

Umraeðufundur um PISA 2009

Námsmatsstofnun

25. janúar 2011

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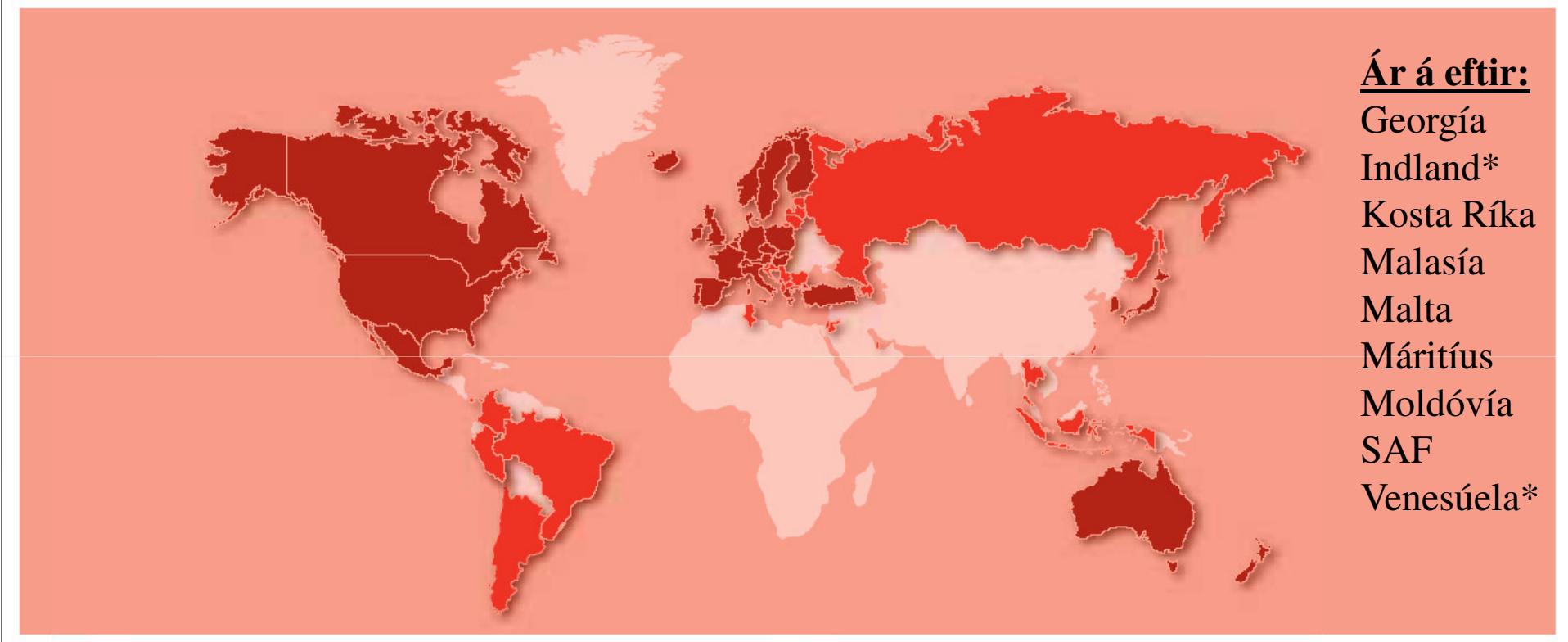


Niðurstöður PISA 2009

Niðurstöður gefnar út af OECD í sex bindum:

- **I. bindi:** What Students Know and Can Do: Student Performance in Reading, Mathematics and Science
- **II. bindi:** Overcoming Social Background: Equity in Learning Opportunities and Outcomes
- **III. bindi:** Learning to Learn: Student Engagement, Strategies and Practices
- **IV. bindi:** What Makes a School Successful? Resources, Policies and Practices
- **V. bindi:** Learning Trends: Changes in Student Performance Since 2000
- **VI bindi:** Digital Readers: Performance in reading digital texts
(Kemur út í júní 2011)

PISA 2009: 65 þátttökuríki



OECD ríkin

Lönd utan OECD



Þátttökuríki í PISA árið 2009 mynda um 90% af efnahagi heimsins

n

PISA 2009 Results: What Students Know and Can Do

STUDENT PERFORMANCE IN READING,
MATHEMATICS AND SCIENCE

VOLUME I



Programme for International Student Assessment



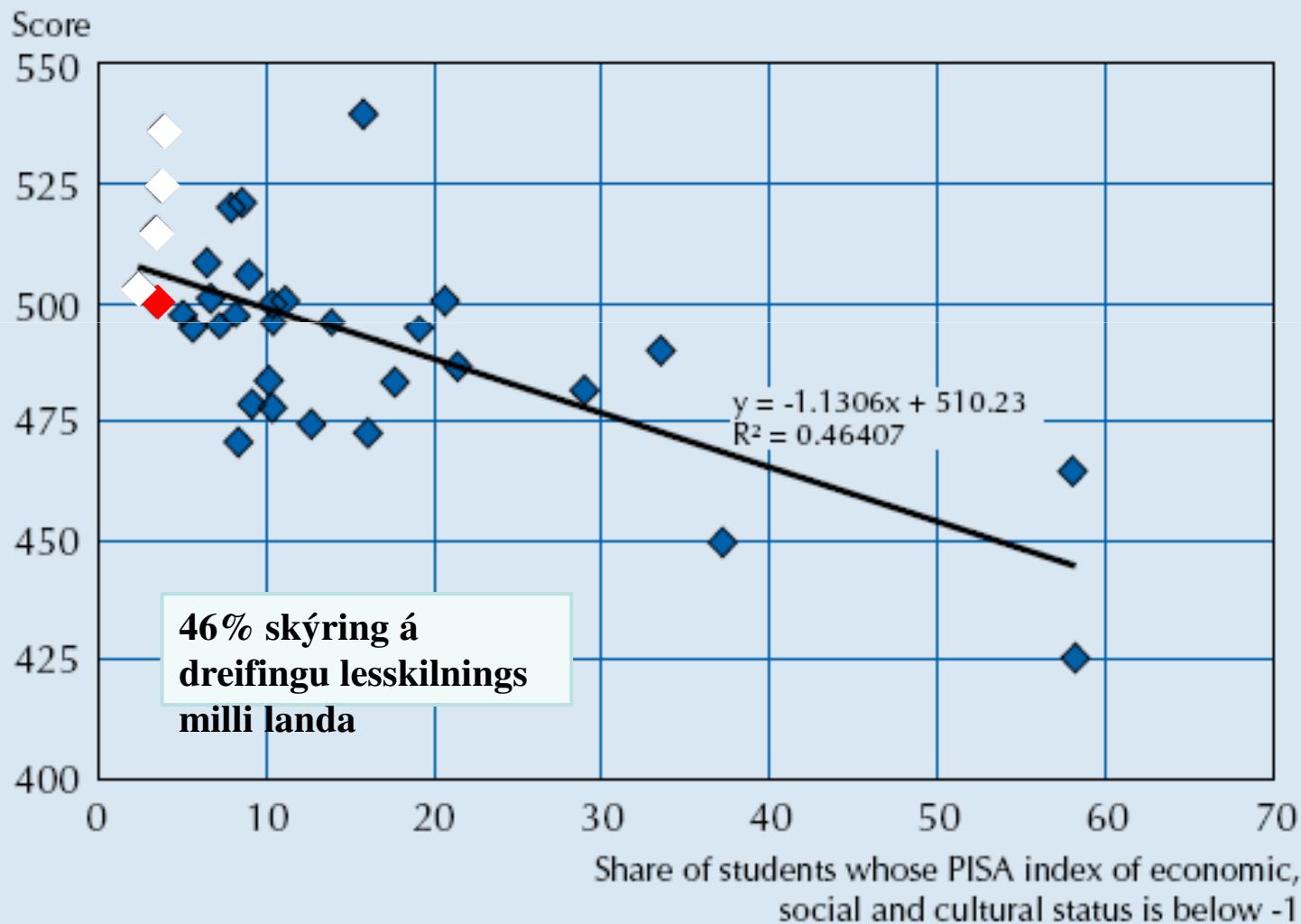
- In the PISA 2009 mathematics assessment, the OECD countries Finland, Switzerland, Japan, Canada, the Netherlands, New Zealand, Belgium, Australia, Germany, Estonia, Iceland, Denmark, Slovenia as well as the partner countries and economies Chinese Taipei, Liechtenstein and Macao-China also perform significantly above the OECD average
- in mathematics.

- In OECD countries, sample sizes ranged from 4 410 students in Iceland to 38 250 students in Mexico.
- Countries with large samples have often implemented PISA both at national and regional/state levels (*e.g. Australia, Belgium, Canada, Italy, Mexico, Spain, Switzerland and the United Kingdom*).
- The selection of samples was monitored internationally and adhered to rigorous standards for the participation rate, both among schools selected by the international contractor and among students within these schools, to ensure that the PISA results reflect the skills of the 15-year-old students in participating countries.
- Countries were also required to administer the test to students in identical ways to ensure that students receive the same information prior to and during the assessment
- (Box I.1.3).

- Figure I.2.4 shows the proportion of students at the lower end of an international scale of the economic, social and cultural background of students and how this relates to reading performance.
- The relationship is strong and explains 46% of the performance variation among countries.
- Turkey and Mexico, where 58% of students belong to the internationally most disadvantaged group, and Chile, Portugal, Spain, Italy and Poland, where this proportion reaches more than 20%, thus face much greater challenges than, for example, Norway, Australia, **Iceland**, Canada and Finland, where the proportion of disadvantaged students is less than 5%.

