



# LEARNING

TO REALIZE EDUCATION'S PROMISE

#wdr2018

[www.worldbank.org/wdr2018](http://www.worldbank.org/wdr2018)

# Education generates multiple benefits



## Individual



## Country



### Economic

Better employment  
Higher income  
More job stability  
Less poverty

More economic growth  
Less inequality  
More economic and social mobility

### The promise of education

### Non economic

Better health  
Fewer unplanned teen pregnancies  
More life satisfaction  
Less crime

More social capital  
More opportunities for redistribution  
Institutional strengthening  
Democratic values

# Yet, investments are not yielding maximum results



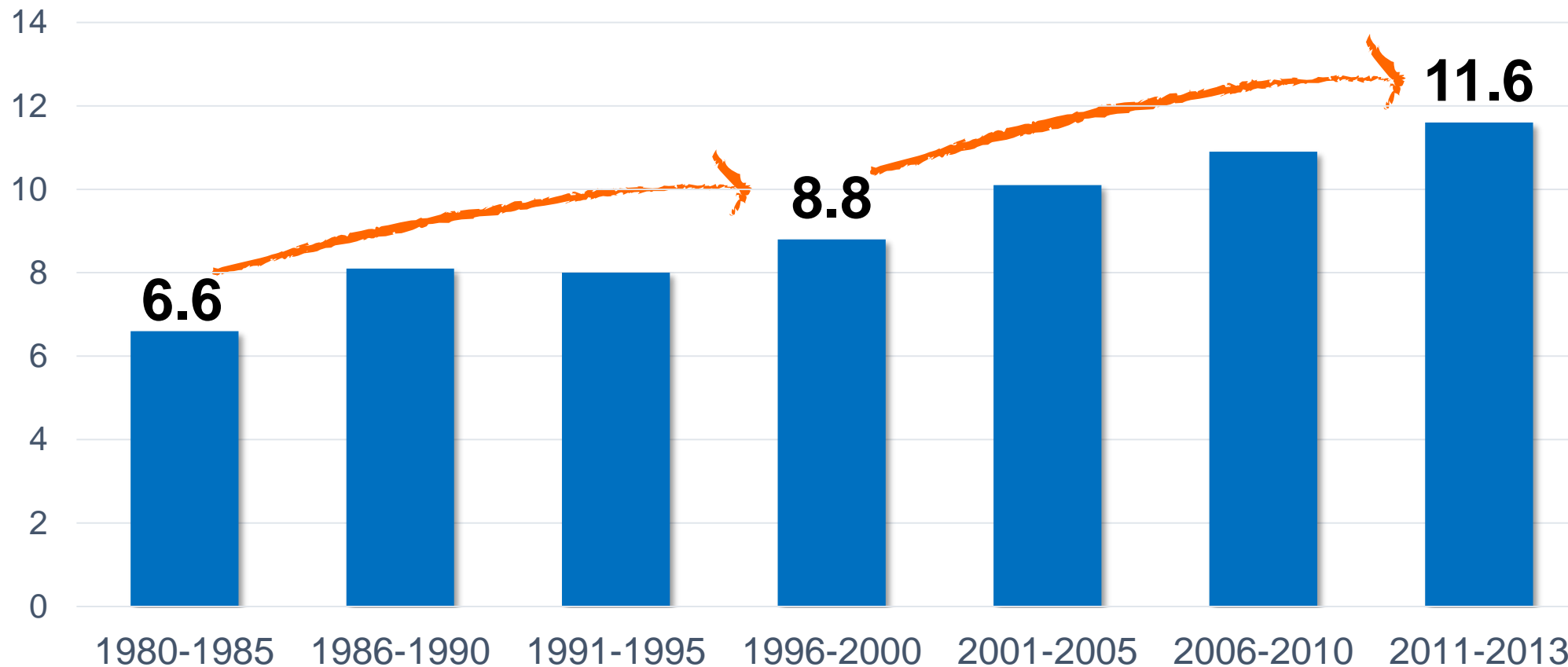
The promise  
of  
education

## Why?

Education can't  
do it alone...

... too many children and  
young people enroll in school  
but they do not learn

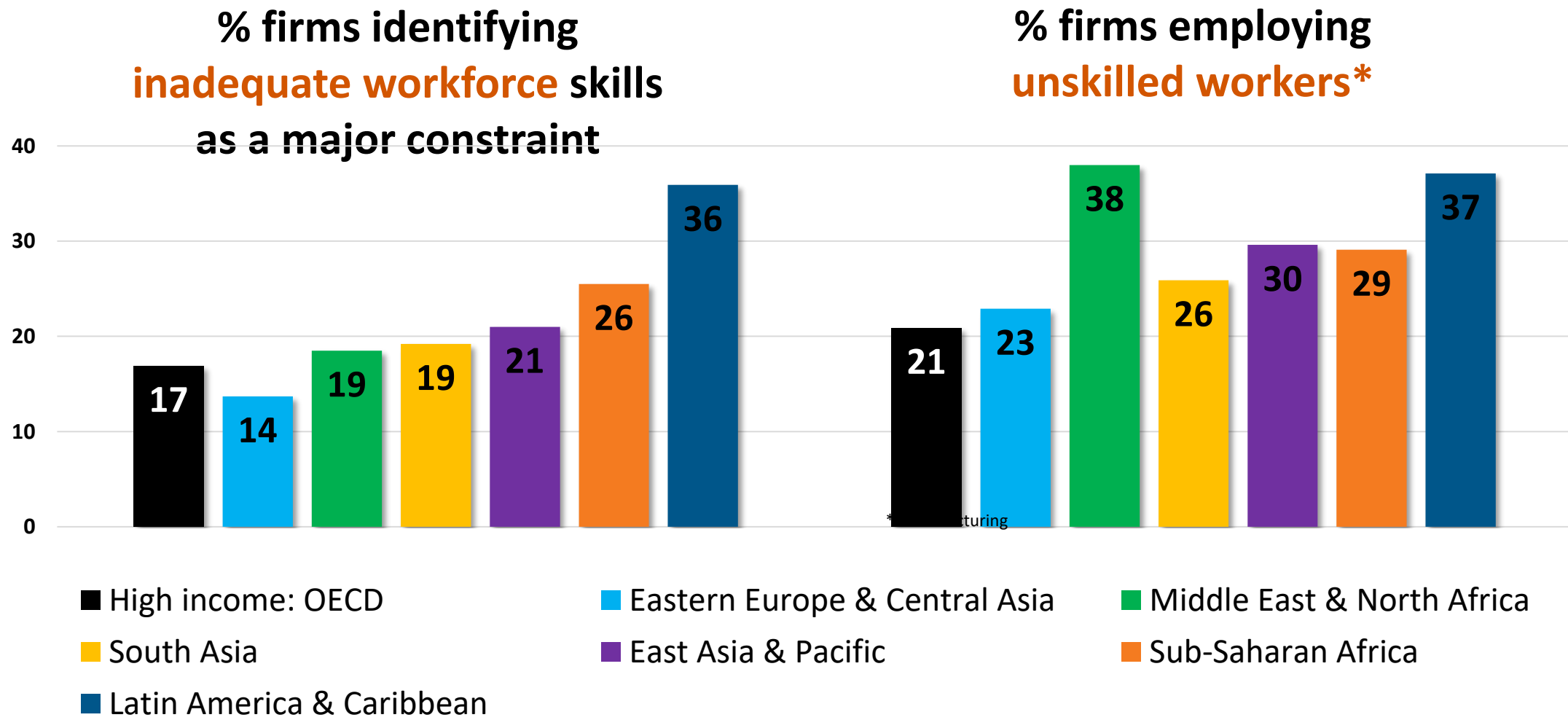
# Globally, schooling doubled since the 1980s



■ Average years of schooling

Source: Montenegro & Patrinos (2014).

# Still, firms around the world can't find skilled workers...



Source: Enterprise Surveys [www.enterprisesurveys.org](http://www.enterprisesurveys.org)

# Schooling is not the same as learning

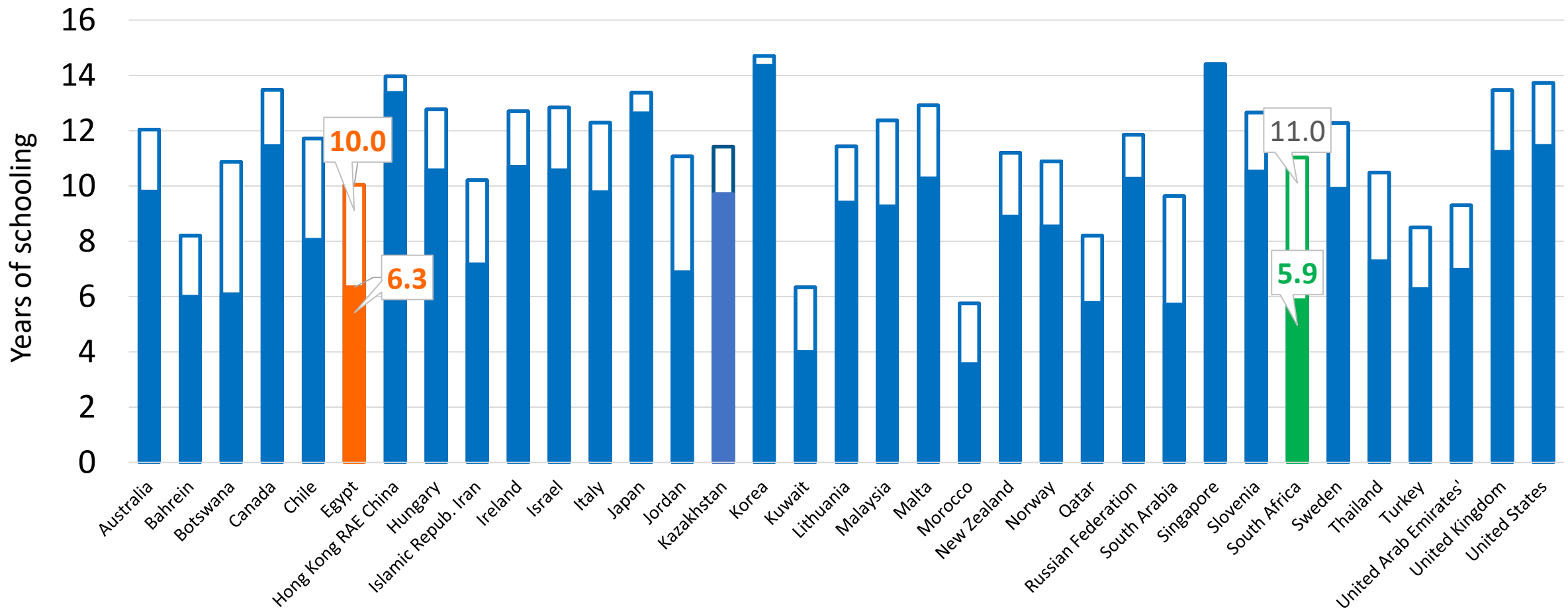


**The world is facing a  
“Learning Crisis”**



# Years of **Schooling** are not the same as **Learning**

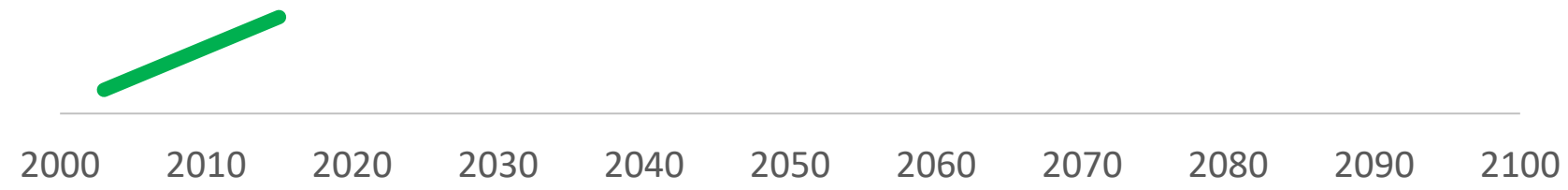
Average years of schooling of 25- to 29-year-olds, unadjusted and adjusted for learning





