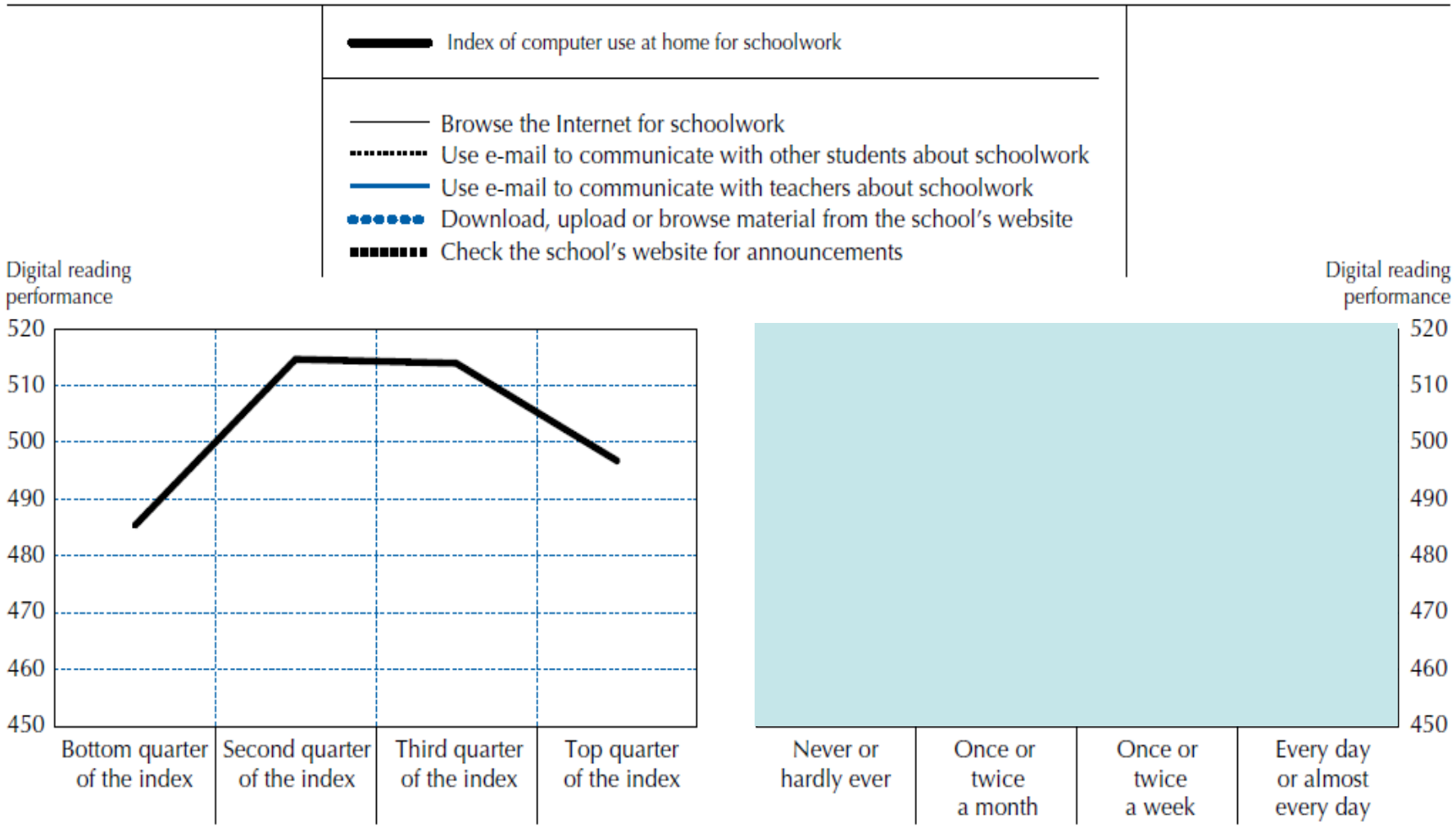
■ Figure VI.6.3 ■

Computer use at home for leisure, and digital reading performance, OECD average-15



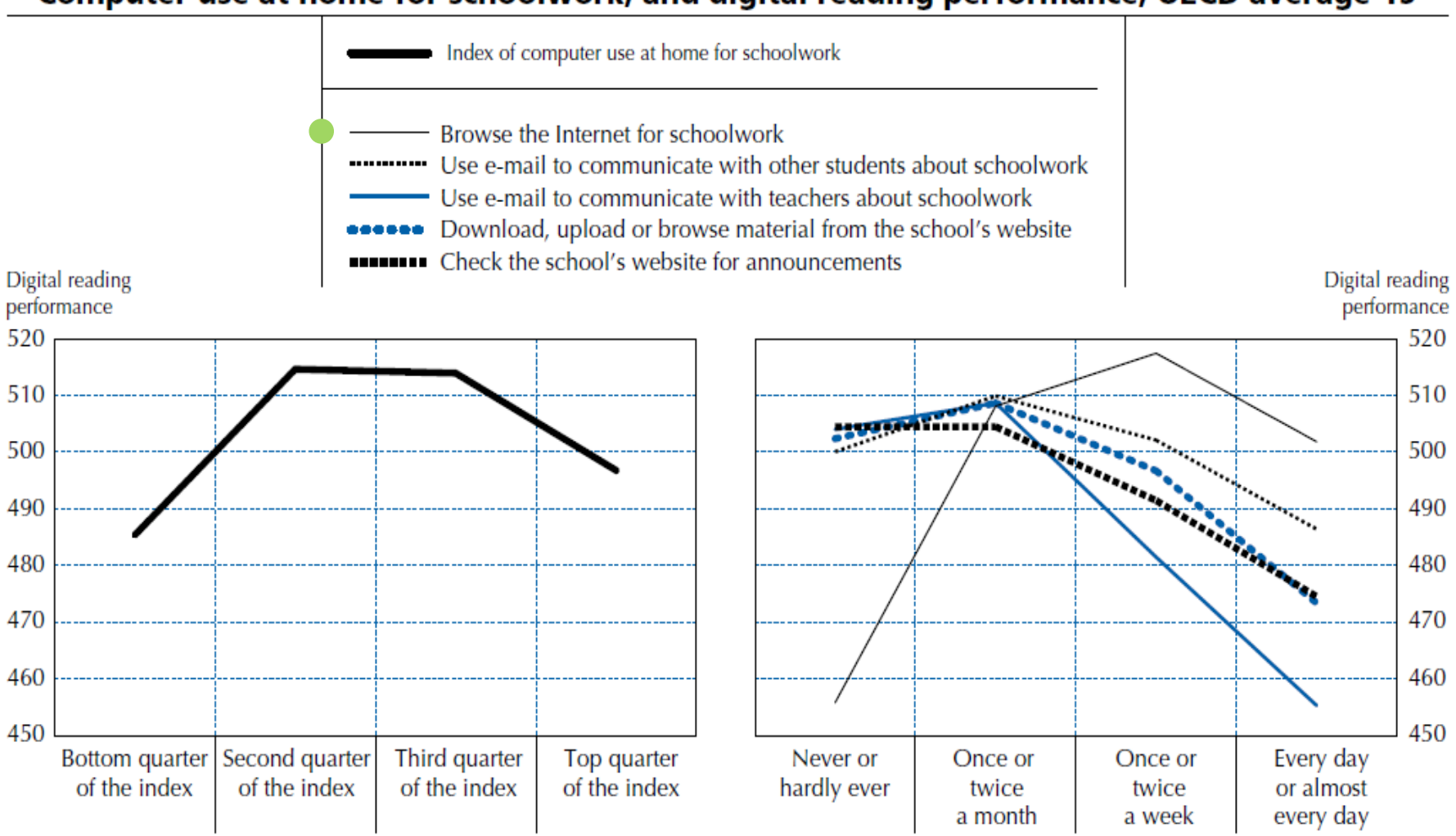
■ Figure VI.6.6 ■

Computer use at home for schoolwork, and digital reading performance, OECD average-15