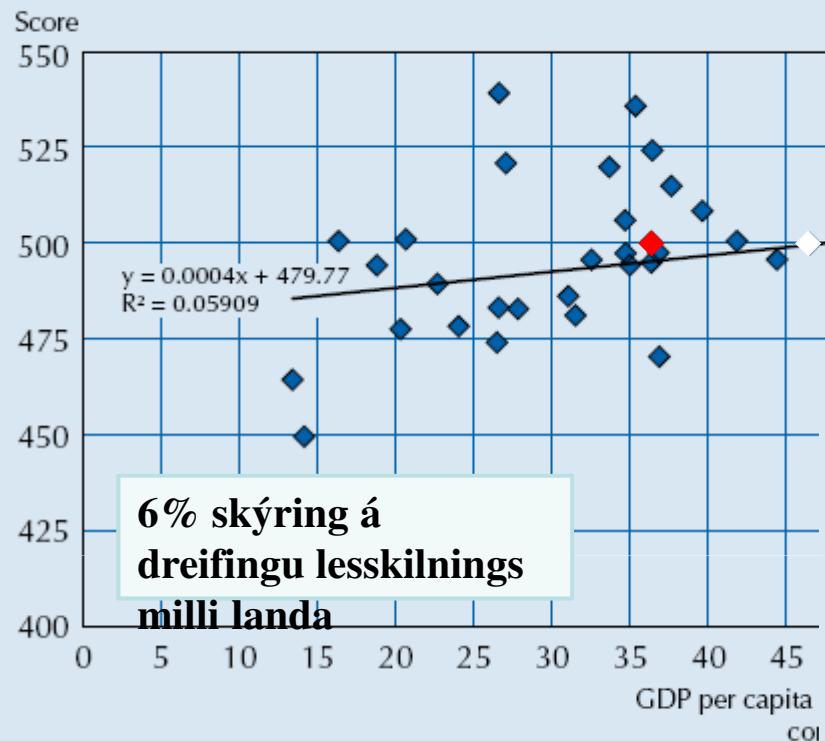
■ Figure I.2.4 ■

Reading performance and share of socio-economically disadvantaged students



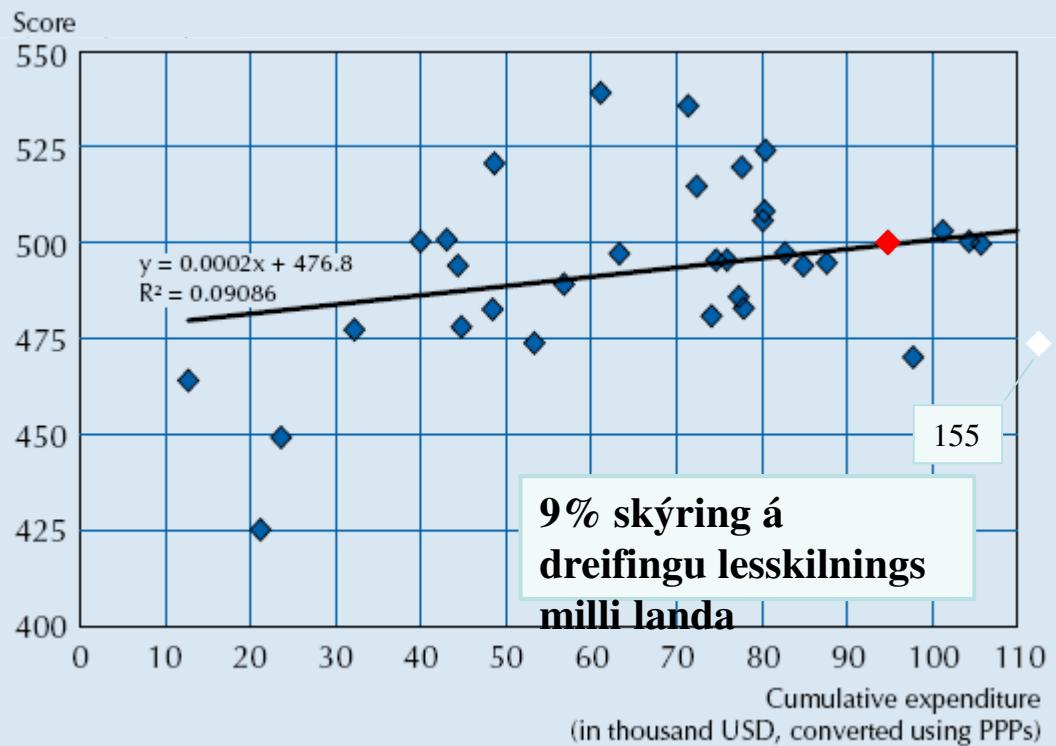
■ Figure I.2.1 ■

Reading performance and GDP



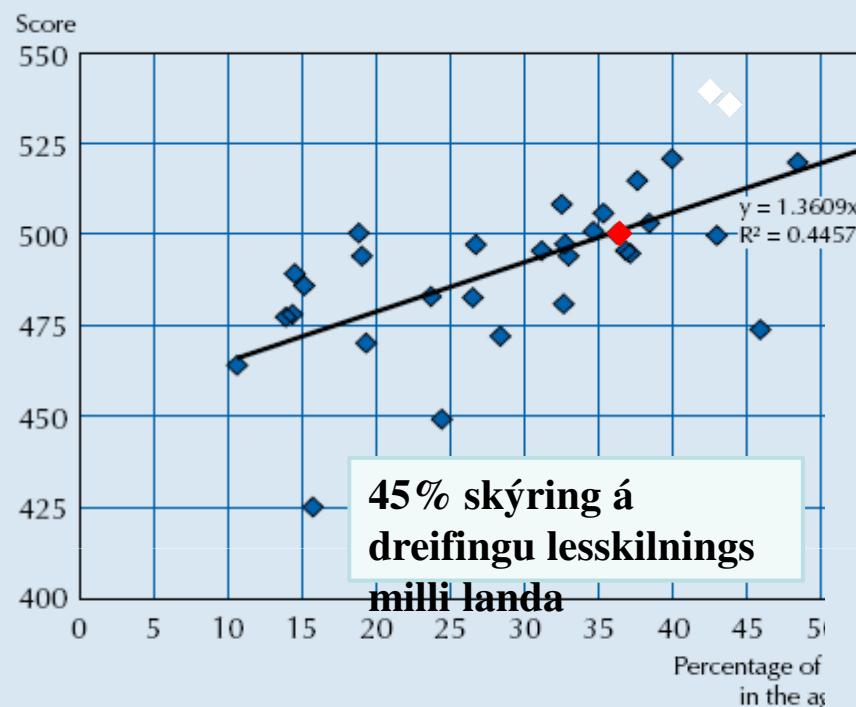
■ Figure I.2.2 ■

Reading performance and spending on education



■ Figure I.2.3 ■

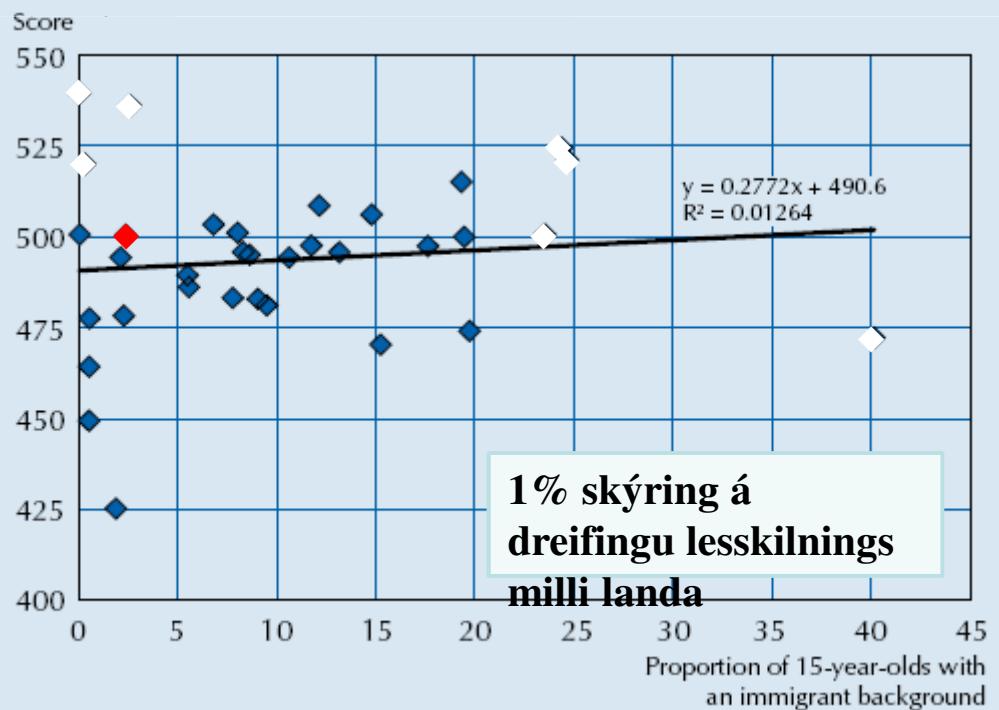
Reading performance and parents' education



Source: OECD, PISA 2009 Database, Table I.2.20.

■ Figure I.2.5 ■

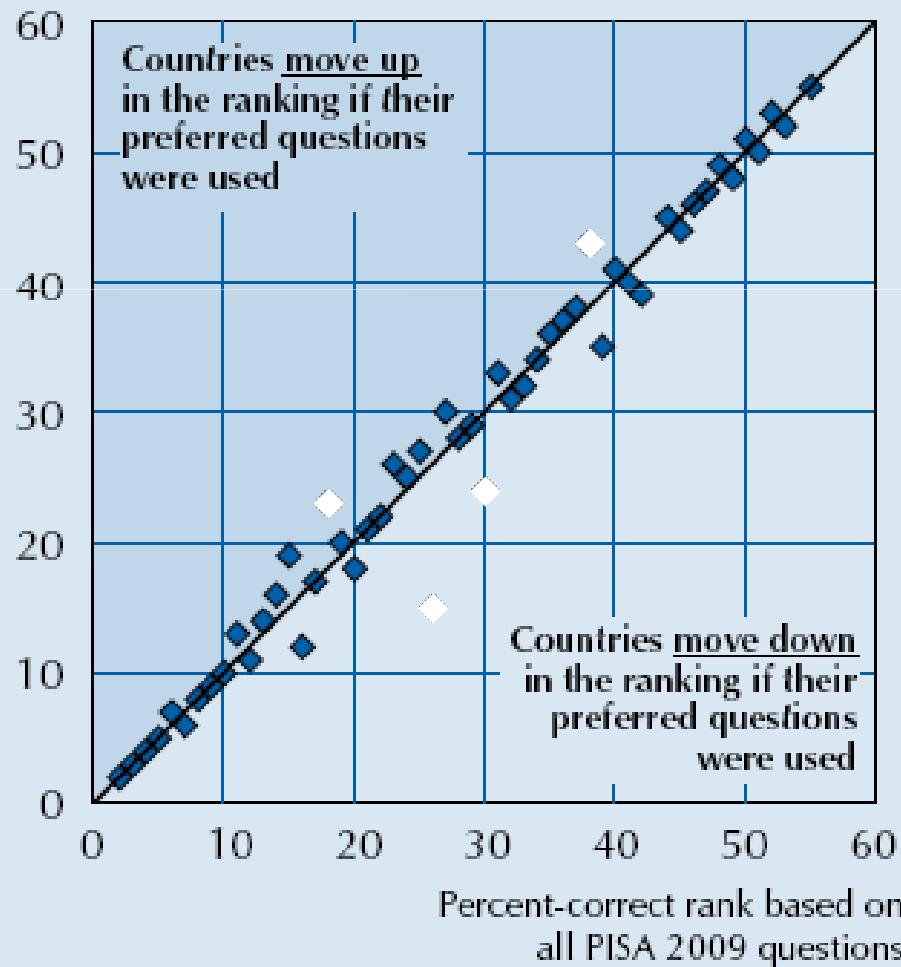
Reading performance and proportion of students from an immigrant background



■ Figure I.2.6 ■

Equivalence of the PISA test across cultures and languages

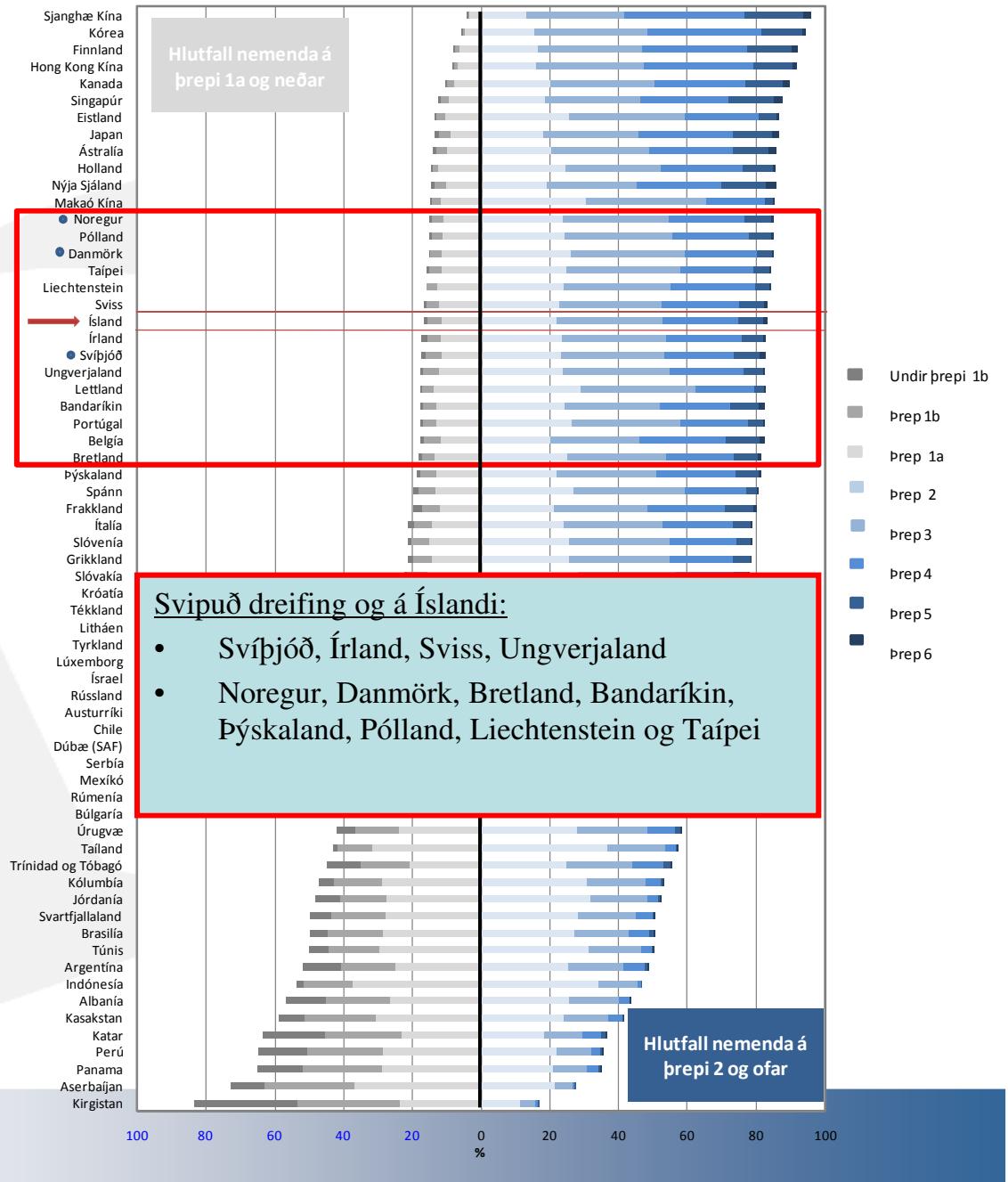
Rank on own preferred new PISA 2009 questions and link questions from previous cycles



