

600000 students

representing about **32 million** 15-year-olds in the schools of the **79 participating countries and economies** sat the **2-hour** PISA test in 2018



but also responded to questions about their aspirations for their future careers, and from where they learn about the world of work

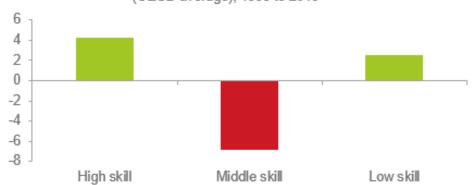


With the labour market undergoing rapid, fundamental change – decision-making is more important, but also more difficult.

Jobs are at risk of automation Significant change High risk

Labour markets are polarising

Percentage point change in share of total employment (OECD average), 1995 to 2015

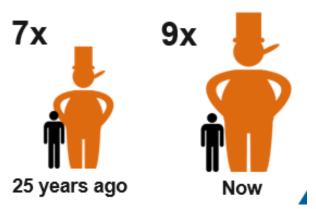


New forms of work are emerging

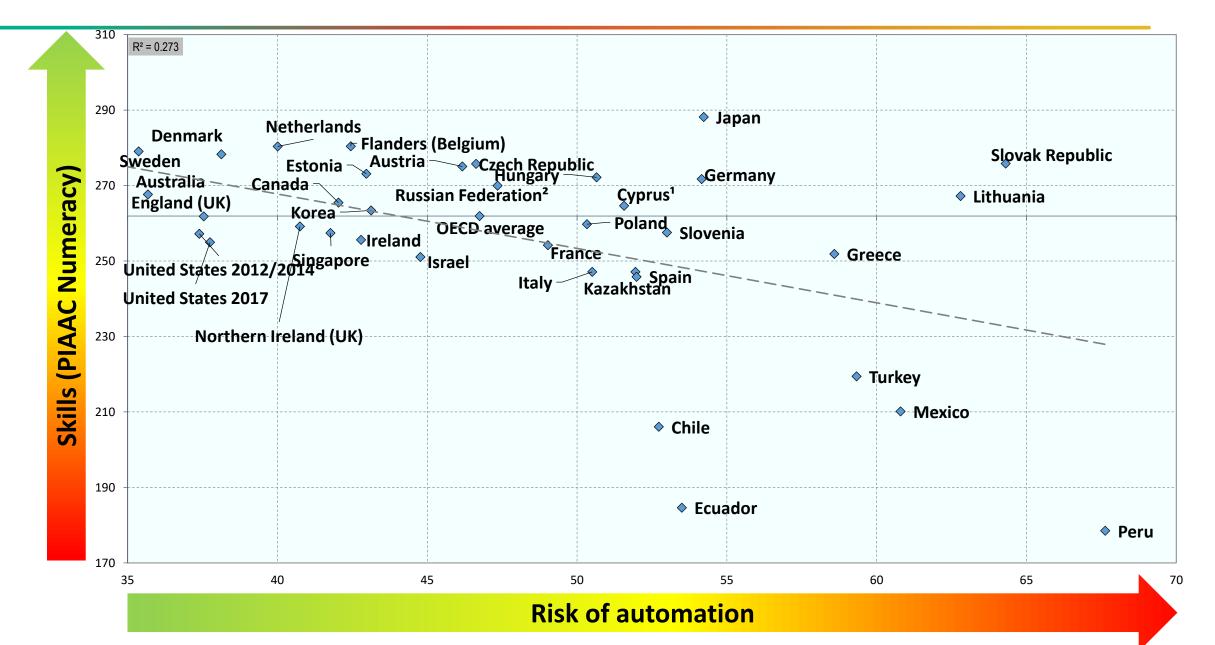


Inequality is rising

Richest 10% v. poorest 10%



Skills and the risk of automation

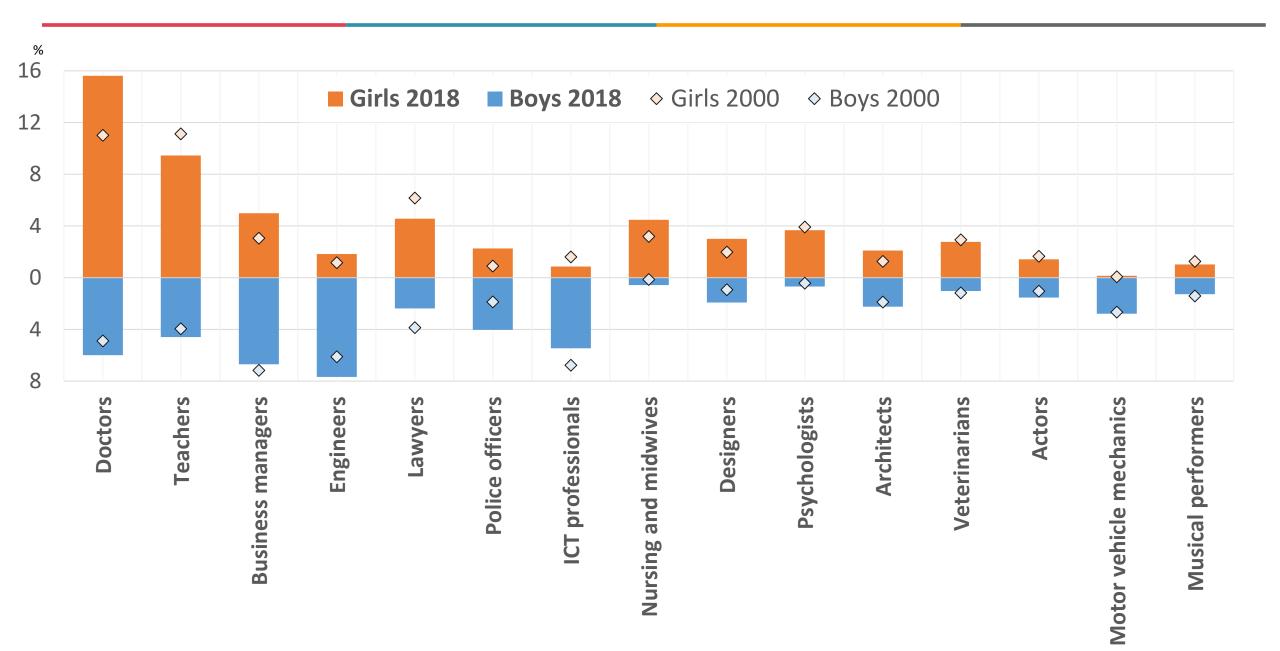




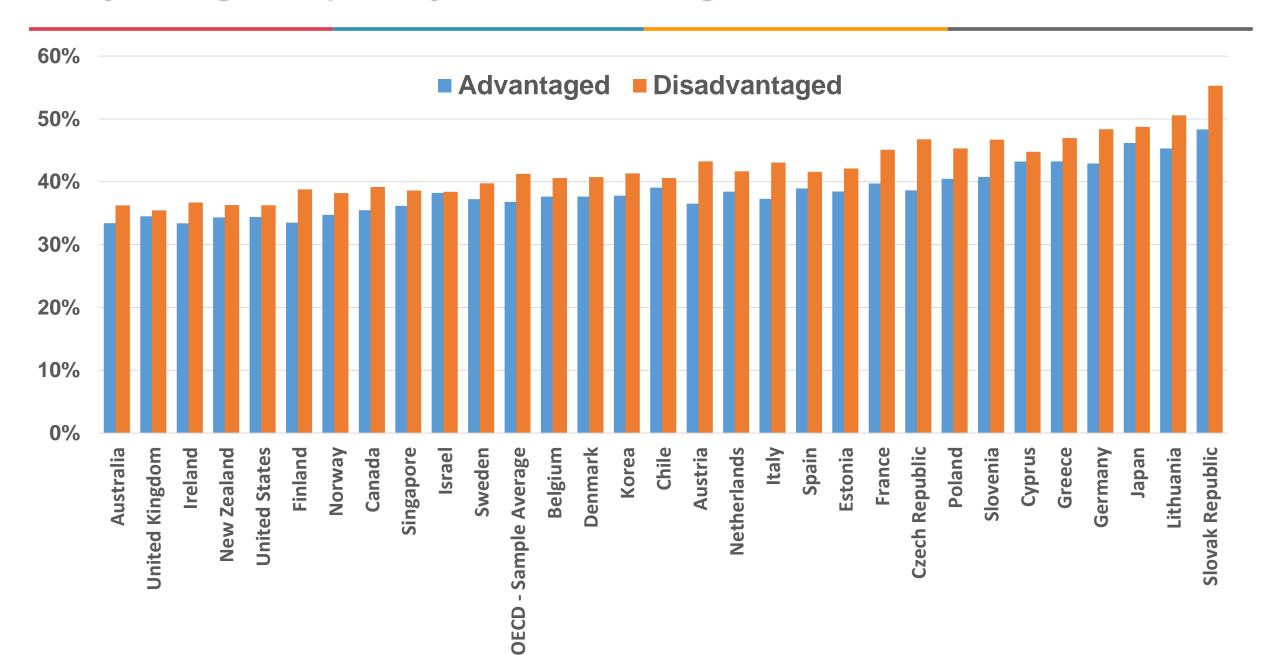
Every day, teenagers make important decisions that shape their future

...but young people's career aspirations are often narrow, unrealistic and distorted by gender and social background

