THE STATE OF GLOBAL TEENAGE CAREER PREPARATION

2025

OECD

About this publication

This publication was produced by Anthony Mann, Jonathan Diaz and Andreas Schleicher in the Directorate for Education and Skills at the Organisation for Economic Cooperation and Development (OECD).

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For more information about the OECD's work on career development within secondary education, please visit https://www.oecd.org/en/about/projects/career-readiness.html.

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I feel confident about the future, but I do worry. I'm scared I will pick the wrong path as I want to do a job that will make me happy with myself.

- Habima, 17

FOREWORD

I am delighted to have been asked to write the foreword to this remarkable report by OECD Education and Skills. Thanks are due to the OECD team and Amazon for their support. The report summarises the largest and most detailed study ever of teenagers' career aspirations and how they compare to labour market needs and skills shortages. What makes it particularly notable is that it compares data since 2000, and now from some 80 countries.

It is most encouraging to see that the educational ambitions of students have increased over the last two decades. This reflects the efforts by teachers and schools, supported by governments, employers and charities to help young people achieve their potential. It is something which should be acknowledged and celebrated.

However, the report shows that in some areas little has changed, and indeed things have got worse:

- A young person's socio-economic background plays a bigger role in determining their educational ambition than their academic ability
- The job expectations of students have changed little since the start of the century and now bear little relation to actual patterns of labour market demand
- Most jobs young people want remain out of reach: their career choices are narrowing and increasingly focused on a limited number of traditional, high status jobs
- Students have never been so unsure about their career prospects - many exhibit great anxiety, uncertainty and confusion about the state of their career preparation
- The percentage of students looking to work in sectors highlighted by the OECD in 2000 as being of particular strategic importance and suffering from skills shortages has remained largely unchanged
- The majority of young people are not getting enough career development opportunities which connect them with people in work and workplaces and help them understand the opportunities open to them.

The impact of the mismatch between the careers young people aspire to and the reality of the labour market revealed in this paper should be of huge concern to all countries. The economic and social costs are enormous - employers not being able to find the future workforce they need, especially in growth areas; and large numbers of young people not fulfilling their potential, becoming NEET and all the social problems that result.

The last 20 years has seen the creation of a plethora of new jobs and roles, with job titles that are often near impossible to decode and understand. At the same time the amount of information about careers and jobs has dramatically increased. This in theory should lead to young people seeking a wider range of jobs but the opposite is true - with them focusing on a limited number of traditional roles. Perhaps the amount of choice is so overwhelming that they stick to the familiar and what they see around them - their family, neighbours and in the local area.

This is why helping young people to understand the job opportunities and career routes open to them is so important, but this paper shows that young people are not getting enough help. A key element of this careers' development is employer engagement which is that rare thing in public policy - an initiative where everybody can win. Young people are seen in research studies to gain better jobs, employers find it easier to recruit and societies gain from lower unemployment. Much more needs to be done to connect students with people in work and workplaces who are best placed to broaden and deepen their understanding of jobs and careers and their future prospects.

There are some simple actions that could be taken that would significantly address the problems the report highlights. What a difference it makes if employers simply encourage their employees to volunteer an hour a year to chat to children and young people about their job and opportunities in the sector. Many employers, from multinationals to small enterprises have recognised the need and engage with schools. But others have yet to engage - it needs to be really easy for them to do, and schools themselves need to see the value. As we look ahead to a world of work which is being rapidly (and unpredictably) changed by technology, employer engagement becomes more important in providing the very latest insights into the reality of jobs. A good example which exemplifies how technology can bridge this gap between students and the modern workplace is Amazon's Career Tours. Through interactive virtual experiences, students engage with content and learn from employee insights across various tech roles at Amazon. Bringing the workplace directly into classrooms helps decode the complexity of modern jobs and expands students' awareness of opportunities in high-demand sectors like technology and gain into careers they might never have considered.

The Education and Employers charity facilitates a coalition between the two worlds. It harnesses technological innovation to connect them in a very effective and efficient way. Our Inspiring the Future platform, which has been replicated in a number of countries makes it really easy for schools and employers to connect. It gets employers and their employees to volunteer from as little as an hour. By doing so via the Inspiring the Future platform it means schools can easily find them and invite them to chat to young people either in person or virtually. The combination of in-person and interactive virtual chats has the potential to revolutionise how children and young people see the opportunities open to them - giving them the chance to meet a diverse range of people doing different jobs, regardless of their geographic or socioeconomic background or family connections. At the same time, it enables employers - government, private, and third sector - to show young people the jobs and opportunities in their sectors, many of which young people will have very little awareness.

Now is the time for action to guarantee that our young people fully understand the opportunities open to them and that we have the future workforce we need to ensure a vibrant and prosperous economy and society for years to come.

Nick Chambers
CEO, Education and Employers Charity

INTRODUCTION

This is the second OECD overview of the global state of teenage career preparation. The first was launched in January 2020 at the World Economic Forum in Davos, Switzerland. Our publication, Dream Jobs: Teenagers' Career Aspirations and the Future of Work, provided important new insights into the significant challenges that young people face as they complete formal schooling.

The study showed that by the age of 15 career aspirations were strongly shaped by social background and highly concentrated with many students planning to work in jobs at significant risk of automation. Career guidance could be seen in the data to enhance the readiness of young people to progress through education towards desired careers, but many students had not yet engaged in beneficial activities.

Dream Jobs was based on data from the 2018 round of the OECD Programme for International Student Assessment (PISA). We now present key findings from PISA 2022, the world's largest dataset on young people's educational experiences and attitudes. In PISA 2022, 690 000 students from 81 countries completed assessments on their proficiency in mathematics, reading and science and provided substantial background information about their lives and schools. They responded moreover to questions concerning their career and educational plans, their participation in career development activities, attitudes towards career progression and participation in part-time work.

With large representative samples from each participating jurisdiction, not only can PISA compare national experiences, but we can also unpack the data to explore how career preparation varies by student characteristics such as gender and social background. PISA 2022 represents the largest ever comparative international survey of student career thinking and preparation.

Between the two studies, much has changed. We have endured a global pandemic, inflation and economic instability, growing concerns over climate change and a period of intense technological change with Artificial Intelligence becoming adopted across economic and educational life. All these factors serve to create greater instability in the labour market, making career planning both more challenging and more important for young people. Over the same period, it has become clearer than ever that teenage career development works. Guidance interventions can be expected to make a positive difference to young people as they transition into the world of work.

Within the data on the career preparation of students contained in PISA 2022, some points of information are particularly important. This is because recent analyses of multiple longitudinal datasets from different countries consistently highlight strong statistical relationships between different forms of teenage career development and thinking and better ultimate employment outcomes. Our 2021 paper, How youth explore, experience and think about their future, summarises analyses of datasets from ten countries. It finds strong associations between the ways in which students, typically around the age of 15, engage in different forms of career development and better results in the labour market as found in employment/unemployment rates, earnings and career satisfaction, typically around the age of 25.

The analysis, which takes account of student gender, social background, academic achievement and other factors which influence success in the competition for work, identifies important teenage predictors of better outcomes. PISA gathers information about many of these indicators. We know that when students actively explore their potential futures in work, they can expect them to do better later than would otherwise be expected.

In PISA, data is available on student career exploration through workplace visits or job shadowing, in job fairs and career conversations. Such activities connect students with people in work, a hugely valuable resource within career development. Studies find too that first-hand experiences of undertaking tasks under supervision within workplaces are also routinely associated with better long-term employment prospects for young people. PISA 2022 allows us to compare how students engage in short work placements (internships) and for some countries in part-time employment while PISA 2018 gathered information about volunteer work. These are all forms of career development that give students unrivalled opportunity to gain skills and insights relevant to occupations of interest, to meet and learn from people doing such jobs, and to build confident insight into how they can best navigate systems of education and training to achieve job ambitions.

Longitudinal studies show us moreover that the ways in which teenagers think about their potential futures in work matters. Young people who express clear job plans around the age of 15 can expect to do better ten years later than comparable peers who are uncertain about their ambitions. Equally, students who are confident that their schools will be able to help them to achieve their aspirations and who understand what desired occupations typically require in terms of educational achievement can anticipate better outcomes. PISA asks students many relevant questions surrounding such career thinking. It also allows us to observe how student participation in career development activities is linked to the career thinking that makes a difference. For schools, insights from longitudinal studies shape many useful questions that can be asked of students as staff seek to identify girls and boys in need of greater support.

What this review of global teenage career preparation reveals

This paper focuses on eight key questions to which PISA data provides often uncomfortable answers.

1. Rapidly growing numbers of students are uncertain about their career plans, linking with poorer ultimate employment outcomes.
2. Students' job plans focus on a small number of predominantly professional occupations which compare poorly to actual patterns of employer demand.
3. Many students, especially from more disadvantaged backgrounds, are confused about what they need to do to achieve their career plans.
4. Overwhelmingly, social background is a stronger determinant of plans for tertiary education than academic ability as tested on the PISA assessments.
5. Too few students are participating in career development activities which are most strongly linked with better ultimate outcomes in employment.
6. Across the OECD, students from more advantaged social backgrounds can expect to engage more in guidance than their disadvantaged classmates who will typically have greater need for support.
7. The interest of girls and boys in occupational fields of strategic importance where their gender is historically underrepresented has changed little over the last generation.
8. Many students feel poorly prepared for their futures and doubt that their schools are helping them in their career preparation.