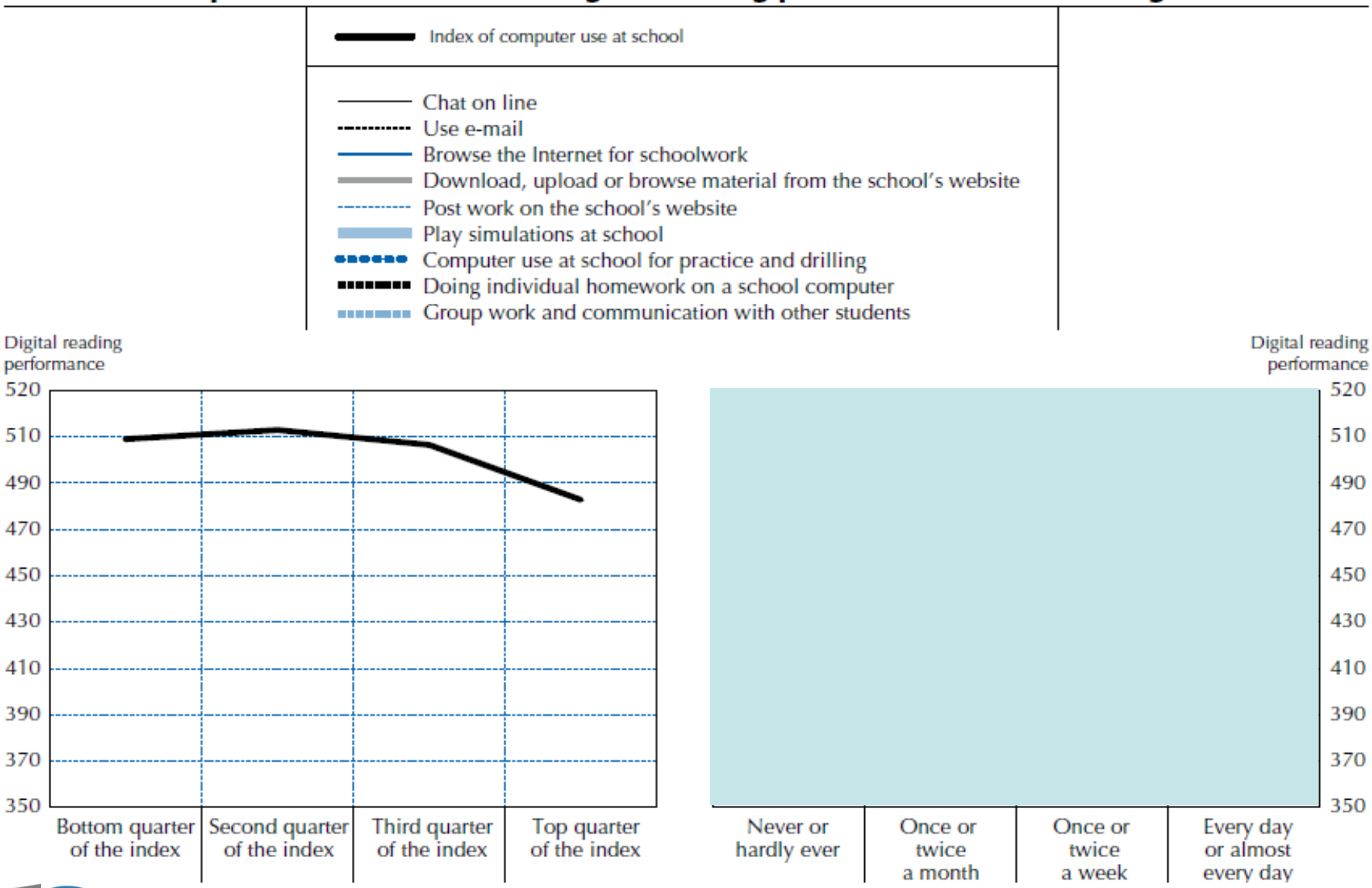
■ Figure VI.6.6 ■

Computer use at home for schoolwork, and digital reading performance, OECD average-15



