

TO PISA OR NOT TO PISA - THE EDUCATION WORLD

MR. PETRI ILMONEN, DEVELOPMENT MANAGER, FAIDD

A) FINNISH EDUCATION SYSTEM
B) NEW PEDAGOGICAL
APPROACHES & THINKING
C) APPS IN EDUCATION



Plickers

A) LECTURE
B) LECTURE & PAIR/GROUP TALKS
C) A BIT OF EVERYTHING BUT
ACTIVATING

START VOTING
LIFT YOUR
PLICKER-CARD

HAVE YOUR
ANSWER'S
LETTER
ON THE TOP!



Plickers



Plickers



elisa 3G 13.41 80%

< Demo Class

● Live View updated

I am less interested of

- A Education in Eu
- B ICT in Edu
- C Apps that work
- D No sleeping

Scan



Plickers

A) LECTURE
B) LECTURE & PAIR/GROUP TALKS
C) A BIT OF EVERYTHING BUT
ACTIVATING

HOW WELL DO YOU KNOW THE PISA-STUDIES?



Explore. Learn. Share.



Plickers

- A) TOO WELL
- B) QUITE WELL
- C) A LITTLE BIT
- D) NOT AT ALL

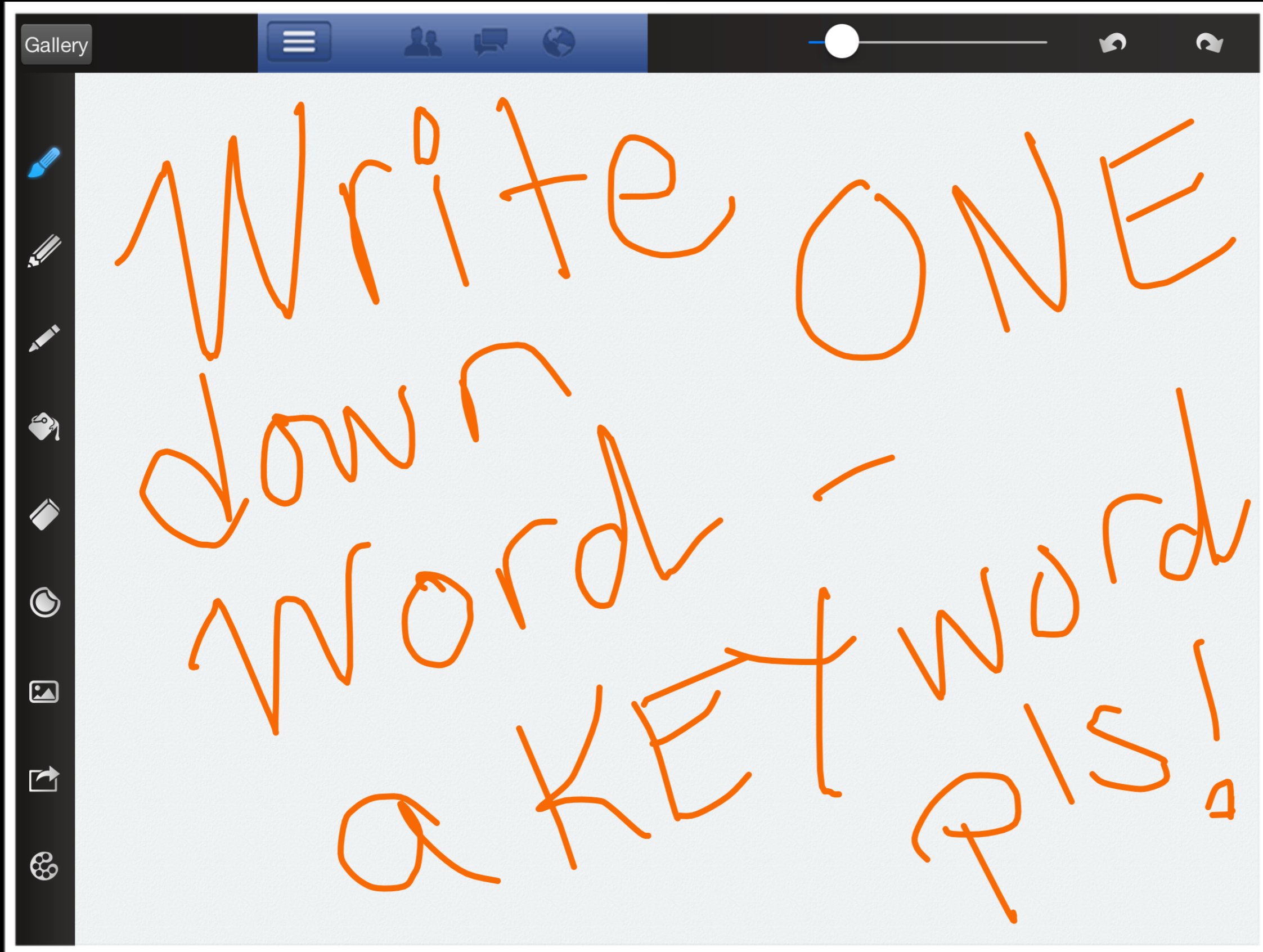


A KEY
ELEMENT
FOR
GOOD
LEARN-
ING?

ACTIVATE YOUR FINGER - USE DRAW FREE -APP



Draw Free

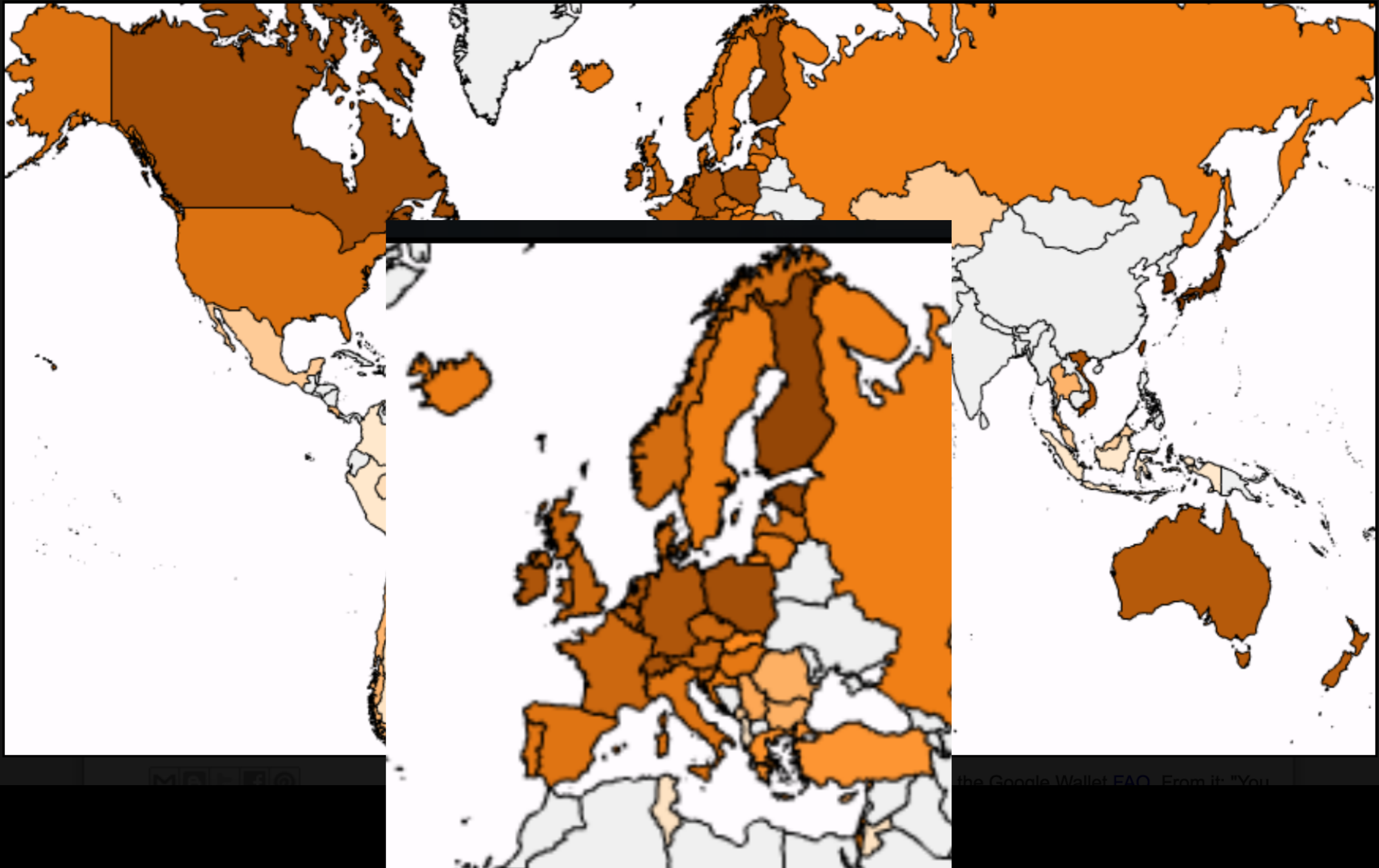


WHAT IS GOOD IN YOUR EDU. SYSTEM?