The fifteen most common occupational expectations among 15-year-olds



Many teenagers aspire to jobs that are at high risk of automation



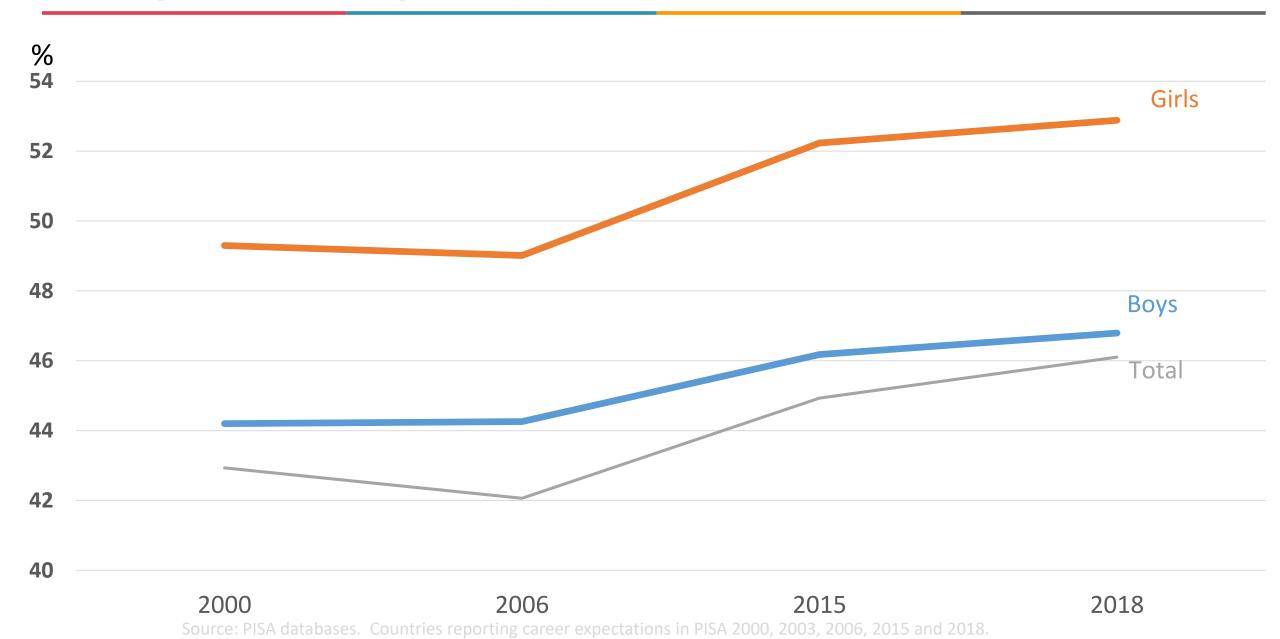


While the world of work has undergone major changes since 2000...

...career expectations of youths have changed little but became more concentrated

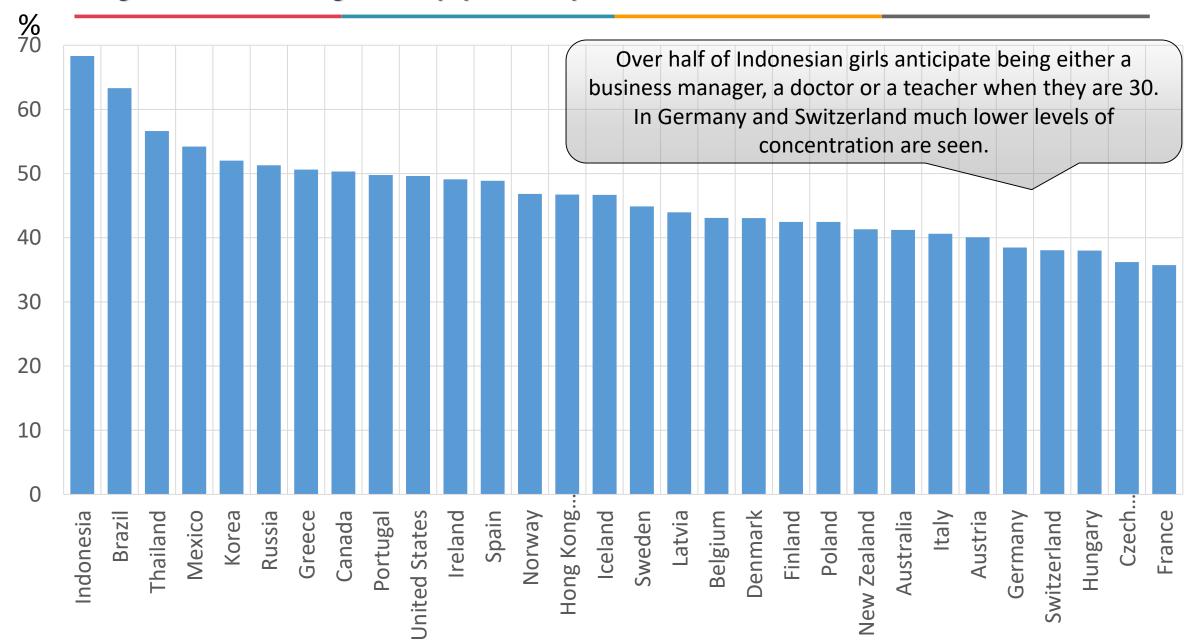
Concentration of occupational expectations between 2000 and 2018

Percentage of students naming 10 most popular occupations



Concentration of occupational expectations by country

Percentage of students naming 10 most popular occupations



Labour market signals are failing to reach young people

	Job title	Projected growth (%)	Student preference rank*	Median annual salary (2018)	Accessibility	Risk of automation
United States	Physical therapist assistants	33.10%	#29	\$58,040	High – associate degree	Lower than average
	Occupational therapy assistants	27.10%	#71	\$60,220	High – associate degree	Lower than average
	Computer user support specialist	10.60%	#229	\$50,980	High – associate degree	Lower than average
Canada	Nurse aides and patient service associate	24.50%	#33	\$ 40,715	High – associate degree	Lower than average
	Veterinary technician	21.50%	#32	\$ 41,804	High – associate degree	Lower than average
	User support technician & Information systems testing technician	13.70%	#158	\$ 55,290	High – associate degree	Lower than average

^{*}Rank is based on ISCO occupation count of 543.