# Brazil

## Progress in Math (PISA 15-year-olds)

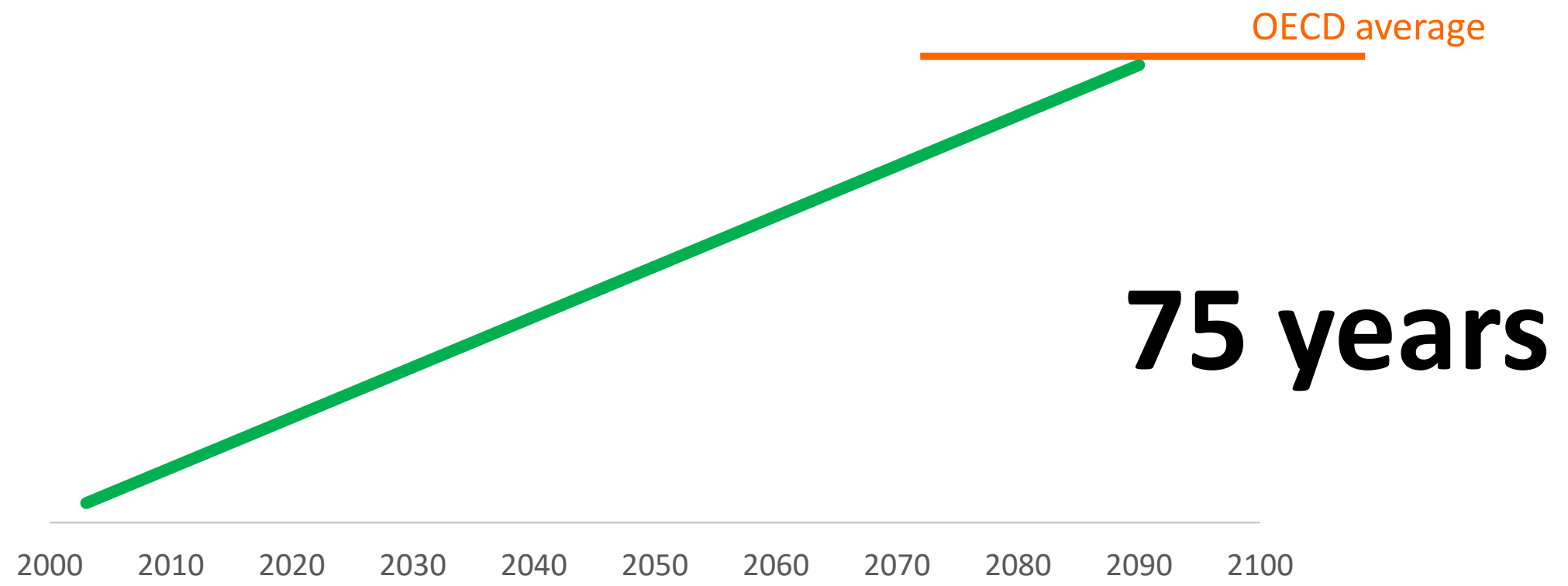






# Brazil

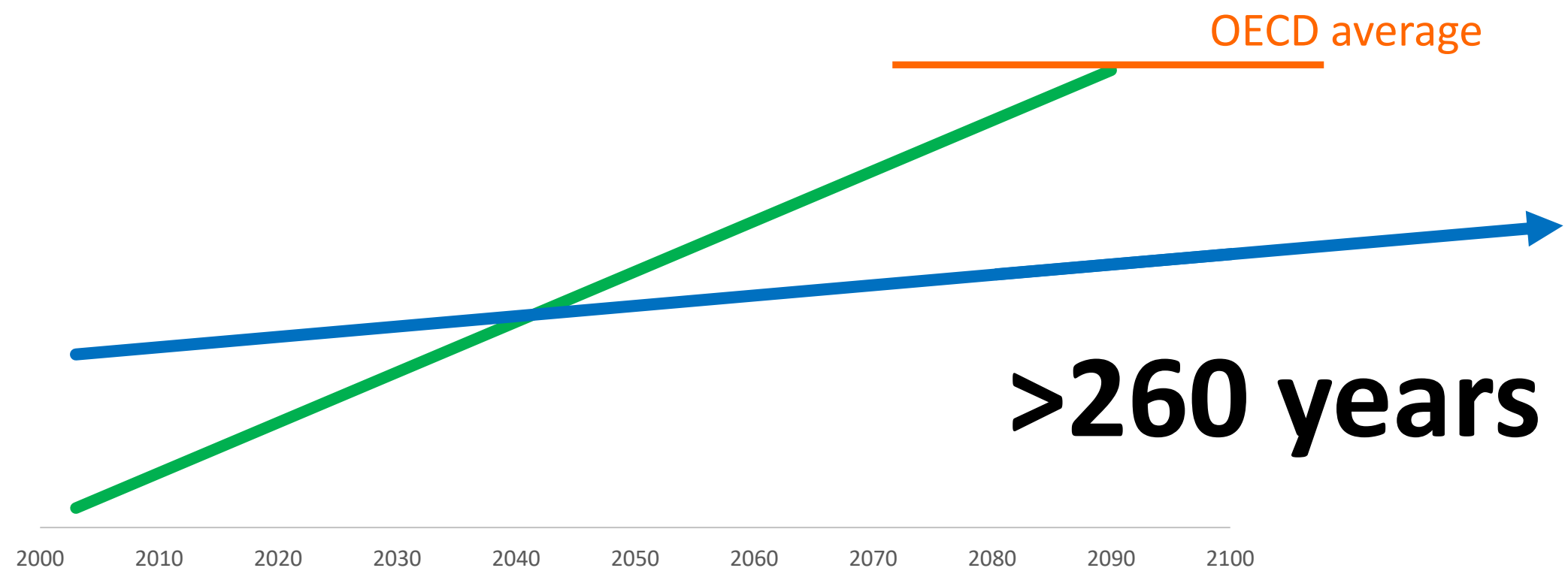
## Time to reach OECD average in Math (PISA 15-year-olds)





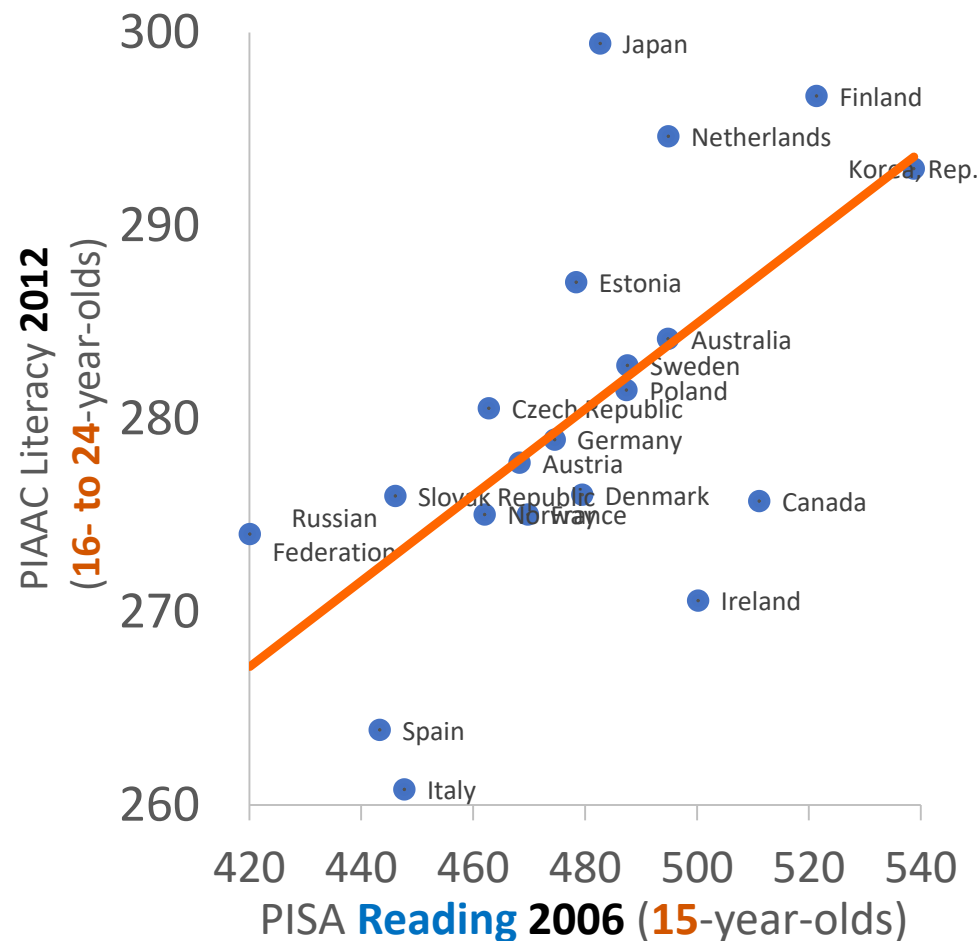
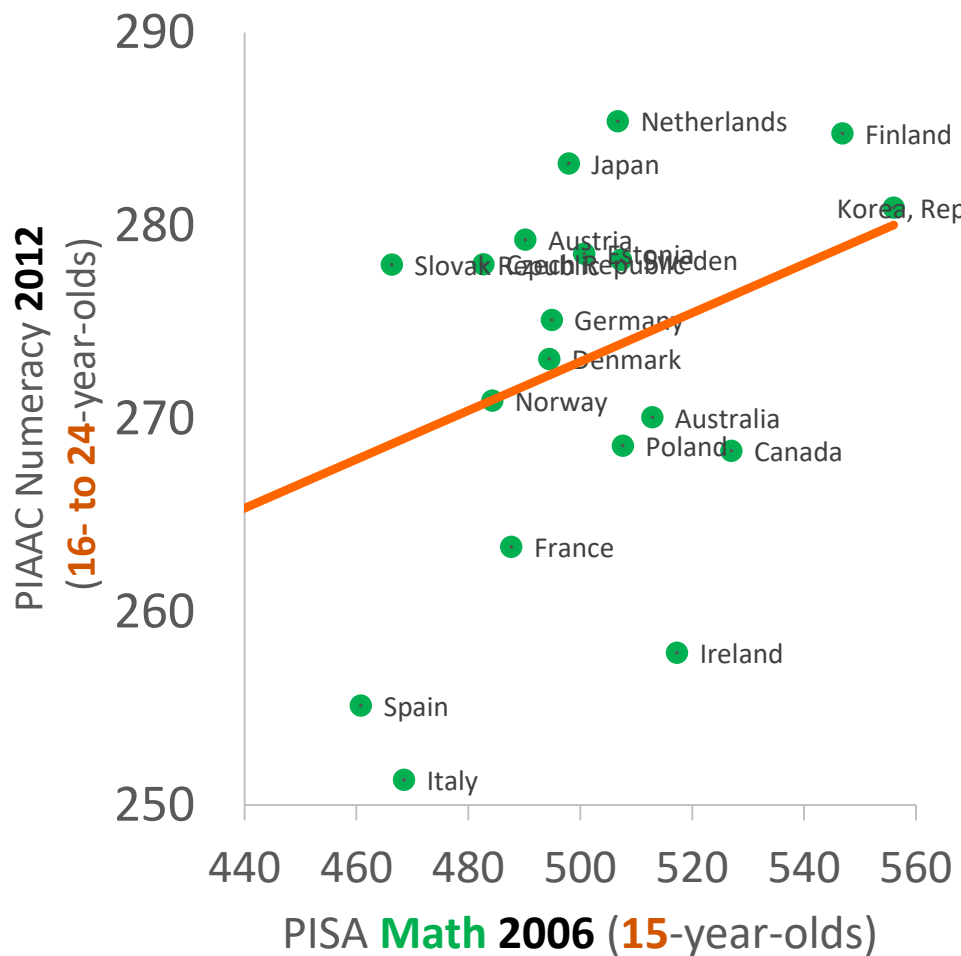
# Brazil