Looking across the PISA 2022 data, while jurisdictions vary considerably in the extent to which students are being effectively prepared for their career progression, it is clear on average that too many students are poorly equipped for their next steps. On average across OECD countries, by the age of 15:

- 39% of students are unclear about their career expectations.
- 21% can be classified as 'misaligned' in their career thinking – expecting to work in a job that typically requires a university education, but not expecting to complete tertiary education.
- 33% would not agree that 'school has taught me things which could be useful in a job'.

By this age, only:

- 35% have attended a job fair.
- 45% have participated in a workplace visit or job shadowed.
- 35% have completed an internship.

Students in greatest need are often getting the least support

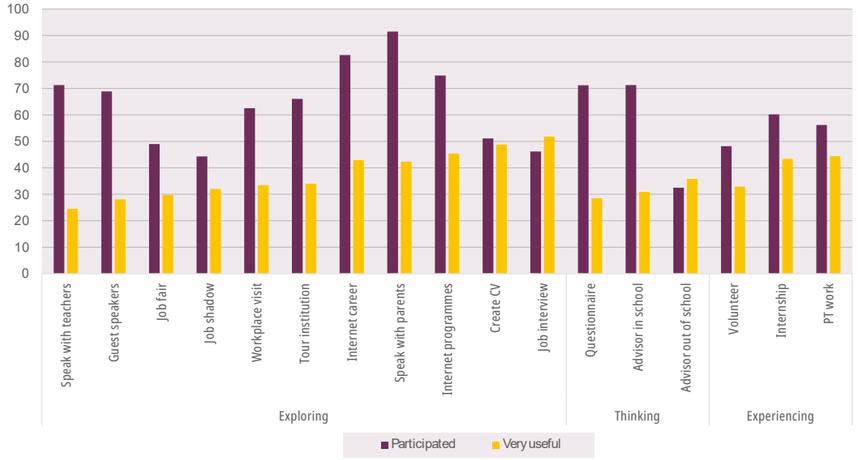
PISA allows us to compare the career development of students by a range of personal and social characteristics. We find that gender and migrant status often influence student preparation for, and thinking about, the future. Systematically for example, girls are less likely than boys to engage in career development activities that connect them with people in work. It is also apparent that often it is students from the most disadvantaged backgrounds who exhibit career thinking of greatest concern and who participate less frequently in guidance activities. If we compare the most socially advantaged quarter of students to their least advantaged peers, it is apparent that career misalignment is concentrated among the latter group. PISA 2022 shows that whereas one student in three from within the most disadvantaged quartile can be categorized as misaligned in their career thinking, this applies to only one in ten of their most privileged peers. Misalignment is a form of career confusion and is strongly connected in longitudinal studies with poorer than expected employment outcomes. Similarly, disadvantaged students are more likely to be uncertain about their career plans and less likely see schooling as valuable to their futures in work, two further predictors of poorer outcomes.

One of the most striking findings from PISA 2022 is that on average across the OECD students from the most socially disadvantaged backgrounds who achieve well on the PISA academic assessments are less likely to expect to complete tertiary education than socially advantaged peers whose academic performance suggests strongly that they will struggle to complete such a level of education. In 2022 across the OECD, social background is a stronger determinant of education ambition than academic ability.

While longitudinal studies provide the best available evidence exploring the long-term impacts of teenage career development, information is limited. By definition, studies focus on activities undertaken a decade or more ago and many longitudinal surveys ask few relevant questions. One way that more current and comprehensive data can be collected is by asking questions of young adults who have recently left secondary education.

Surveys of adults aged 19-26 have been undertaken in the Spain, the United Kingdom and the United States. All explore the perspectives of the users of guidance systems. In Madrid, Spain 1,015 young adults who had participated in secondary education within the region were asked which forms of career development they participated in while in secondary school and if having done so, whether the activities proved helpful to them after leaving school. Overwhelmingly, users of the system felt that they were useful to them, often very useful (Figure 0.1), but that frequently many youth completed secondary education without such opportunity for career development.

Figure 0.1. Percentage of young adults in Madrid, Spain recalling participation in a career development activities while in secondary education and if having done so, perceptions on activities being very useful in 'planning and preparing for working life after secondary education.'



Note. Survey of 1 015 young adults (aged 19-26) who had attended secondary education in the Community of Madrid, Spain. The survey was undertaken in the summer of 2024.

Source. OECD survey of young adults in Madrid, Mann, A. et al. (2025), Career Readiness in Madrid (Spain): insights from a survey of young adults (19-26), OECD Publishing, Paris.

The essential role of employer engagement

The reason why we launched Dream Jobs with Education and Employers at Davos in 2020 during the World Economic Forum was to underline the essential importance of employer engagement in the career development of students. A further important take away from our review of longitudinal datasets is that the career development activities which connect students directly with people in work and workplaces are strongly linked with long-term boosts in employment. Whereas activities such as job fairs, workplace visits, job shadowing and internships cannot take place without the involvement of people in work, other predictors of better outcomes such as student participation in career conversations and Career Pathway programmes, and the development of recruitment skills (CV workshops and interview practice) routinely involve employers and are enhanced by them.

Something special happens when students engage with people in work. It is a form of social capital. Students gain opportunity to access information and advice about the world of work and how it might relate to them individually in ways which are especially trustworthy and relevant. It allows young people to envision new potential futures for themselves and to challenge stereotypical ideas about the sorts of people who are suited for different professions. As the saying goes, if you can't see it, you can't be it. Employer engagement also provides students with chances to develop new relationships of long-term value, leading to recommendations or job offers. Effective guidance demands extensive student engagement with workplaces and people in work and the afterword of this paper explores in detail why this is the case and how it can be best delivered.

An urgent need for greater investment in effective career development

Never before have so many young people left education more highly qualified and with more years of schooling, but often we see them struggling to activate their accumulated human capital in the labour market. Across the OECD, overwhelmingly students now stay in education or training until at least 18 years and often older. As they progress, they are required to make ever more decisions about what they will study, where they will study and how hard they will engage in learning. Societies introduce programmes of career guidance to help students make informed decisions that enable progression towards achievable and personally fulfilling ambitions. The presence in many societies of unemployed graduates alongside extensive skill shortages highlights failures in the system.

There are simple ways in which guidance systems can be improved in many jurisdictions. As well engaging more systematically with workplaces and people in work, more effective provision will begin early in school life. In too many systems, guidance provision happens only towards the end of schooling. The most important decisions that students make – about their engagement in education – happen continually from the earliest years of education.

The career thinking demonstrated by students at age 15 is the product of many years of opportunity (and lack of opportunity) to discuss, explore and experience potential futures in light of their educational involvement.

Assuredly, schooling is about more than the preparation for work, but we owe it to our young people that they go through education blind neither to the breadth of opportunities presented by the working world nor its potential pitfalls. We can and must do better — PISA 2022 challenges jurisdictions to view these results as a baseline from which educational provision can be significantly improved in most countries.

A new OECD dashboard on teenage career readiness

PISA 2022 provides considerably more data than it is possible to present in this paper and to coincide with its publication, a new OECD dashboard on teenage career readiness, also kindly supported by Education and Employers and Amazon, has been launched to allow for comparisons between and within jurisdictions. For the first time, it will be possible to easily measure the differences in student expectations and assumptions, an important step in the continuing enhancement of guidance provision.

To view the OECD dashboard on teenage career readiness, visit:
https://www.oecd.org/en/data/dashboards/career-readiness

Andreas Schleicher
OECD Director for Education and Skills
Special Advisor on Education Policy to the Secretary General

Across the OECD, PISA 2022 shows that 39% of students can now be classified as career uncertain.

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1 Career uncertainty: Do students have clear career plans, and does it matter?

The percentage of students who are uncertain about their career plans has grown substantially since 2018, increasing the risk of poor employment outcomes.

Since 2000, students completing the PISA surveys have often been asked to name the type of job they expect to work in around the age of 30. As explored later in this paper, answers to the question provide valuable insights into how student career plans relate to actual patterns of demand for labour. But more than this, it is important to know whether students have clear expectations at all.

Many longitudinal studies have explored whether teenage career uncertainty can be related to later employment outcomes. A recent OECD review of 19 studies found that 15 provide evidence that uncertainty is bad for young people. Uncertain teenagers on average go on to experience poorer employment outcomes in adulthood than would be otherwise expected given their educational success, social background, gender, migrant status and other characteristics. It pays to have a clear vision for the future.

Why is this? It is known that student career plans do have a predictive quality. Someone with a clear job plan at 15 is more likely to end up working in that profession than in any other random occupation. Consequently, it matters whether teenagers express interest in working in fields of strategic importance and if not there is an onus on societies to consider how student understanding of such occupations and progression routes into them can be improved. In general however most young people do not go on to secure the exact job they expected when in school. The larger importance of career certainty and uncertainty lies in what it says about how much a young person is actively thinking about their future lives in work.

PISA shows clearly that young people who participate more in career development activities are less likely to be uncertain about their plans. A student with a career plan can begin a deep exploration of a professional area, investigating what it would mean in practice to work in such a field by speaking to people employed in related jobs and seeking out first-hand experiences through internships, voluntary work or part-time employment. Importantly, they can also begin working out what they need to do to achieve their career goal: how hard they will need to work to secure grades at the right level in the right subjects to allow them to have a good chance ultimately of entering their desired profession.