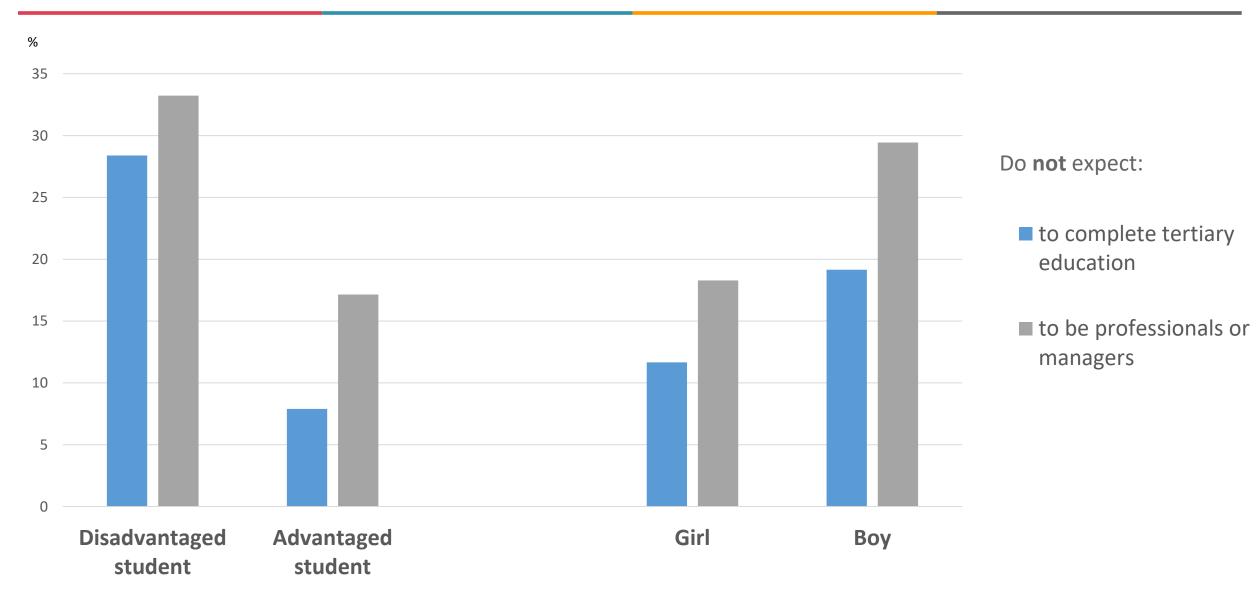


High performers with low expectations

"Across OECD countries, approximately one in three disadvantaged teenagers who perform well on the PISA tests does not expect to pursue tertiary education or work in a university-level profession

High performers in PISA who do not have high expectations for their future

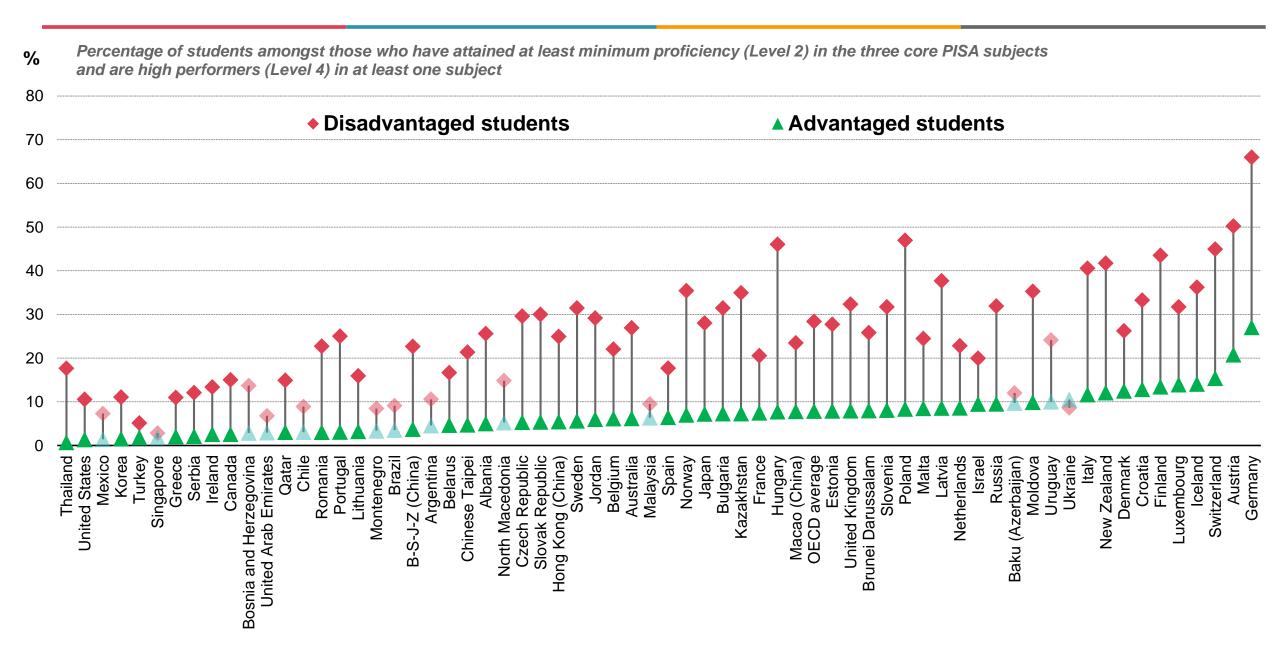
Percentage of students who do not expect to complete tertiary education amongst high performers (OECD average)