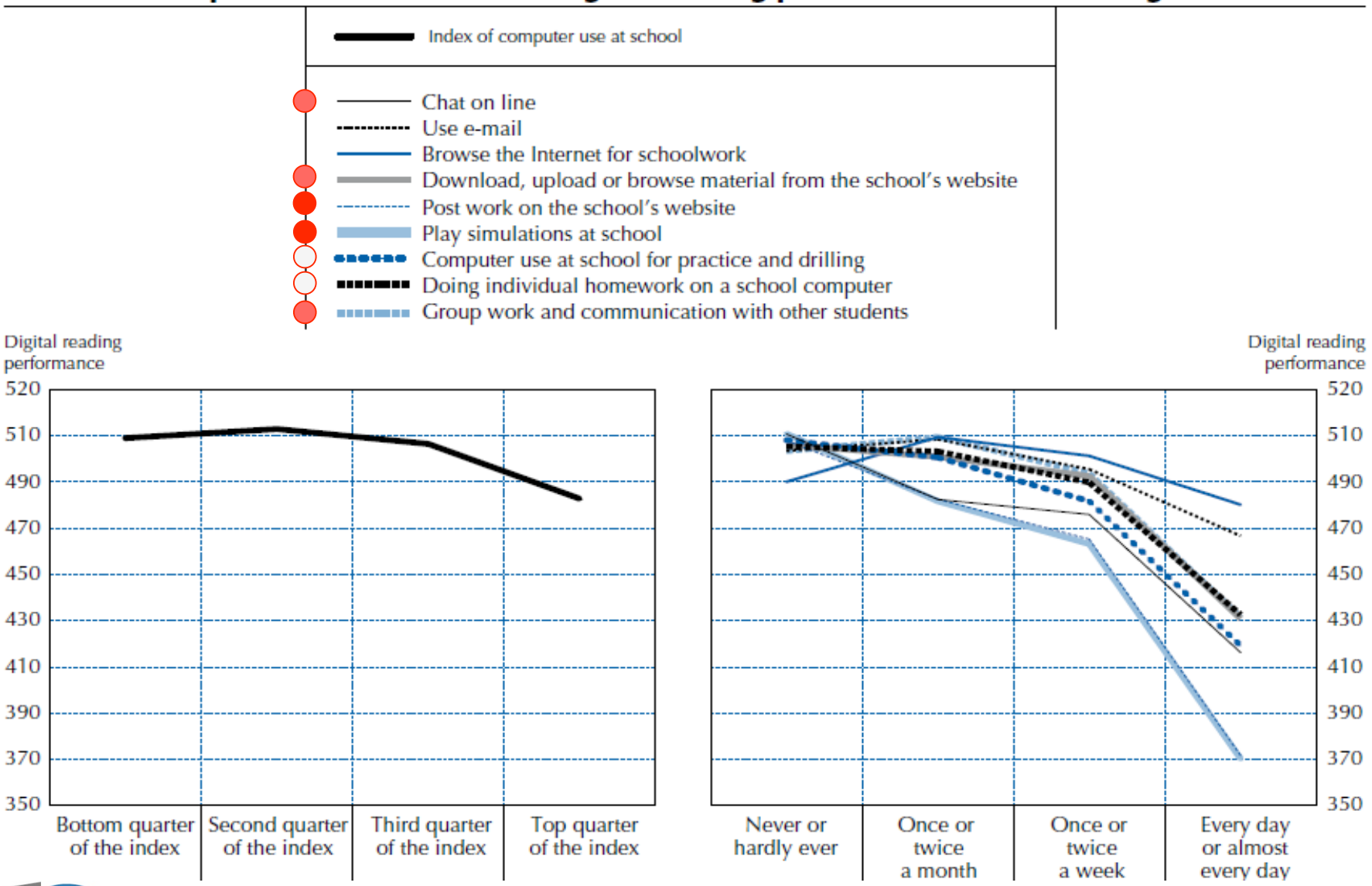
■ Figure VI.6.7 ■

Computer use at school and digital reading performance, OECD average-15



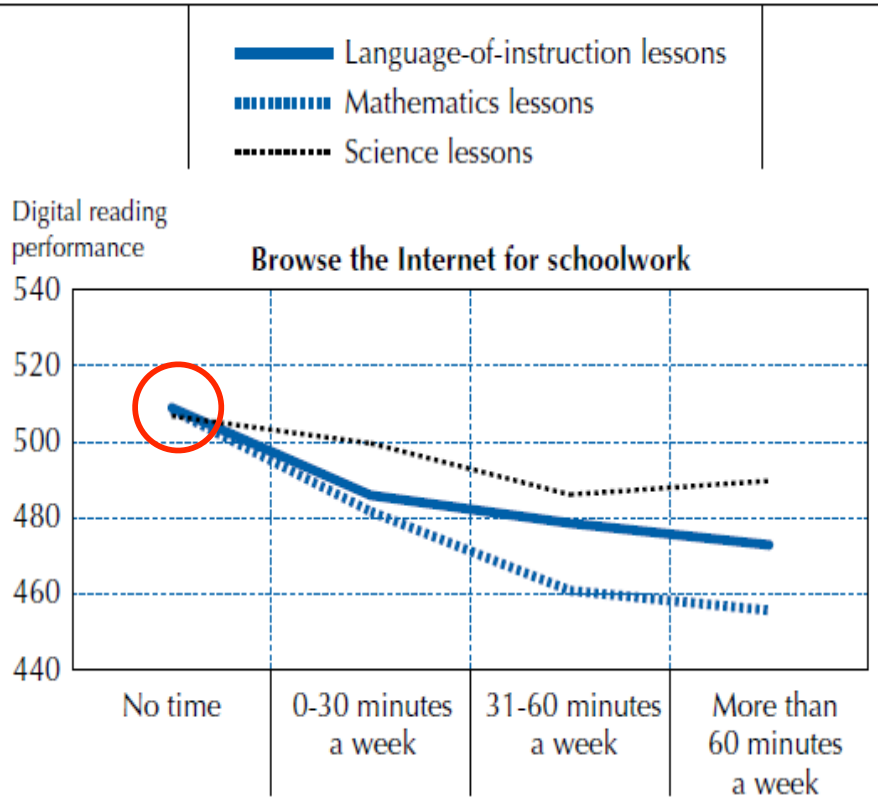
■ Figure VI.6.7 ■

Computer use at school and digital reading performance, OECD average-15



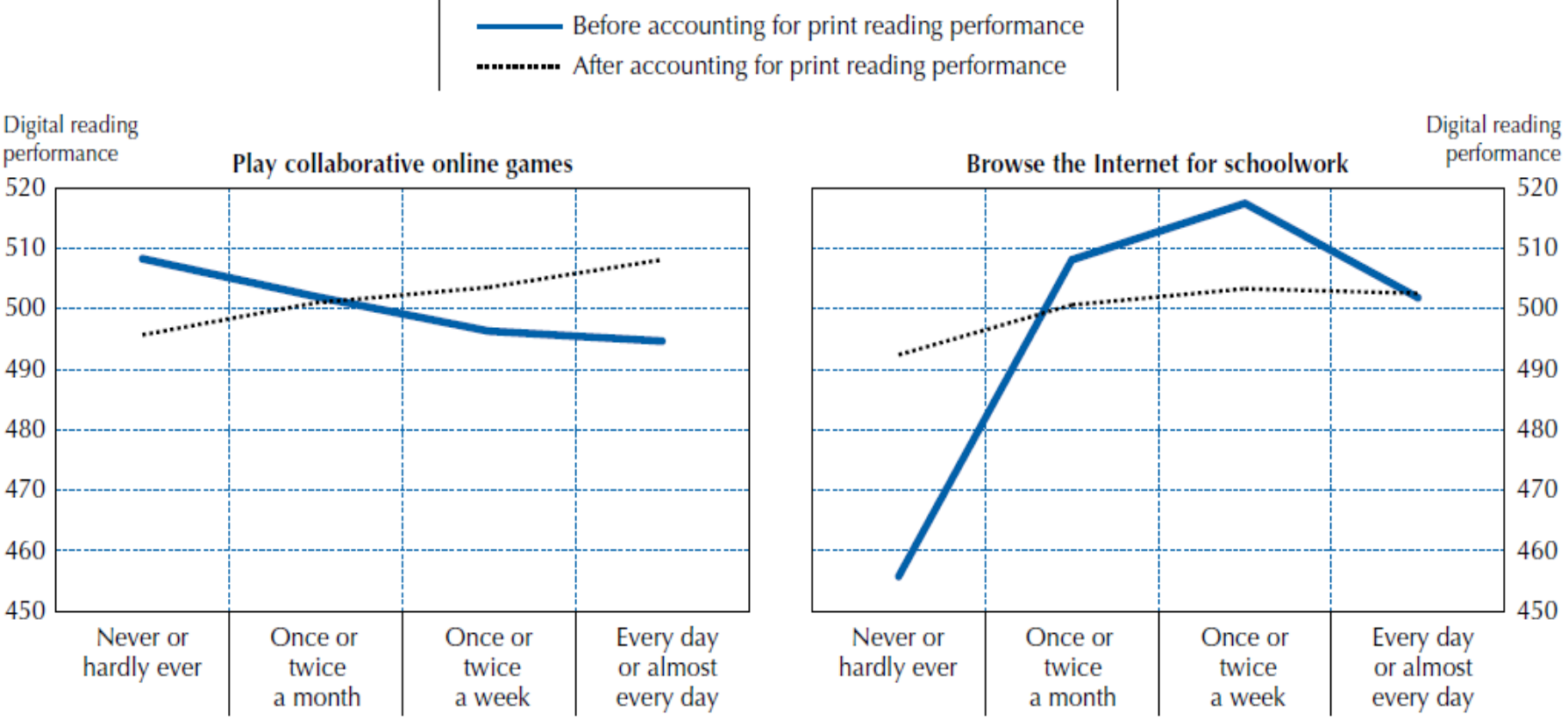
■ Figure VI.6.10a ■

Intensity of computer use in school lessons, and digital reading performance, OECD average-15