## Time to reach OECD average in Math and Reading (PISA 15-year-olds)





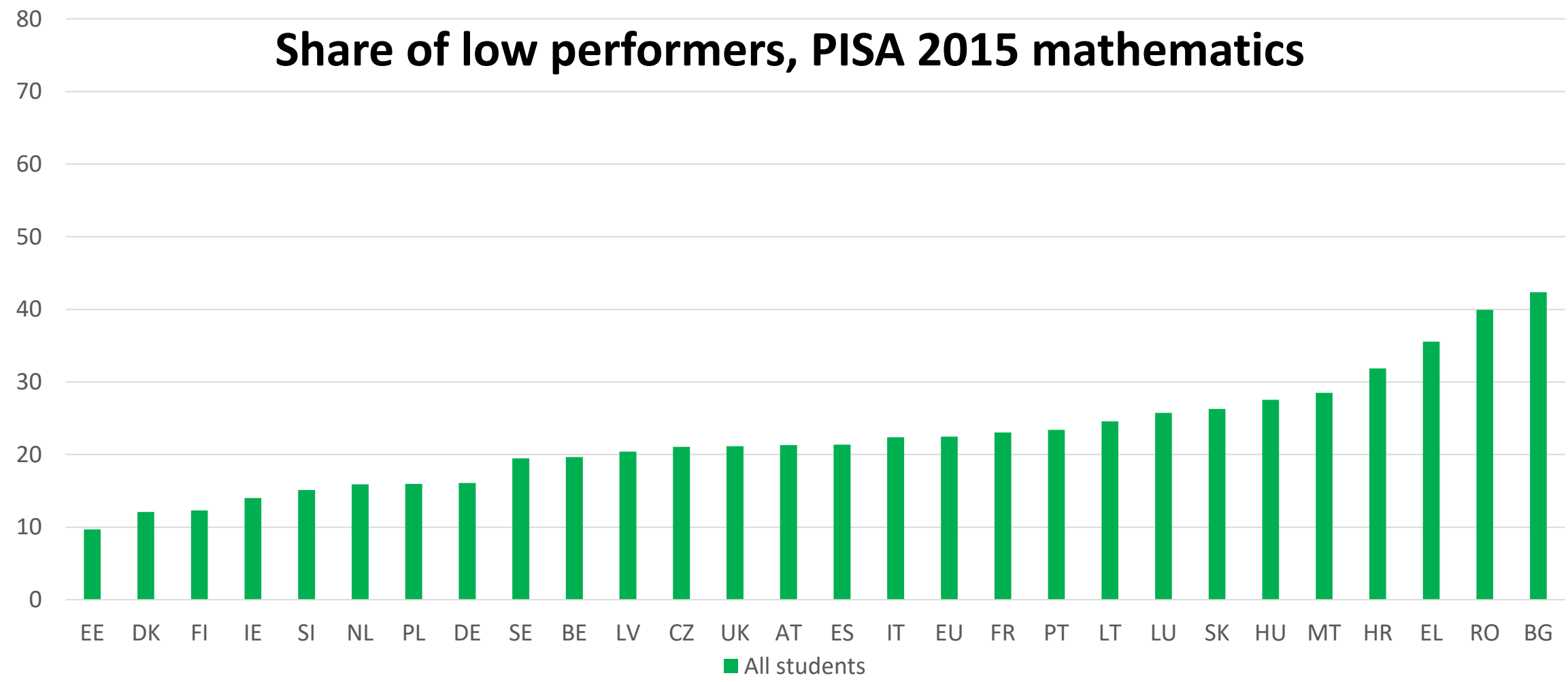
# The learning crisis becomes a skills crisis





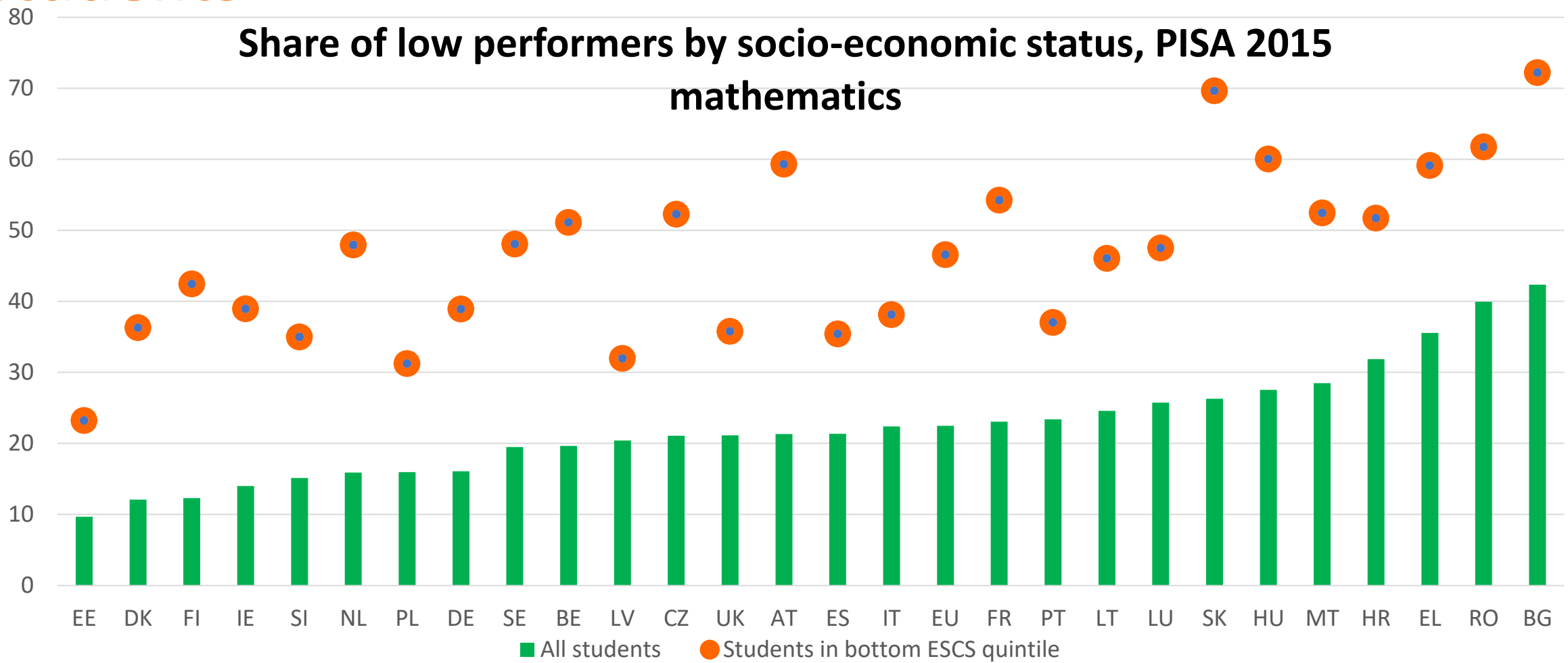
# Weak foundational skills affect Europe too. .