Ekki metin:
Danmörk
Ísland
Slóvakía
Argentína
Aserbaíjan
Lettland
Liechtenstein
Serbia
Singapúr
Taíland

Hæfnisþrep

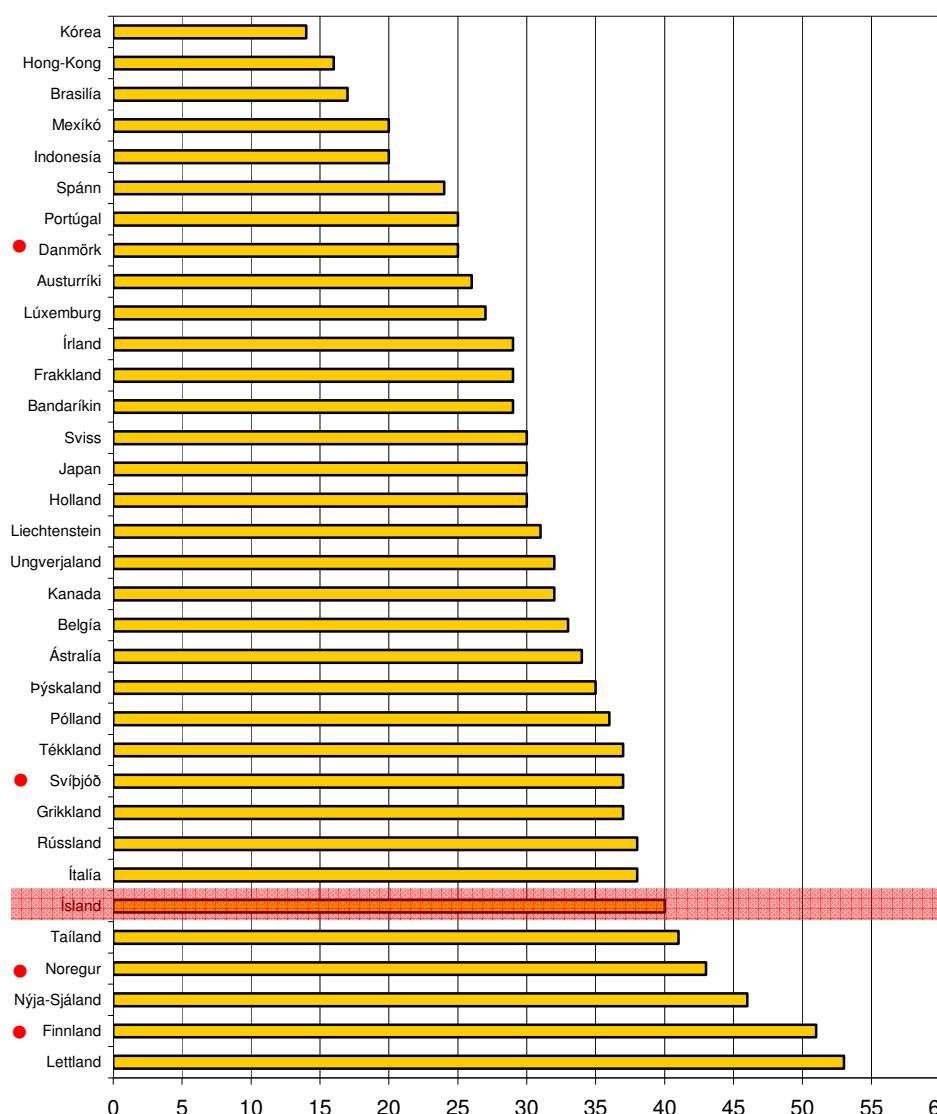
- Lesskilningur er flokkaður í 7 hæfnisþrep
- Undir þr.2 (16,8% ísl nem.)
- Prep 1b (4,2% ísl. nem.)
 - Finna atriði í stuttum einföldum texta, studdum af táknum eða myndum
- Prep 6 (0,7% ísl. nem.)
 - Draga ályktanir, meta andstæðar upplýsingar, samþætta úr mörgum textabrotum með framandi efni



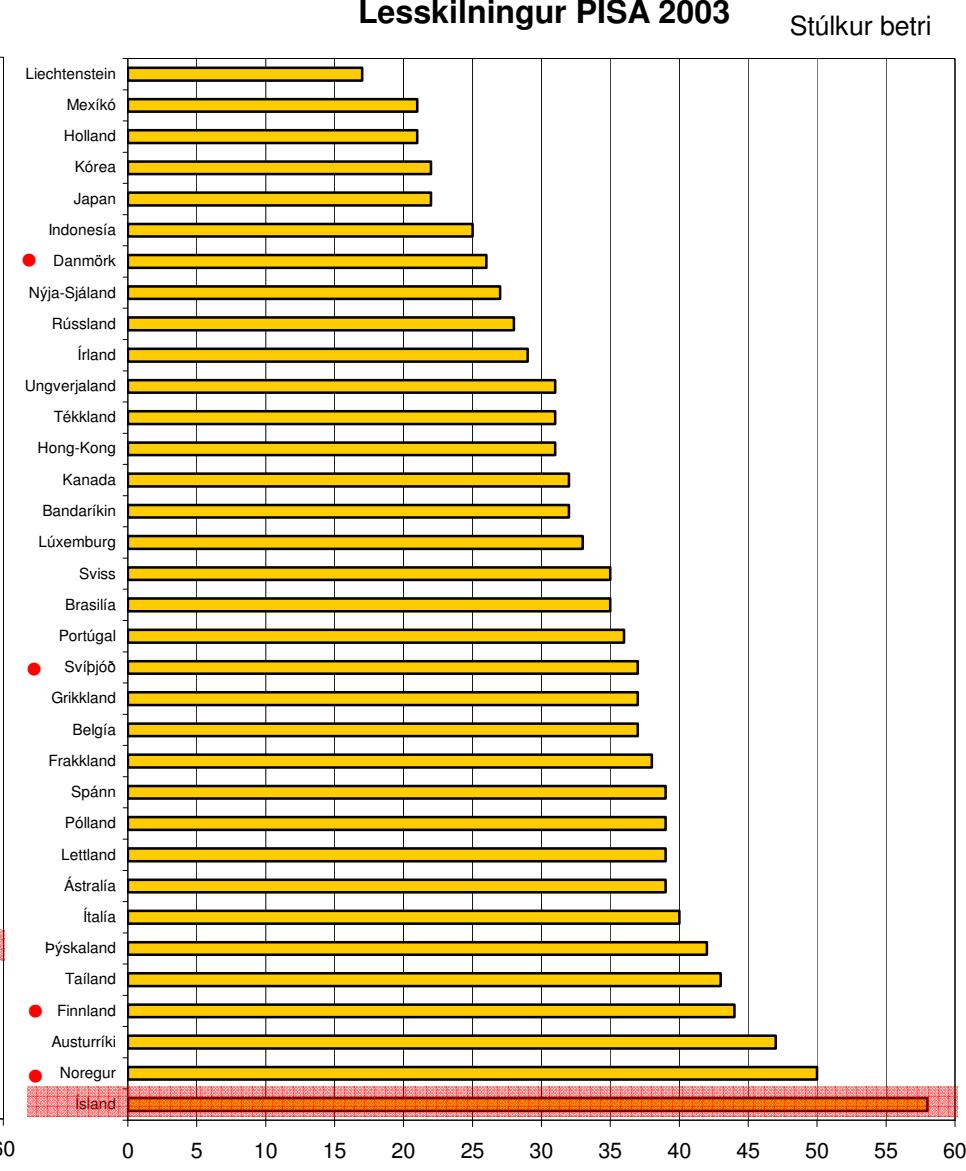
Lesskilningur



Lesskilningur PISA 2000

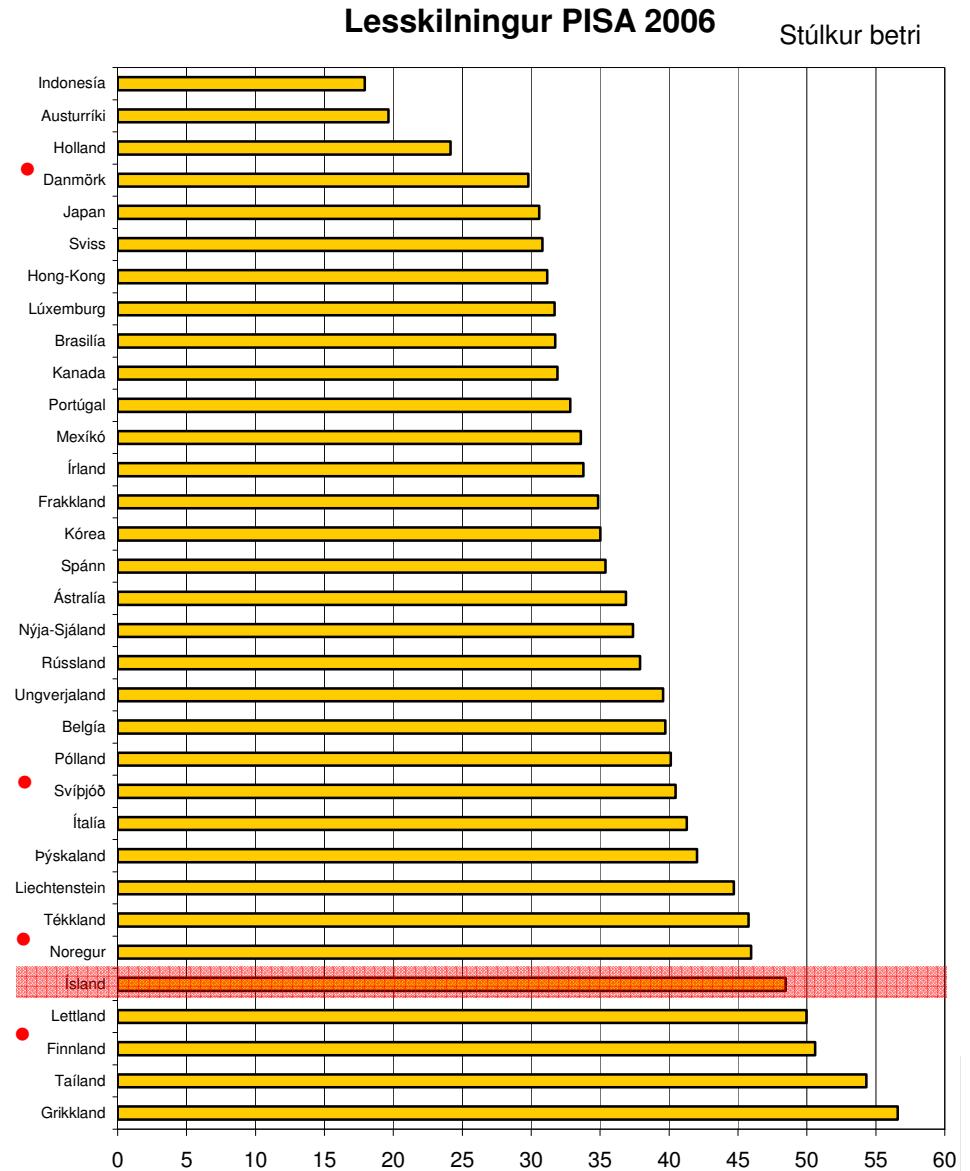


Lesskilningur PISA 2003



- Alls staðar í heiminum hafa stúlkur mikla yfirburði í lesskilningi
- Hvergi þó eins mikla og
 - á Ísland
 - í Taíland
 - í Noregur
 - í Finnland
 - í Lettland