Draw Free

RULING THE ED. WORLD ACCORDING TO THE PISA TESTS

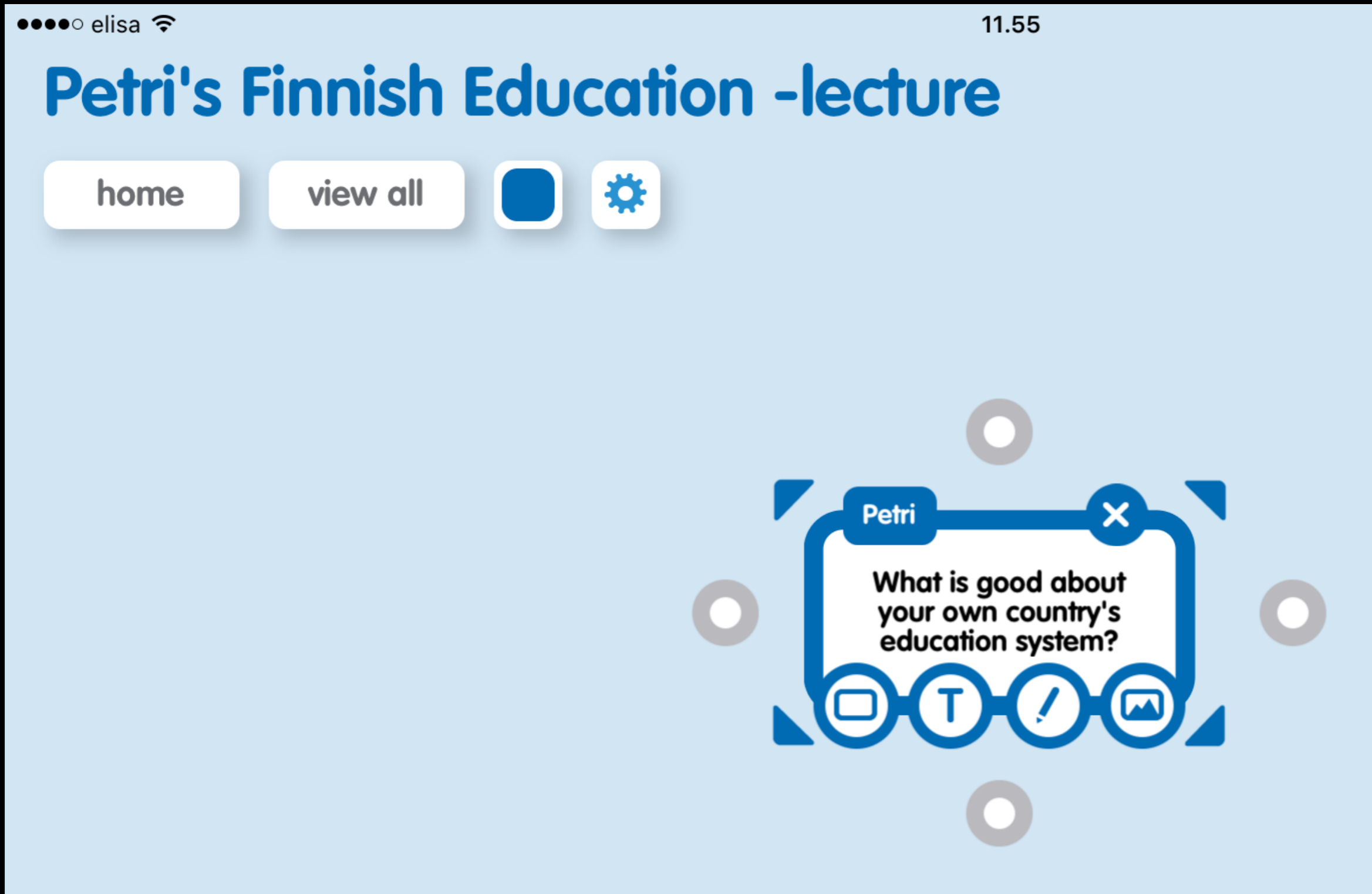


Source: OECD.COM

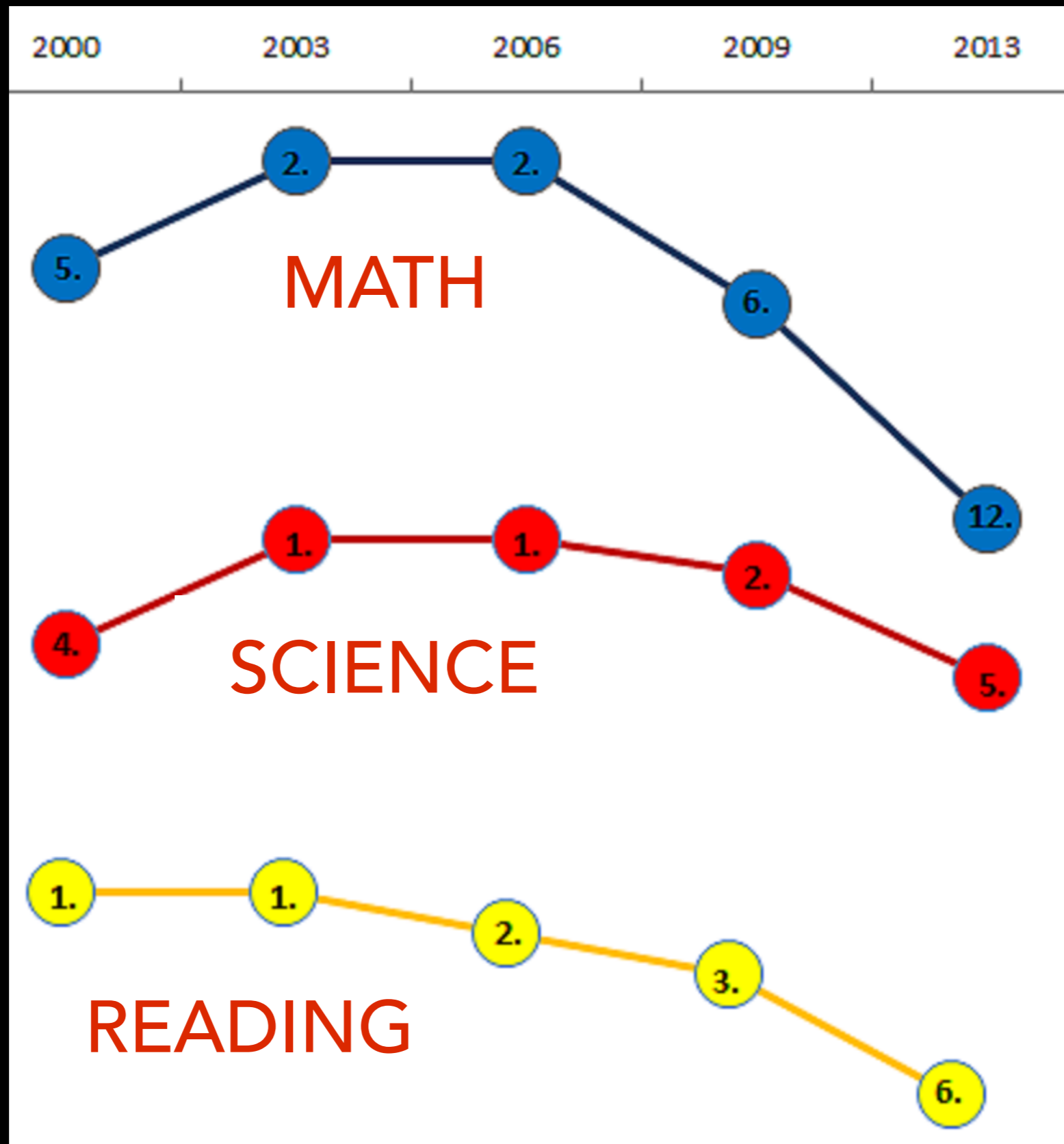


Happy 98th b-day Finland!

LET'S POPPLET - NO WE WON'T!



13 YEARS OF PISA - THE RANKING OF FINLAND



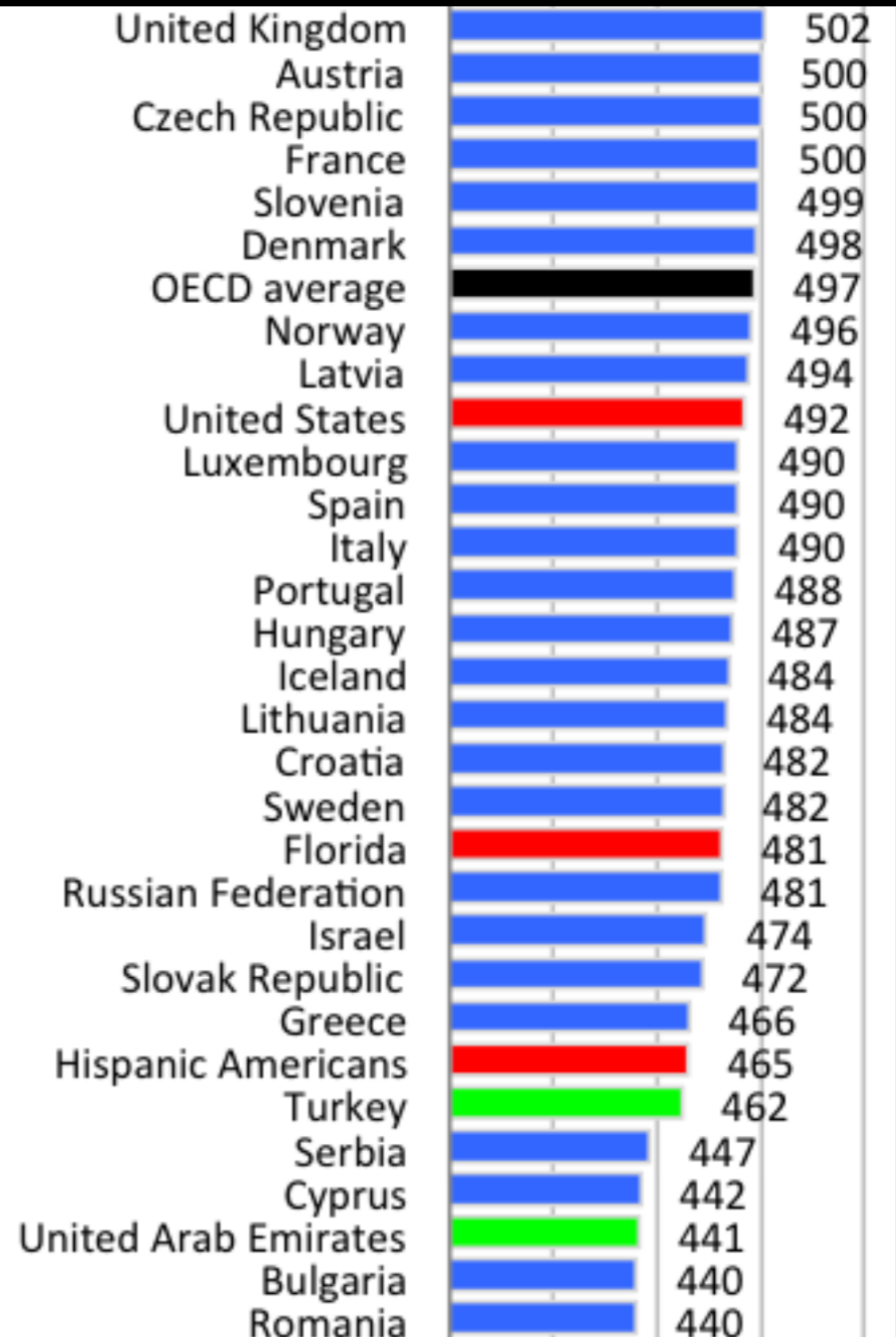
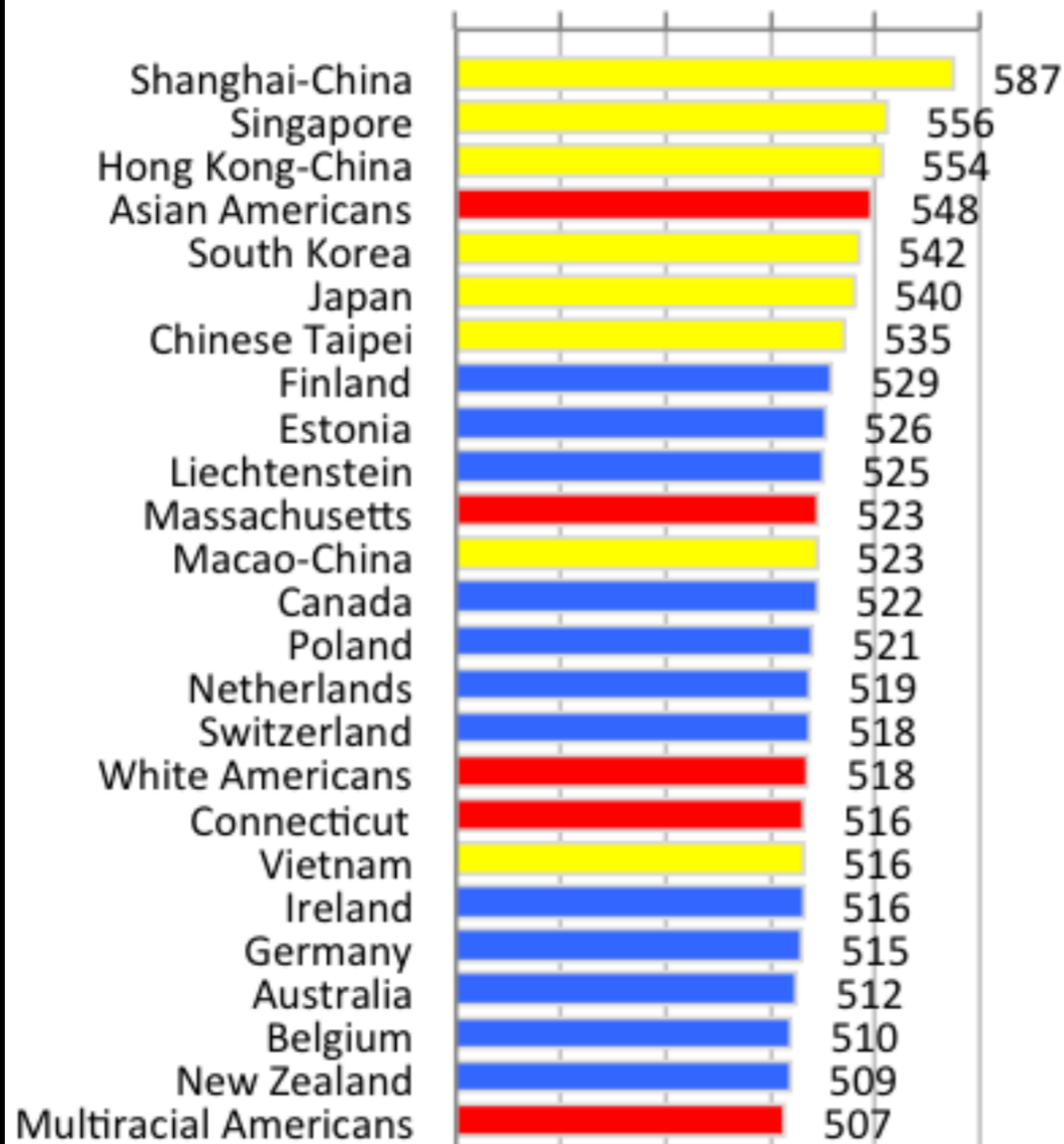
RULING THE ED. WORLD ACCORDING TO THE PISA TESTS