In most OECD countries, students focus their attention on a narrower range of subjects within upper secondary education often with significant consequences for their further progression in education, training and work. For students to make informed investments in their schooling, they need help in understanding whether different roles in the labour market would be fulfilling and obtainable to them personally. As will be seen, many young people express plans for the future that will be challenging given the levels of academic success they demonstrate in the PISA assessments on mathematics, reading and science.

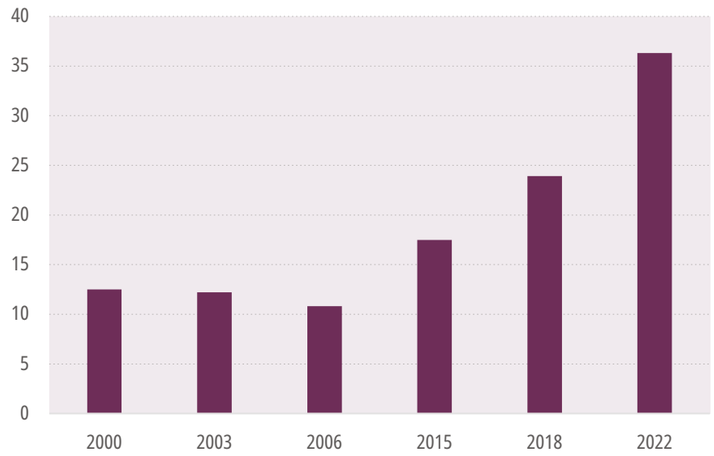
It is likely moreover that career uncertainty contributes to poorer educational success. PISA shows that career uncertainty is especially high among students who performed at the lowest levels on the study's academic assessments. In 2022, whereas 34% of the highest performers can be classified as career uncertain, this applies to 44% of the lowest performers.

Students are classified in PISA as being uncertain if they provide no answer to the survey's question on their occupational expectation, but also if the response given is too vague or broad to allow for identification within the International Standardised Classification of Occupations. Checks are undertaken to see if students who failed to write in an answer to this question also failed to respond to other questions that required written answers, such as those related to parental occupation. In PISA 2022, more than three-quarters of students who did not enter a classifiable occupation did write in details for at least one parental occupation.

Since the turn of the century, the percentage of students with clear career plans has fallen with uncertainty rising substantially over the last decade. Figure 1.1 compares results for all PISA surveys since 2000 which have featured this same question concerning student job plans. Across the OECD, PISA 2022 shows that 39% of students can now be classified as career uncertain. While levels of uncertainty vary considerably across OECD countries, in very few are more than three in four students now clear about their future plans (Figure 1.2).

An important question for schools to ask students around the age of 15 is what type of job they expect to have when they are around 30. Students may be thinking of a few different professions or change their plans over time and this is very reasonable. The important thing is that they are encouraged to begin imagining their futures in work through lower secondary, allowing them time to explore fields of potential interest while they have plenty of time to build an understanding of how the choices they make in education and training can either enable or hinder easy access towards desirable ultimate employment.

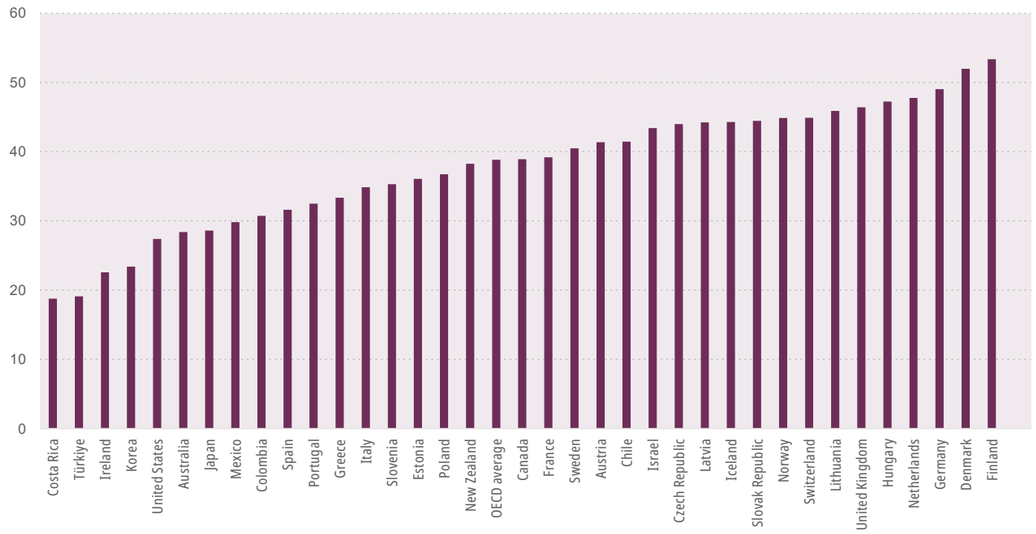
Figure 1.1. Average rate of teenage career uncertainty within OECD countries participating in all PISA surveys, 2000-2022



Source. OECD PISA databases 2000-2022.

Note. The figure shows the average level of uncertainty among students from countries participating in all PISA surveys asking: 'What kind of job do you expect to have when you are about 30 years old?' This question was not asked in 2009 or 2012. The countries participating in all relevant surveys are: Australia, Austria, Czechia, France, Germany, Greece, Hungary, Ireland, Italy, Mexico, Portugal, South Korea and the United Kingdom.

Figure 1.2. Percentage of students who can be classified as career uncertain, OECD countries, PISA 2022



Source: OECD PISA databases 2022.

"I feel anxious about working life. I want to be able to enjoy my career and have a stable income, but I don't know what options would be available for me as I'm not sure what career to do.

- Bella, 17

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Career planning. What are the job expectations of students, have they changed over time and how do they compare to actual patterns of employer demand?

The job expectations of students have changed little since the start of the century, are increasingly concentrated and bear little relation to actual patterns of labour market demand.

After students completing the PISA survey have written in an occupational expectation, analysts use the International Standardised Classification of Occupations (ISCO) to classify their choice. This allows comparisons to be made within and between countries and over time. ISCO was last updated in 2008 and puts all jobs into ten major groups.

PISA 2022 shows that the occupational expectations of students are highly concentrated. Looking at the ten most popular job plans shows that on average across the OECD 50% of girls and 44% of boys expect to work in one of ten jobs. Figures 2.1 and 2.2 shows the ten most common job expectations for girls and boys in 2000 and 2022 as an average for students in all OECD countries participating in the surveys. Career interests are heavily shaped by gender, but variation is reducing. Whereas three occupations in 2000 appealed to both girls and boys, by 2022 this figure had risen to five. Across the OECD, girls are now less likely to anticipate working as a hairdresser or office clerk and more likely to plan on working as an architect or police officer.

Since 2000, levels of this career concentration – which in some studies is associated with poorer ultimate employment outcomes later on – have steadily increased. Figure 2.3 tracks the average percentage of girls and boys saying they will work in one of the ten most popular job choices within countries for which data are available.

A striking finding from the PISA 2022 data is the strong growth in teenage expectations of working in one narrow field of employment: the professions (Figure 2.4). ISCO major group 2 includes six subgroups of professionals related to: science and engineering; healthcare; teaching; business administration; information and communications technology; and legal, social and cultural professions. Eighteen OECD countries have participated in every PISA cycle since 2000 which asked students to share their occupational plans. As Figure 2.4 shows, over this period the proportion of students from these countries expecting to work as a professional has increased from 48% to 59% while interest in all other major groups of employment has remain steady or fallen. For all OECD countries participating in PISA 2022, on average 58% of students who expressed a job expectation said that they anticipated working as a professional. Students anticipating such an occupation are more likely to be girls (69%), students from the most socially advantaged quartile (72%), high performers on the PISA assessments (73%) and residents of urban areas (64%).

While large numbers of students expect to become a professional in every OECD country, levels of interest vary (Figure 2.5). In some countries such as Canada, Mexico and Costa Rica, more than 70% of students say that they will work in this field. Expectations are lowest in countries with historically strong systems of vocational education and training. While countries vary in the proportions of workers in the actual labour market who are employed as professionals, in no OECD country is there greater demand for employment than the potential supply as indicated by student job expectations.

ISCO allows for comparisons to be made between student job plans and actual distributions of workers within labour forces. Figures 2.5 and 2.6 compare patterns of student occupational expectations by ISCO major group and actual patterns of labour market distribution in two countries. In England, three times more students expect to work as a professional than there are actual jobs available. In Norway, this ratio is lower.

Table 2.1. The most popular ten expected occupations of girls. Average of all OECD countries, PISA 2000 and PISA 2022

Rank	Occupational expectation (2000)	%	Occupational expectation (2022)	%
1	Teachers	12.0	Doctors	12.2
2	Doctors	7.9	Teachers	7.3
3	Lawyers	4.5	Lawyers	6.5
4	Psychologists	3.6	Nursing and midwives	5.8
5	Nursing and midwives	3.4	Psychologists	5.3
6	Hairdressers	3.4	Designers	3.7
7	Designers	2.8	Veterinarians	2.9
8	Writers	2.6	Architects	2.7
9	Veterinarians	2.5	Police officers	1.9
10	General and keyboard clerks	1.9	Actors	1.7
	Total	**44.5**	**Total**	**50.0**

Source. OECD PISA databases 2000 and 2022.