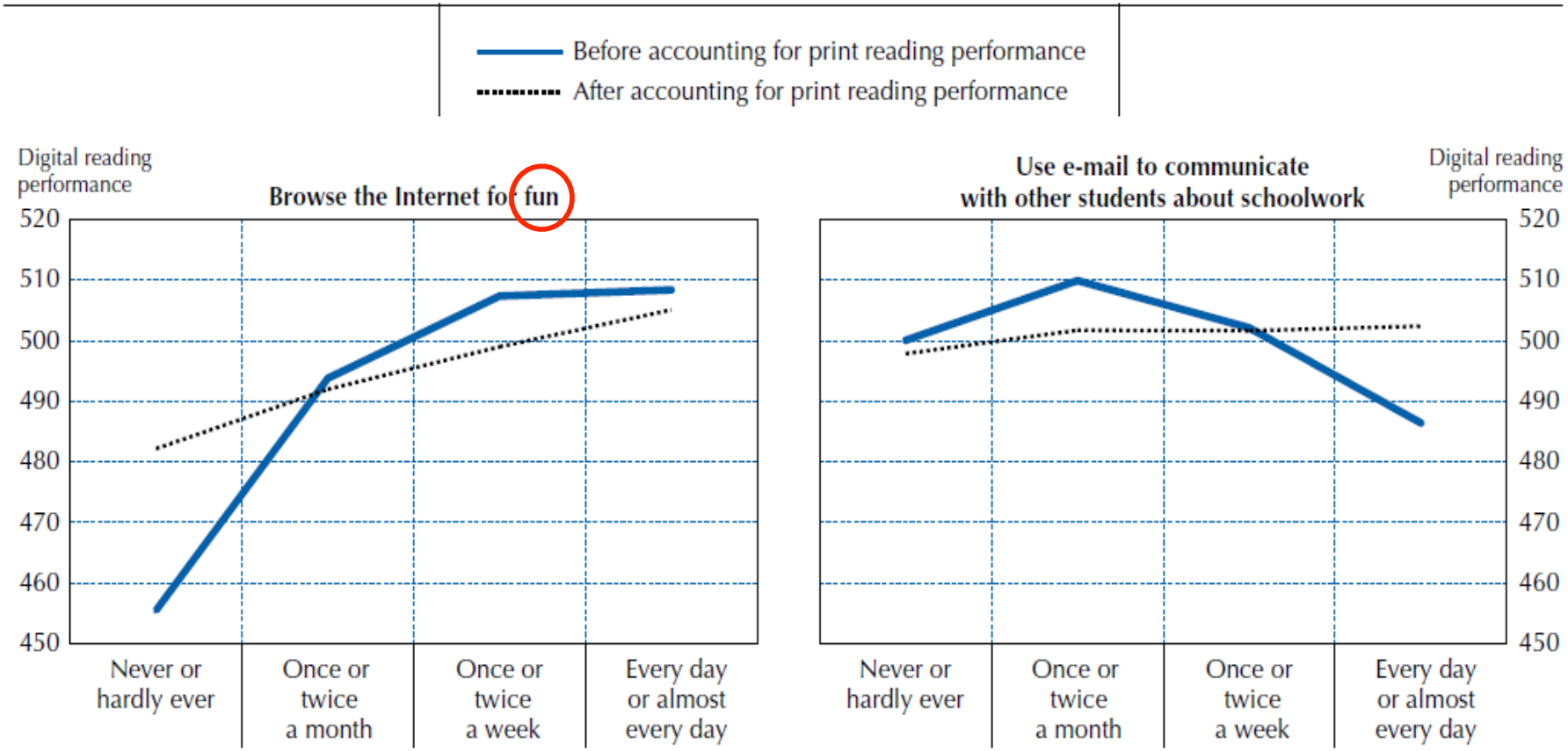
■ Figure VI.6.11 ■

Frequency of computer use at home for leisure and schoolwork, and digital reading performance, before and after accounting for print reading performance, OECD average-15



■ Figure VI.6.11 ■

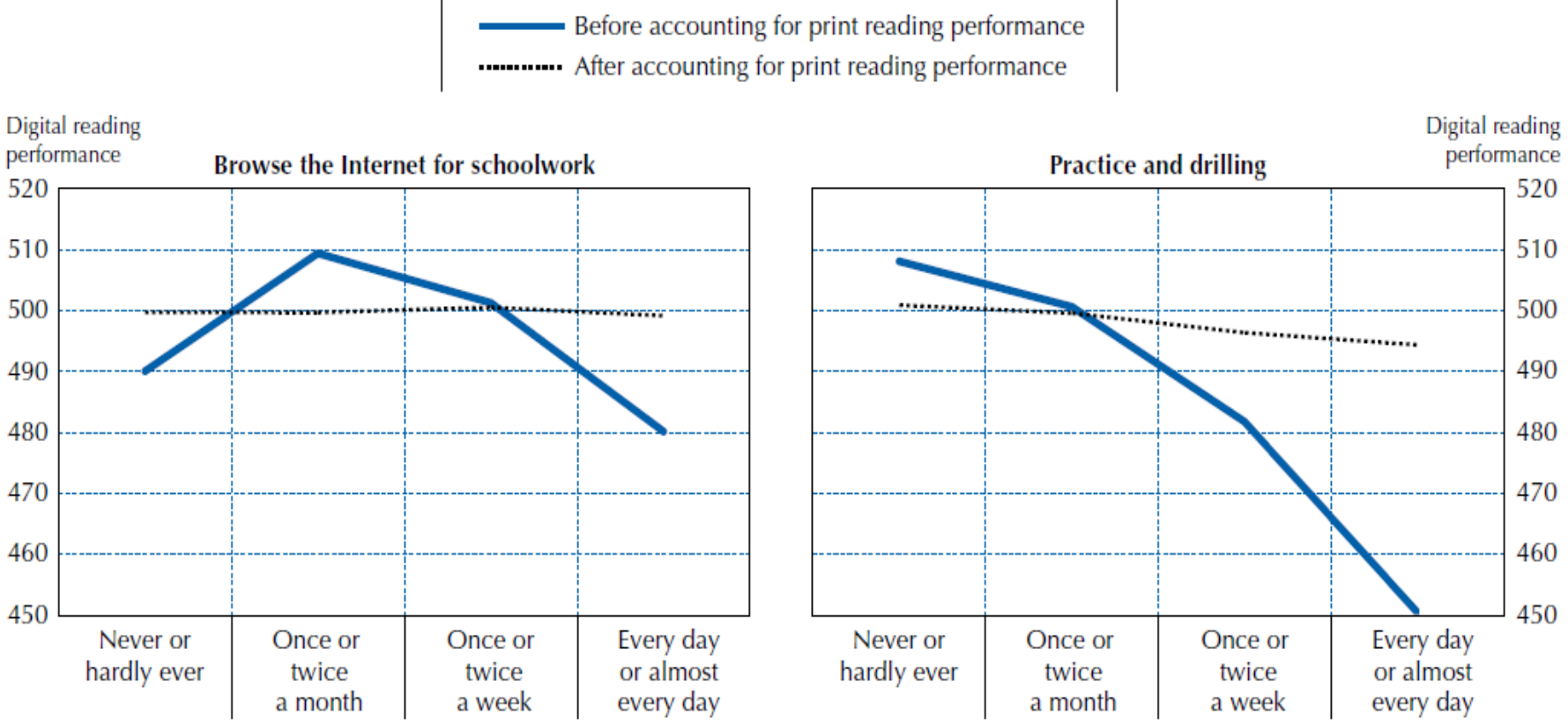
Frequency of computer use at home for leisure and schoolwork, and digital reading performance, before and after accounting for print reading performance, OECD average-15