Maths				Sciences				Reading			
1		Shanghai, China	613	1		Shanghai, China	580	1		Shanghai, China	570
2		Singapore	573	2		Hong Kong, China	555	2		Hong Kong, China	545
3		Hong Kong, China	561	3		Singapore	551	3		Singapore	542
4		Taiwan	560	4		Japan	547	4		Japan	538
5		South Korea	554	5		Finland	545	5		South Korea	536
6		Macau, China	538	6		Estonia	541	6		Finland	524
7		Japan	536	7		South Korea	538	7		Taiwan	523
8		Liechtenstein	535	8		Vietnam	528	8		Canada	523
9		Switzerland	531	9		Poland	526	9		Ireland	523
10		Netherlands	523	10		Liechtenstein	525	10		Poland	518
11		Estonia	521	11		Canada	525	11		Liechtenstein	516
12		Finland	519	12		Germany	524	12		Estonia	516
13		Canada	518	13		Taiwan	523	13		Australia	512
14		Poland	518	14		Netherlands	522	14		New Zealand	512
15		Belgium	515	15		Ireland	522	15		Netherlands	511

Source: OECD.COM

OVER ALL RANKING

350 400 450 500 550 600



I am happy about
the PISA down fall

Reading 6th (1st in EU)

Math 12th (4th, after Liechtenstein, Swiss,
Holland, Estonia)

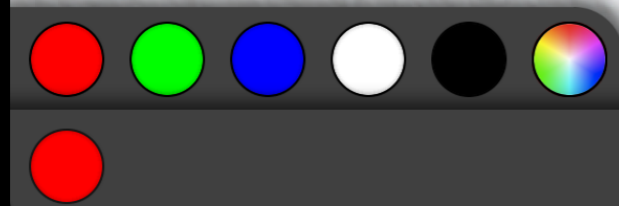
Science 5th (1st in EU)

Over all (1st in EU)

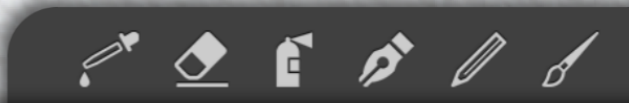


TIME TO ACTIVATE YOUR FINGER AGAIN
- THE SECRET OF FINLAND'S SYSTEM!

What's
Good



op.fi/Rahaa



HOW CAN WE RULE THE ED. WORLD?

FREE (INC. UNIVERSITY)

PRE-SCHOOL @6, SCHOOL @7

MASTER'S DEGREE

FREE LUNCHES

"FREE" CURRICULUM - 2/3

INDEPENDENCY & FREEDOM OF PEDAGOGICAL APPROACH
--> LEARNER CENTERED INTERACTION

RIGHT FOR SUPPORT - EVERY LEARNER MATTERS:

3 STAGES: EARLY, INTENSIVE & SEN

NO STAD. TESTING & RANKING (BOOKS, TEACHERS, LEARNERS)



DR. PASI SAHLBERG
UNIVERSITY OF HARVARD

WHY -
HOW DARE YOU?

How do we
evaluate our
teachers?

We never speak of this.

It is irrelevant in our country.

Instead, we discuss:
"How can we help them?"

Pasi Sahlberg
Finnish Educator and Scholar

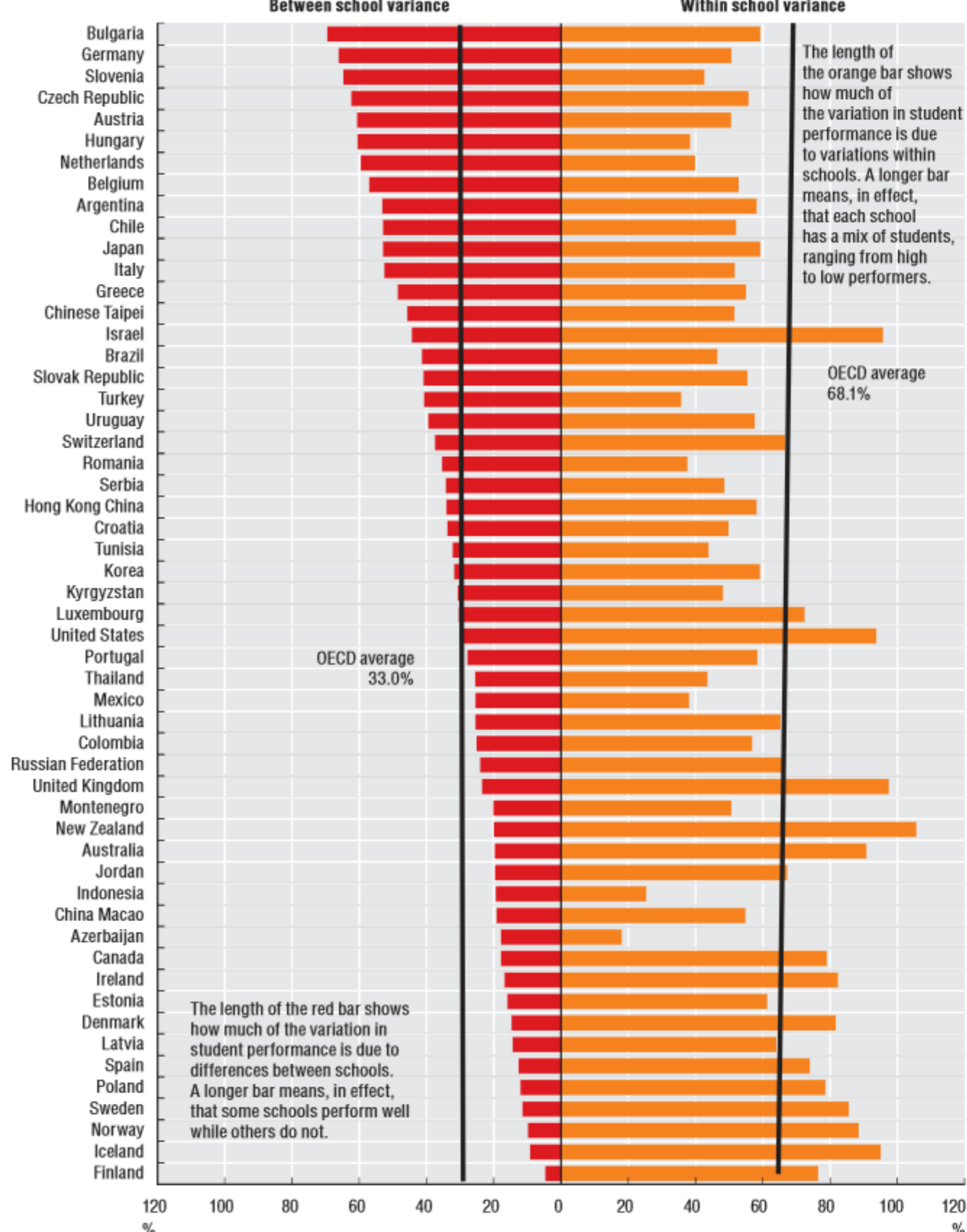


WHAT MAKES FINLAND SO GOOD?

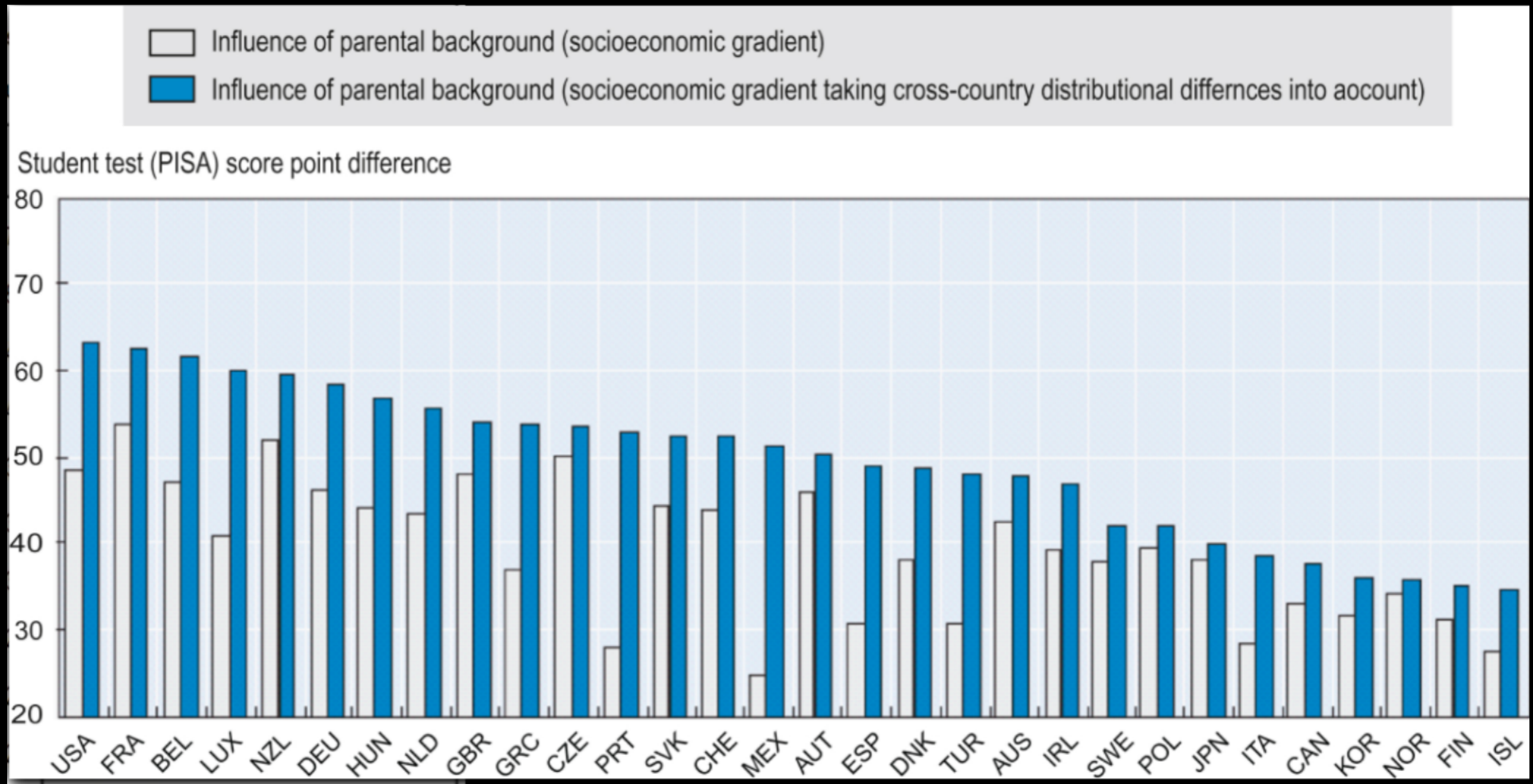
- SCHOOL AUTONOMY & IDENTITY
- LIMITING STUDENT TESTING
- PLANNING RESPONSIBILITY AND TRUST
- INVESTING IN EQUITY AND EQUALITY (EVERY CHILD)
- HANDLING LEADERSHIP TO EDUCATION PROFESSIONALS
- INTERNATIONAL INFLUENCE
- RESPECTFUL & INSPIRING WORKING CONDITIONS
- COOPERATION & COLLABORATION
 - NO TOUGH COMPETITION
- HIGH TEACHER EDUCATION PROGRAM
- FAIRNESS IN PAY