## Share of low performers, PISA 2015 mathematics





# ... Driven partly by low learning of disadvantaged students

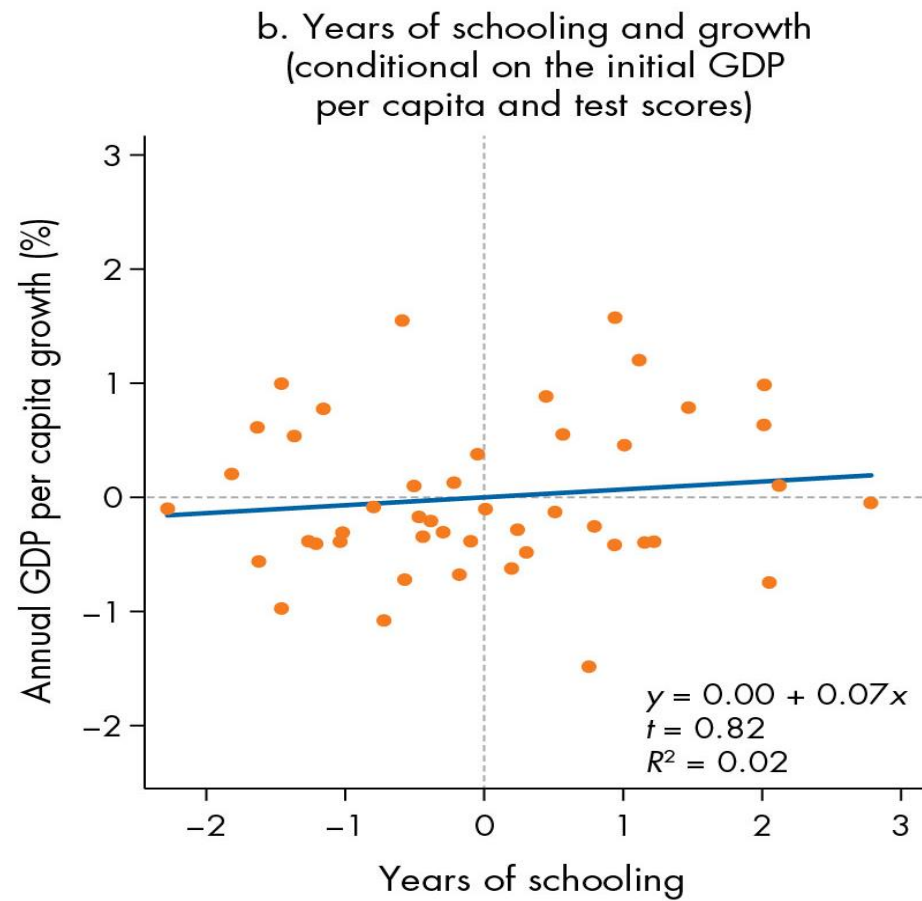
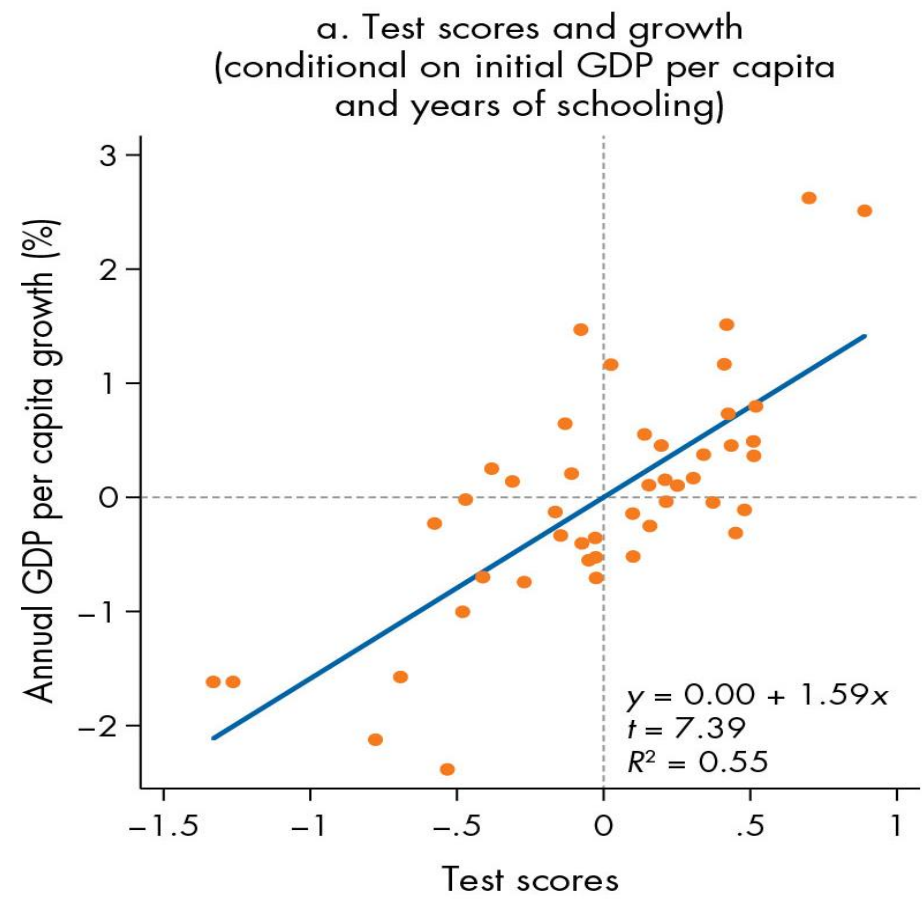


Source: World Bank staff calculations based on PISA 2015



# What matters for growth is learning

## Annual average per capita growth in income 1970-2015, conditional on test scores, years of schooling, and initial income





# Nearly **2 billion** working age adults (15-64) around the world have low literacy skills



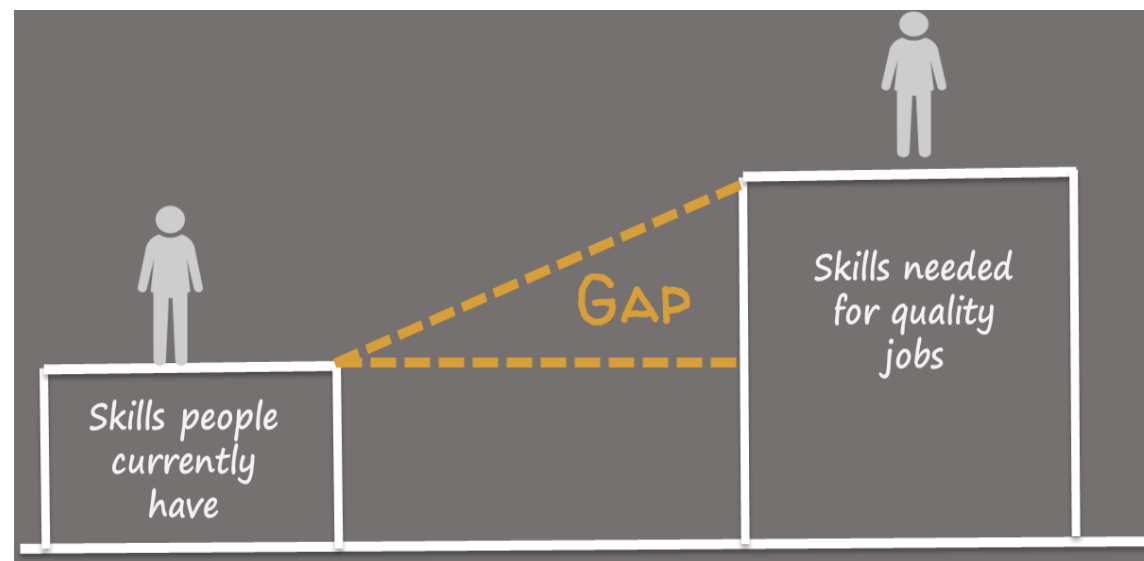
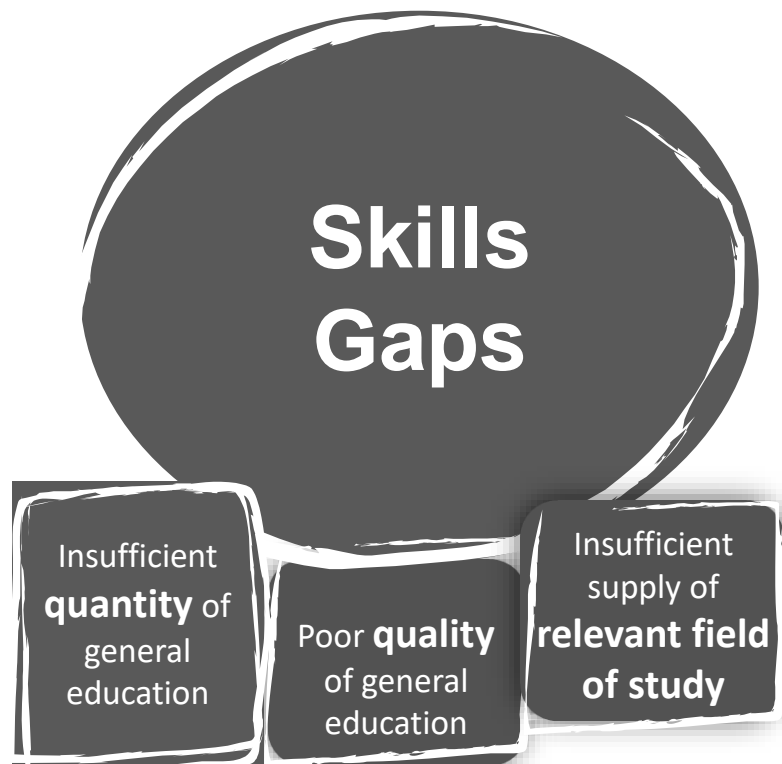
# **Zooming in: Workforce Skills**



**Worker Productivity and Employability** are a function of supply, demand, and other factors



## Zooming in on **Skills Gaps**: quantity and quality issues

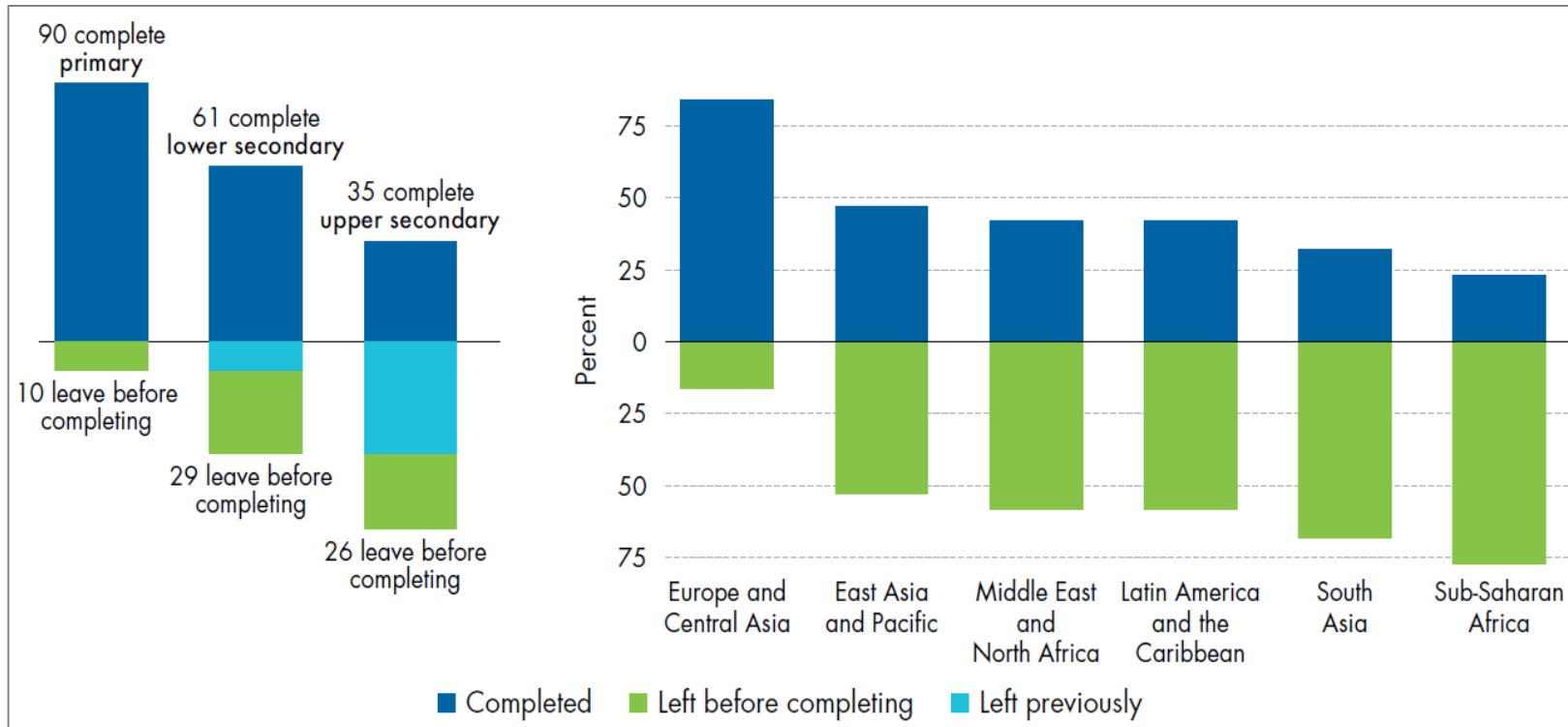




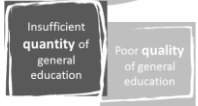
# Globally, just 35% of primary entrants complete upper secondary education; In SSA, less than 25%