Note. Data on the most popular occupational expectations of girls and boys for all countries participating in PISA 2022 are available on the OECD dashboard https://www.oecd.org/en/data/dashboards/career-readiness

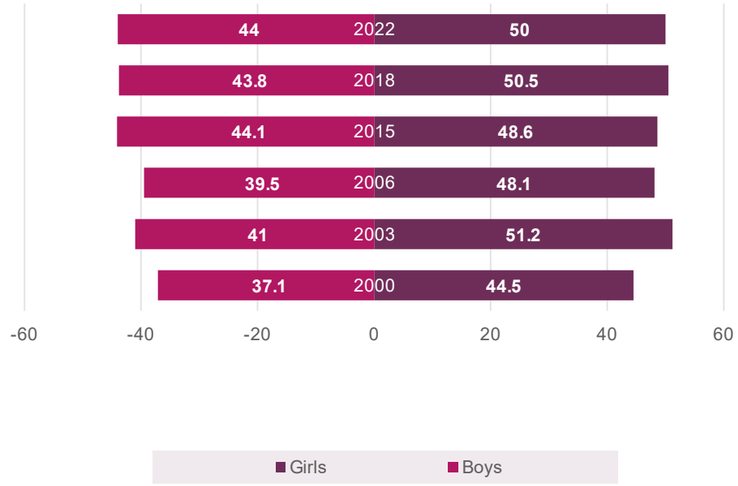
Table 2.2. The most popular ten expected occupations of boys. Average of all OECD countries, PISA 2000 and PISA 2022

Rank	Occupational expectation (2000)	%	Occupational expectation (2022)	%
1	ICT professionals	7.9	ICT professionals	8.7
2	Engineers	5.4	Sportspeople	7.4
3	Sportspeople	4.5	Engineers	6.6
4	Teachers	4.2	Doctors	5.2
5	Doctors	3.6	Teachers	3.3
6	Motor vehicle mechanics and repairers	2.9	Architects	3.0
7	Lawyers	2.3	Lawyers	2.8
8	Architects	2.3	Motor vehicle mechanics and repairers	2.5
9	Police officers	2.0	Police officers	2.2
10	Science and engineering professionals	1.9	Managing directors and chief executives	2.2
	Total	**37.1**	**Total**	**44.0**

Source. OECD PISA databases 2000 and 2022.

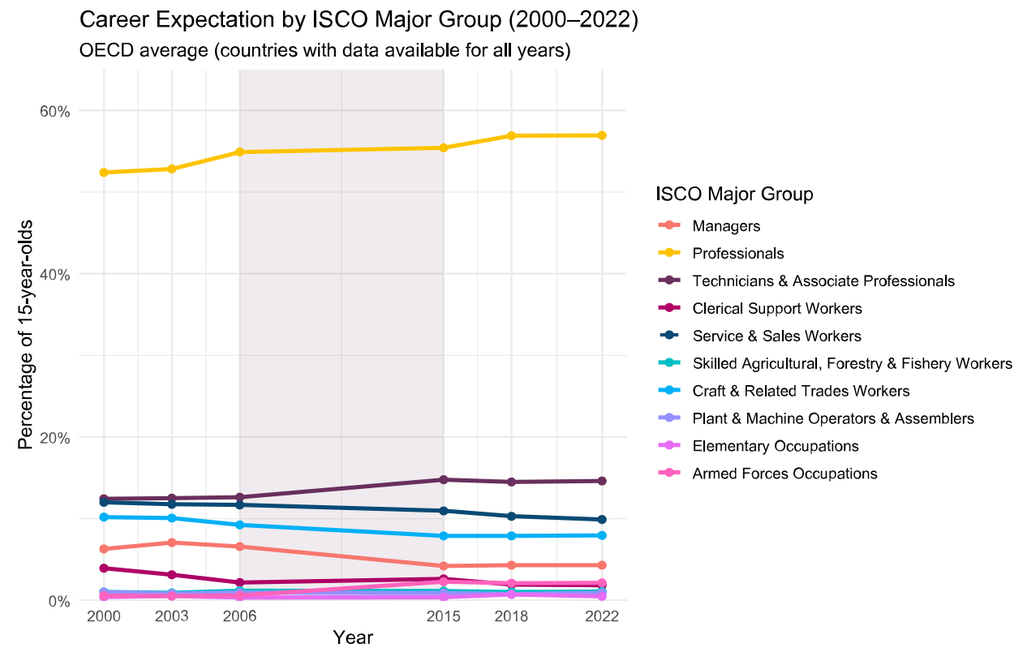
Note. Data on the most popular occupational expectations of girls and boys for all countries participating in PISA 2022 are available on the OECD dashboard https://www.oecd.org/en/data/dashboards/career-readiness

Figure 2.3. Changing patterns of career concentration 2000-2022, girls and boys expecting to work in one of 10 most popular career choices. Average of all OECD countries participating in relevant PISA studies



Source. OECD PISA databases 2000-2022.

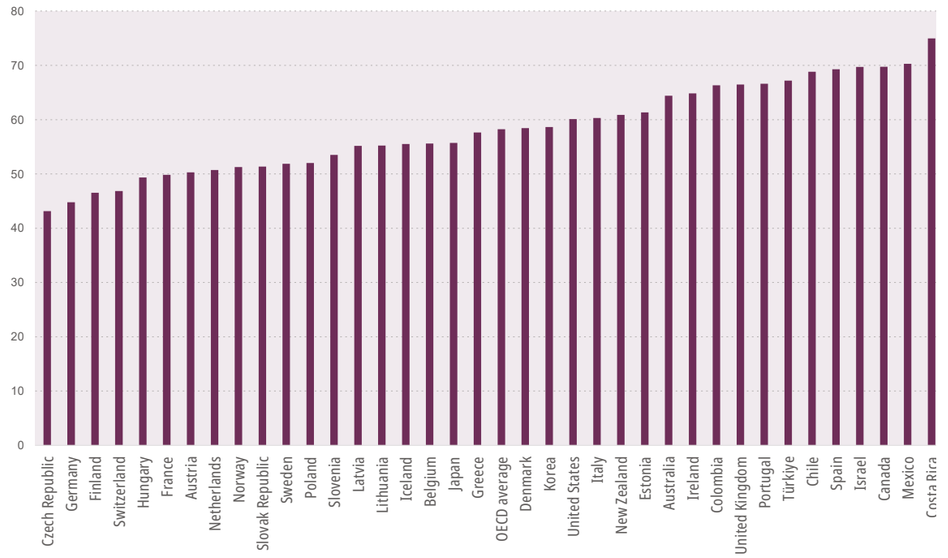
Figure 2.4. Occupational expectations of students by ISCO major group. Average of all OECD countries participating in relevant PISA studies, 2000-2022



Source. OECD PISA databases 2000-2022.

Note. The figure shows the average percentage of girls and boys from countries participating in PISA 2000, 2003, 2006, 2015, 2018 and 2022 expecting to work in one of the 10 most popular career choices for their gender as a proportion of all students expressing an occupational expectation. Participating countries: ustralia, Austria, Belgium, Czechia, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Korea, Latvia, Mexico, Poland, United Kingdom and the United States.

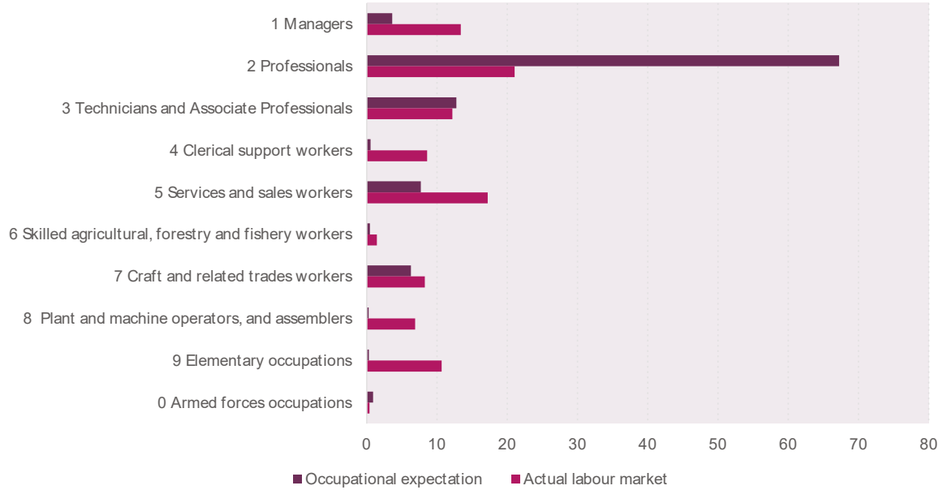
Figure 2.5. Percentage of students who expect to work as a professional (ISCO 2). OECD countries, PISA 2022



Source. OECD PISA data 2022.

Note. Major group 2 of the International Standardised Classification of Occupations includes six subgroups of professionals related to: science and engineering; healthcare; teaching; business administration; information and communications technology; and legal, social and cultural professions.