RULING THE ED. WORLD

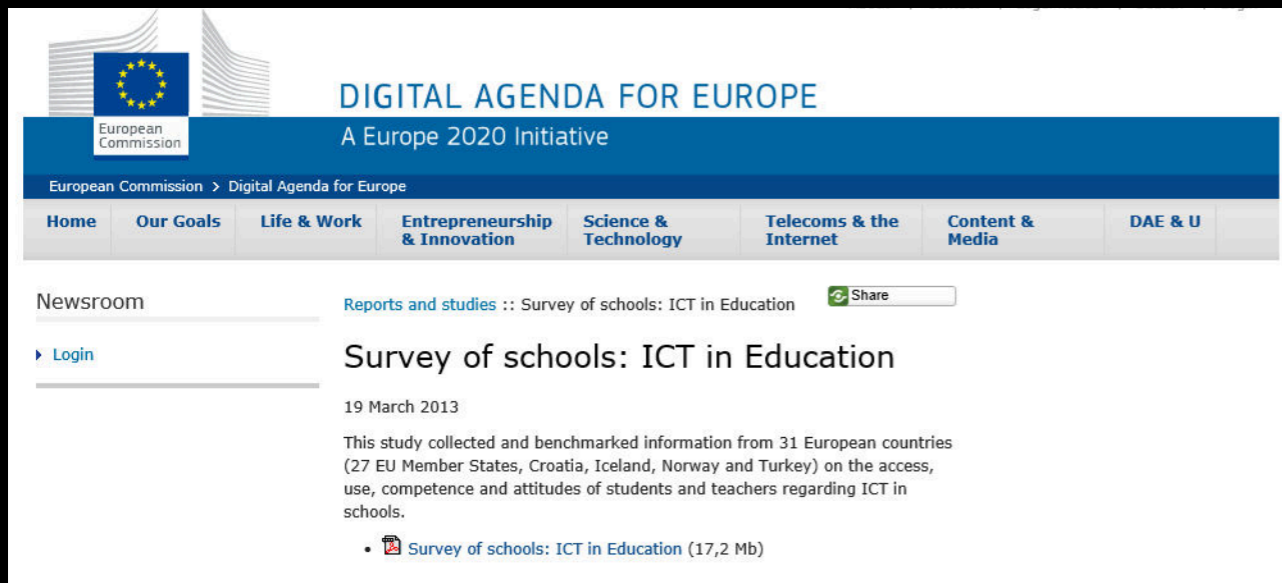
The difference between the schools is the smallest in the world



MONEY VS. EDUCATION



WHAT IS THE CHALLENGE?



The screenshot shows the European Commission website. At the top left is the European Commission logo. The main header reads "DIGITAL AGENDA FOR EUROPE" and "A Europe 2020 Initiative". Below this is a navigation menu with links for Home, Our Goals, Life & Work, Entrepreneurship & Innovation, Science & Technology, Telecoms & the Internet, Content & Media, and DAE & U. The main content area is titled "Newsroom" and features an article titled "Survey of schools: ICT in Education" dated 19 March 2013. The article text states: "This study collected and benchmarked information from 31 European countries (27 EU Member States, Croatia, Iceland, Norway and Turkey) on the access, use, competence and attitudes of students and teachers regarding ICT in schools." A download link for the survey report is provided at the bottom of the article.

European Commission

DIGITAL AGENDA FOR EUROPE
A Europe 2020 Initiative

European Commission > Digital Agenda for Europe

Home Our Goals Life & Work Entrepreneurship & Innovation Science & Technology Telecoms & the Internet Content & Media DAE & U

Newsroom

Reports and studies :: Survey of schools: ICT in Education [Share](#)

[Login](#)

Survey of schools: ICT in Education

19 March 2013

This study collected and benchmarked information from 31 European countries (27 EU Member States, Croatia, Iceland, Norway and Turkey) on the access, use, competence and attitudes of students and teachers regarding ICT in schools.

- [Survey of schools: ICT in Education \(17,2 Mb\)](#)

[http://ec.europa.eu/
information_society/newsroom/
cf/dae/itemdetail.cfm?
item_id=9920](http://ec.europa.eu/information_society/newsroom/cf/dae/itemdetail.cfm?item_id=9920)



Fig. 1.1d: Students per computer

(Grade 11 vocational, country and EU level, excl. LU, SE, 2011-12)



Fig. 1.6b: Students per data projector

(Grade 8, country and EU level, 2011-12)

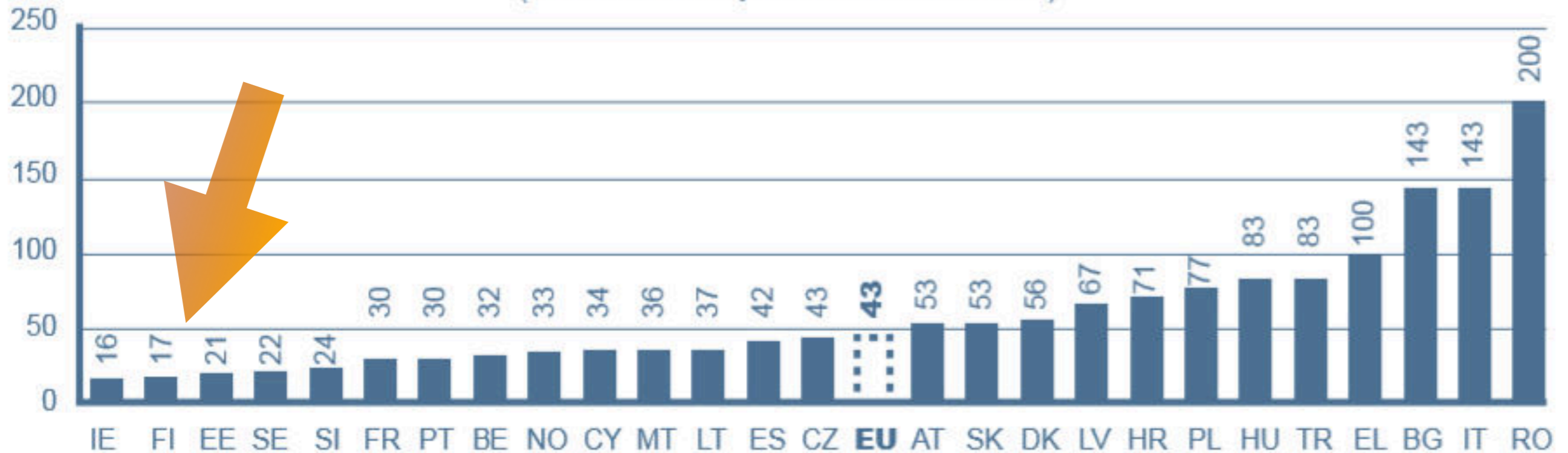


Fig. 1.10b: % of students in schools with a virtual learning environment
(Grade 8, country and EU level, 2011-12)

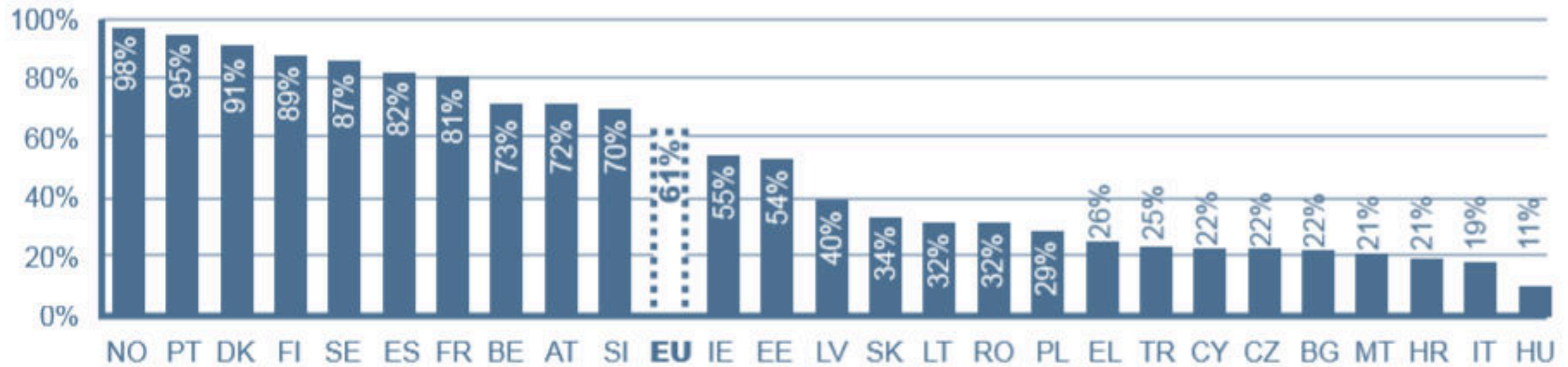


Fig. 1.10c: % of students in schools with a virtual learning environment
(Grade 11 general, country and EU level, 2011-12)

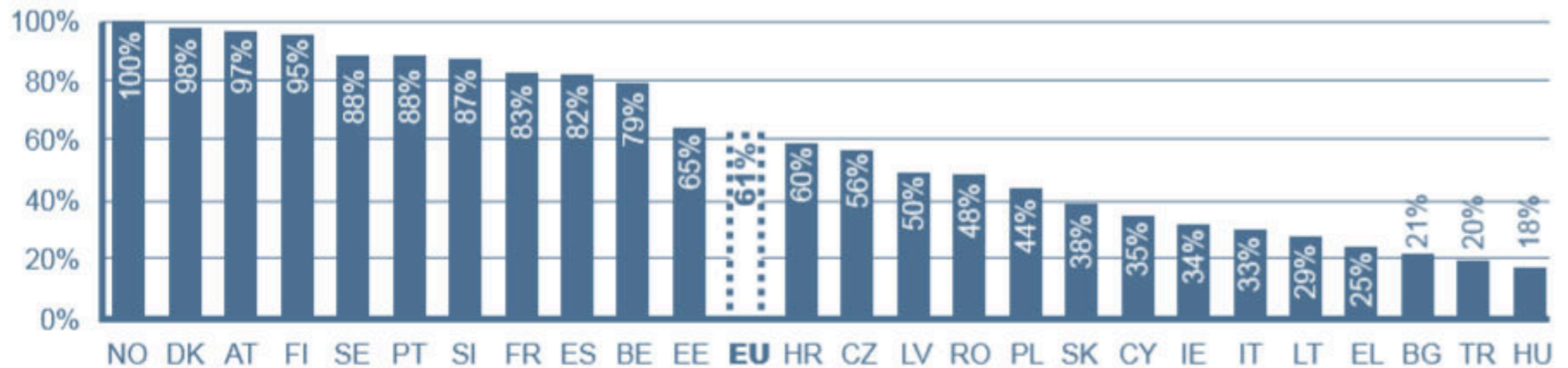


Fig. 1.9a: % of students in schools without broadband
(Grade 4, country and EU level, 2011-12)