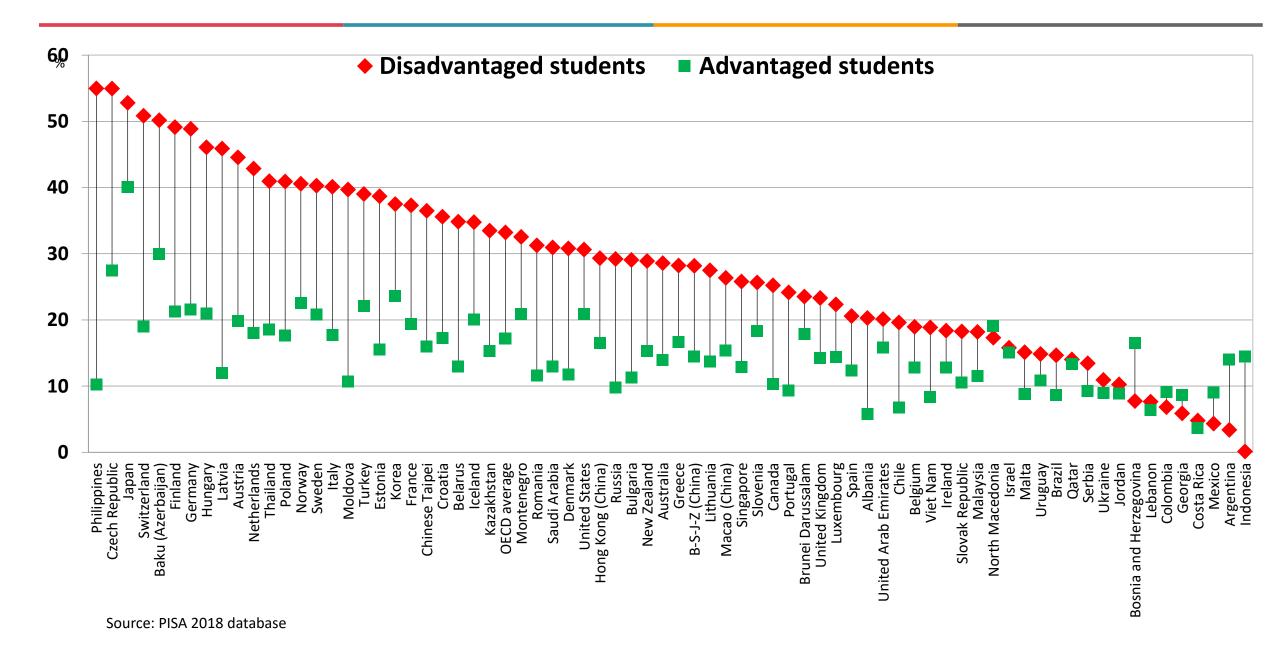
Notes: High performers are students who attained at least minimum proficiency (Level 2) in the three core PISA subjects and are high performers (Level 4) in at least one subject.

Source: PISA 2018 database

High performers who do not expect to complete higher education

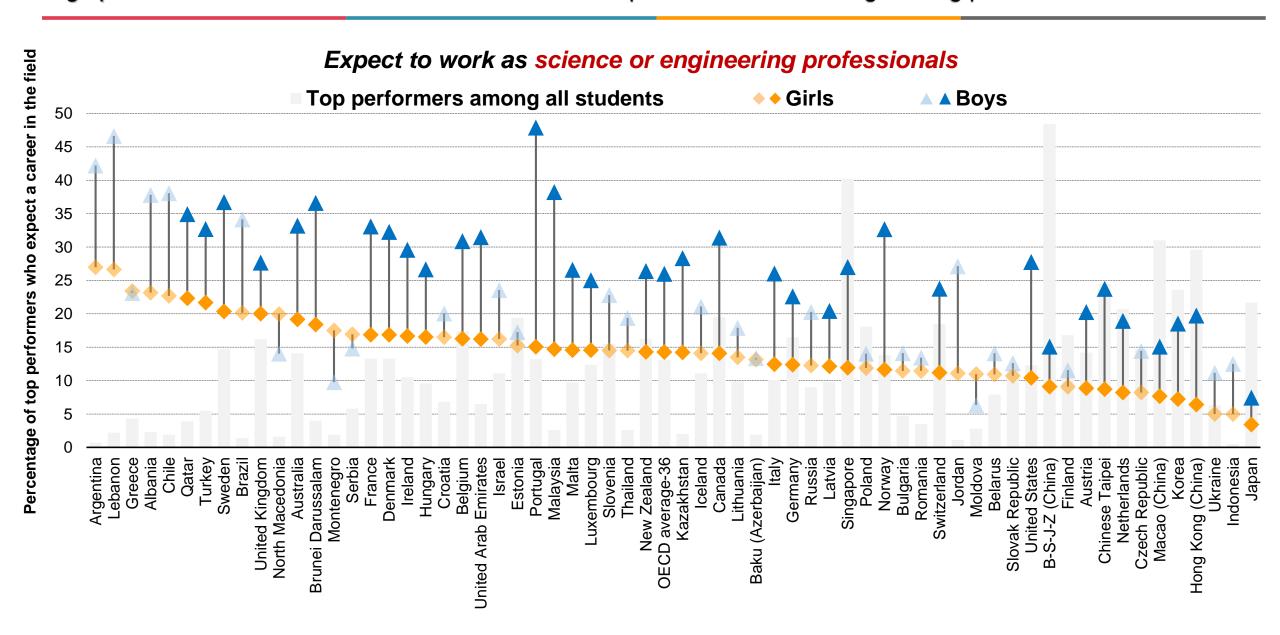


High performers who do not expect to be professionals or managers



Gender gap in career expectations amongst top performers

High performers in mathematics and/or science who aspire to science and engineering professionals