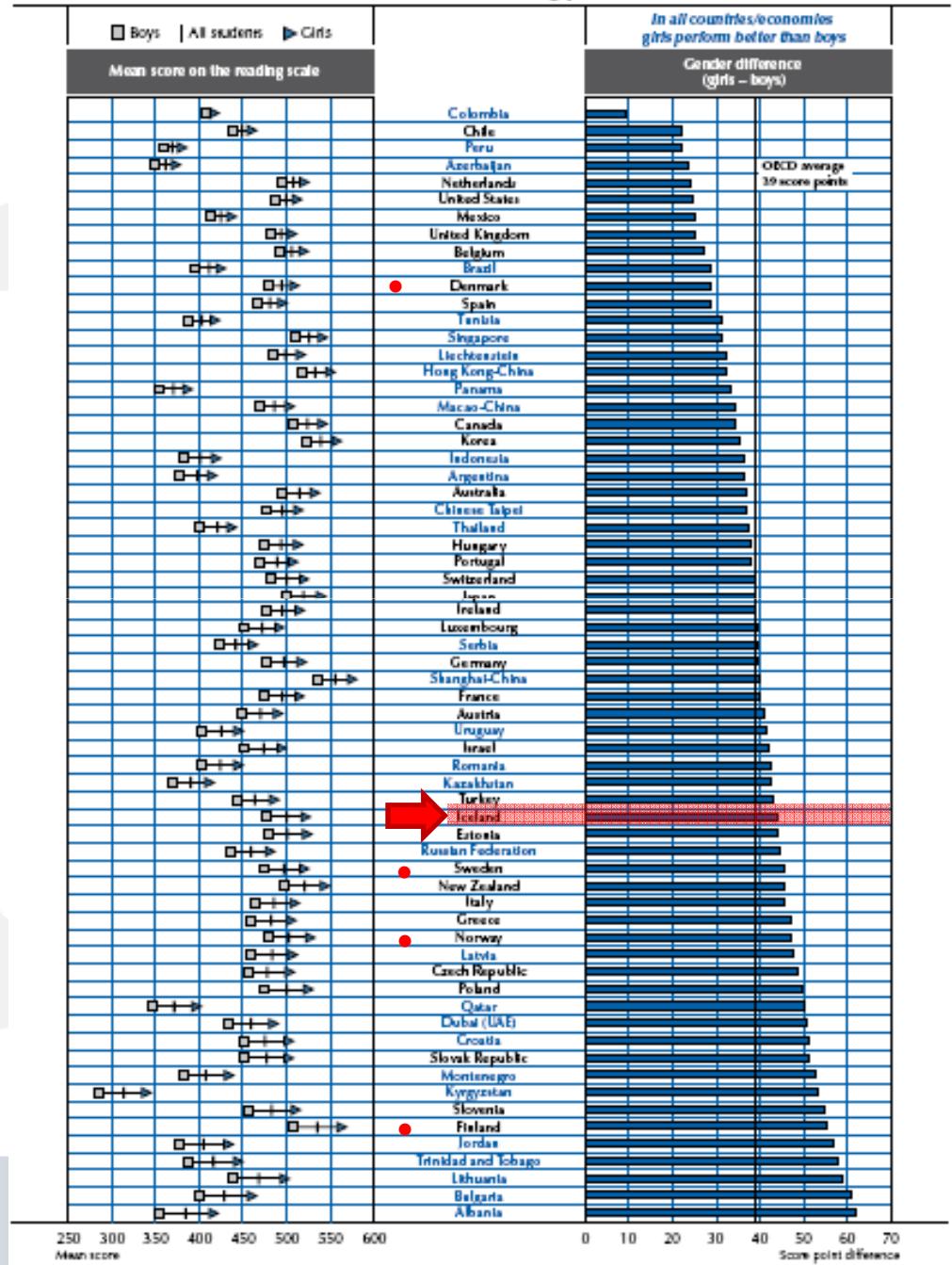
Lesskilningur



- Kynjamunr á Íslandi:
 - 2000: 40 stig
 - 2009: 44 stig

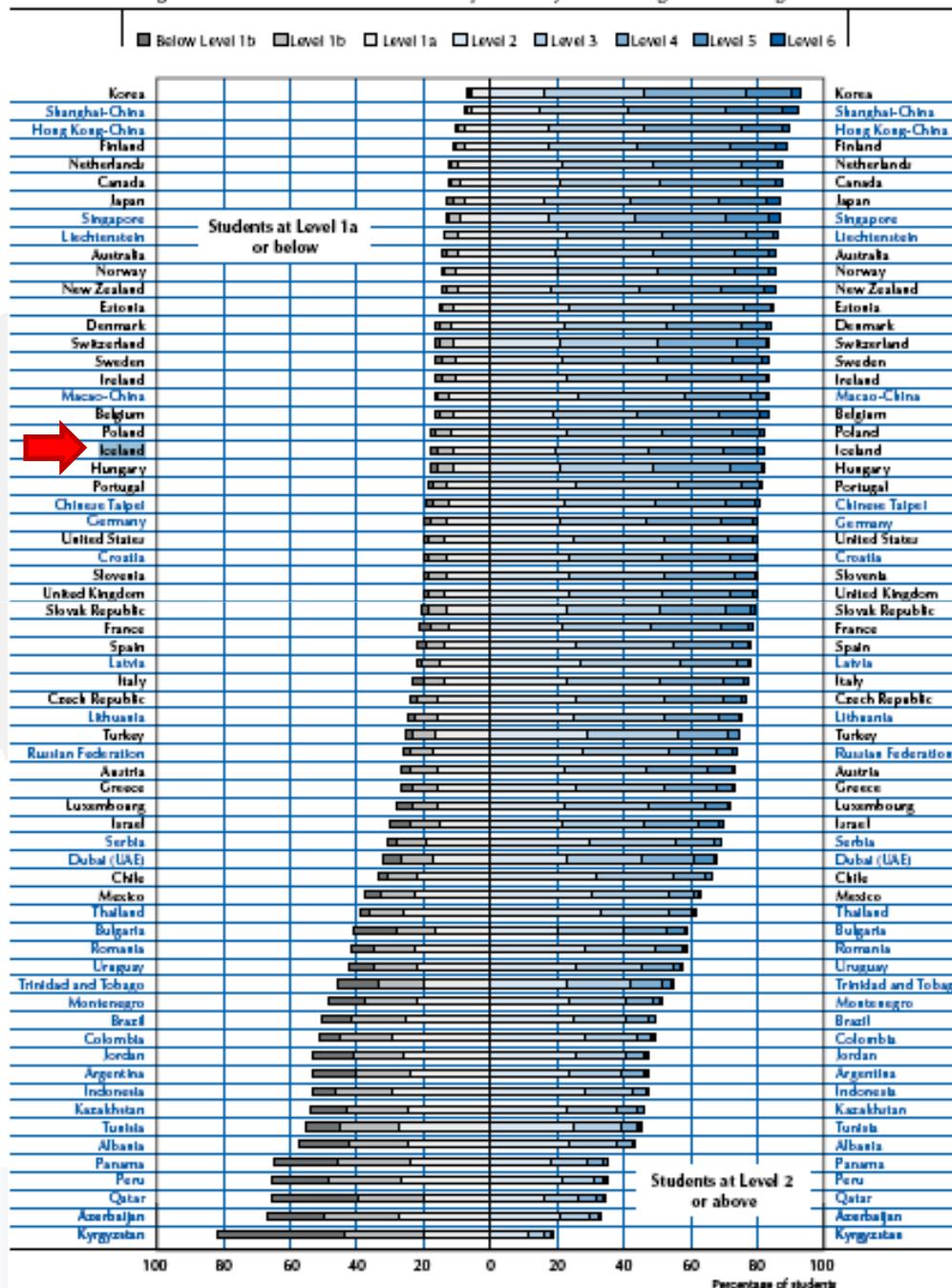
■ Figure I. 2.17 ■

Gender differences in reading performance

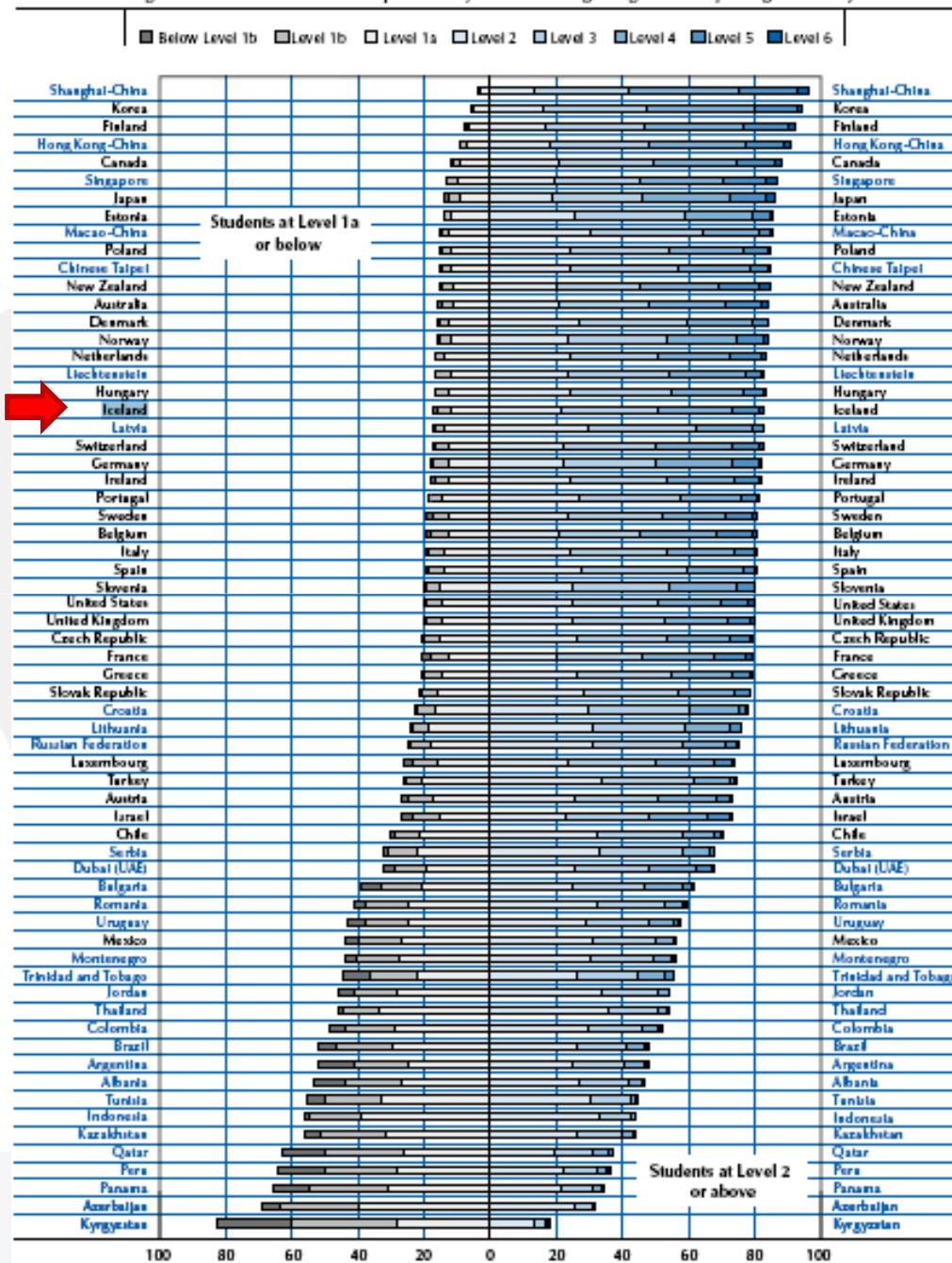


■ Figure I. 2.20 ■

How well do students access and retrieve information from what they read?
Percentage of students at the different levels of proficiency in accessing and retrieving information