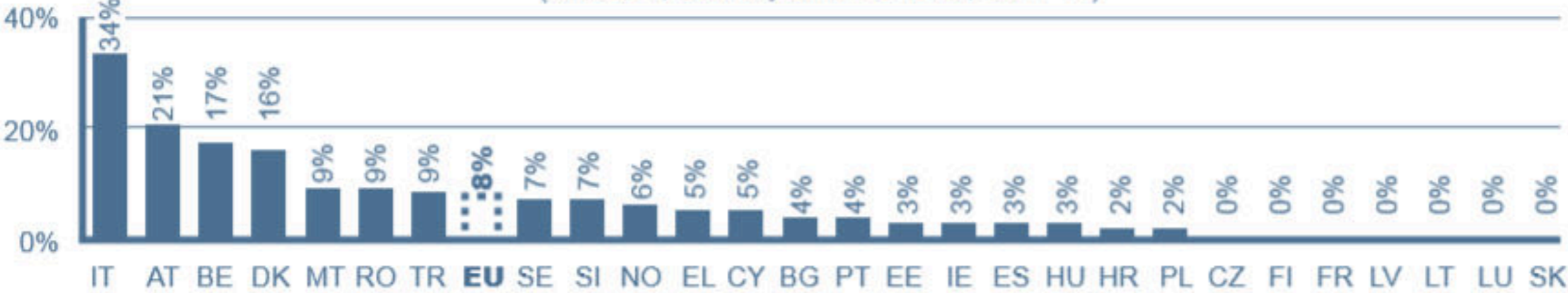


Fig. 2.8b: % students 'never or almost never' using a computer in lessons in the last year

(Grade 11 general, country and EU level, 2011-12)

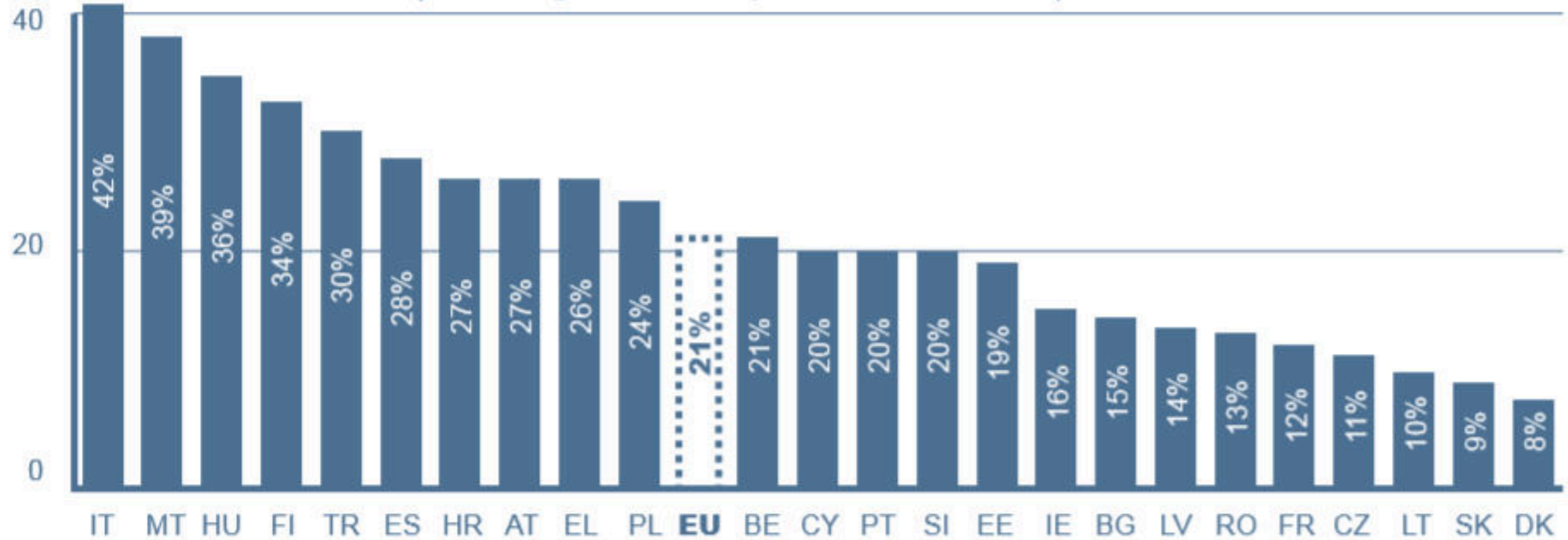
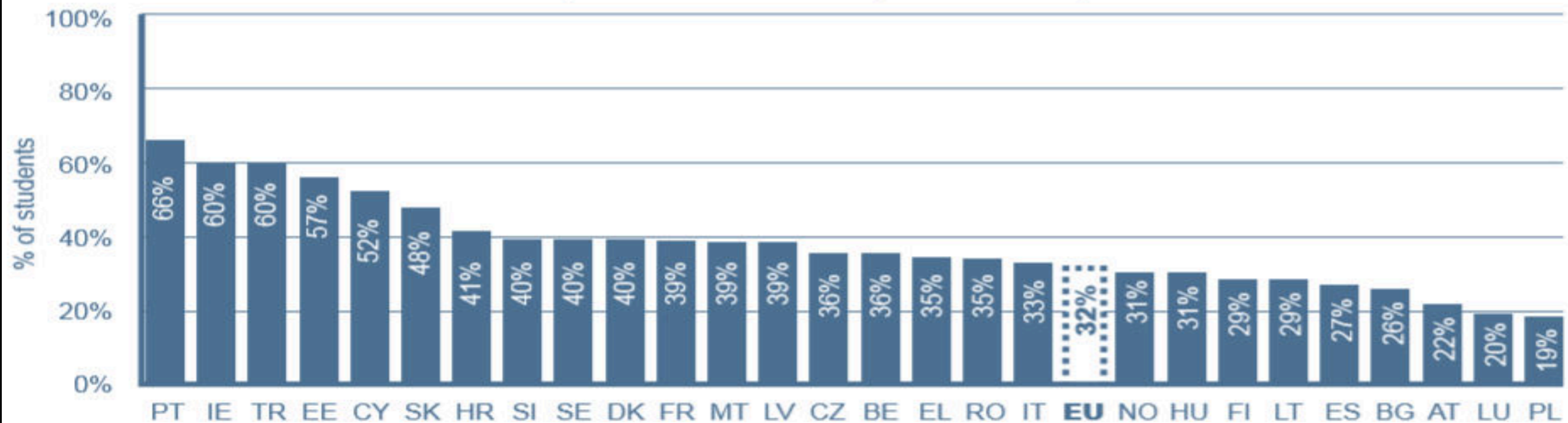


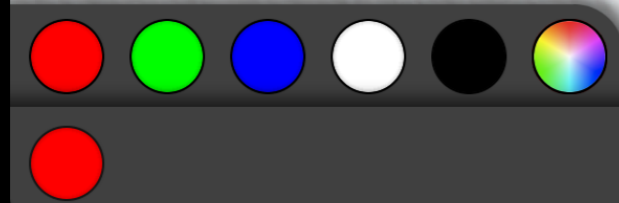
Fig. 2.2d: Teachers' use of ICT in more than 25% of lessons

(Grade 8, EU and country level, 2011-12)



PAPER EX -APP AND YOUR OWN FINGER...

What's
Good



op.fi/Rahaa



WHAT IS THE
FUTURE?

A REFORM
OF THE CORE
CURRICULUM



GOALS OF LEARNING

REMEMBER

CONTENT

SEARCH FOR
INFORMATION

ROUTINE
COGNITIONS

GOALS OF LEARNING

KNOWLEDGE
BUILDING

SKILLS

KNOWHOW TO
ORGANIZE
INFORMATION

HIGHER
COGNITIONS

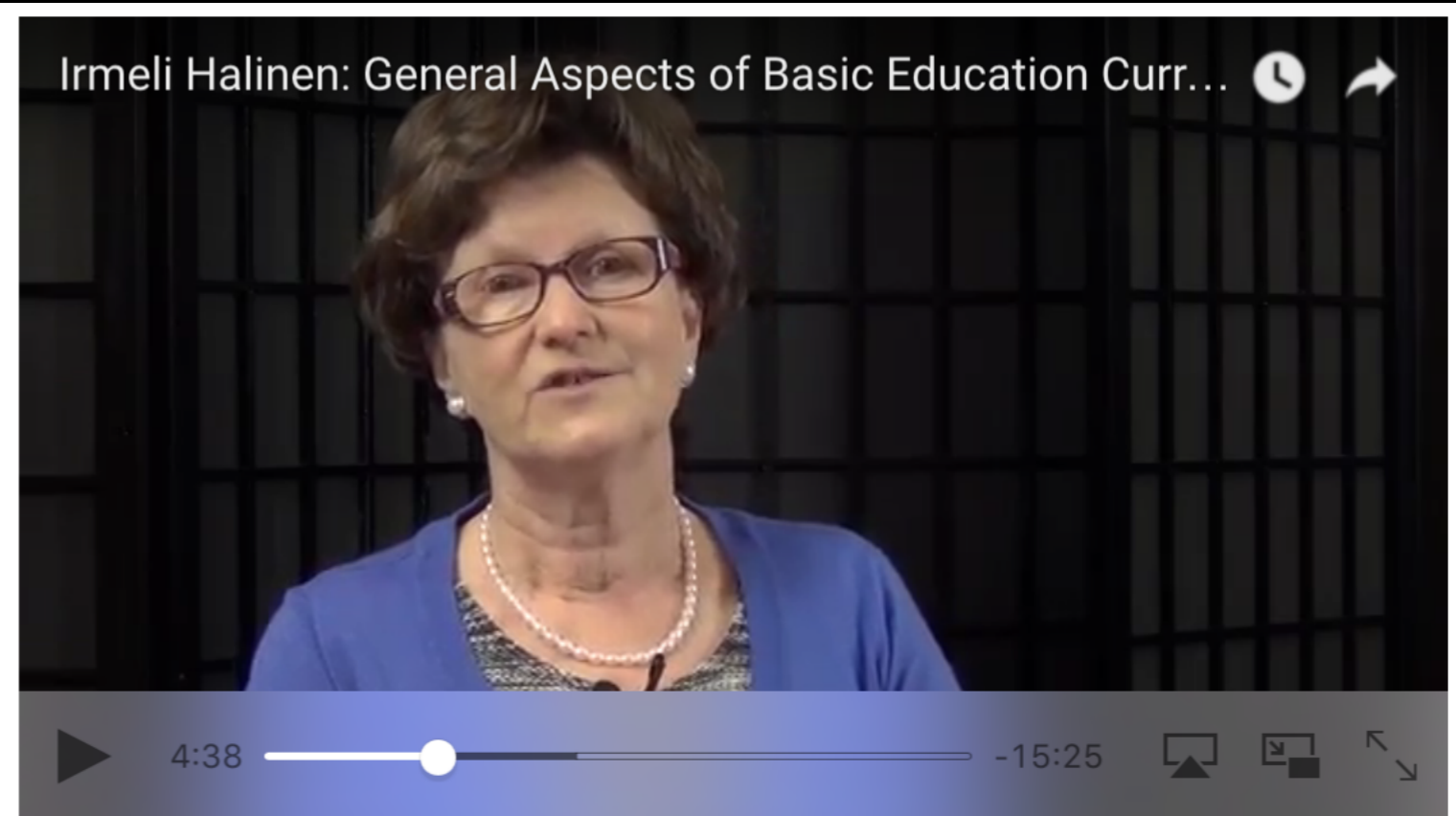
NATIONAL BOARD OF
EDUCATION

MS. IRMELI HALINEN

"HIGH QUALITY OF
EDUCATION IS A BASIC
RIGHT"

"IN EDUCATION
WE BUILD
THE FUTURE"

4:38-6:20



Ms Irmeli Halinen, Head of curriculum development with Finnish National Board of Education, discusses the basic education curriculum reform in Finland.