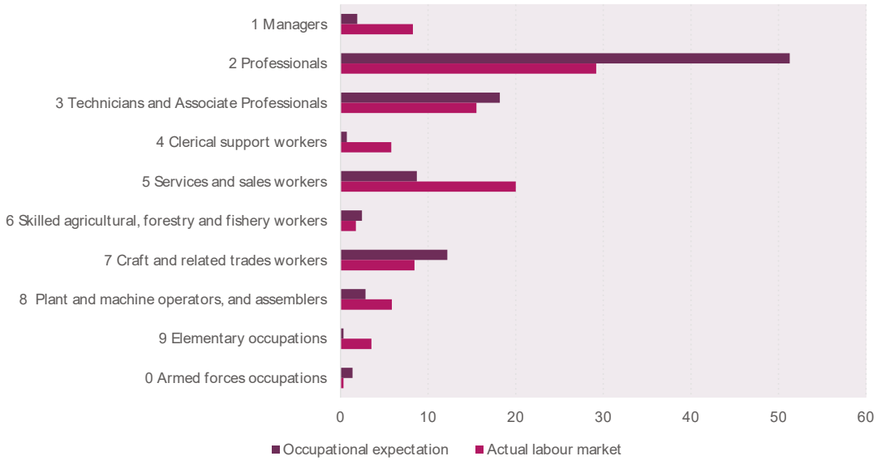
Figure 2.6. Comparison of student occupational expectations in England (PISA 2022) with national labour market distributions



Source. OECD PISA 2022 database and Office for National Statistics (ONS), released 8 December 2022, ONS website, statistical bulletin, Industry and occupation, England and Wales: Census 2021, Mann, A. et al., (2024), Teenage career development in England: A Review of PISA 2022 Data, OECD Publishing, Paris.

Note: Census data from the Office for National Statistics (ONS) contains information from all people in England and Wales.

Figure 2.7. Comparison of student occupational expectations in Norway (PISA 2022) with national labour market distributions



Note. Occupations are classified using the International Standard Classification of Occupations (ISCO-08). Data on student career expectations is derived from the OECD PISA 2022 database, while actual labour market distributions reflect employment data from the International Labour Organisation (ILO) for 2022.

Source. OECD PISA 2022 database. ILO (2024), Employment by sex, age and occupation (thousands) - Annual. https://www.ilo.org/shinyapps/bulkexplorer54/?lang=en&id=EMP_TEMP_SEX_AGE_OCU_NB_A.

For all OECD countries participating in PISA 2022, on average 58% of students who expressed a job expectation said that they anticipated working as a professional.

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3 Career alignment and misalignment. Do students understand what they need to do to achieve their job plans?

Many students, especially from more disadvantaged backgrounds, are confused about what they need to do to achieve their career plans.

What students think about their futures in work matters. It is predictive of likely outcomes later on. As discussed, young people who are uncertain about their career plans on average go on to do worse in work than would otherwise be expected. The same also applies to a large group of students who can be described as 'misaligned' in their career thinking.

Over recent years, a growing number of studies have looked at the alignment and misalignment of the professional and educational plans of secondary school students. Longitudinal surveys commonly ask students about the careers they plan to pursue and the highest levels of education they expect to complete. Where the education level is well-matched with the typical qualifications required for entry into the anticipated profession, students can be described as being 'career aligned'. When their expected levels of education are much higher or lower than that which is normally required, they are seen as misaligned. It is of greatest concern when students effectively underestimate the education required and this form of misalignment is routinely found in longitudinal studies to be linked with worse employment outcomes than would otherwise be expected in early adulthood.

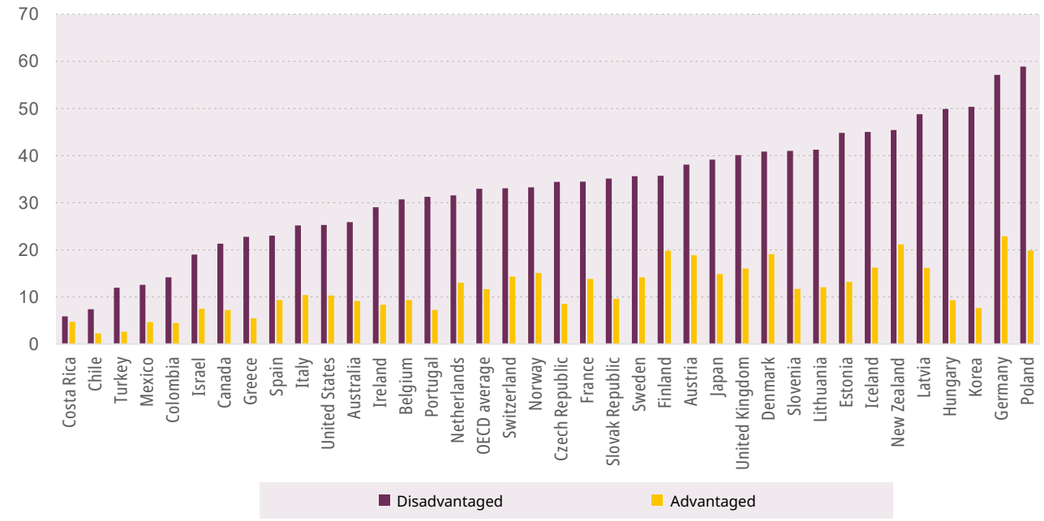
Across OECD countries, on average one student in five who expects to work in a profession which typically requires tertiary education as an entry qualification (jobs classified within major groups 1, 2 and 3 in the International Standardised Classification of Occupations), but does not plan on continuing in education beyond the completion of upper secondary education. It does not pay to be confused about how the education and training system works.

PISA 2022 shows that it is students who are from the most socially disadvantaged backgrounds who are systematically more likely to be so misaligned in their career thinking (Figure 3.1).

On average, across OECD countries, 34% of students from the least advantaged quarter of students can be described in this way compared to 11% of the most advantaged students. In some countries, around half of disadvantaged students express such confusion in their future planning. Equally, students who perform at the lowest levels on the PISA academic assessments demonstrate high levels of misalignment (Figure 3.1). While studies show that such low-performing students are likely to struggle to complete tertiary education, at the age of 15 many expect to work in a profession that typically requires a university qualification.

Over the last twenty years, levels of such misalignment have fallen as the educational ambitions of students have increased. Looking at OECD countries for which data are available in both 2003 and 2022 shows that the percentage of students expecting to complete some form of tertiary education rose from 58% to 67%. Increases in educational ambition are in general to be welcomed as young people with higher levels of qualifications can expect to enjoy, on average, greater security in the labour market and teenage educational ambitions do have a predictive quality. Analysis of PISA data shows that students who engage more strongly in career development activities are less likely to demonstrate misalignment. For schools, tests for career misalignment are further simple ways of helping students to explore what employers will ultimately demand in terms of education and training to allow entry into desirable professions.

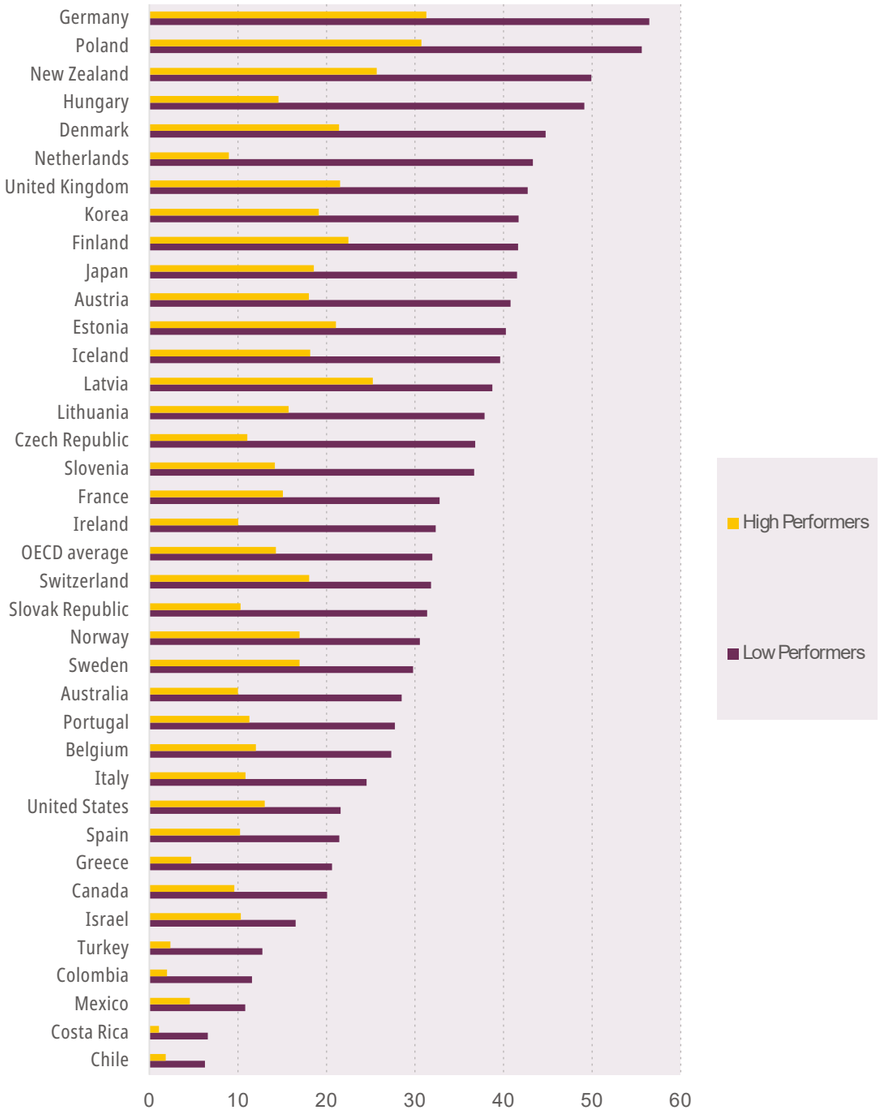
Figure 3.1. Career misalignment of students from high and low quartiles by Economic, Social and Cultural Status (ESCS). OECD countries, PISA 2022



Source. OECD PISA 2022 database.