Insufficient quantity of general education

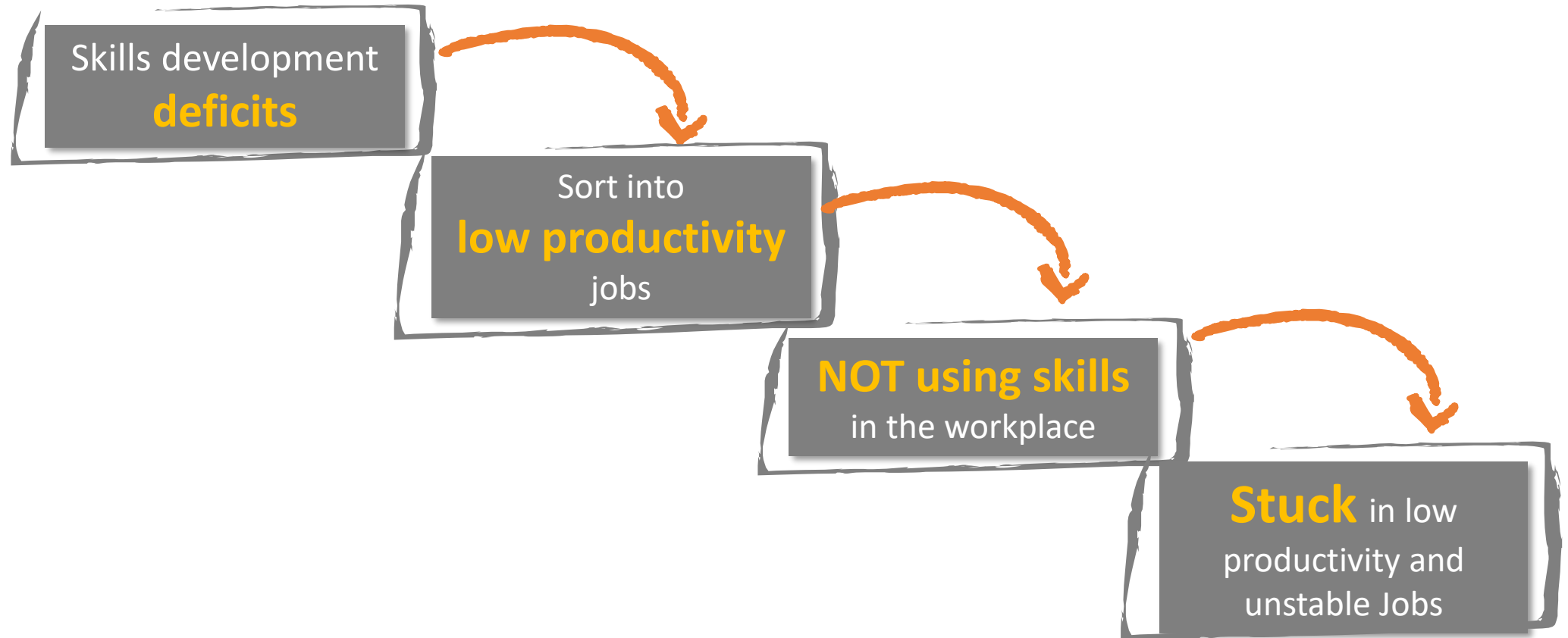
Poor quality of general education



Note: Compiled by WDR 2018 Team, with data from UNESCO (2010, 2015) and WIDE (2017). Estimates are for circa 2010



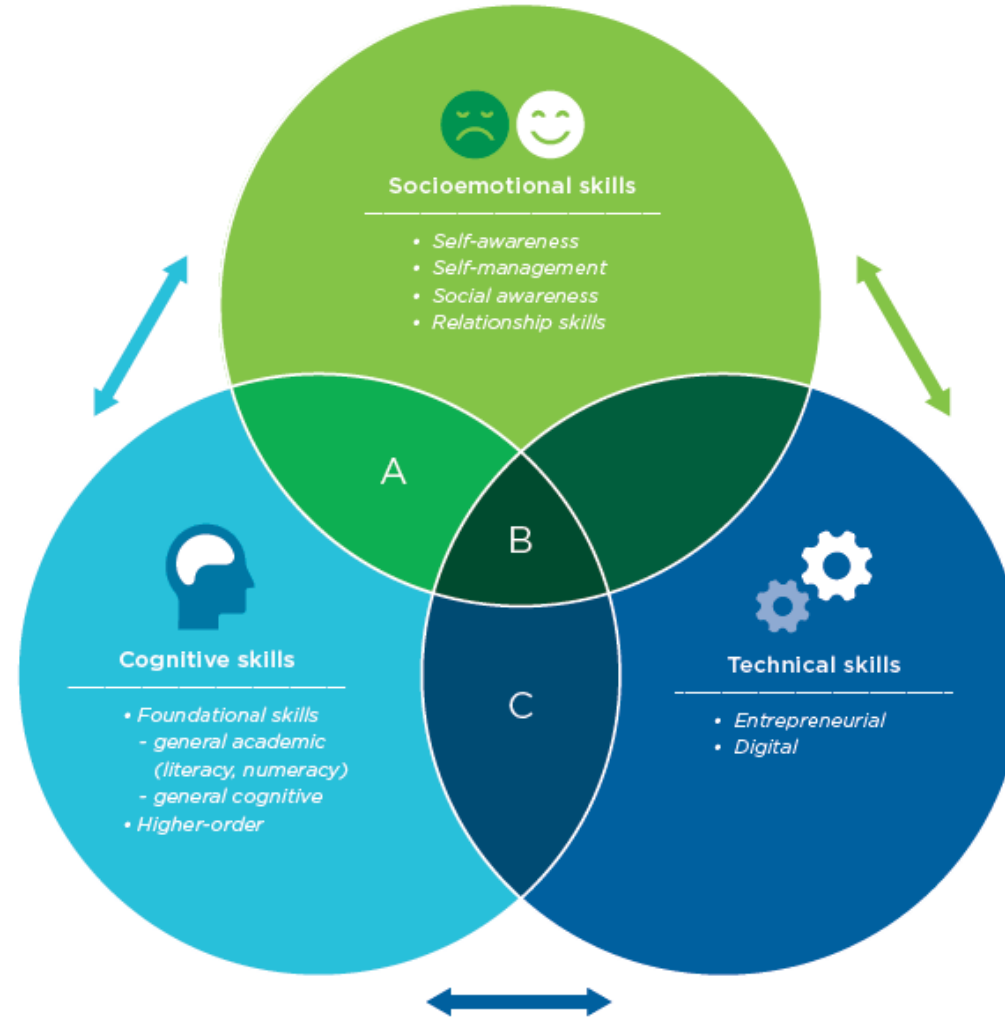
# Zooming in on **Low Quantity**: Implications of leaving school prematurely



# Zooming in on **Low Quality**: understanding skills interaction

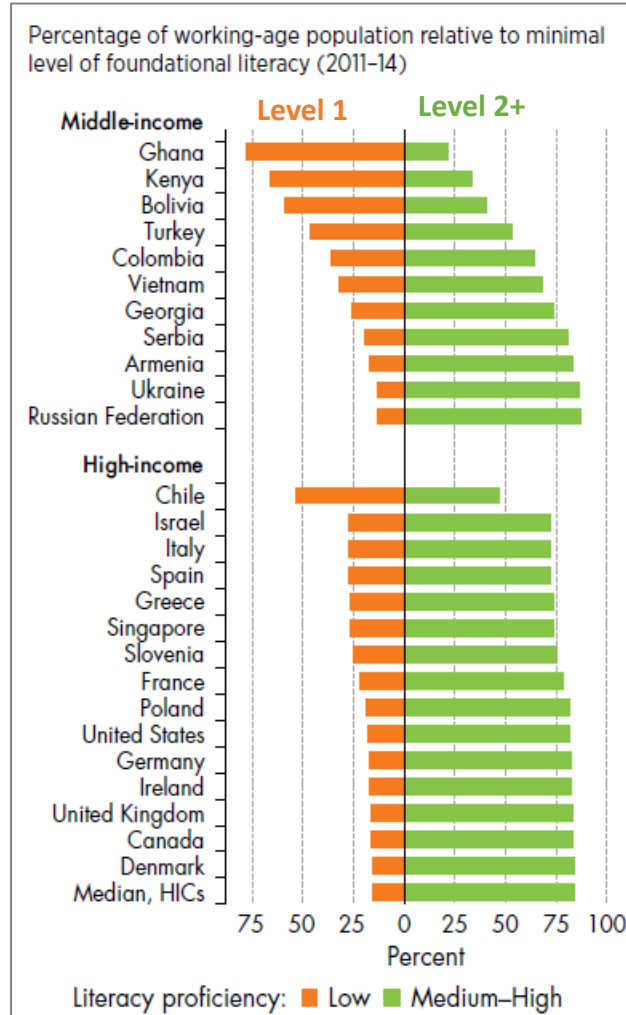
Insufficient quantity of general education

Poor quality of general education



# Wealthier countries have higher literacy levels, but all countries face low-literacy challenges

Insufficient quantity of general education  
 Poor quality of general education

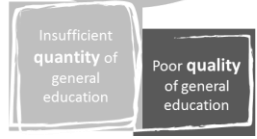


**Low Literacy Proficiency:**  
 Ability to access information

**Medium-High Literacy Proficiency:**  
 Ability to identify, integrate, and evaluate information



# Formal education in different countries vary greatly in delivering literacy proficiency



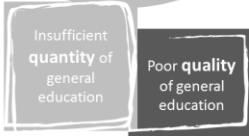
Years of Formal Education Needed to Reach Basic Level 1 Literacy Proficiency		
9 years (Lower Secondary)	12 years (Upper Secondary)	16 years (Tertiary)
<i>Armenia*</i>	Canada	<i>Bolivia*</i>
Australia	Chile	<i>Ghana*</i>
Denmark	<i>Colombia*</i>	<i>Kenya*</i>
Estonia	France	
Finland	Germany	
<i>Georgia*</i>	Israel	
Ireland	Singapore	
Japan	Slovenia	
Korea	Turkey	
Netherlands	United States	
Norway		
Poland		
<i>Serbia*</i>		
Slovak Republic		
Sweden		
<i>Vietnam*</i>		

Note: Data from PIAAC , STEP Skills Survey (2011-14).