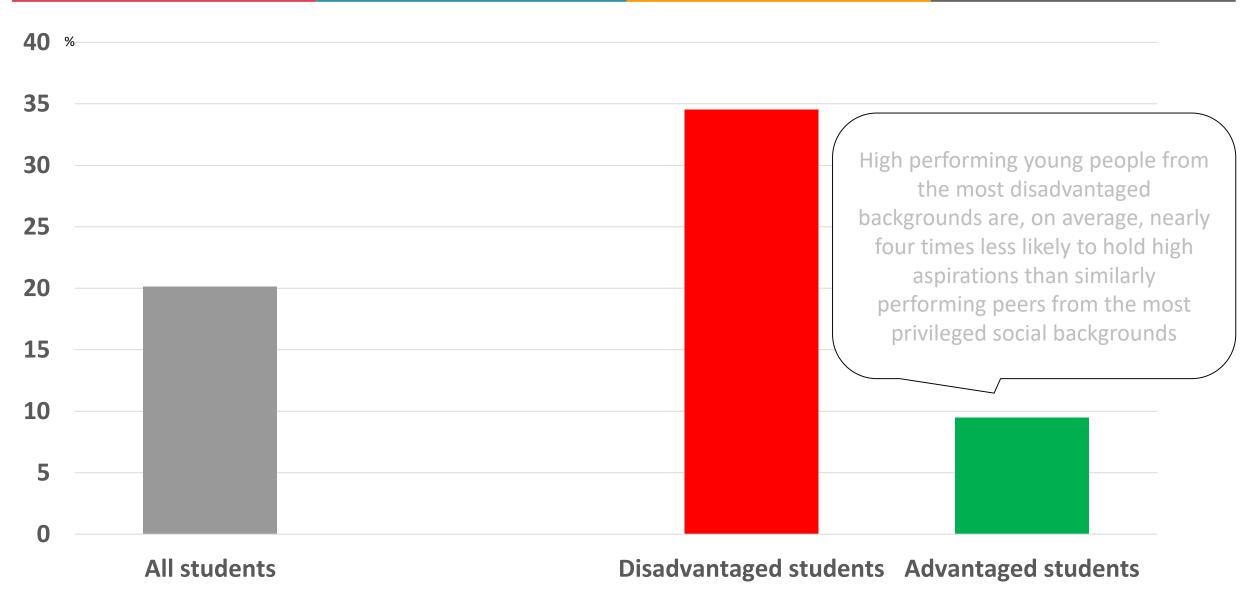




Do teenagers know what they need to do to fulfil their career expectations?

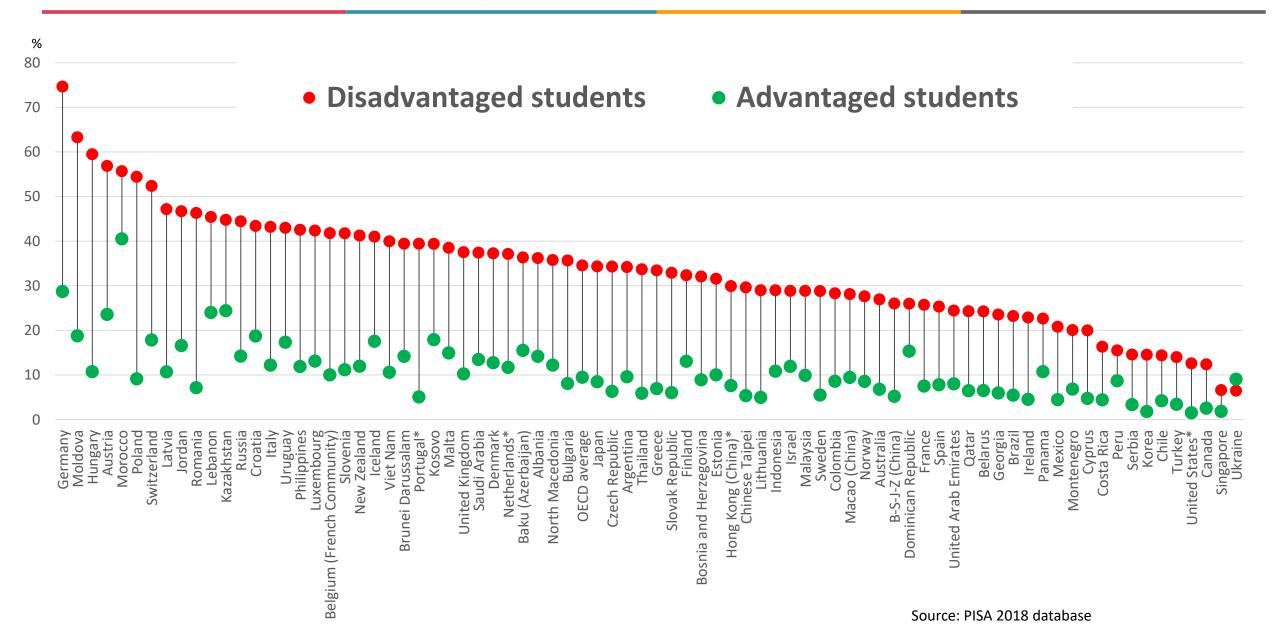
One in five young people across the PISA 2018 countries underestimate the levels of education typically required to secure the professional or managerial occupational positions they aspire to