Note. Students are categorised as misaligned where they expect to work in an ISCO 1-3 occupation and expect to complete education at a level lower than ISCED 5.

Figure 3.2. Career misalignment of students by high and low academic performance. OECD countries, PISA 2022



Source. OECD PISA data 2022

Note. Students are categorised as misaligned where they expect to work in an ISCO 1-3 occupation and expect to complete education at a level lower than ISCED 5. High performers are students who achieved above level 4 in at least one of the PISA assessments in science, mathematics and reading and above level 2 in the other two assessments. Low performers are students who achieved below level 2 proficiency in one of the three assessments.

"It is pretty difficult to decide what I want to do because I have no clue what grades I am going to get and what opportunities in and out of school I'll have.

- Mahmoud, 17

4 Aspiration gaps. Are the education plans of students driven more by social background than ability?

The education plans of students are driven more by social background than by ability.

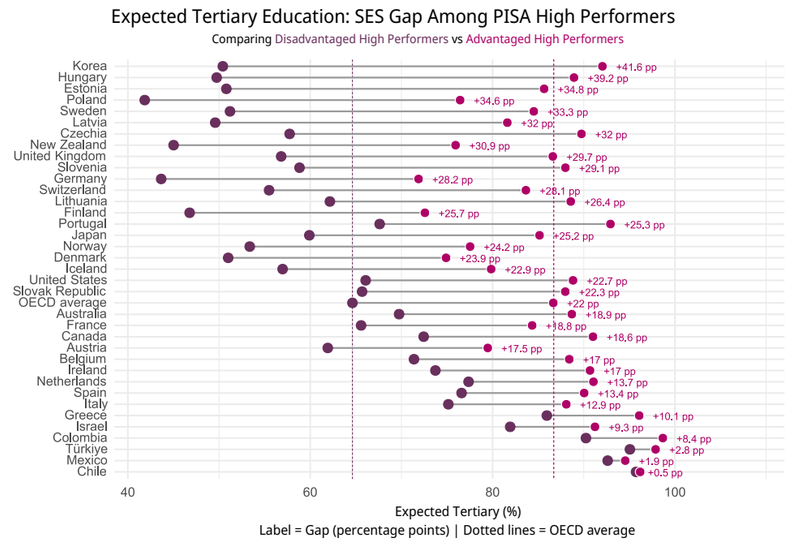
By the age of 15, students in most OECD countries are approaching important decision points. In many countries, it is around this age that students decide whether they will continue in secondary education and if so, whether they will pursue general education pathways which commonly enable access to tertiary education or to enrol on programmes of vocational education and training.

It has long been understood that the social background of students plays an influential role in the decision-making of students. Data from PISA 2022 provides new insight into just how strongly the family background of students shapes their aspirations.

PISA uses an algorithm that draws on parental occupation, educational levels and household possessions to place all students on a spectrum by economic, social and cultural status (ESCS). Figure 4.1 compares educational plans of high performing students on the PISA assessments in mathematics, reading and science by their ESCS status. The figure illustrates a consistent 'aspiration gap' in educational plans. Across OECD countries, on average the most socially disadvantaged students are 22 percentage points less likely to anticipate completing some form of tertiary education. In Czechia, Estonia, Hungary, Korea, Latvia, Sweden and the United Kingdom, this gap in 30 percentage points or more.

Figure 4.2 further explores the data and finds that on average across the OECD countries, low performing students from the highest ESCS backgrounds are more likely to expect to complete some form of tertiary education than high performing students from the lowest ESCS backgrounds. This gap averages 8 percentage points across the OECD and is found in most member countries. It is only in nine jurisdictions where the two figures are comparable or where academic ability is a better measure of educational plans than social background. Analysis of PISA data shows that students who have engaged in different career development activities in general demonstrate significantly higher levels of educational ambition.

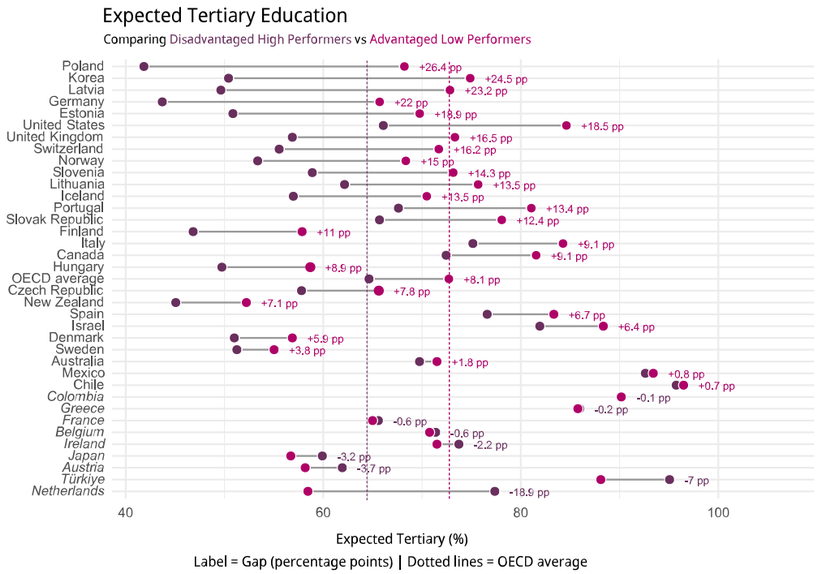
Figure 4.1. The expectation of high performing students in completing some form of tertiary education by economic, social and cultural status. OECD countries, PISA 2022



Source. OECD PISA 2022 database.

Note. High performers are students who achieved above level 4 in at least one of the PISA assessments in science, mathematics and reading and above level 2 in the other two assessments. The figure compares the percentages of students from the most socially advantaged and disadvantaged quartiles by assessment of economic, social and cultural status expecting to complete ISCED levels 5-8.

Figure 4.2. Comparison of the education expectations of high performing, low ESCS students and low performing, high ESCS students. OECD countries, PISA 2022.



Source. OECD PISA 2022 database.

Note. High performers are students who achieved above level 4 in at least one of the PISA assessments in science, mathematics and reading and above level 2 in the other two assessments. Low performers are defined as students who failed to achieve level 2 in one of the three assessments. The figure compares the percentages of students from the most socially advantaged and disadvantaged quartiles by assessment of economic, social and cultural status expecting to complete ISCED levels 5-8.

5 Effective career guidance. Are students engaging in career guidance activities that make a difference?

Too few students are participating in career development activities which are most strongly linked with better ultimate outcomes in employment.

Career guidance systems are funded by societies with a primary purpose of enhancing the job outcomes of students and enabling the more efficient operation of economies. Historically, evidence concerning the extent to which guidance interventions enable better employment outcomes for youth has been limited. In recent years however substantial new evidence has emerged, providing considerable confidence that public investments in teenage career development are well placed.

In order to assess the likely long-term impacts of guidance provision, it is necessary to compare the outcomes of large numbers of young people who participate in interventions against those of similar peers who do not, following both groups into adulthood and using statistical controls to ensure that any benefits are not masks for other characteristics which shape employment success. Such assessments can be undertaken by randomised control trials, but in the field of career development these are very rare. It is possible however to use longitudinal cohort studies to identify teenagers who participated in guidance activities while in school and then follow them into adulthood. The OECD has reviewed such studies in the research literature and overseen new analyses in ten countries (Australia, Canada, People's Republic of China, Denmark, Germany, Korea, Switzerland, United Kingdom, United States and Uruguay).

As summarised in the publication How youth explore, experience and think about their future: a new look at effective career guidance (OECD 2021), the analysis produced compelling new evidence of significant links between forms of teenage career development and better ultimate employment outcomes.

The study confirmed three forms of teenage career development which are strongly linked with greater job success around the age of 25. These relate to ways in which students around the age of 15 explore, experience and think about their potential futures in work. Specific predictors include participation in activities such as job fairs and workplace visits, participation in career conversations and experiences of work through part-time work, volunteer work and internships/ short work placements. Such activities are linked in turn to forms of career thinking (certainty, alignment, ambition, instrumental motivation) which are also associated with better ultimate employment outcomes. While not comprehensive, the PISA studies provide important opportunity to assess levels of student engagement against such predictors of better ultimate transitions into work.

Figure 5.1 compares average student participation levels across a range of career development activities in countries for which data are available for both 2018 and 2022. It finds that in spite of the COVID-19 pandemic, students increased their engagement in most activities. However, comparatively few students still participate in many important activities. Three types of career development bring students into firsthand contact with workplaces and people in work, which provide important sources of information and experience to students.