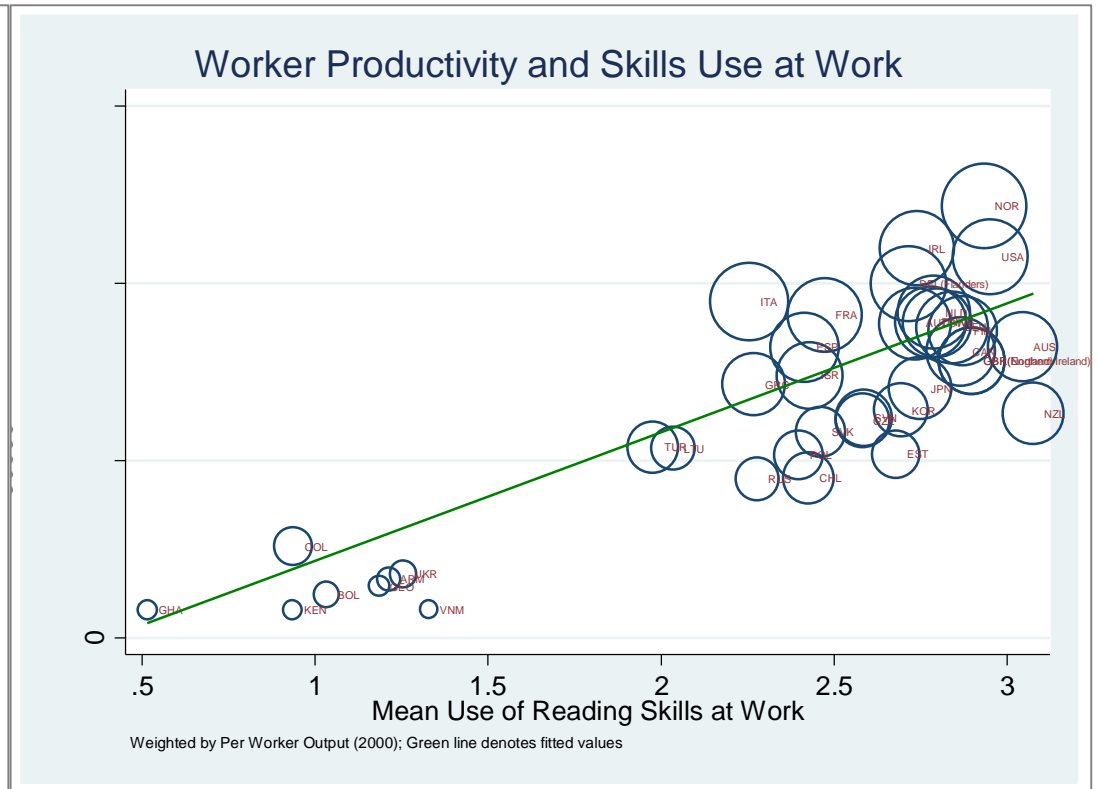
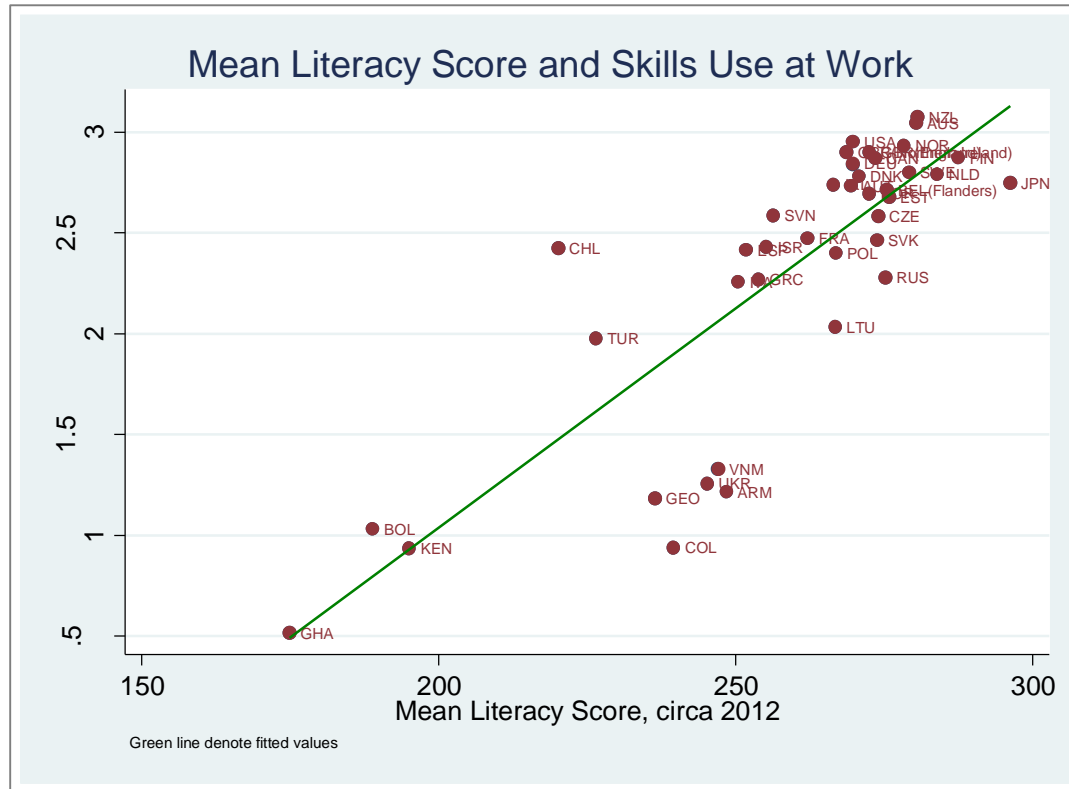
\* denote STEP data countries



Zooming in on **Low Quality**: implications



**Workers with higher literacy proficiency are more likely to use their skills at work, and have higher productivity on the job**

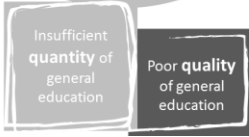


Note: OECD PIAAC Data, 2012; Worker Productivity Data from WB, 2011. Graph Weighted by per worker output in 2000

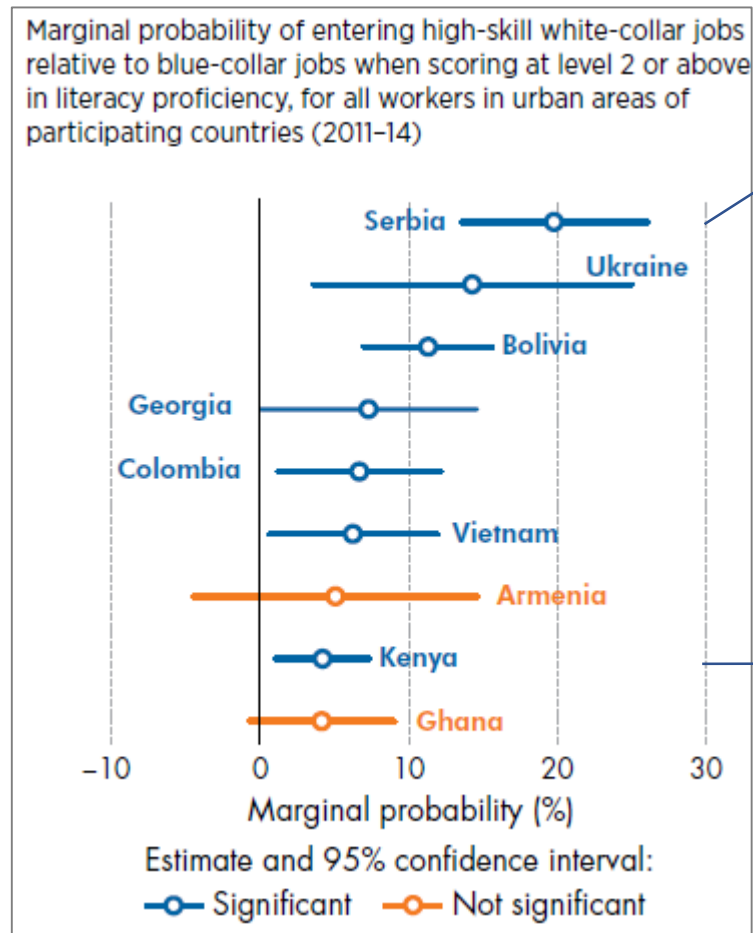




Zooming in on **Low Quality**: implications



## Workers with higher literacy proficiency are more likely to enter white-collar, better paying, stable jobs



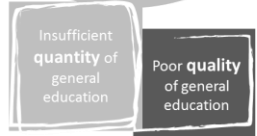
Avg. diff in wage/hr is 63 Serbian Dinar (≈ \$.62)

Avg. diff in wage/hr is 94 Kenyan Shilling (≈ \$.91)