Students with professional or managerial occupational expectations, but not planning to complete tertiary education



Source: PISA 2018 database

Misalignment: Students with professional or managerial occupational expectations, but not planning to complete tertiary education

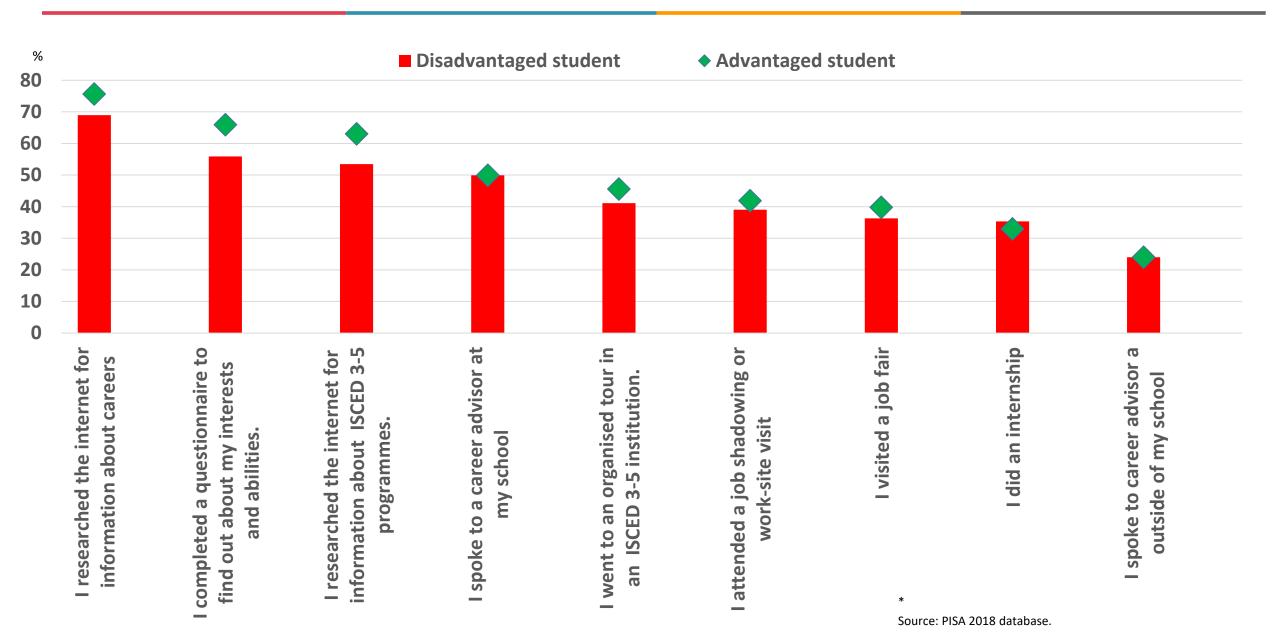




Effective career guidance encourages students to reflect on who they are and who they want to become...

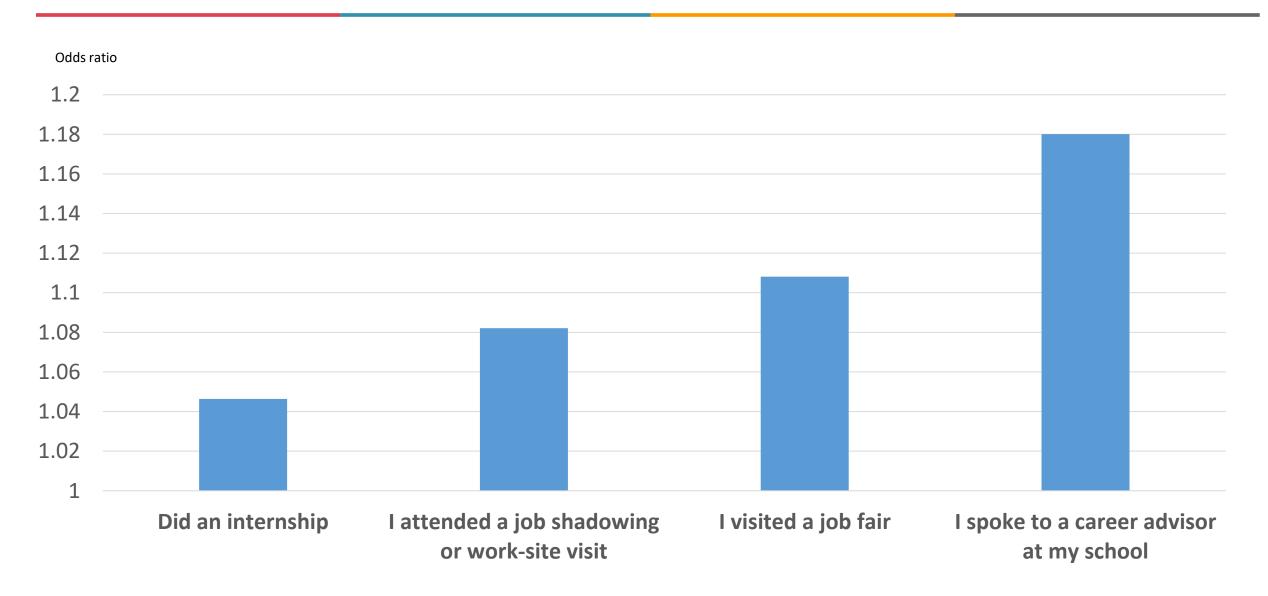
...and to think critically about the relationships between their educational choices and future life