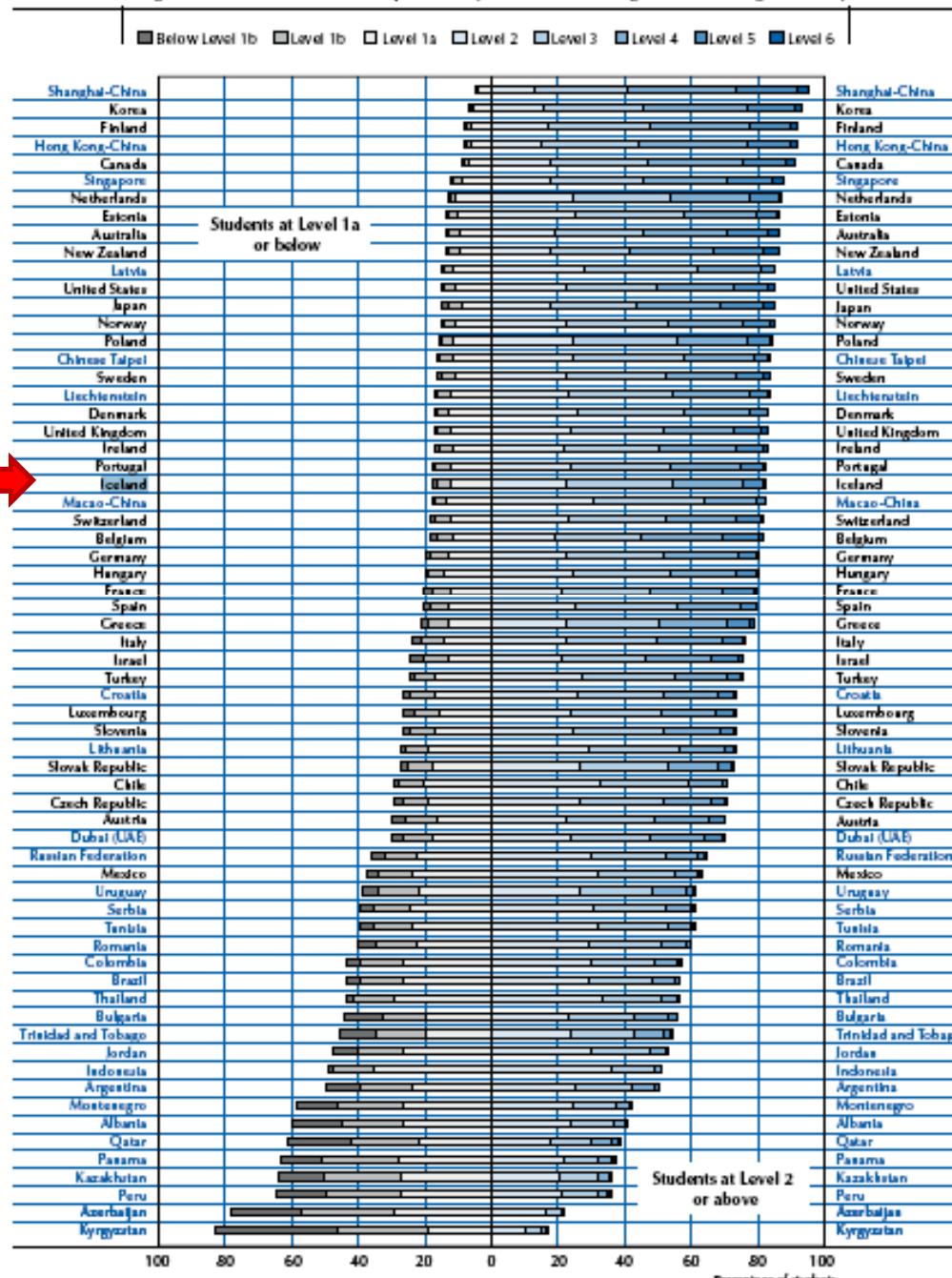


■ Figure I. 2.23 ■
How well do students Integrate and Interpret what they read?
Percentage of students at the different proficiency levels in integrating and interpreting what they read

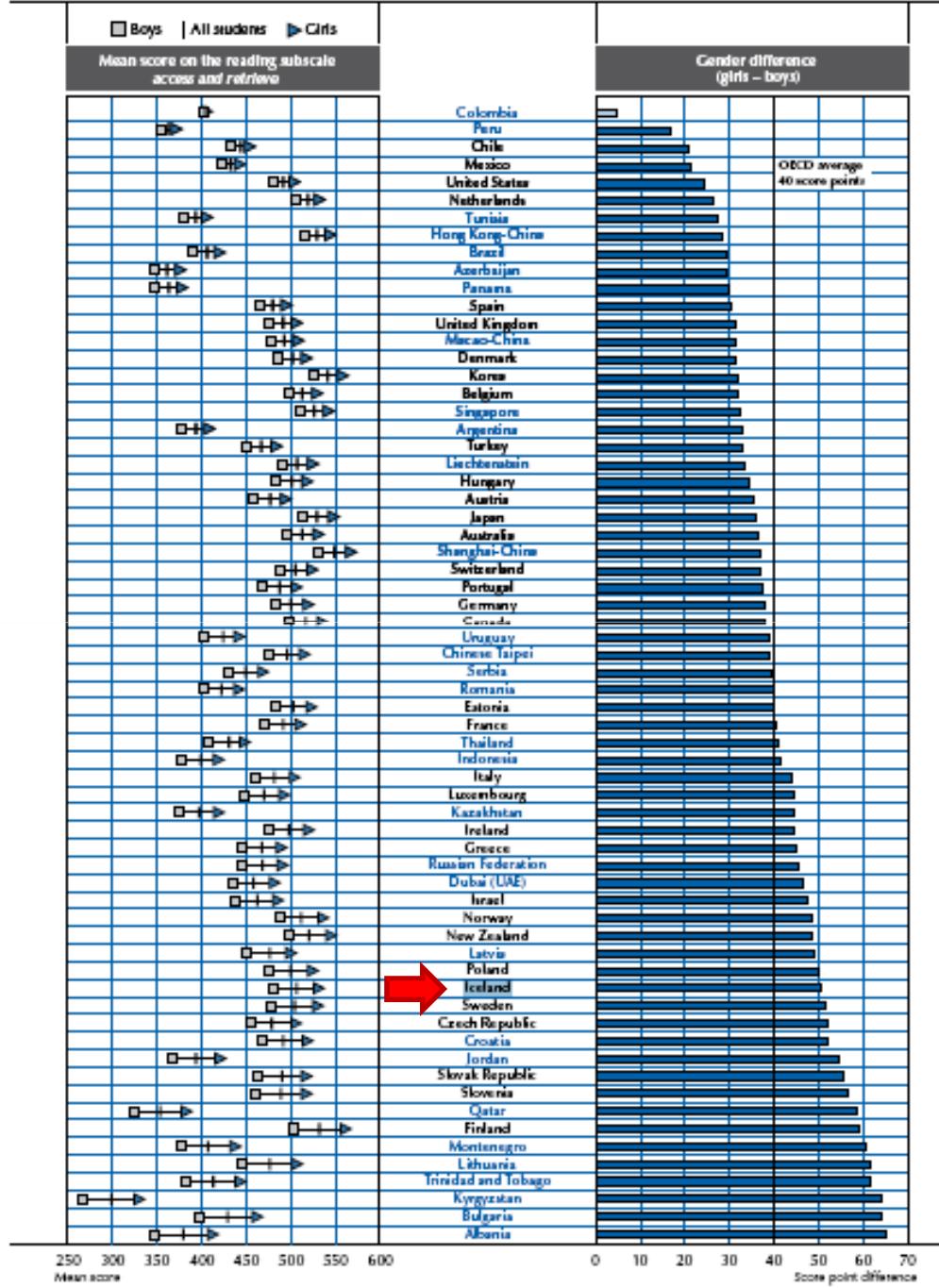


■ Figure I. 2.26 ■

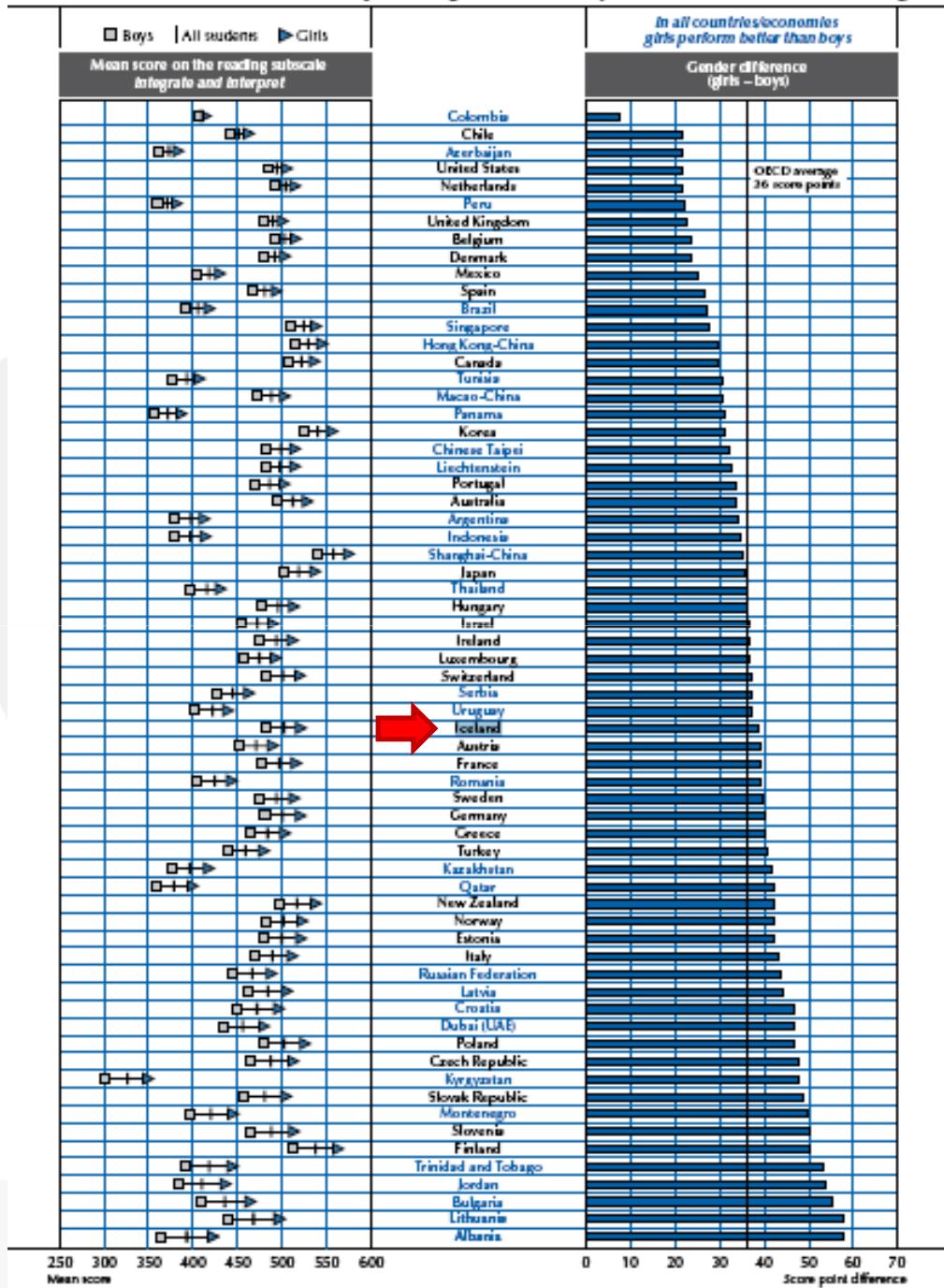
How well do students reflect on and evaluate what they read?
 Percentage of students at the different proficiency levels in reflecting and evaluating what they read



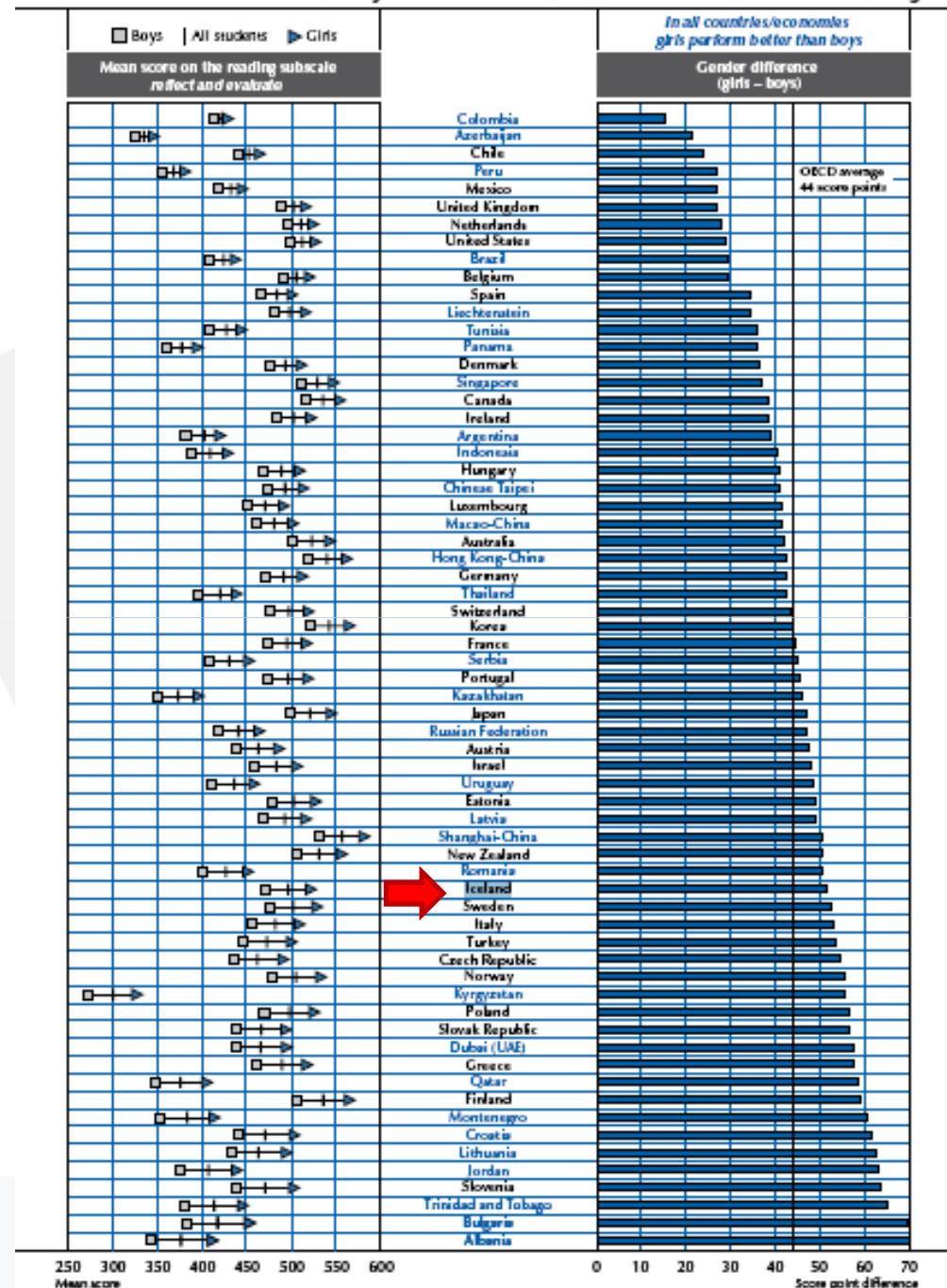
■ Figure I. 2.30a ■
Gender differences in the ability to access and retrieve information from reading