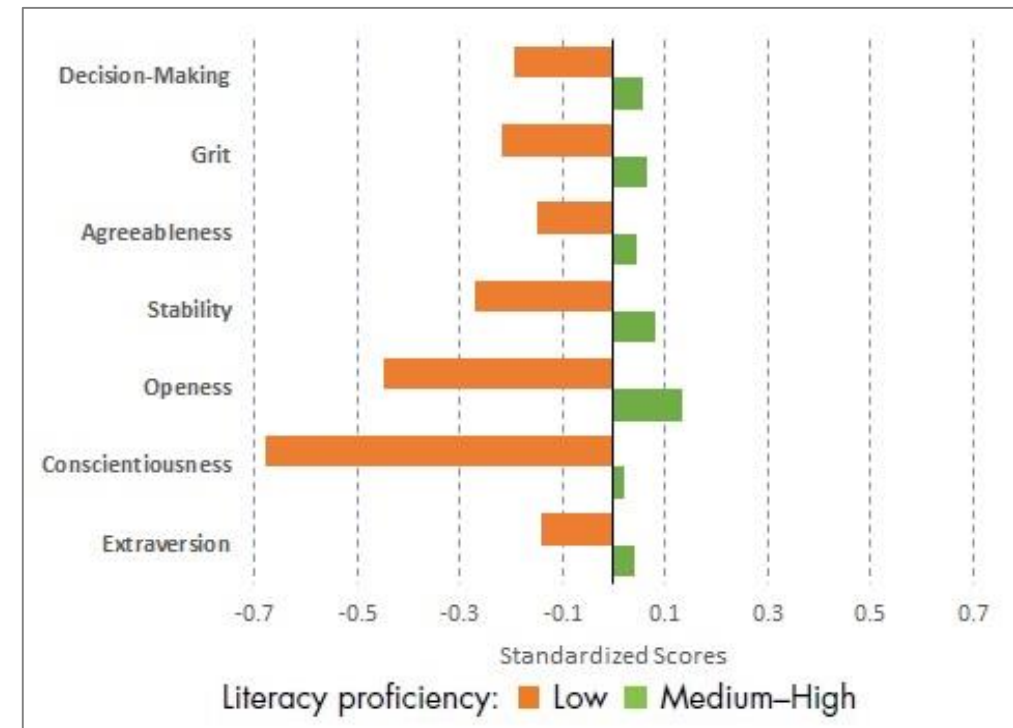
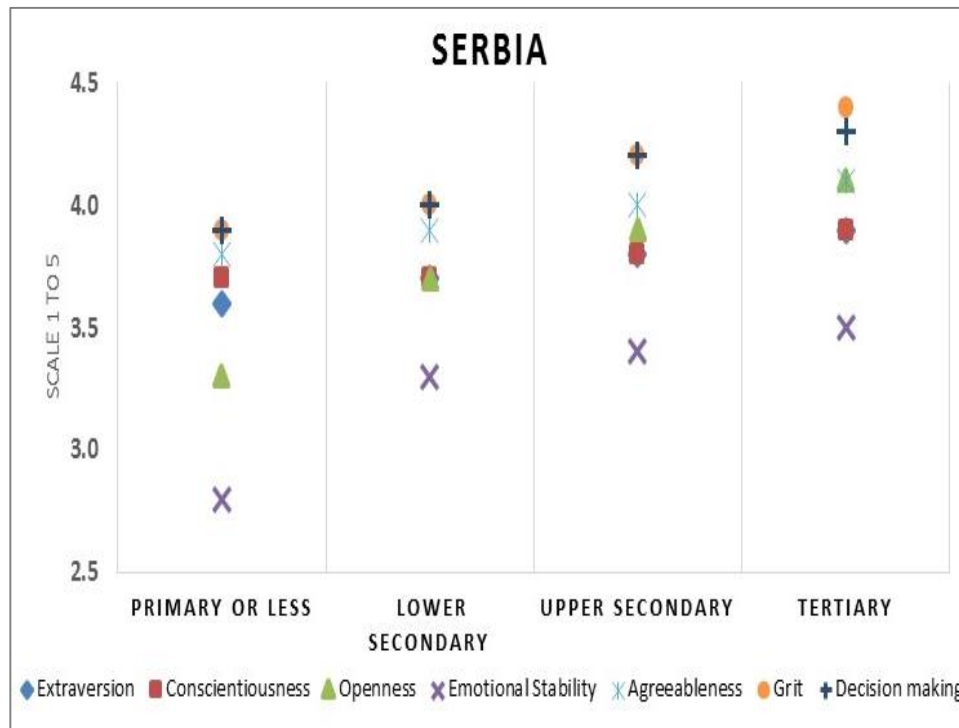
Note: Data from STEP Skills Survey (2014).



Zooming in on **Low Quality**: cognitive and non-cognitive



## Both quantity and quality of general education are correlated with better socioemotional skills



Note: Data from STEP Skills Survey in Serbia (2014).

# Zooming in: Understanding Young People's Pathways



## Young People Follow Different Pathways:



- Join the labor force / find employment
- Enroll in basic or post basic-equivalent job training
- Pursue further education
- Become inactive (not in school, not working)

**But, for many, accumulated skills deficits make it difficult to obtain a quality job**





# Training for Jobs

## Pathways

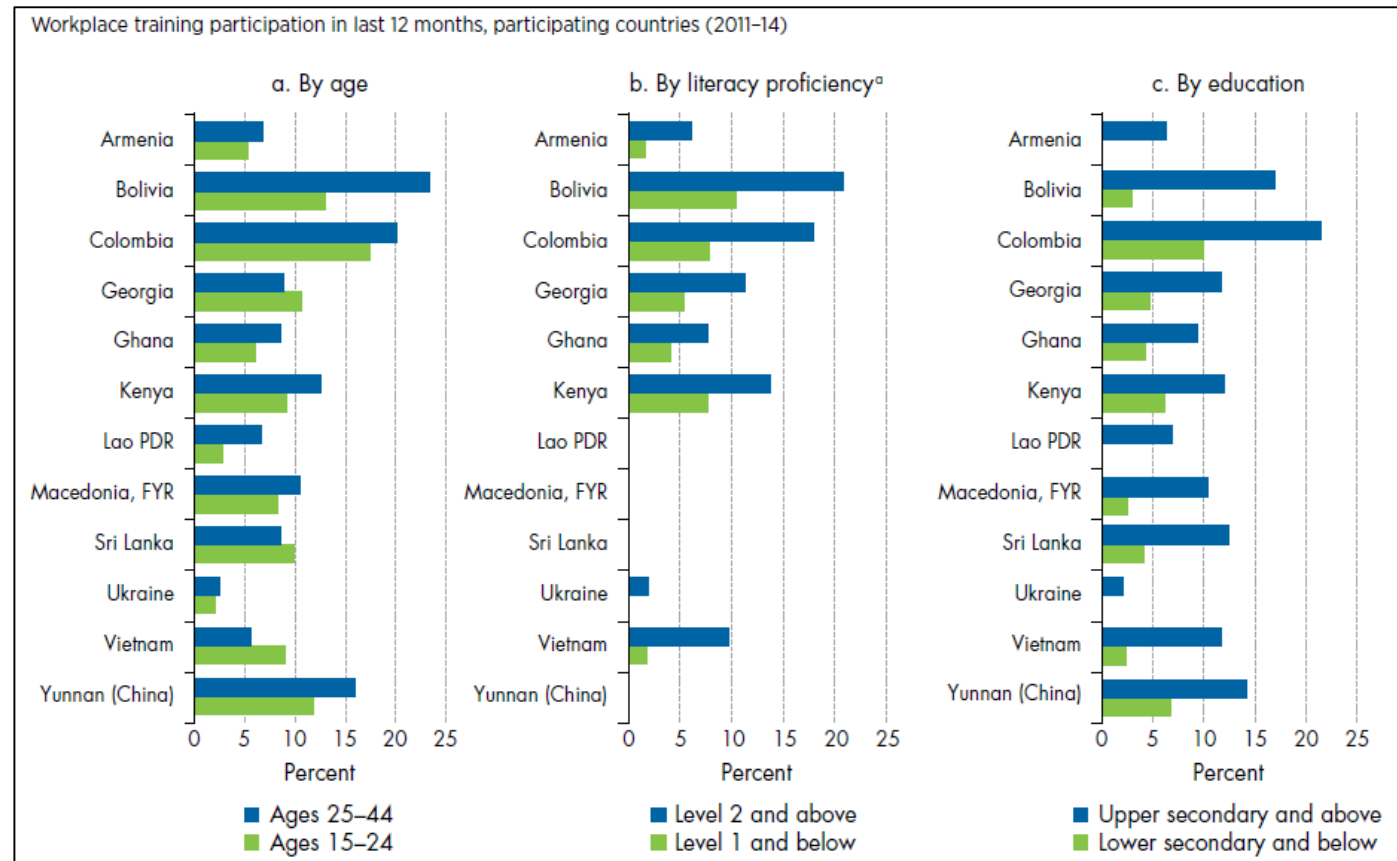
- Join the labor force / find employment
- Enroll in basic or post basic-equivalent job training
- Pursue further education
- Become inactive (not in school, not working)



## Successful Program Features

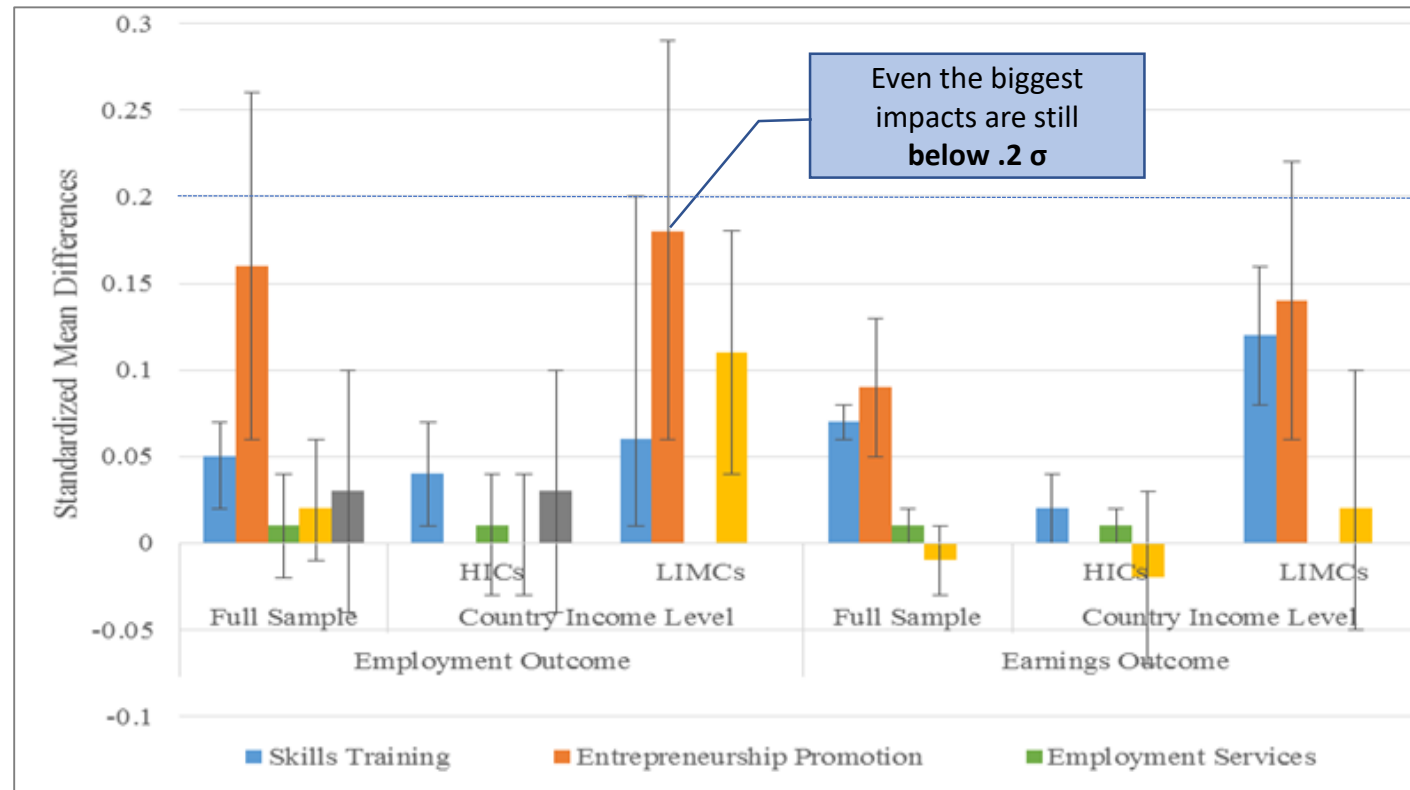
1. Establishing Partnerships
2. Combining Classroom and Workplace Learning
3. Identifying Capable Teachers and Trainers
4. Making Information Available for Decision-making