Þjálfunaráhrif 25 stig

■ Figure VI.6.12 ■

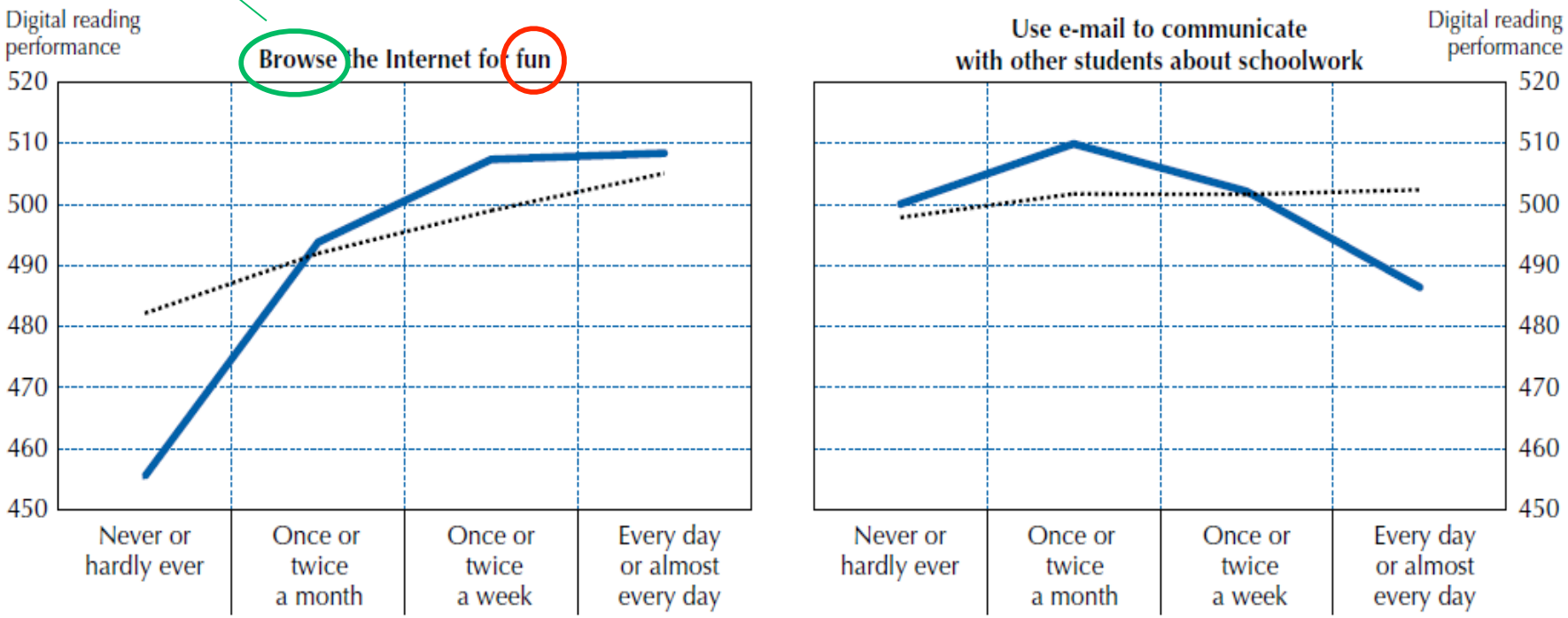
Frequency of computer use at school, and digital reading performance, before and after accounting for print reading performance, OECD average-15



■ Figure VI.6.11 ■

Frequency of computer use at home for leisure and schoolwork, and digital reading performance, before and after accounting for print reading performance, OECD average-15