[http://oph.fi/english/education_development/current_reforms/
curriculum_reform_2016](http://oph.fi/english/education_development/current_reforms/curriculum_reform_2016)

kerroin
Tassu. Se oli hyvä
ni nukkuu pehmeään
päällä. Se oli hyvin
oira. Tassu sai jokato
sai mehukkaita
sikein

NEW NATIONAL CURRICULUM

Kaunokirjoitus on suoraviivaistunut vuosikymmenien aikana

1931

1950

Aa

Aa

Hh

Hh

17?

17?

1986

2004

Aa

Aa

Hh

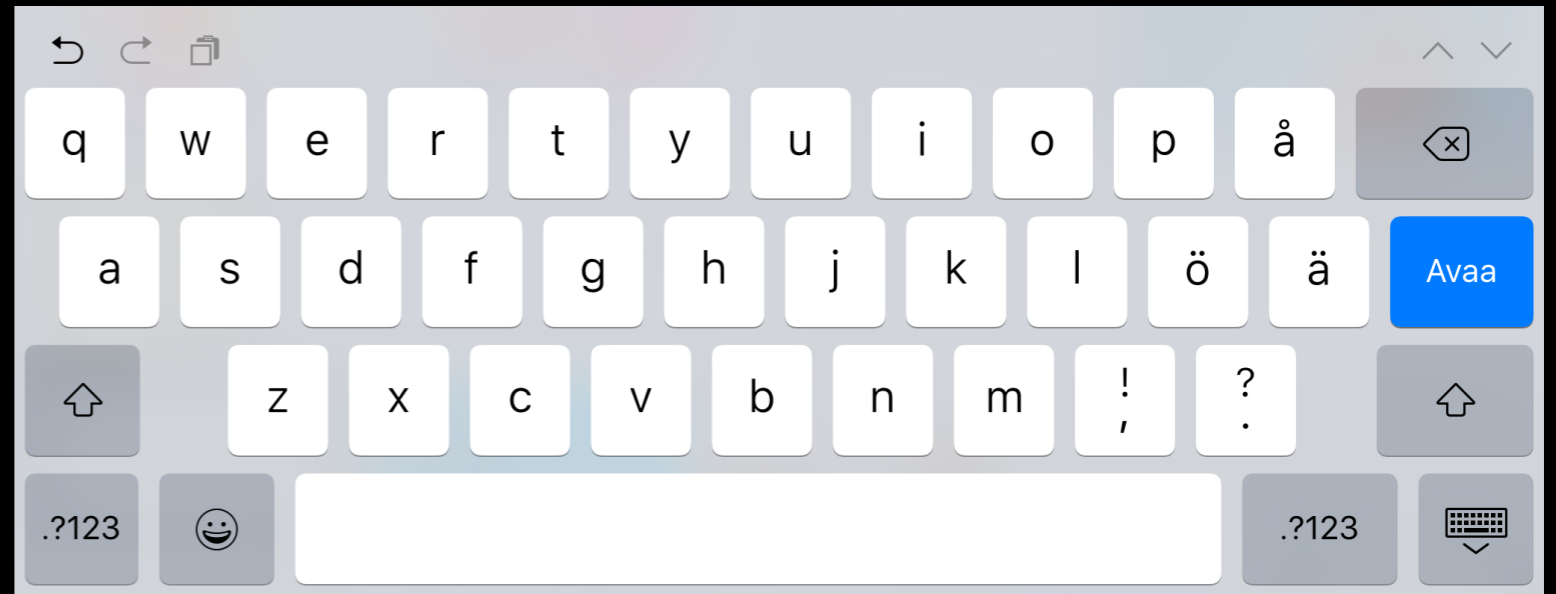
Hh

17?

17?

Lähteet: Opetushallitus ja Ringvall Leena: Käsialan opetus ja sen asema Suomen koululaitoksessa vuosina 1866–2004, pro gradu -tutkielma, Turun yliopisto, Rauman opettajankoulutuslaitos, 2007

Koonnut: HEIDI LÄMSÄ HS, grafiikka: PETRI SALMÉN HS



ABCDEFGHIJ
KLMNOPQRSTU
VWXYZÅÄÖ
abcdefghijklmnopq
rstuvwxyzääö

OPETUSHALLITUS
Mallikirjaimet, numerot ja muut merkit
1.8.2015
© Jarno Lukkarila, Typolar

0123456789
-.,!/?€

WHAT WILL CHANGE?

PHENOMENON BASED LEARNING / BROADWAY BASED COMPETENCE

- THINKING & LEARNING
- CULTURAL COMPETENCE, INTERACTION AND EXPRESSION
- LOOKING AFTER ONESELF, SAFETY
- MULTILITERACY
- ICT COMPETENCE (DIGITAL LEAP, CODING)
- ENTREPRENEURSHIP & WORKING LIFE COMPETENCE
- PARTICIPATION, EMPOWERMENT AND RESPONSIBILITY

WHAT WILL CHANGE?

FOUR CEES-POLICY

CREATIVITY

CRITICAL THINKING

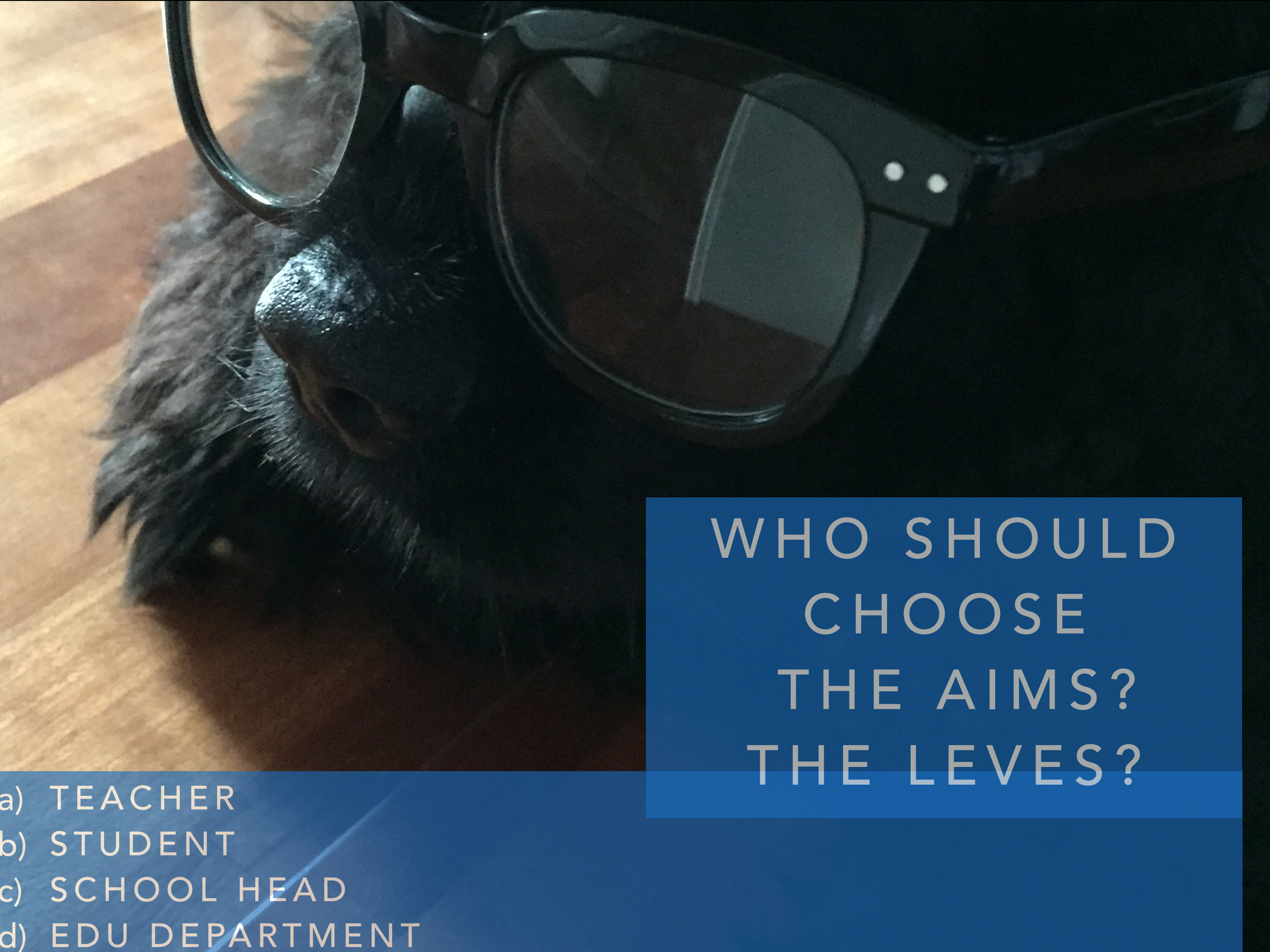
COMMUNICATION

COOPERATION



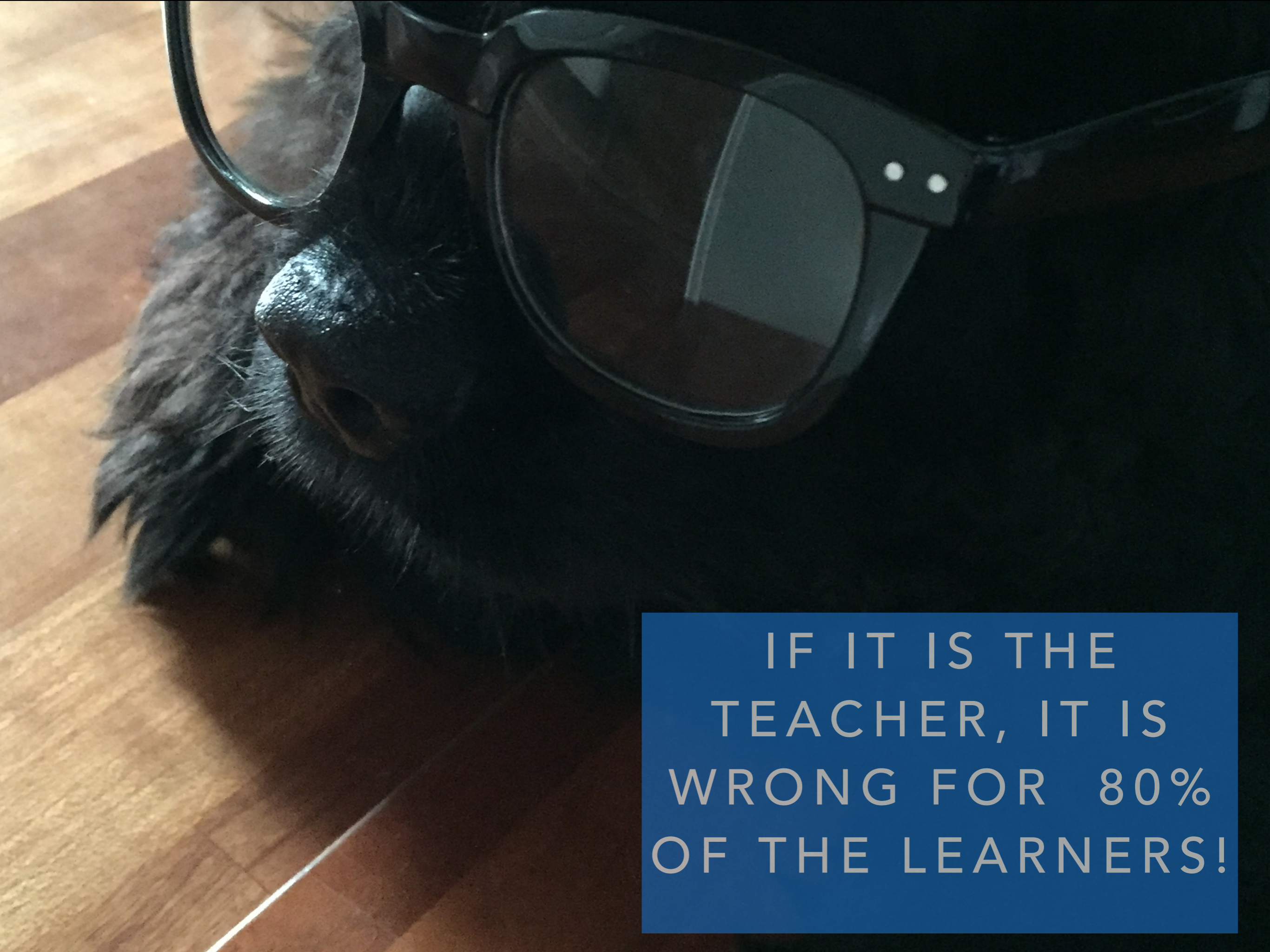
Plickers

A
TEST



WHO SHOULD
CHOOSE
THE AIMS?
THE LEVES?