Participation in career development activities OECD average



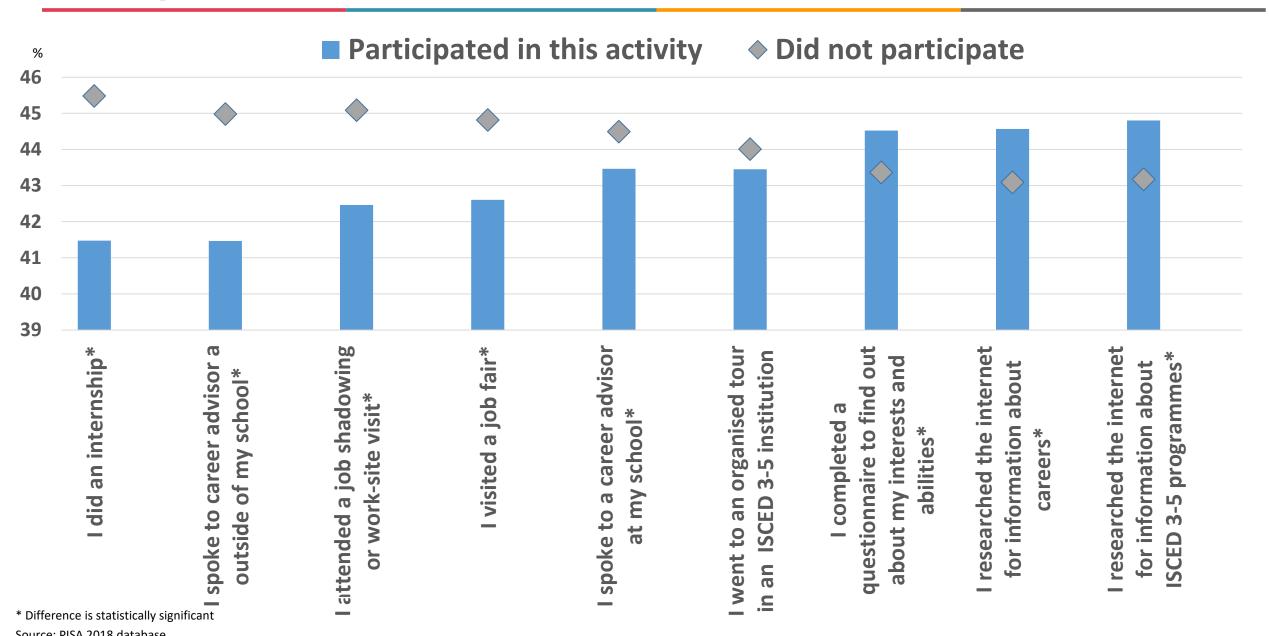
Effect of participation in career development on positive attitudes towards school

Odds ratio of the likelihood of students agreeing with the statement "Trying hard at school will help me get a good job"



Note: Odds ratio are adjusted for gender, socio-economic status, school type (private/public, class size, urban/rural, staff/student ratio), immigrant background, motivational factors (whether students skipped classes or days) and cognitive potential (whether students repeated a year of study).

Concentration of occupational expectations by participation in career development activities





Economic, educational and social outcomes linked to career guidance (Hughes et al. 2016).

Experimental and quasi-experimental studies published in English in OECD countries (1996-2016)

	Largely positive		Largely negative
Economic (adult employment & earnings) – 27 studies	67 %	33%	0%
Educational (academic achievement) – 47 studies	58%	40%	2%
Social (well-being, self-esteem, career management skills) – 25 studies	67%	33%	0%

Effective career guidance ...

- Starts early (primary) and intensifies around key decision points
- Connects classroom learning with future economic lives
- Provides easy access to trustworthy labour market information and advice/guidance from well-trained and impartial professionals
- Addresses information asymmetries about specific professions and challenges stereotyping
- Broadens understanding of the labour market focusing in particular occupations which are poorly understood and of strategic importance
- Targets young people from disadvantaged backgrounds for the greatest levels of intervention
- Is experiential with rich and plentiful engagement from the world of work

Employer engagement to boost young people's understanding of jobs and careers needs to be...

- authentic enabling first-hand encounters
- commonplace volume of encounters matters
- valued (relevant) by young people themselves
- varied different activities can be associated with different outcomes for different types of students
- contextualised by effective career guidance
- personalised in recognition of existing work-related networks and aspirations
- begun young addressing attitudes and expectations from primary schooling

Thank you

Find out more about our work at www.oecd.org/pisa

- PISA 2018: Insights and Implications
- PISA 2018 Results (Volume I): What Students Know and Can Do
- PISA 2018 Results (Volume II): Where All Students Can Succeed
- PISA 2018 Results (Volume III): What School Life Means for Students

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