Kynjamunurinn

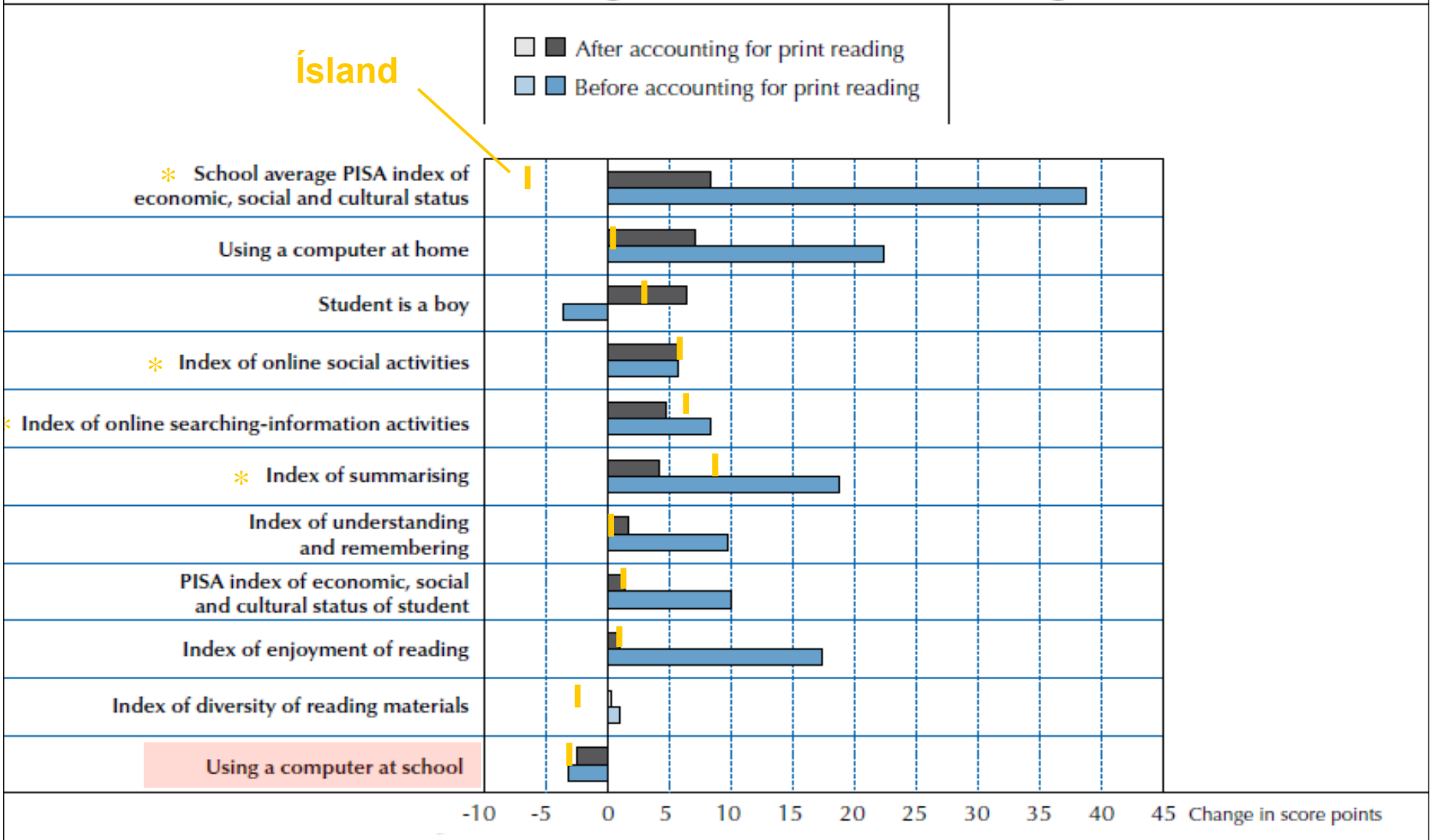


Þjálfunaráhrif 25 stig

7.
Some Aspects Related to Digital Reading Proficiency

■ Figure VI.7.2 ■

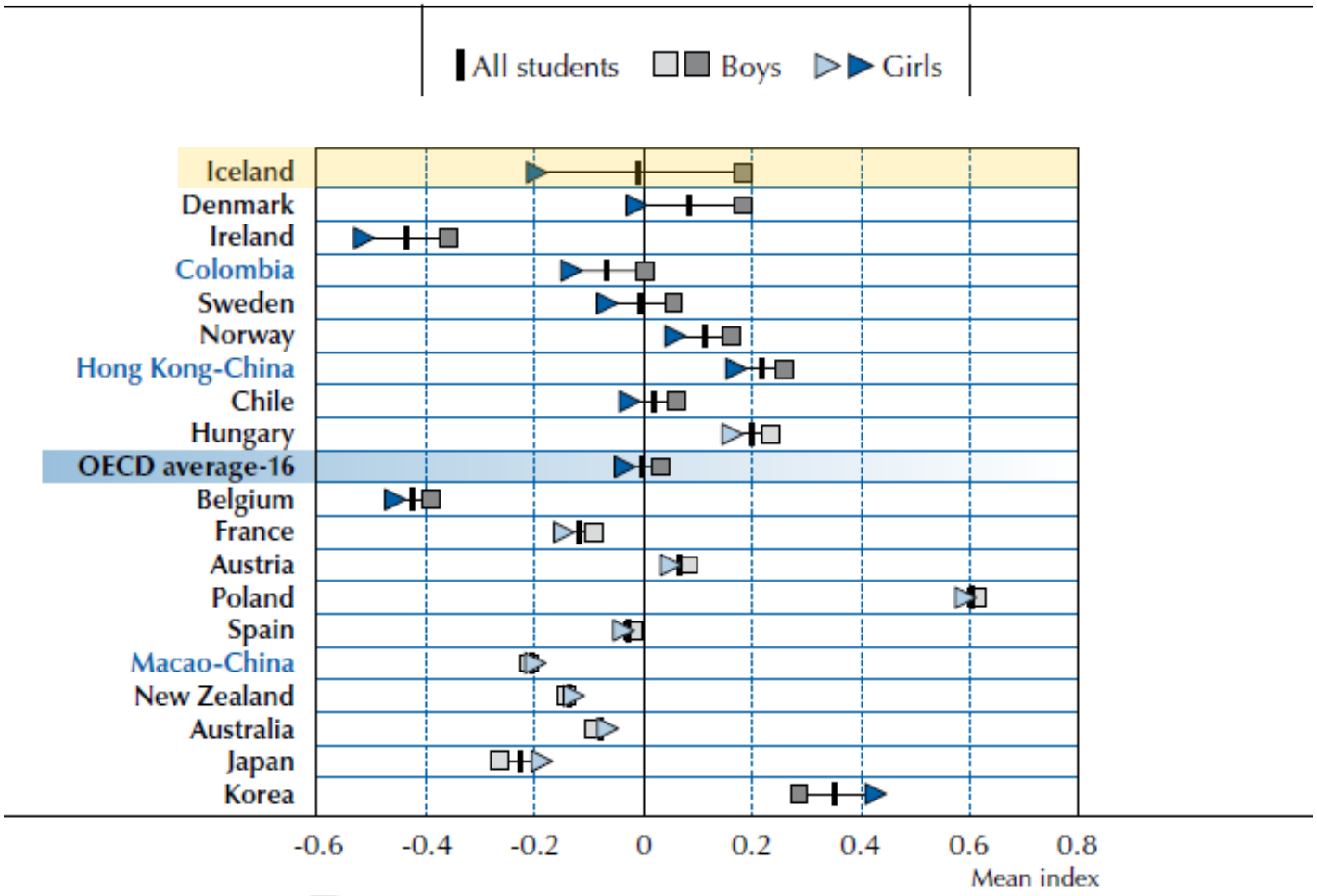
Score point differences in digital reading associated with variables in the multilevel regression models, OECD average-15



Netið notað sem upplýsingamiðill

■ Figure VI.4.6 ■

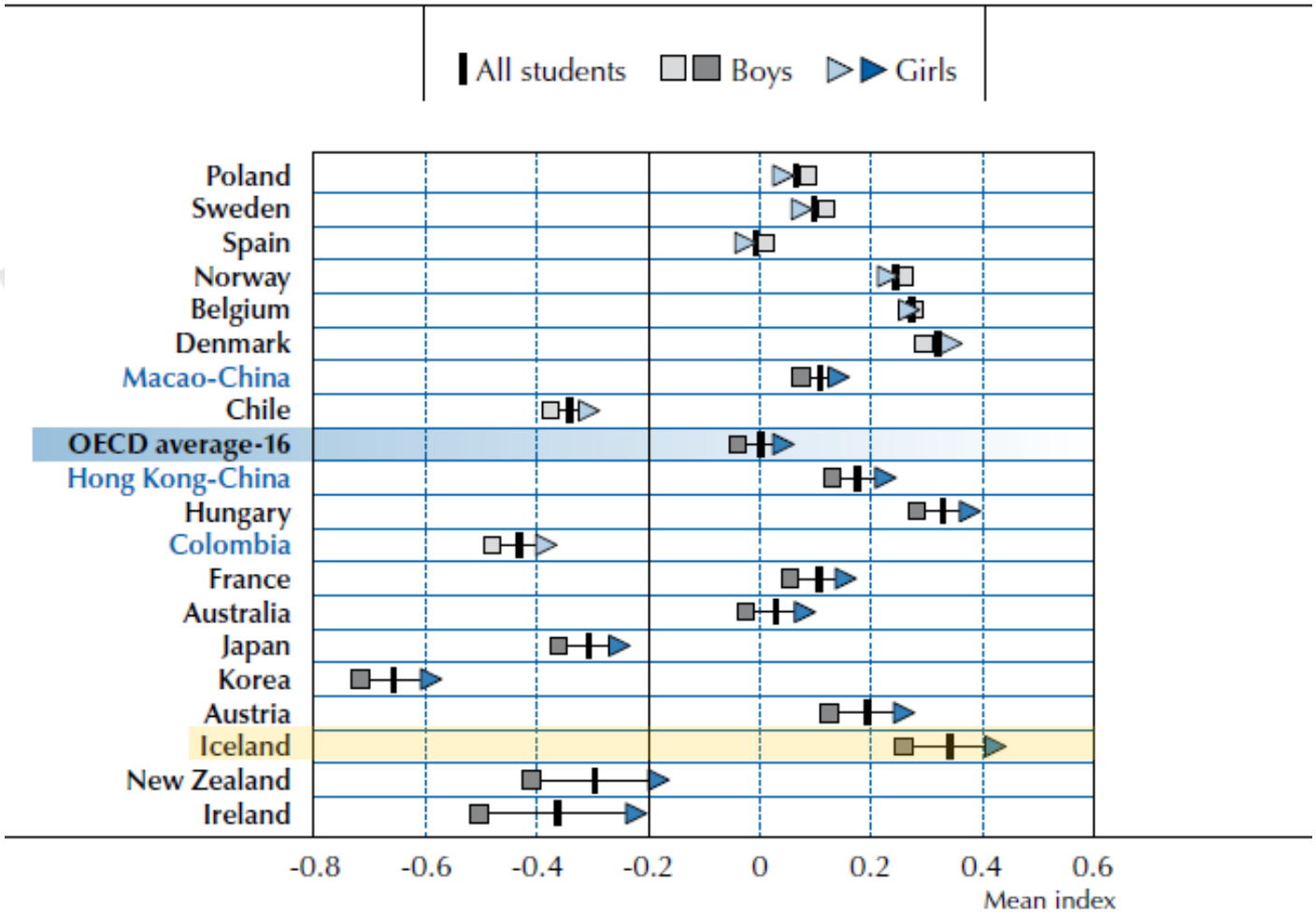
Index of online searching-information activities, by gender