Looking across all OECD countries, in 2022 by the age of 15 only 45% of students had visited a workplace or job shadowed (Figure 5.2), 35% had attended a job fair (Figure 5.3) and 35% completed an internship (Figure 5.4). In general, students who could recall such activities generally said that it had happened on just a single occasion, limiting opportunities to gain useful, new information and experiences. Opportunity for thinking and reflection are greater but also limited. PISA 2022 shows that on average 64% of students across the OECD had completed a career questionnaire (Figure 5.5) and 55% had spoken with a career advisor either in or out of school (Figure 5.6) by the age of 15.

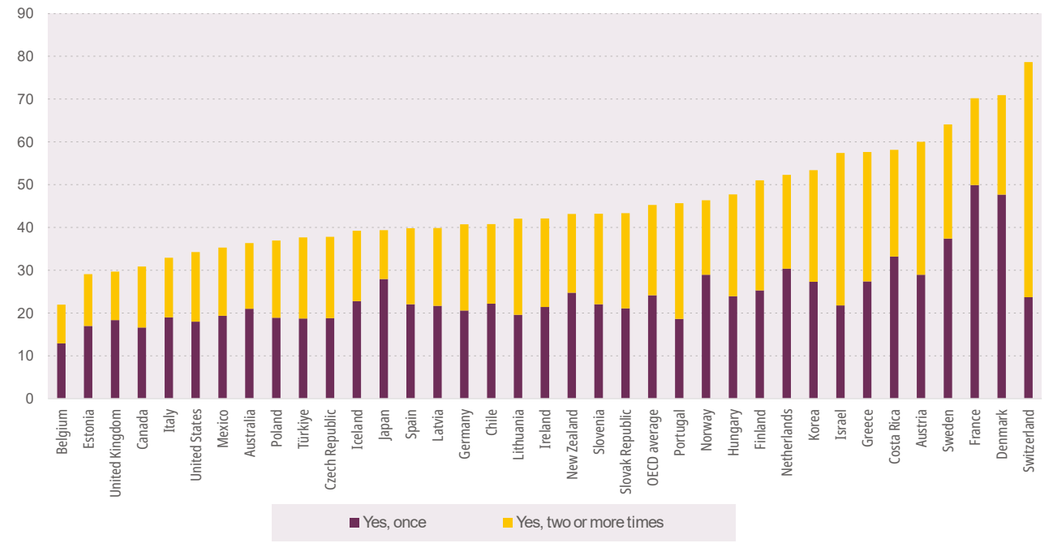
Where students are engaging most strongly is online. On average, 76% of students said that they had used the internet to explore possible careers and 66% to research post-secondary programmes with majorities of both groups doing so on two or more occasions. While digital provision promises to make guidance more effective, efficient and equitable, to date very little research has explored the quality of such resources and how students respond to them. In a field where innovation is rapid, the OECD Observatory on Digital technologies in Career guidance for Youth has begun the process of collating examples of online provision linked to specific forms of career development, laying the basis for future reviews of effective practice.

Figure 5.1. Student participation in career development activities. Average of all OECD countries providing data in both 2018 and 2022

Source. OECD PISA 2018 and 2022 databases.

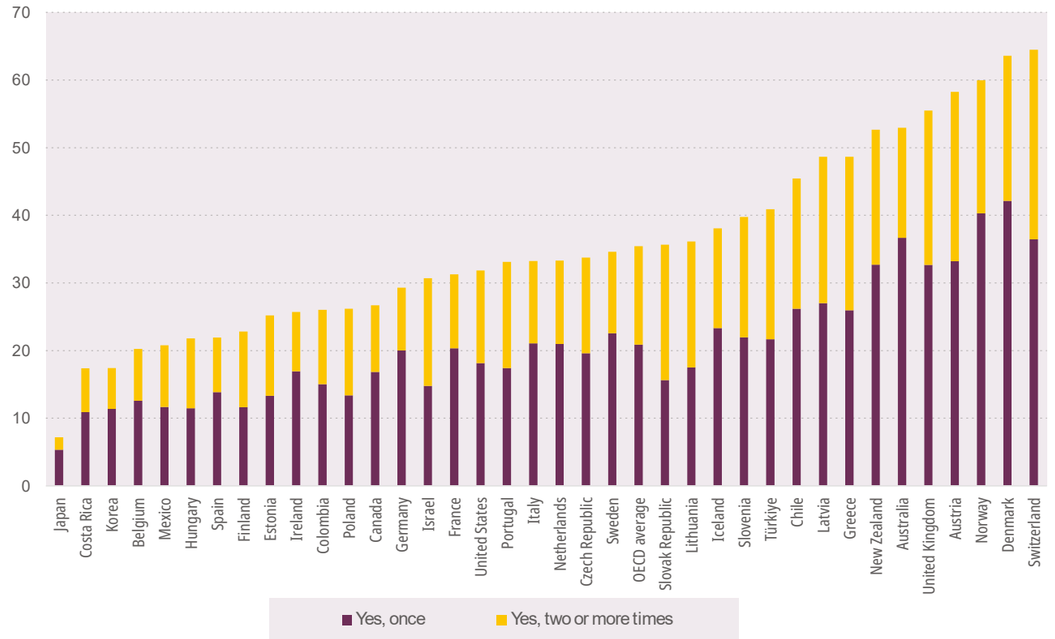
Note. The figure presents the average participation rates for the following countries providing relevant data in PISA 2018 and 2022: Australia, Austria, Belgium, Costa Rica, Denmark, Germany, Greece, Hungary, Iceland, Ireland, Italy, Korea, Lithuania, New Zealand, Poland, Slovak Republic, Slovenia, Spain and the United Kingdom.

Figure 5.2. Percentage of students agreeing that they had participated in job shadowing or a work-site visit. OECD countries, PISA 2022



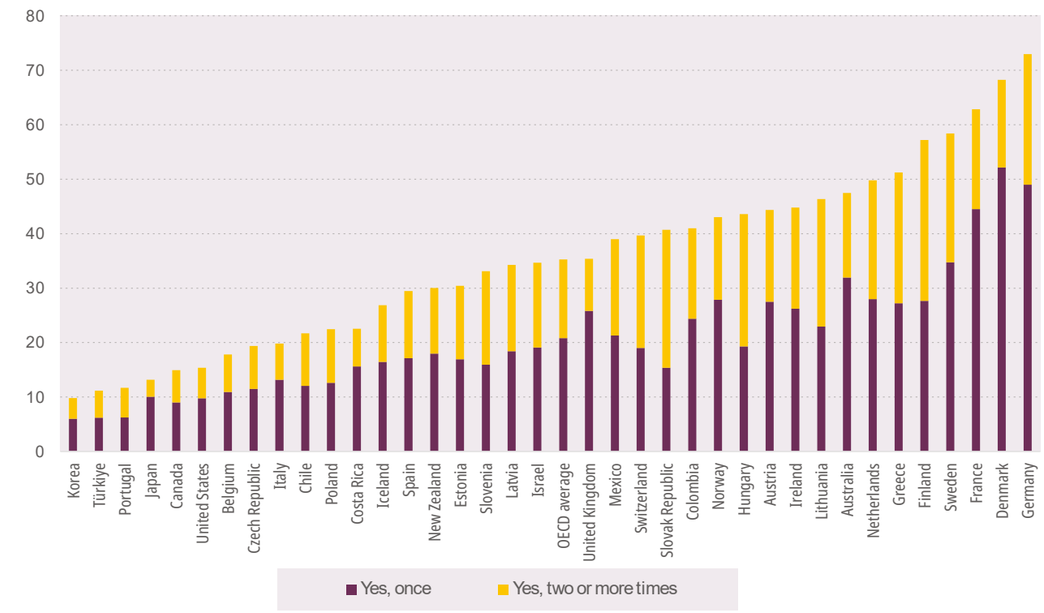
Source. OECD PISA database 2022.

Figure 5.3. Percentage of students agreeing that they had visited a job fair. OECD countries, PISA 2022



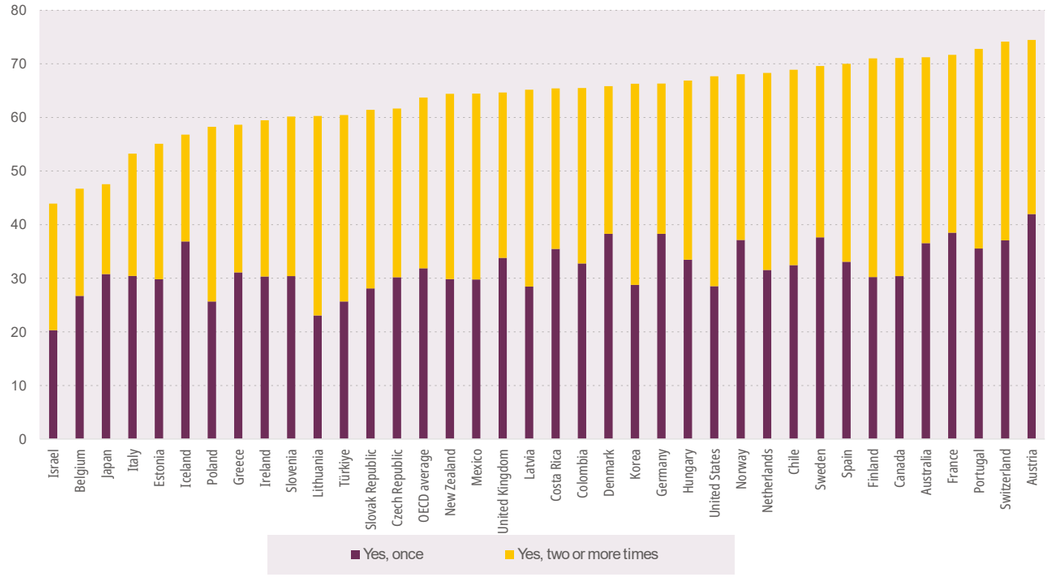
Source. OECD PISA database 2022.