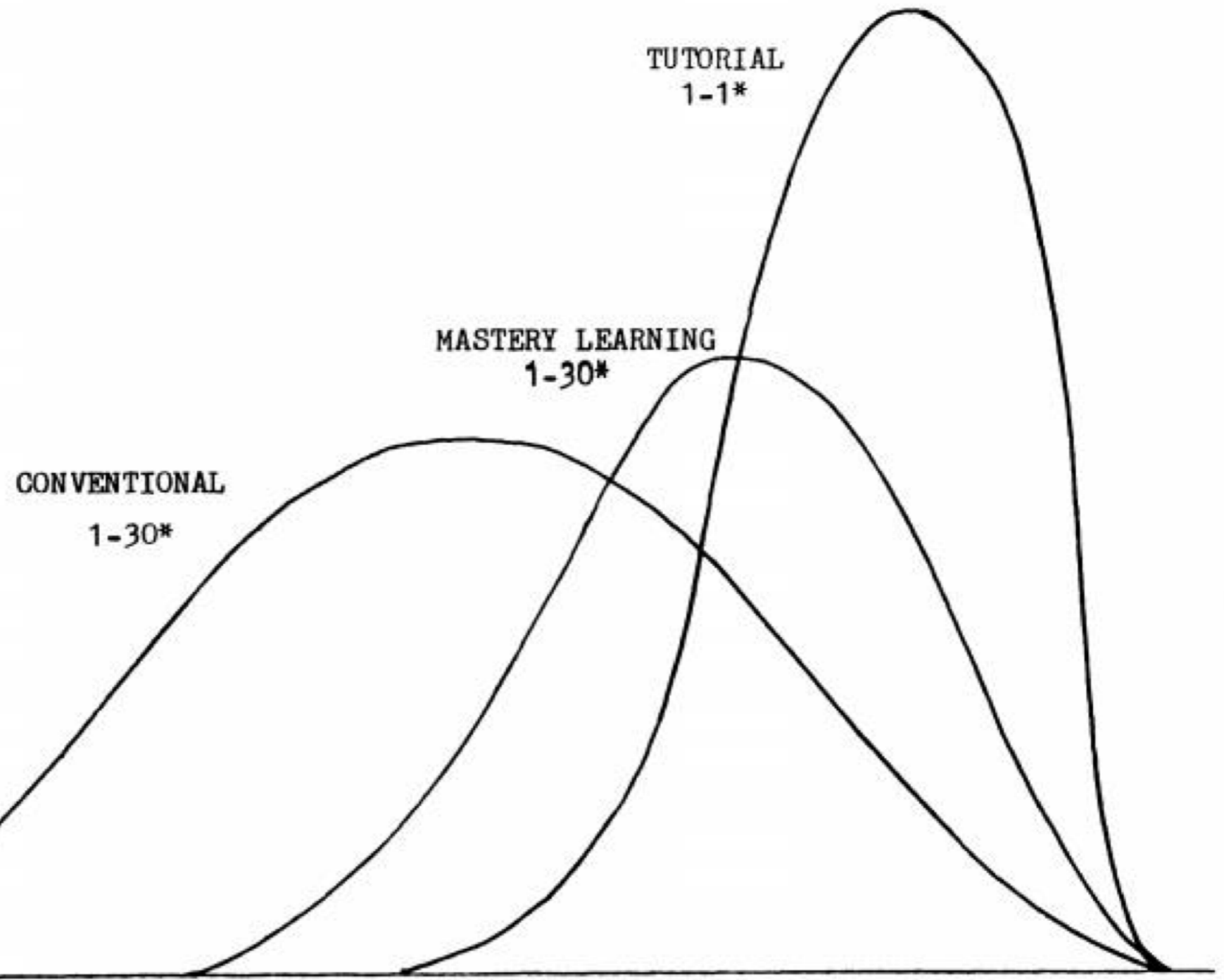
- a) TEACHER
- b) STUDENT
- c) SCHOOL HEAD
- d) EDU DEPARTMENT



IF IT IS THE
TEACHER, IT IS
WRONG FOR 80%
OF THE LEARNERS!

Mastery Learning

(Bloom 1971, 1984)



Summative Achievement Scores

Pekka Peura 2014

*Teacher-student ratio



DON'T READ TO YOUR
TEST
- THAT SHOWS ONLY
WHAT YOU HAVE
MEMORIZED YESTEDAY

HOW MUCH HOME
WORK?

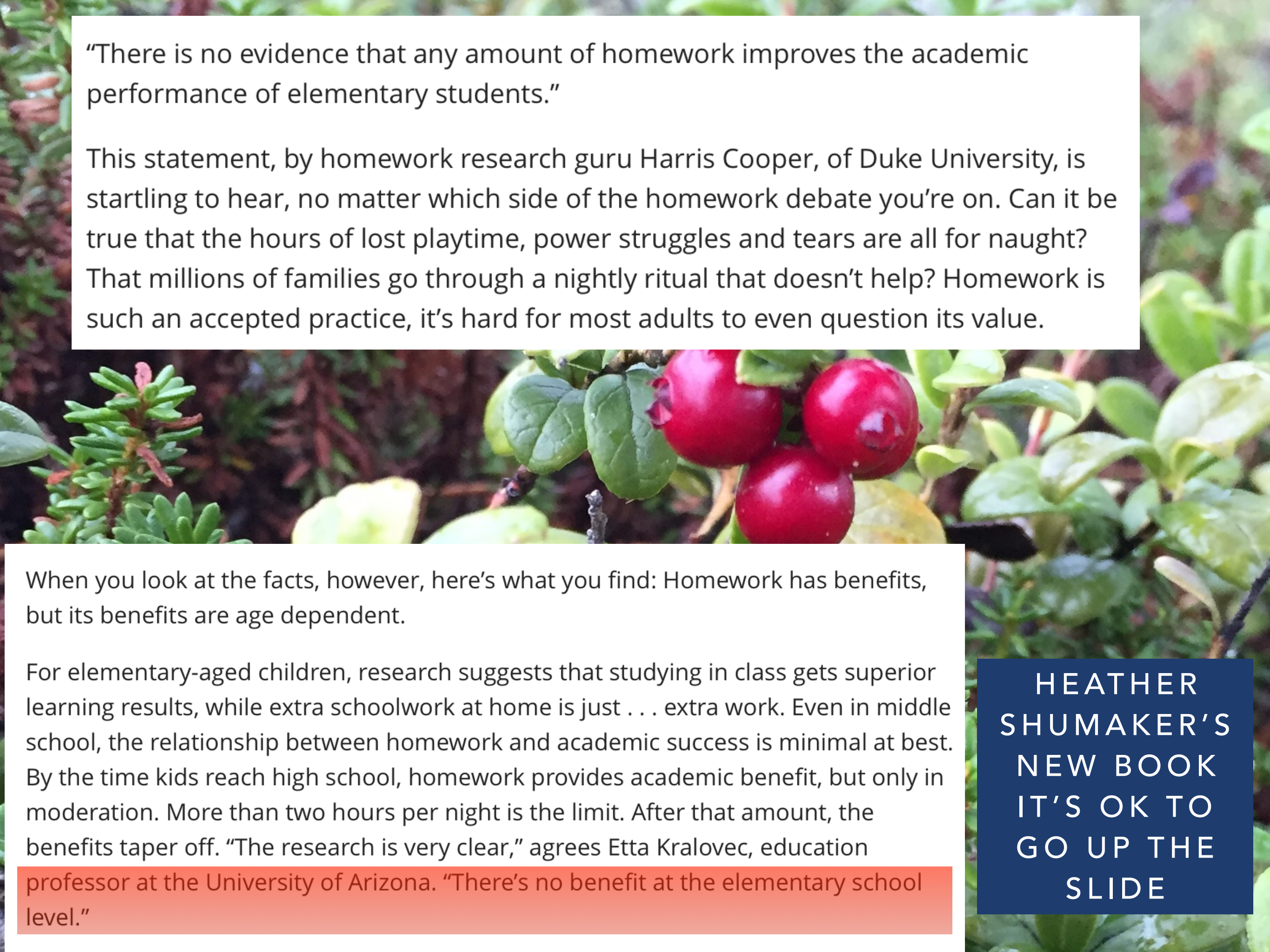
A) NOTHING OR <15 MIN

B) <30 MIN

C) <1H

D) 2H OR MORE





“There is no evidence that any amount of homework improves the academic performance of elementary students.”

This statement, by homework research guru Harris Cooper, of Duke University, is startling to hear, no matter which side of the homework debate you're on. Can it be true that the hours of lost playtime, power struggles and tears are all for naught? That millions of families go through a nightly ritual that doesn't help? Homework is such an accepted practice, it's hard for most adults to even question its value.

When you look at the facts, however, here's what you find: Homework has benefits, but its benefits are age dependent.

For elementary-aged children, research suggests that studying in class gets superior learning results, while extra schoolwork at home is just . . . extra work. Even in middle school, the relationship between homework and academic success is minimal at best. By the time kids reach high school, homework provides academic benefit, but only in moderation. More than two hours per night is the limit. After that amount, the benefits taper off. “The research is very clear,” agrees Etta Kralovec, education professor at the University of Arizona. “There's no benefit at the elementary school level.”