Netið notað sem samskiptamiðill

■ Figure VI.4.7 ■

Index of online social activities, by gender



Index for summarising

- Þú hefur nýlokið við að lesa langan og frekar flókinn 2ja síðna texta um sveiflur á hæð vatnsborðs stöðuvatns í Afríku. Þú átt að skrifa samantekt (útdrátt).
- Hvernig metur þú gagnsemi eftirfarandi aðferða við að skrifa samantekt úr þessum 2ja blaðsíðna texta?
  - *a) Ég skrifa samantekt. Að því loknu athuga ég hvort samantektin nái yfir efni allra málsgreina textans eins og hún ætti að gera*
  - *b) Ég reyni að afrita nákvæmlega eins margar setningar og hægt er*
  - *c) Áður en ég skrifa samantektina les ég textann eins oft og ég get*
  - *d) Ég athuga vandlega hvort mikilvægasta innihald textans komi fram í samantektinni*
  - *e) Ég les í gegnum textann og strika undir mikilvægustu setningarnar. Að því loknu umorða ég þær á minn hátt í samantektinni*

(d)(e)>(a)(c)>(b) : átta samanburðarpör: d>a, d>c, d>b, e>a, e>c, e>b, a>b, c>b

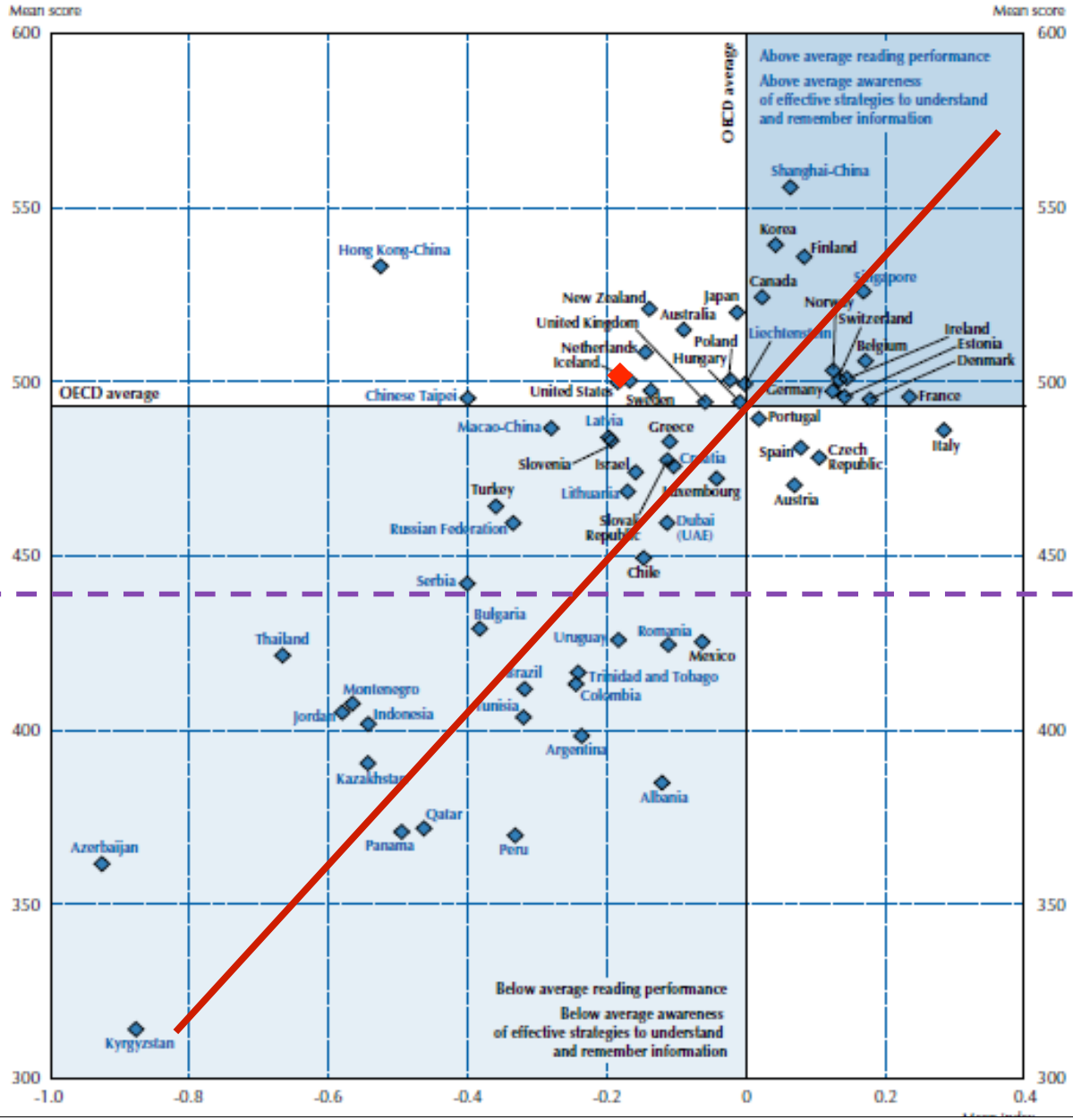
Index for summarising

- Þú hefur nýlokið við að lesa langan og frekar flókinn 2ja síðna texta um sveiflur á hæð vatnsborðs stöðuvatns í Afríku. Þú átt að skrifa samantekt (útdrátt).
- Hvernig metur þú gagnsemi eftirfarandi aðferða við að skrifa samantekt úr þessum 2ja blaðsíðna texta?
  - *a) Ég skrifa samantekt. Að því loknu athuga ég hvort samantektin nái yfir efni allra málsgreina textans eins og hún ætti að gera*
  - *b) Ég reyni að afrita nákvæmlega eins margar setningar og hægt er*
  - *c) Áður en ég skrifa samantektina les ég textann eins oft og ég get*
  - *d) Ég athuga vandlega hvort mikilvægasta innihald textans komi fram í samantektinni*
  - *e) Ég les í gegnum textann og strika undir mikilvægustu setningarnar. Að því loknu umorða ég þær á minn hátt í samantektinni*

(d)(e)>(a)(c)>(b) : átta samanburðarpör: d>a, d>c, d>b, e>a, e>c, e>b, a>b, c>b

▪ Figure III.1.13 ▪

Association between awareness of effective strategies to summarise information and performance in reading