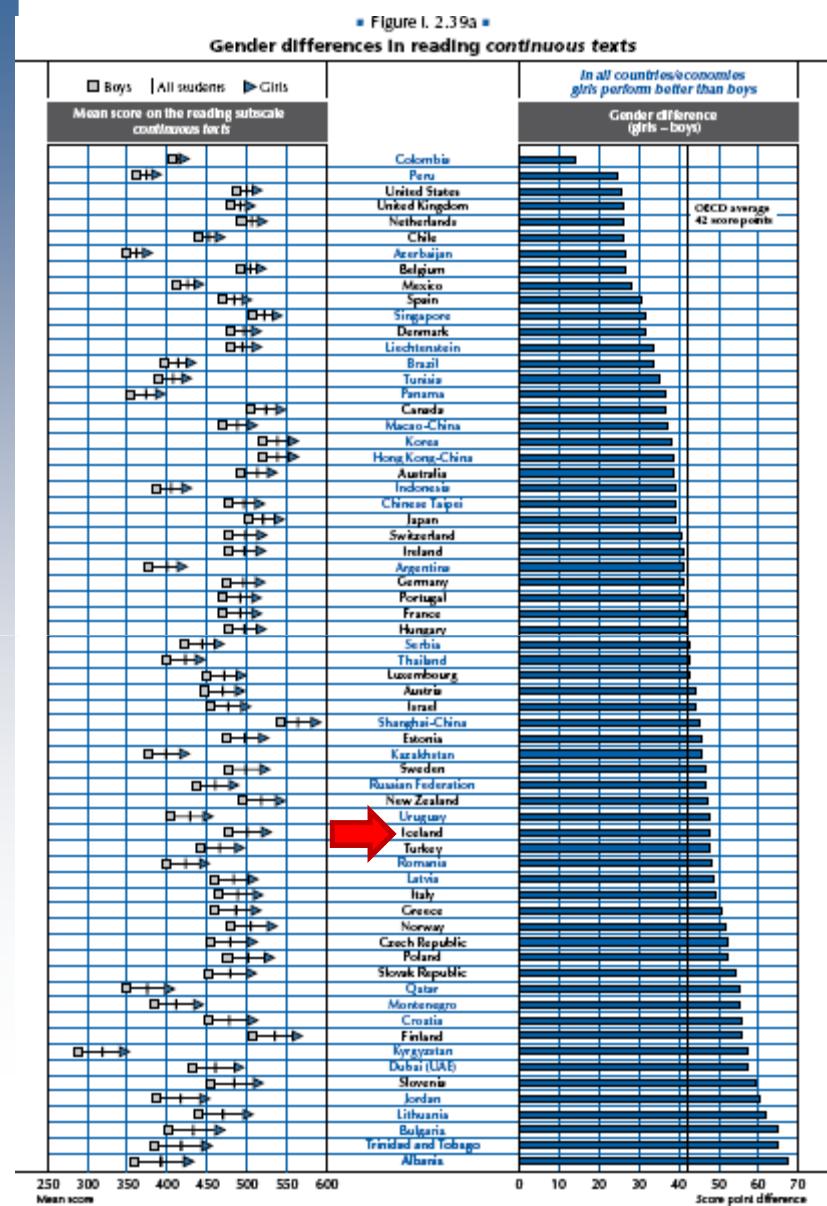


■ Figure I. 2.30b ■
Gender differences in the ability to Integrate and Interpret information from reading

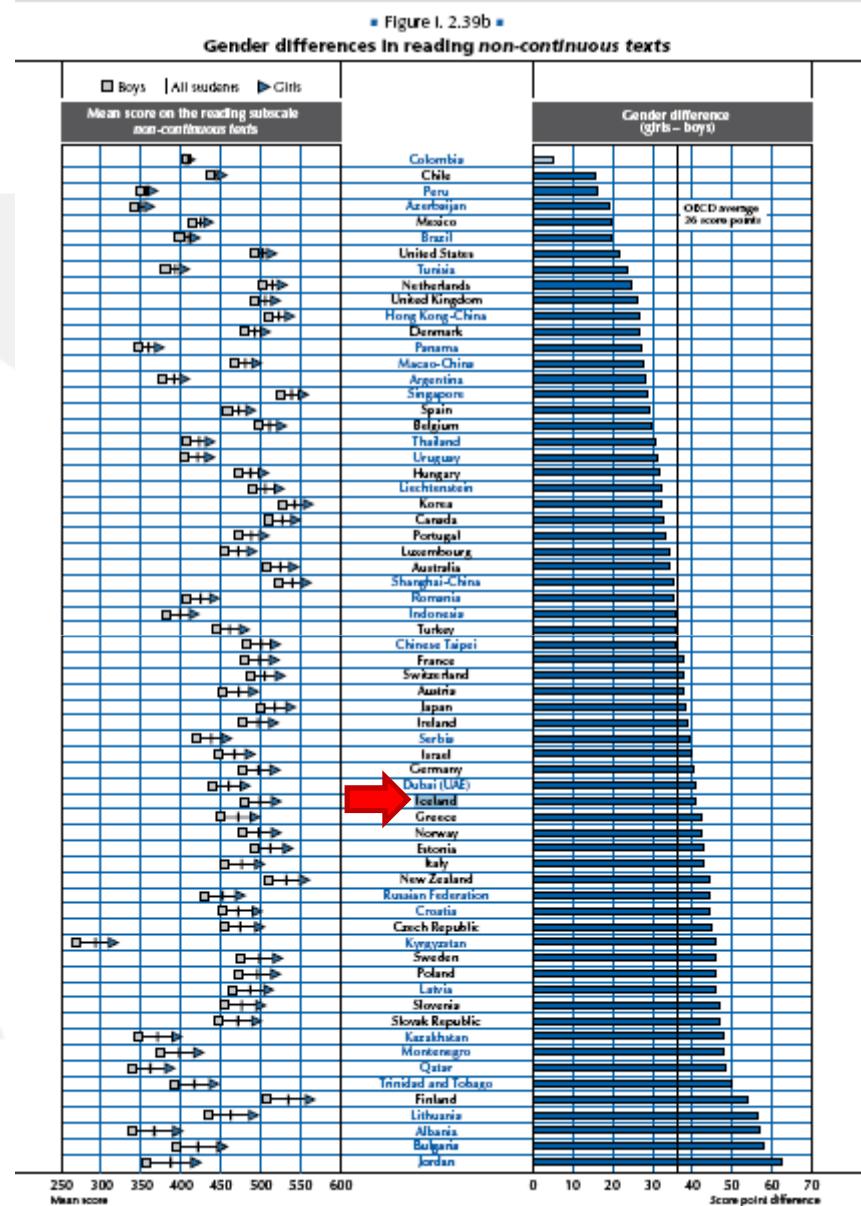


■ Figure I. 2.30c ■
Gender differences in the ability to reflect on and evaluate information from reading





Continuous: 48 stig

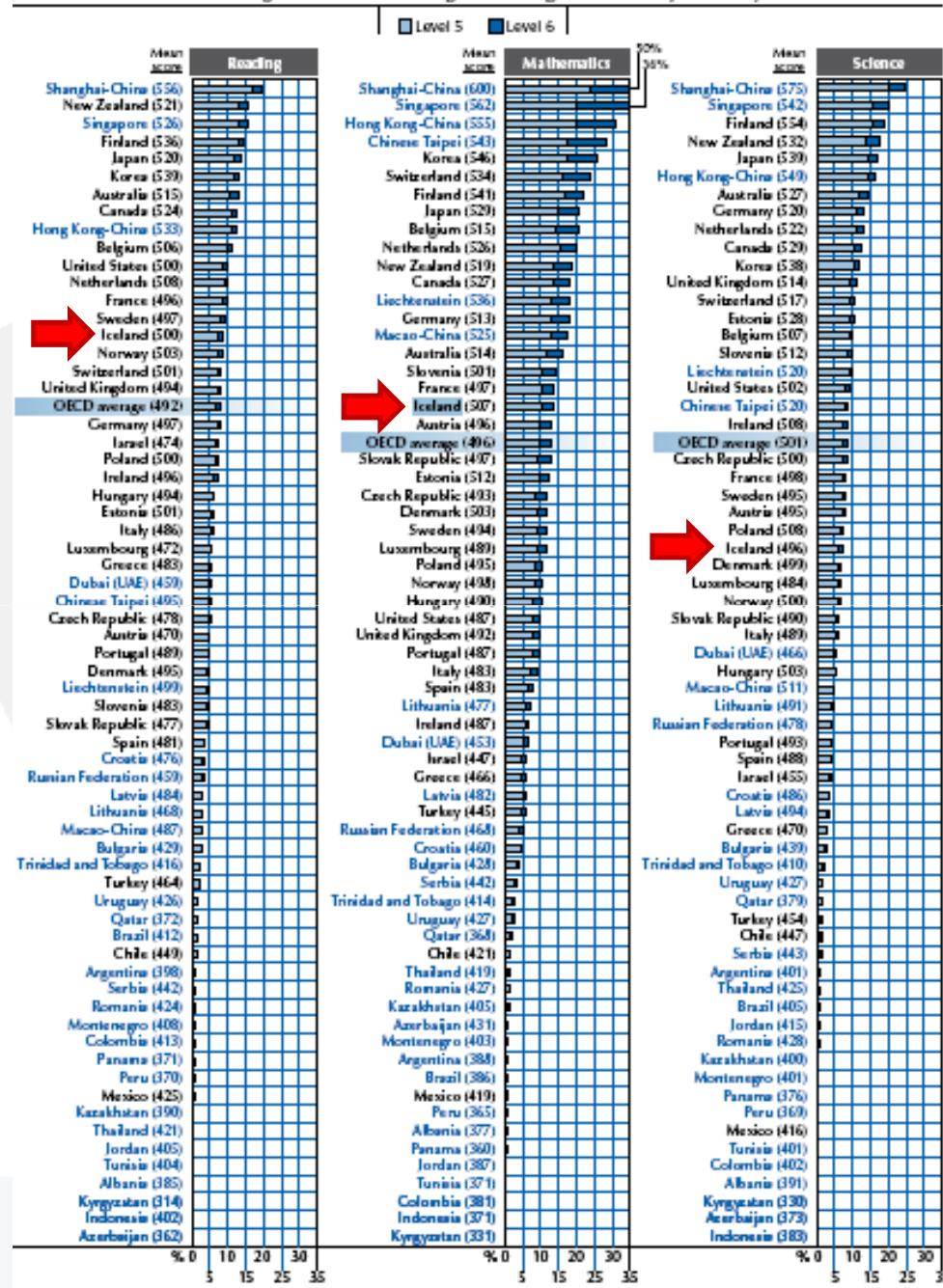


Non-continuous: 42 stig



■ Figure I.3.b ■

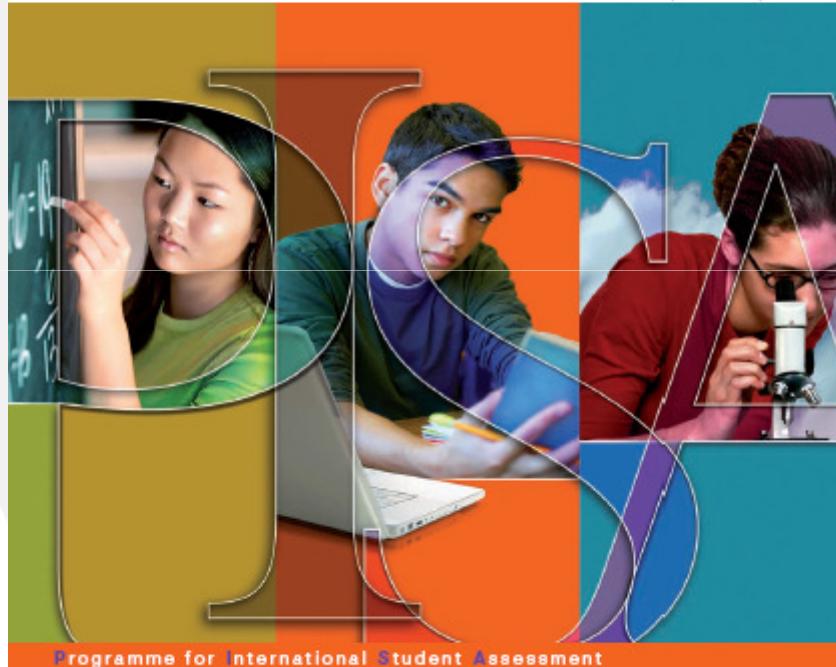
Top performers in reading, mathematics and science
Percentage of students reaching the two highest levels of proficiency