# Less than 15% of young people receive **workplace training**, those who do tend to already have better literacy or education



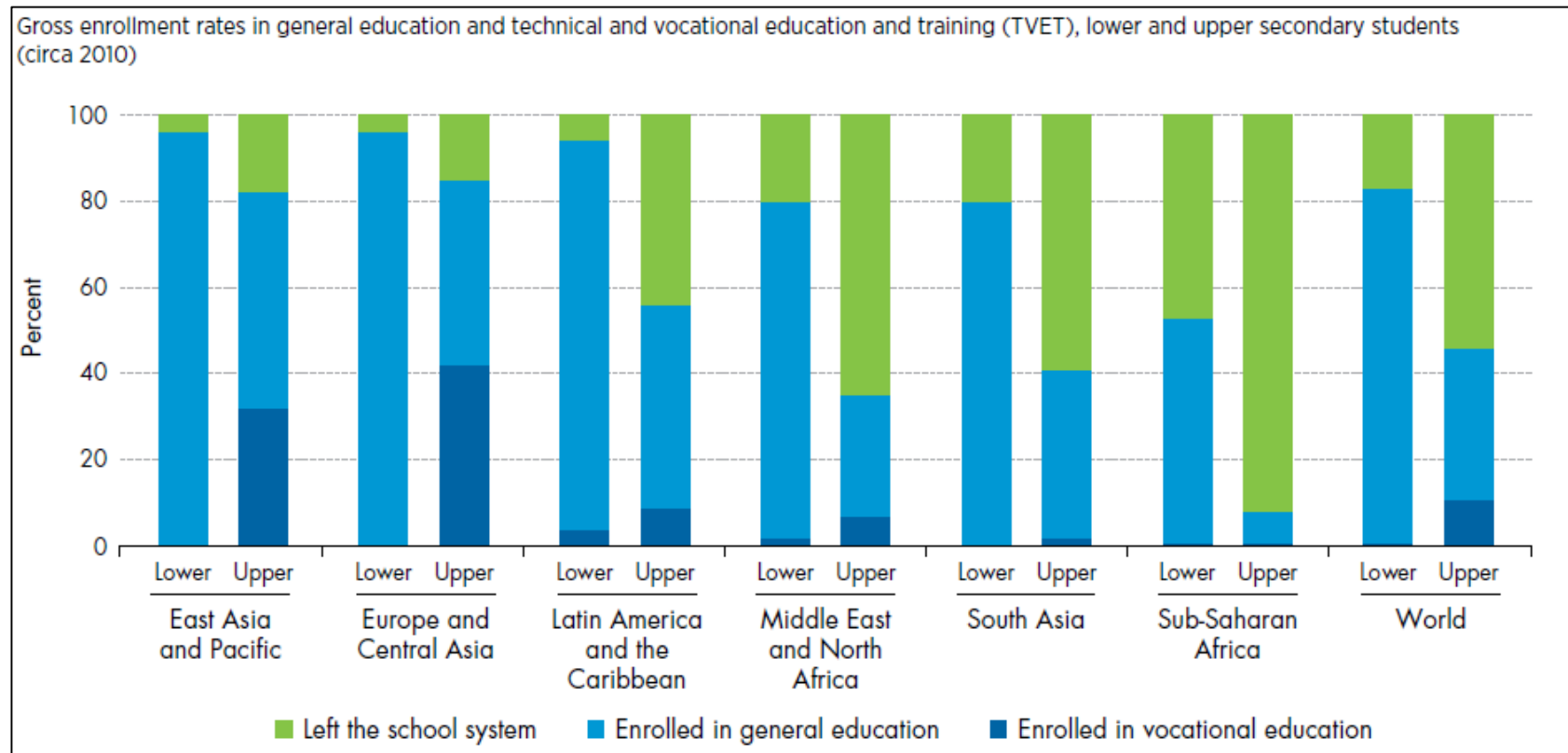
Note: Data from STEP Skills Survey (2011-14).

Even fewer young people enroll in **short-term training programs**.  
STTs are costly, and less than 30% have positive, significant impacts



Note: Adapted from Kluge and others 2016. Standard mean differences of .2, .5, .8 are commonly considered as small, moderate, and large effects respectively.

## Globally, more students still leave school early than enroll in either general or TVET upper secondary education



Notes: compiled by WDR 2018 team, using data from UIS (2016).





Depending on the target population and context, interventions have to be tailored;

## Four Successful Training Program Features

### 1. Establishing Industry Partnerships

Sector/industry programs use intermediary institutions—usually network aggregators or nonprofits with industry-specific expertise—to work with employers in a given industry to anticipate job openings, design program content, and maximize potential placement.

### 2. Combining Classroom and Workplace Learning

Apprenticeships are a common way to combine classroom and workplace learning, and may last from one to three years and take place at the secondary or post-secondary level or as an alternative to upper secondary education—giving students the opportunity to engage in industry-supervised workplace practices.

### 3. Identifying Capable Teachers and Trainers

Successful training programs require teachers with industry expertise to ensure content is aligned with job requirements and provide recognized career development tracks for technical trainers and instructors.

### 4. Making Information Available for Decision-making

Career information interventions are usually grouped into career education programs, which might include providing direction on coursework selection, and career planning, which is usually provided on an individual basis.





Options

Destinations

Implications

## Program Examples

### 1. Establishing Industry Partnerships

*The Wisconsin Regional Training Partnership (USA)*

*Jewish Vocational Service—Boston (USA)*

*Per Scholars—New York City (USA)*

*McKinsey Generation Program (India, Kenya, Mexico, Spain, USA)*

### 2. Combining Classroom and Workplace Learning

*State Apprenticeship Programs—WA, VA (USA)*

*Lei Do Aprendiz (Brazil)*

*Apprenticeship Program for Women (Malawi)*

### 3. Identifying Capable Teachers and Trainers

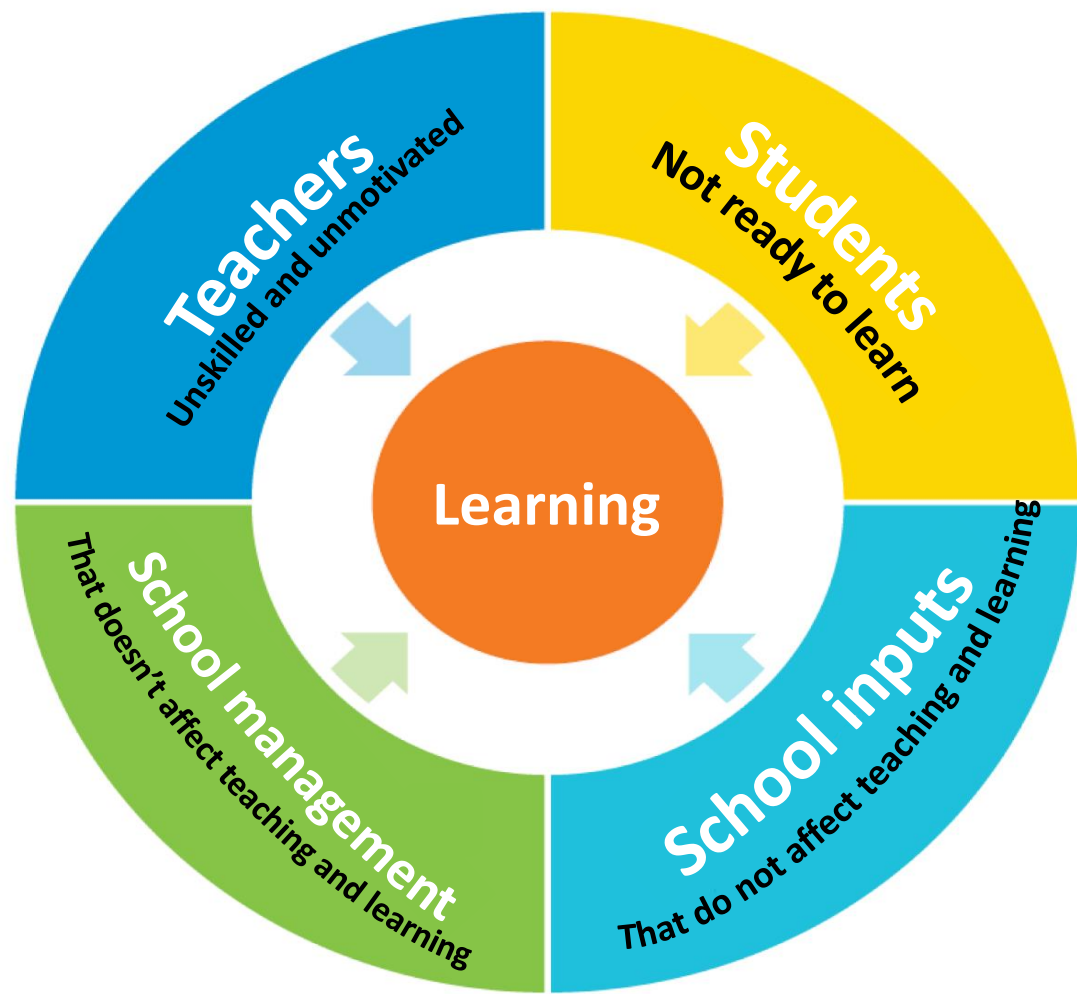
*Polytechnics (Ghana)*

*Vocational Colleges (Malaysia)*

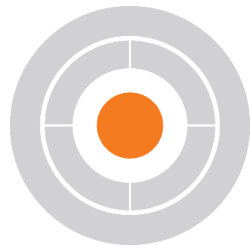
*TVET Trainers (Algeria, Bahrain, Egypt, Jordan, Lebanon, Morocco, Oman, Saudi Arabia, Tunisia, UAEs)*



# Where do educational systems breakdown?



# Policy measures to improve learning:



**Assess** learning to make it a serious goal



**Act** to make schools work for all learners



**Align** actors to make the whole system work for learning



[www.worldbank.org/wdr2018](http://www.worldbank.org/wdr2018)

Alexandria Valerio

[avalerio@worldbank.org](mailto:avalerio@worldbank.org)

# LEARNING

TO REALIZE EDUCATION'S PROMISE