HEATHER
SHUMAKER'S
NEW BOOK
IT'S OK TO
GO UP THE
SLIDE



REFLECTION TIME

Dr Edward de Bono's

Six Thinking Hats®



Red Hat

intuition, hunches,
feelings, emotions



White Hat

information available
and needed, facts, data



Yellow Hat

benefits, value,
positive aspects



Black Hat

caution, difficulties,
risks, weaknesses



Green Hat

creative ideas,
alternatives, possibilities

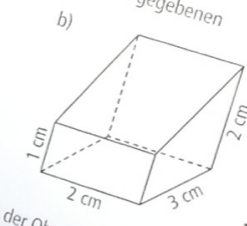
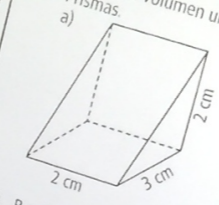


Blue Hat

managing the thinking,
focus, summary

PER - Rückblick

1. Bestimme Volumen und Oberfläche des gegebenen Prismas

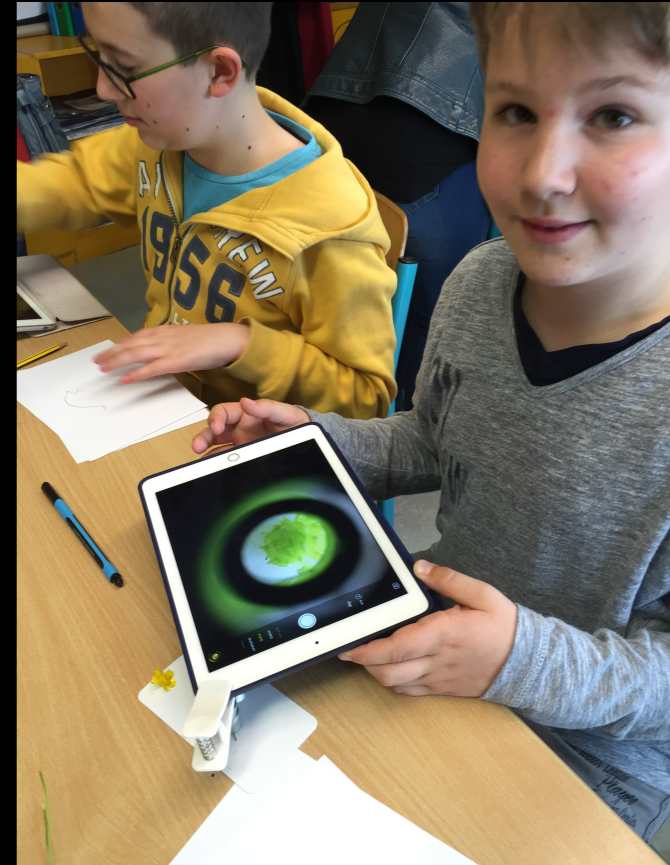
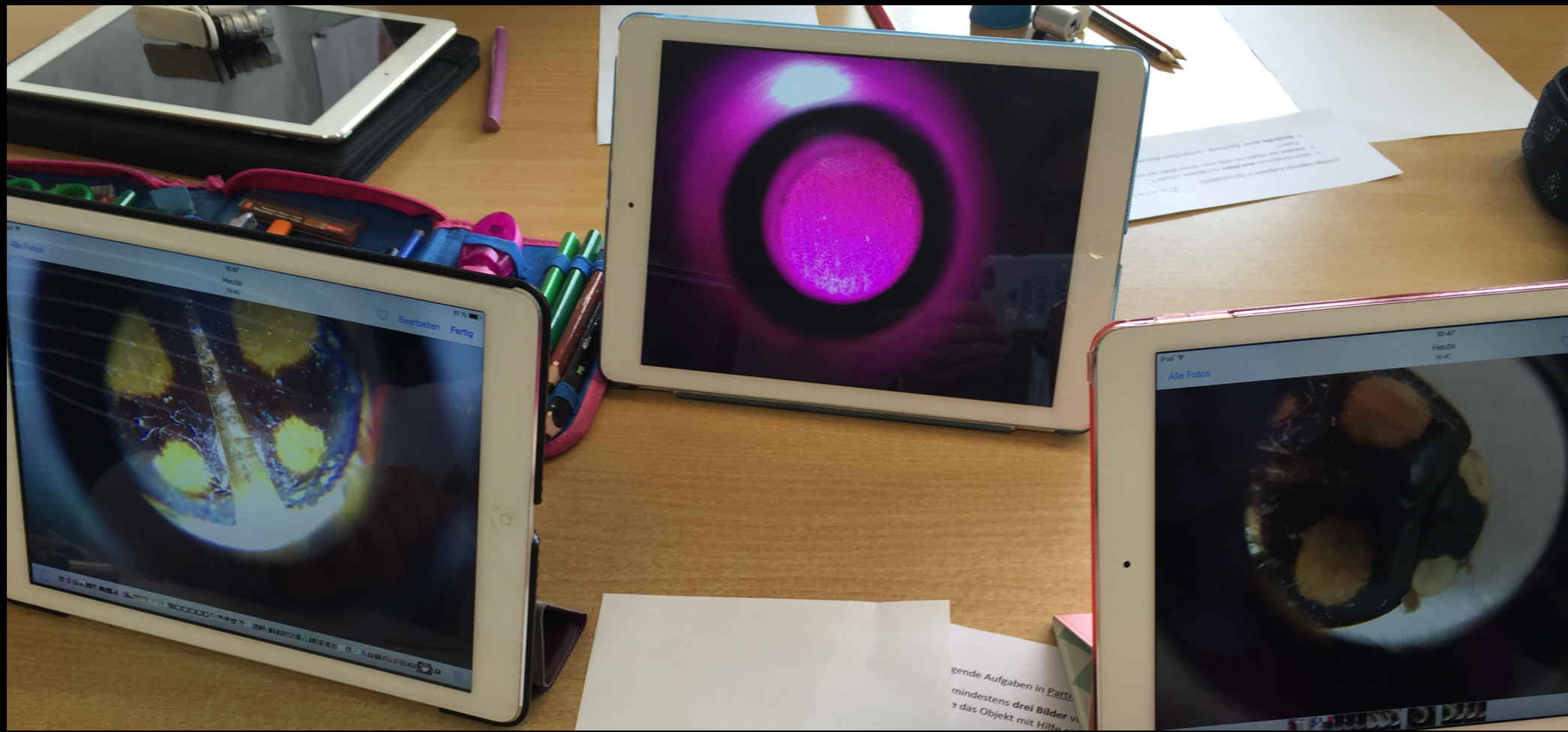


2. Bestimme Volumen und Größe der Oberfläche des gegebenen Zylinders.
a) $r = 15 \text{ mm}; h = 25 \text{ mm}$
b) $r = 7,5 \text{ cm}; h = 13,4 \text{ cm}$
c) $r = 48,25 \text{ dm}; h = 7,75 \text{ m}$
d) $d = 27,0 \text{ cm}; h = 2,5 \text{ dm}$

3. Welche Masse hat ein Zylinder mit $r = 8,5 \text{ cm}$ und $h = 10 \text{ cm}$?

Handwritten notes on a grid notebook. The notes include:
200) $V = \pi \cdot r^2 \cdot h$
157) $V = 3712 \text{ cm}^3$
2) $V = \pi \cdot r^2 \cdot h$
147) $V = 157 \text{ cm}^3$
Below these are some partially legible notes:
 $r = 15 \text{ mm}$
 $V = \pi \cdot 15^2 \cdot 25$
 $V = 15708 \text{ mm}^3$
 $V = 157 \text{ cm}^3$





Ranking	Country	Efficiency Scores	PISA rank (2012 Maths)
1	Finland	87.81%	5
2	Korea	86.66%	1
3	Czech Republic	84.38%	14
4	Hungary	84.08%	24
5	Japan	83.88%	2
6	New Zealand	83.30%	12
7	Slovenia	83.28%	10
8	Australia	81.23%	9
9	Sweden	80.58%	23
10	Iceland	79.39%	17
11	UK	78.71%	16
12	France	78.69%	15
13	Israel	77.84%	25
14	Netherlands	76.80%	4
15	Ireland	76.80%	11
16	Austria	74.68%	8
17	Norway	74.05%	18
18	Belgium	73.52%	6
19	USA	72.66%	22
20	Chile	72.54%	28
21	Turkey	71.44%	27
22	Denmark	70.60%	13
23	Italy	69.81%	20
24	Portugal	68.29%	19
25	Germany	67.01%	7
26	Spain	63.09%	21
27	Grece	60.64%	26
28	Switzerland	59.71%	3
29	Indonesia	51.13%	30
30	Brazil	25.45%	29

8.39

Profiili

Tim Walker
@timdwalk SEURAA SINUA

American teacher at a Finnish public school, blogging at TaughtByFinland.com & moderating #FinnEdChat
about.me/timothydwalker

8 288 TWIITIT 200 SEURATUT 3 275 SEURAAJAT Seurataan

Tim Walker @timdwalk 1 h
Teacher spends two days as a student and is shocked at what she learns buff.ly/1ta0FNC #edchat #HGSEa317

Tim Walker @timdwalk 3 h
Why is bilingual education 'good' for rich kids but 'bad' for poor, immigrant students? buff.ly/1zABlpY #edchat #edreform

Tim Walker @timdwalk 4 h
TIME Magazine Attacks America's Teachers: Write a Letter to TIME

Am I being biased?

8.41

An American teacher loves teaching in Finland, but he wants to change one thing - T...
www.taughtbyfinland.com/home/an-american-teacher-loves-...n-finland-but-he-wants-to-change-one-thing#.VE86pbQaySM

Want to know when a new post is out? Join 1000 others. [→](#)

Taught by Finland

An American teacher loves teaching in Finland, but he wants to change one thing
9/6/2014 6 Comments

[Tykkää](#) [Jaa](#) 985 henkilöä tykkää tästä. Rekisteröidy ja näe, mistä kaverisi tykkäävät.

Follow Taught by Finland on Facebook!

Follow [Jaa](#)

CNN NEWS REPORT

◀ Takaisin ohjelmaan Safari 17.46



0:00 2:58

Education Finland has best education system in the world NBC NightlyNews_09292010

181 426 näyttökertaa

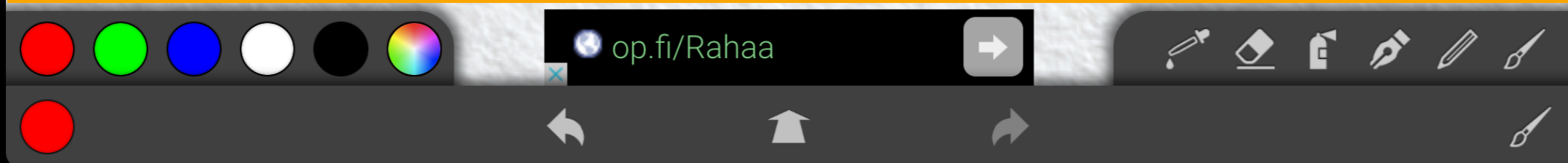
676 12

The image shows a video player interface. At the top, there is a navigation bar with a back arrow, the text 'Takaisin ohjelmaan Safari', and the time '17.46'. The video frame shows a male news anchor in a dark suit and purple striped tie, speaking. An 'Education Nation' logo is overlaid on the right side of the video. The video progress bar at the bottom shows '0:00' and '2:58'. Below the video, the title 'Education Finland has best education system in the world NBC NightlyNews_09292010' is displayed, along with '181 426 näyttökertaa' (views) and engagement icons for likes (676) and comments (12).

http://youtu.be/0_9s3A2pcA

THERE IS ALWAYS THE THIRD...

NAME ONE



ALL IN ALL - 3 POINTS

PEDAGOGICAL FREEDOM

LET'S FINNISH TEACHERS TEACH THEIR LEARNERS TO

LEARN - NOT JUST TO PASS A TEST

HOLISTIC GROWTH

SCHOOL NEEDS TO BE READY TO RECEIVE

ALL CHILDREN JUST AS THEY ARE

HAVE A HEART

LOVE WHAT YOU DO

[HTTP://YOUTU.BE/C9EGZ9HXFEI](http://youtu.be/C9EGZ9HXFEI)

Teacher Compliments Students And It's Turning His Classroom Around



0:00

1:05



A photograph of the Aurora Borealis (Northern Lights) in a dark night sky. The aurora displays vibrant green and purple bands. In the foreground, the dark silhouettes of several pine trees are visible against the glowing light.

@PILMONEN
PETRI.ILMONEN@KVL.FI

RESOURCES: WWW.VISITFINLAND.FI WWW.OPH.FI WWW.OPM.FI
WWW.OECD.COM





**GOOD TEACHERS
USE
GOOD TOOLS**