PISA 2009 Results: Overcoming Social Background

EQUITY IN LEARNING OPPORTUNITIES
AND OUTCOMES

VOLUME II

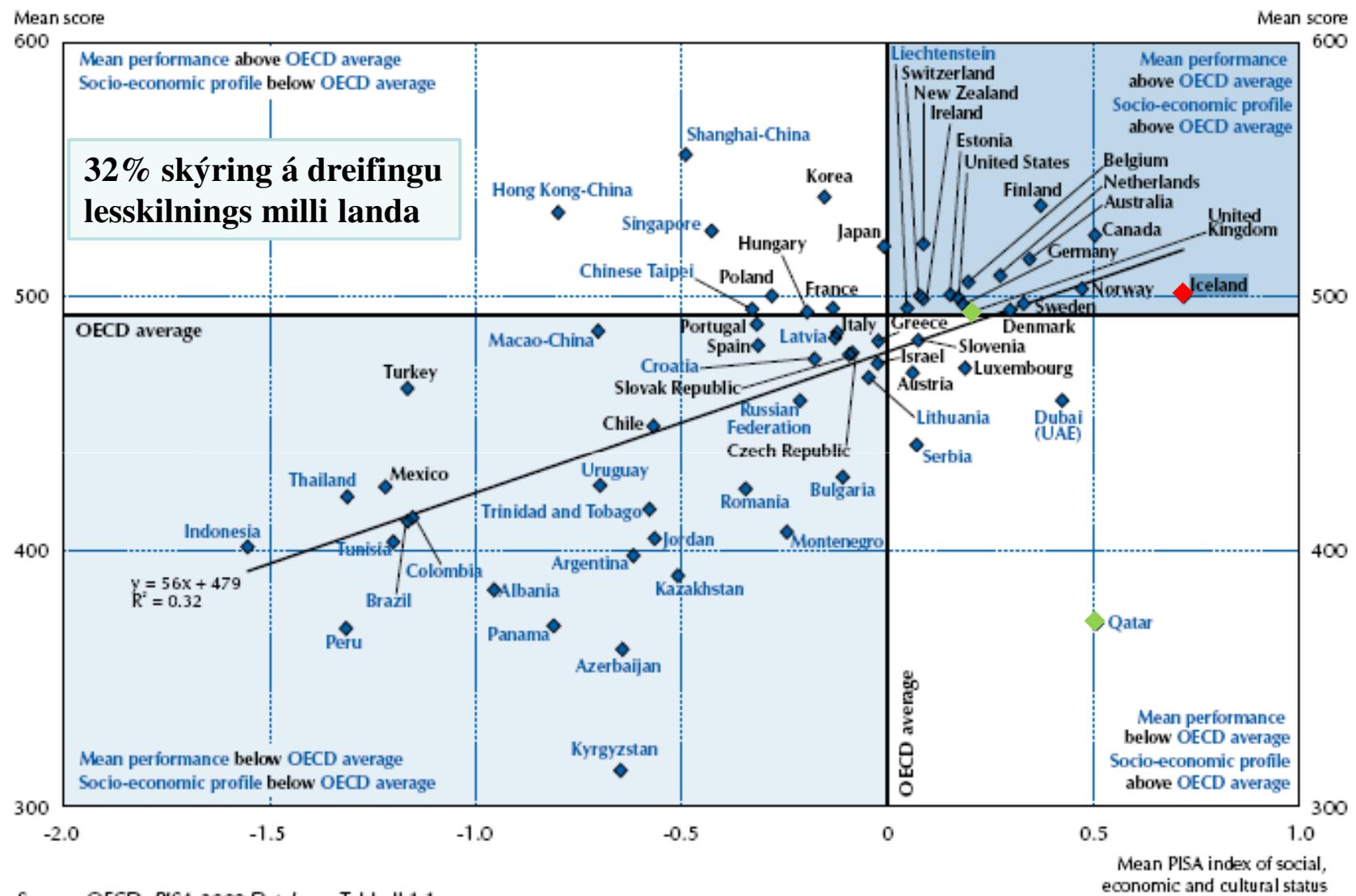


Students in urban schools perform better than students in other schools, even after accounting for differences in socioeconomic background.

- In Turkey, the Slovak Republic, Chile, Mexico and Italy, as well as the partner countries Peru, Tunisia, Albania, Argentina and Romania, the performance gap between students in urban schools and those in rural schools is **more than 45 score points** after accounting for differences in socio-economic background.
- This is more than one year of education across OECD countries. That gap is **80 score points or more** – or two years of schooling – in Hungary and in the partner countries Bulgaria, Kyrgyzstan and Panama.
- However, this pattern is not observed in Belgium, Finland, Germany, Greece, **Iceland**, Ireland, Israel, the Netherlands, Poland, Sweden, the United Kingdom and the United States.



■ Figure II.1.2 ■
Reading performance and socio-economic profile



Source: OECD, PISA 2009 Database, Table II.1.1.

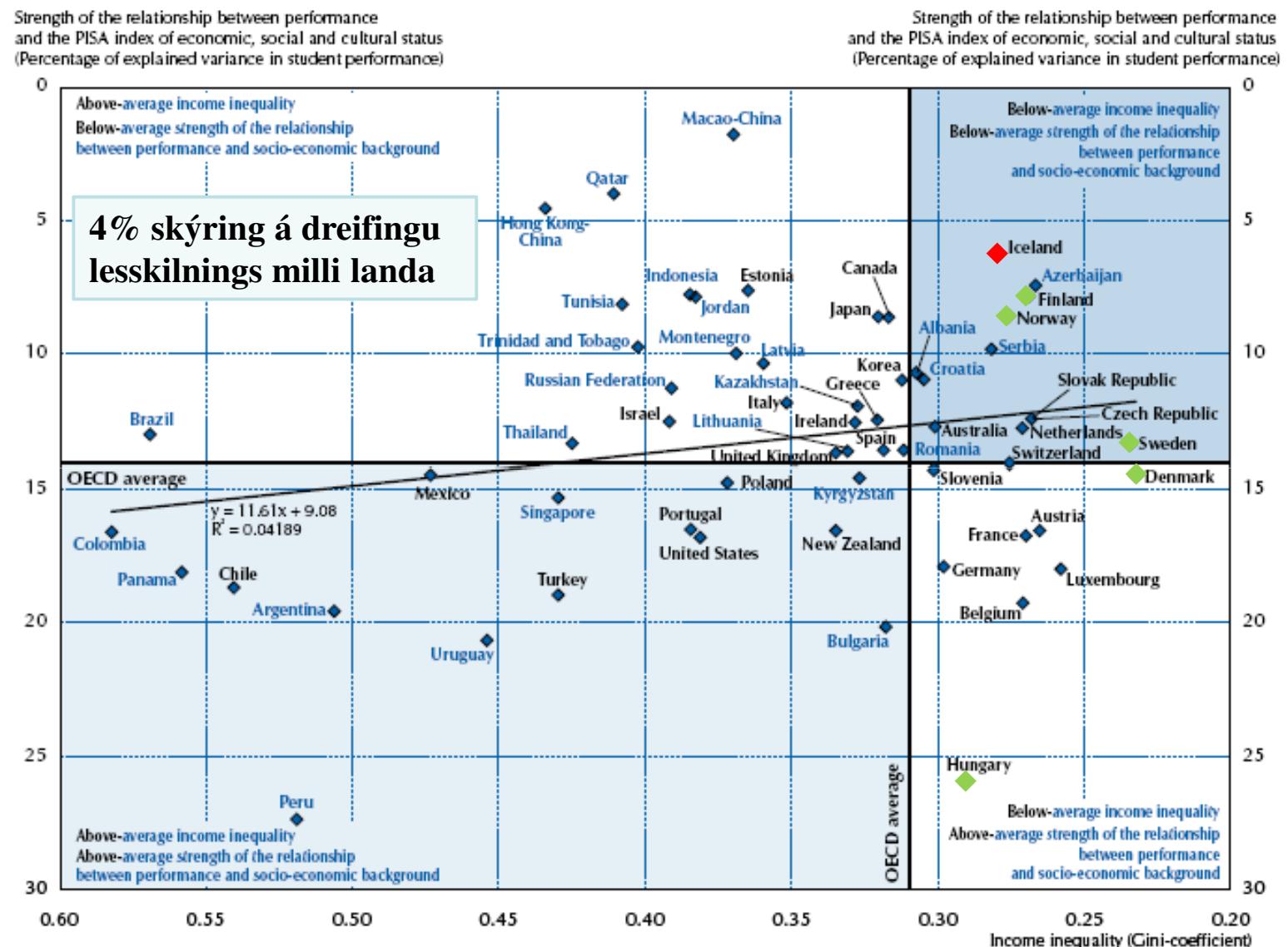
PISA index of economic, social and cultural status (socio-economic background)

- PISA mælikvarðinn sem tekur til efnislegrar, félagslegrar og menningarlegrar stöðu foreldra (e. Economic, social and cultural status) var gerður til að ná í einni mælingu skýrri og ítarlegri mynd af sem flestum bakgrunnsþáttum nemandans sem taka til heimils, stöðu og efnislegra gæða sem og þátttöku foreldra á vinnumarkaði.
- Þessi mælikvarði var búinn til úr eftirfarandi breytum:
 - Aðsta starf sem foreldrar gegna (e. Highest international socioeconomic index of occupational status), ISCO-88
 - Mesta menntun sem foreldrar hafa breytt í fjölda ára við nám (e. Highest educational level of parents)
- Veraldlegar eigur á heimili (e. Home possessions) sem fengið er með því að spyrja nemendur hvaða hlutir eru til á heimilinu:
 - Skrifborð til að læra við
 - Pitt eigið herbergi
 - Rólegur staður til þess að læra á
 - Fræðsluhugbúnaður
 - Tenging við Internetið
 - Þinn eigin vasareiknir
 - Sígildar bókmenntir (t.d. Halldór Laxness eða Íslendingasögurnar)
 - Ljóðabækur
 - Listaverk (t.d. málverk)
 - Bækur sem nýtast við lærðóm
 - Orðabók
 - Uppþvottavél
 - DVD spilari eða myndbandstæki
 - Öryggisgæsla eða öryggiskerfi
 - Gervihnattadiskur
 - Flatsjónvarp eða skjávarpi