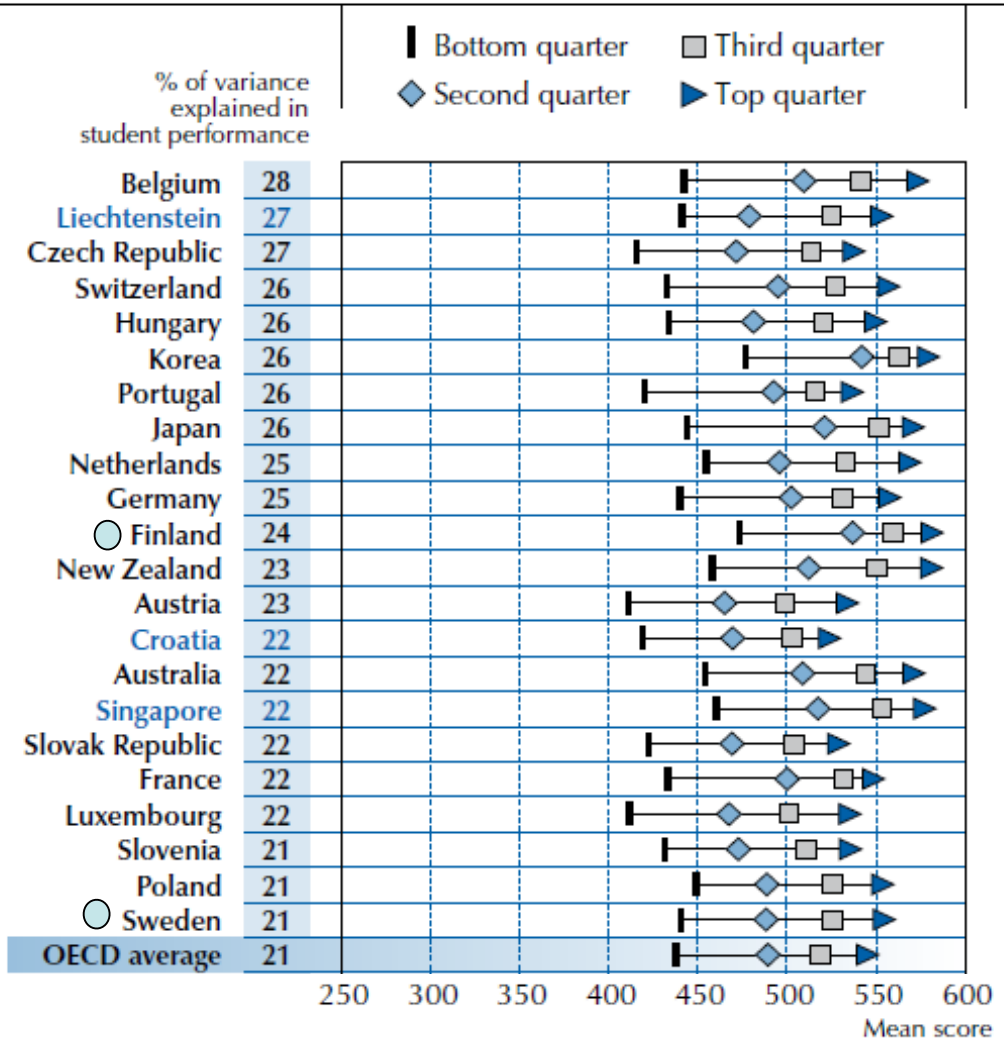


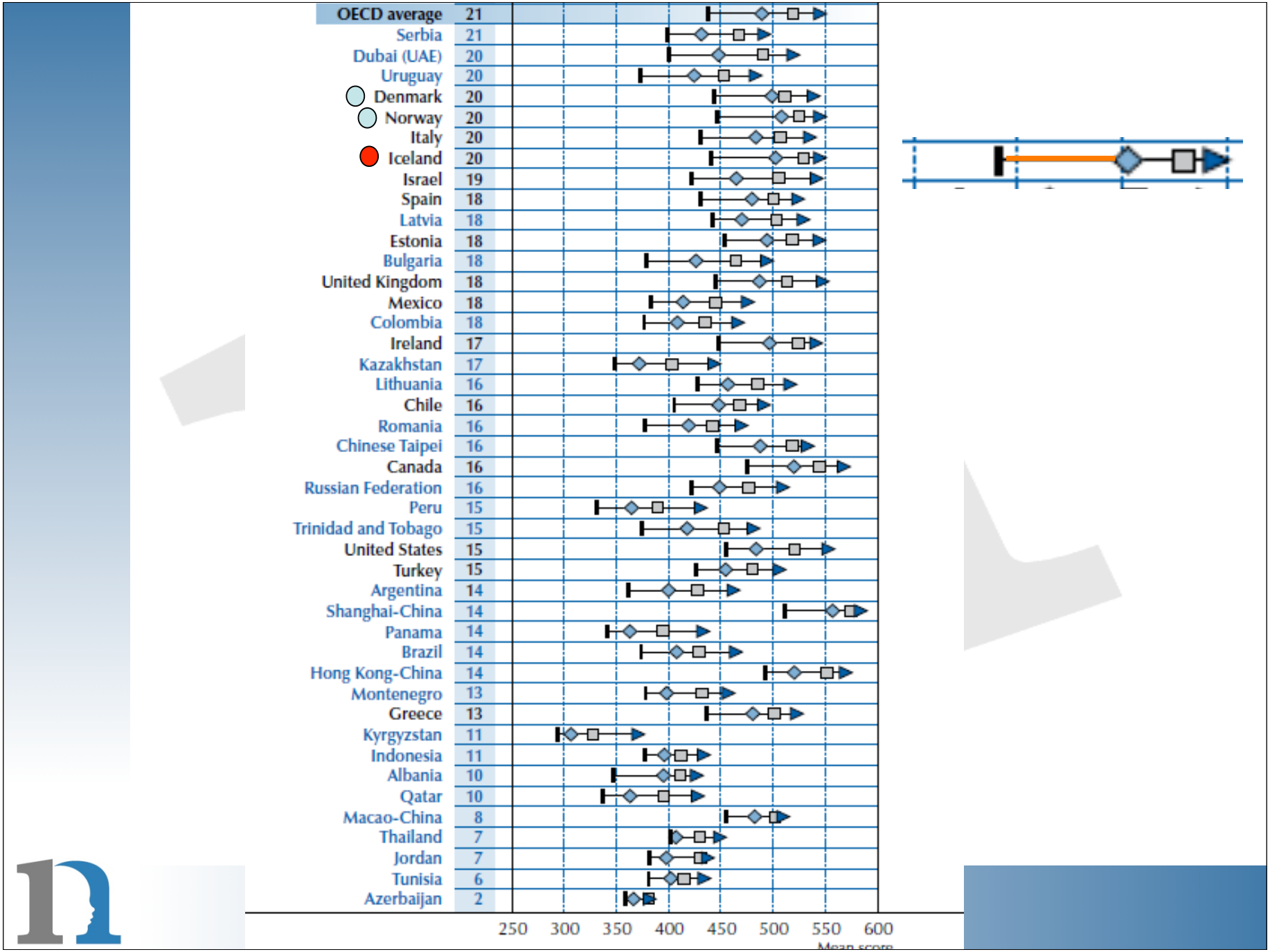
■ Figure III.1.13 ■

Association between awareness of effective strategies to summarise information and performance in reading

■ Figure III.1.14 ■

How students' awareness of effective strategies to summarise information relates to their reading performance




OECD average 21
Serbia 21
Dubai (UAE) 20
Uruguay 20
Denmark 20
Norway 20
Italy 20
Iceland 20
Israel 19
Spain 18
Latvia 18
Estonia 18
Bulgaria 18
United Kingdom 18
Mexico 18
Colombia 18
Ireland 17
Kazakhstan 17
Lithuania 16
Chile 16
Romania 16
Chinese Taipei 16
Canada 16
Russian Federation 16
Peru 15
Trinidad and Tobago 15
United States 15
Turkey 15
Argentina 14
Shanghai-China 14
Panama 14
Brazil 14
Hong Kong-China 14
Montenegro 13
Greece 13
Kyrgyzstan 11
Indonesia 11
Albania 10
Qatar 10
Macao-China 8
Thailand 7
Jordan 7
Tunisia 6
Azerbaijan 2
250 300 350 400 450 500 550 600
Mean score

■ Figure VI.7.2 ■

Score point differences in digital reading associated with variables in the multilevel regression models, OECD average-15