■ Figure II.1.3 ■

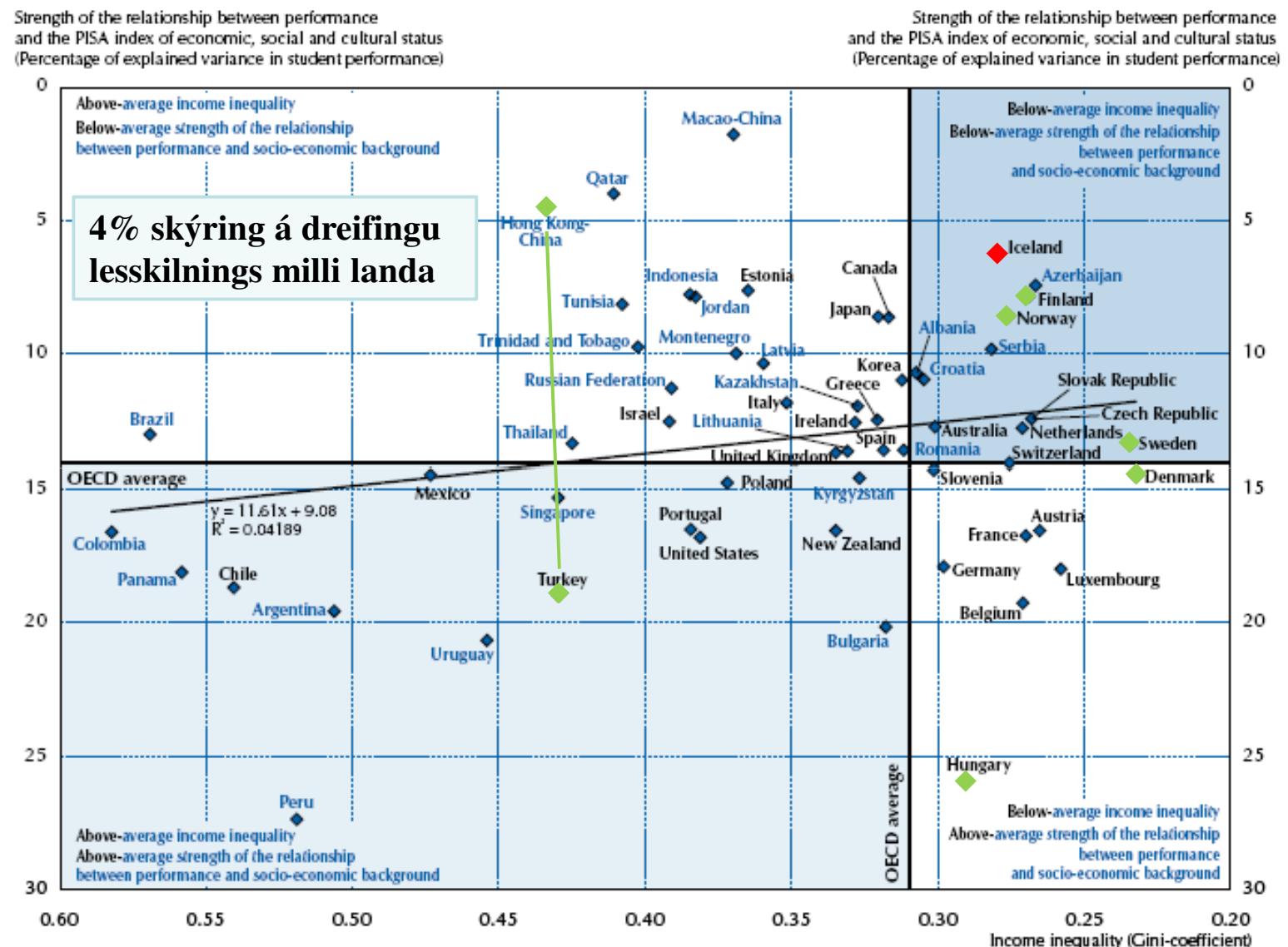
Income inequality in the population and strength of the relationship between socio-economic background and performance



- The weak relationship shown in Figure II.1.3 suggests that countries with similar levels of income inequality (Gini-coefficient) distribute learning opportunities very differently.
- This finding is important as it shows that equity in educational opportunities can be achieved even where income is distributed highly inequitably.
- For example, in Iceland and Hungary, two OECD countries with a Gini coefficient of around 0.29, close to the OECD average of 0.31, the proportion of the variation in student reading performance explained by the variation in students' socio-economic background is 6% and 26%, respectively.
- A wide range of countries sits between these two extremes.

■ Figure II.1.3 ■

Income inequality in the population and strength of the relationship between socio-economic background and performance



■ Figure II.2.1 ■

Performance differences among the highest- and lowest-achieving students

Gaps at the top and bottom end of the distribution of reading performance

Gap between 90th percentile and median student

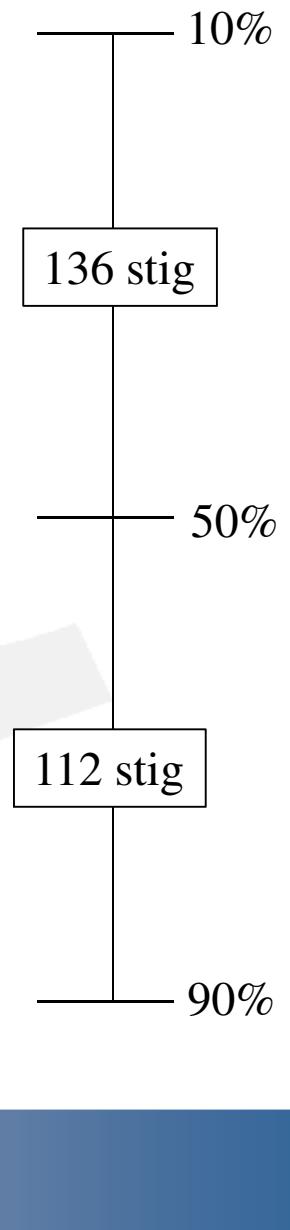
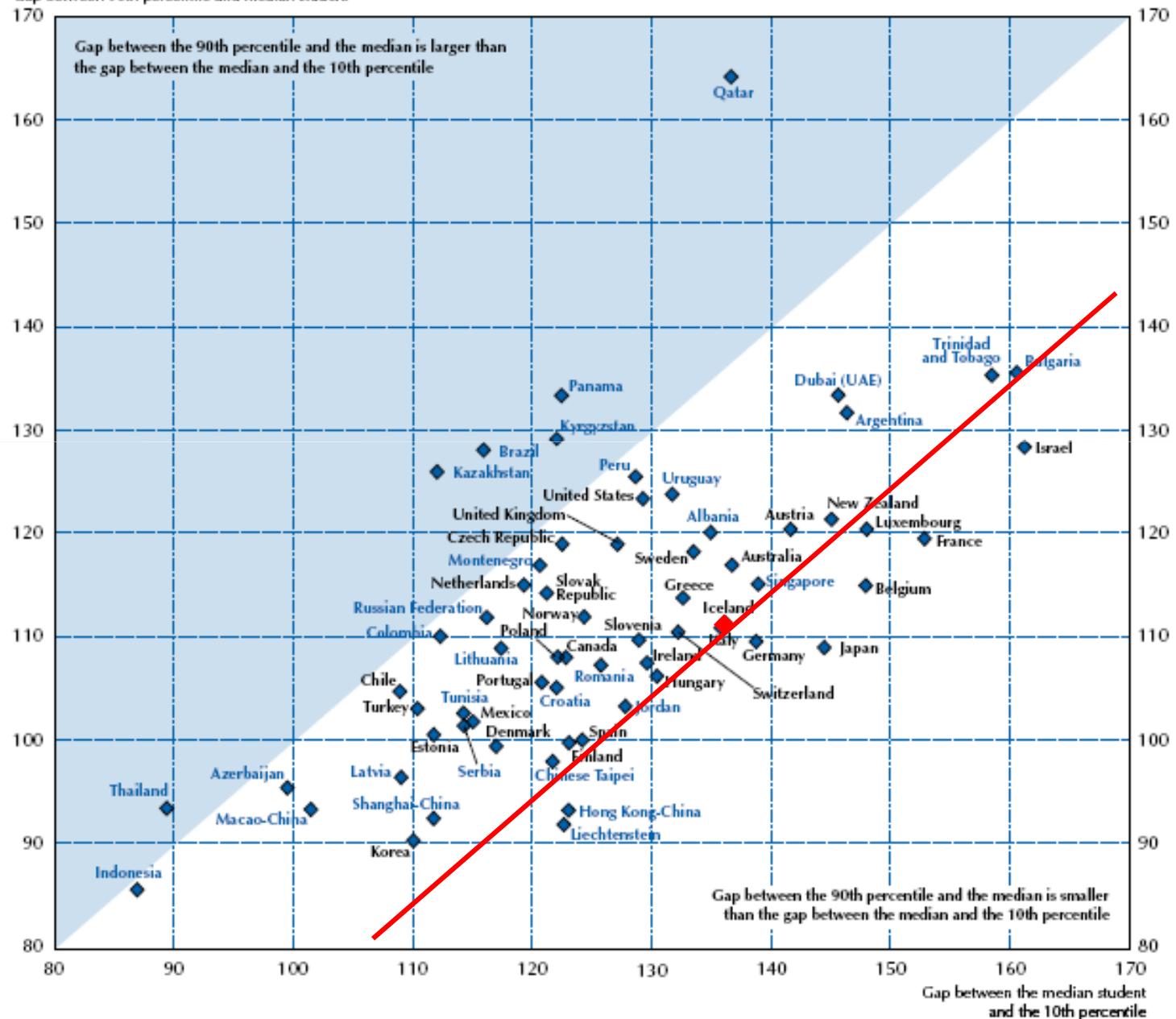
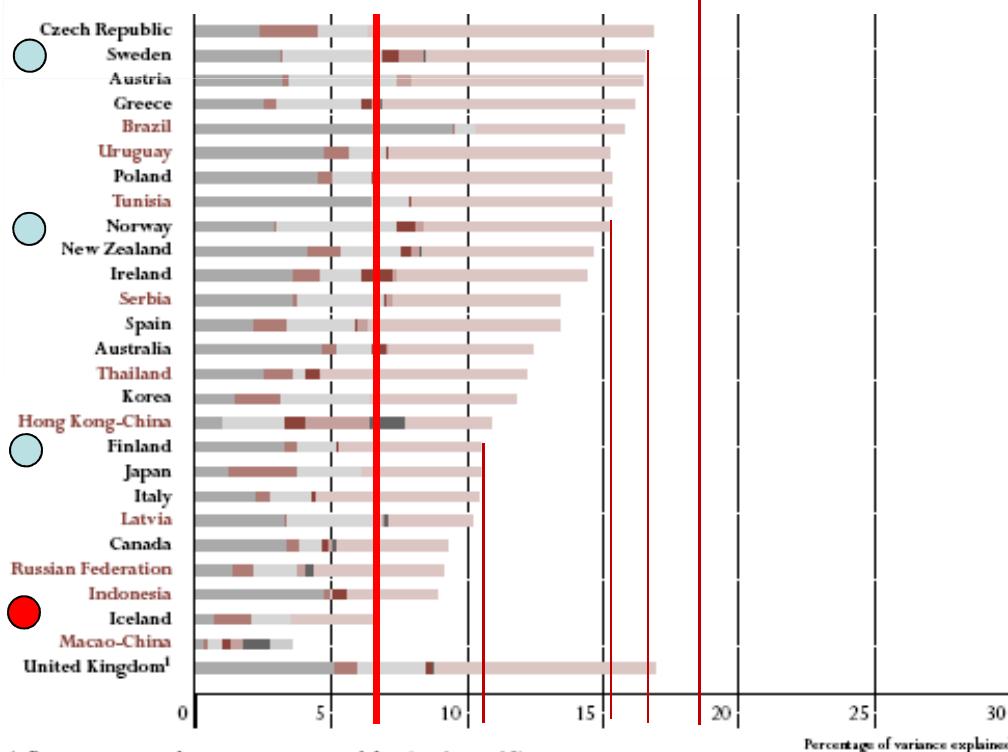


Figure 4.7 ■ Effect of student-level factors on student performance in mathematics

Performance variation that is attributable to:

- The highest international socio-economic index of occupational status (HISEI) between both parents
- The highest level of education between both parents
- Possessions related to "classical" culture
- Single-parent families
- Immigrant background
- The language spoken at home
- More than one of the above factors



1. Response rate too low to ensure comparability (see Annex A3).

Source: OECD PISA 2003 database, Table 4.2.

- Fleiri en einn þáttur
- Á Íslandi er samtals 7% af breytileika skýrður með þjóðfélagslegri stöðu nemenda:
 - Fjárhags- og félagsstaða (0,5%)
 - Menntun foreldra (1,5%)
 - Menningareigur (1,5%)
 - Börn einstæðra, áhrifin ekki mæld
 - Börn innflytjenda, áhrifin ekki mæld
 - Fleiri en einn þáttur (3,5%)

PISA 2009

- Tengsl lesskilnings við:
 - Fjárhags- og félagsstöðu foreldra
 - Menntun foreldra
 - Menningareigur
 - Börn einstæðra
 - Börn innflytjenda
 - Fleiri en einn þáttur
- Á Íslandi er samtals 15,5% af breytileika í lesskilningi skýrður með þjóðfélagslegri stöðu nemenda.