Figure 5.4. Percentage of students agreeing that they had completed an internship (short work placement). OECD countries, PISA 2022



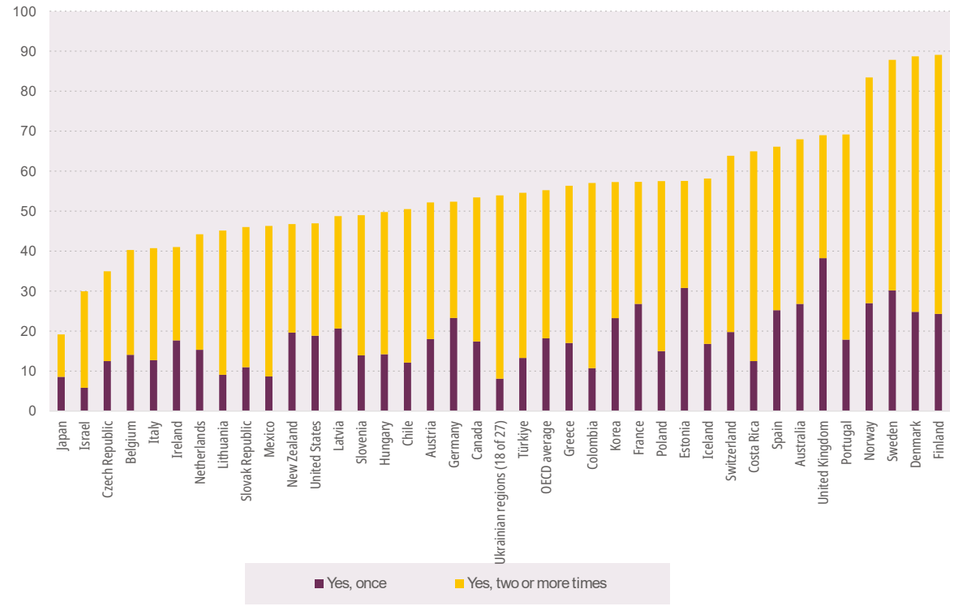
Source. OECD PISA database 2022.

Figure 5.5. Percentage of students agreeing that they had completed a questionnaire about their interests and abilities. OECD countries, PISA 2022



Source. OECD PISA database 2022.

Figure 5.6. Percentage of students agreeing that they had spoken with a career advisor either in or out of school. OECD countries, PISA 2022



Source. OECD PISA database 2022.

"It was very useful for me to speak to someone doing a job that I'm interested in doing. I learnt the ins and outs of the job and became sure that I want to do it because of the salary!

- Aaron, 17

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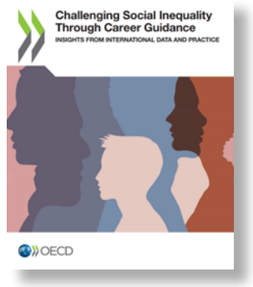
6 Equitable career development. Are guidance systems responding effectively to social inequalities?

Across the OECD, students from more advantaged social backgrounds can expect to engage more in career development activities than their disadvantaged classmates.

Both the educational and occupational plans of students and the family-based resources available to them to support their career exploration are strongly shaped by social background, presenting additional barriers to successful transitions for many young people. As discussed in the OECD paper, Challenging Social Inequality through Career Guidance (2024), effective guidance systems will respond to additional needs, but on average disadvantaged students engage less in important career development activities than their more privileged peers.

PISA places students on a spectrum of economic, social and cultural status (ESCS) based on parental occupation, education level and household possessions. Compared to students from the most advantaged quartile, the most disadvantaged students are more likely to be uncertain about their career plans and more likely to be misaligned in their education and job goals when they express them. Disadvantaged students are much less likely to plan on completing tertiary education even when they perform highly on the PISA academic assessments. Analysis of PISA data shows that students who engage in career development activities are significantly more likely to have clear job expectations, to be aligned in their future plans and to anticipate completing some form of tertiary education. However, PISA also shows that students from the most disadvantaged backgrounds are less likely on average to engage in career development activities than their more socially advantaged classmates.

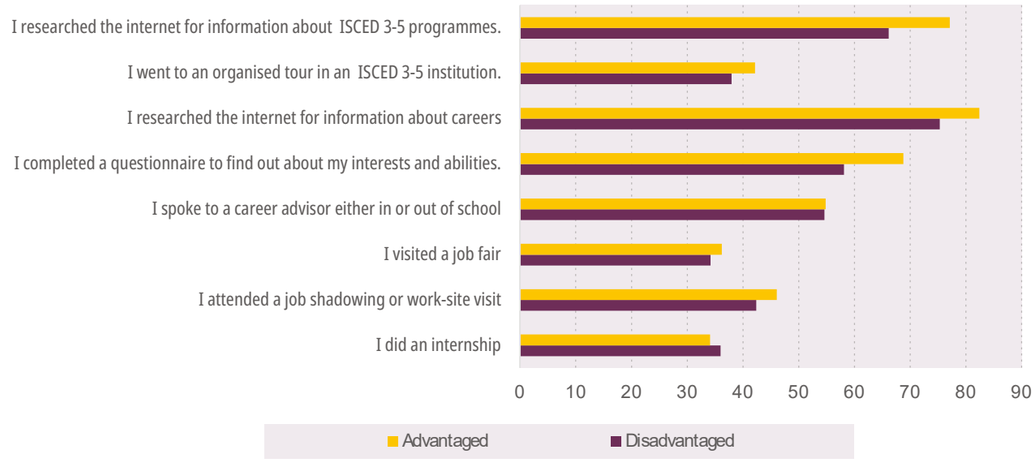
Figure 6.1 presents data from all OECD countries participating in PISA 2022. It shows that on average in seven of eight guidance activities, the most advantaged quartile of students engaged



more frequently – and often considerably moreso – than their most disadvantaged peers. The only field where socially disadvantaged students can anticipate engaging more commonly is in internships. While variations between the two groups may be modest, more equitable (and so more effective) guidance systems would be expected to target greater resource on students from more disadvantaged backgrounds. Figures 6.2 and 6.3 breaks down data on participation in job shadowing/ workplace visits and job fairs respectively by country.

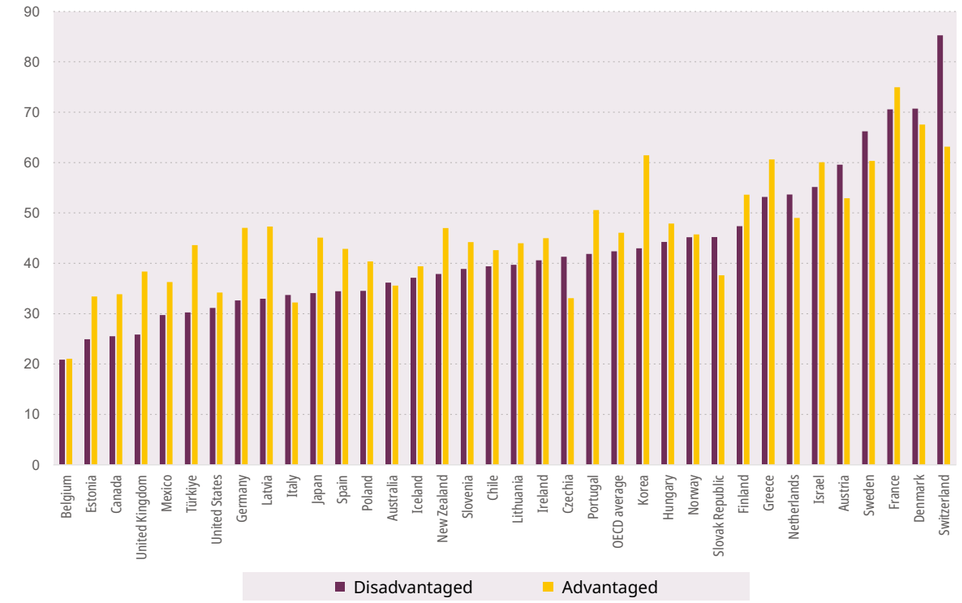
The most common forms of career development for students relate to resources available outside of the classroom such the use of the internet to explore future careers and educational programmes and in career conversations. Whereas 76% of high ESCS students went online to research post-secondary programmes and 82% to research careers, only 66% and 75% respectively of low ESCS students did the same. PISA 2018 shows that while 79% of the most socially disadvantaged students had spoken to someone about a job they would like to do after they finish education, this applied to 87% of their most advantaged peers.

Figure 6.1. Student participation in career development activities by economic, social and cultural status (ESCS), high and low quartiles. Average of OECD countries, PISA 2022



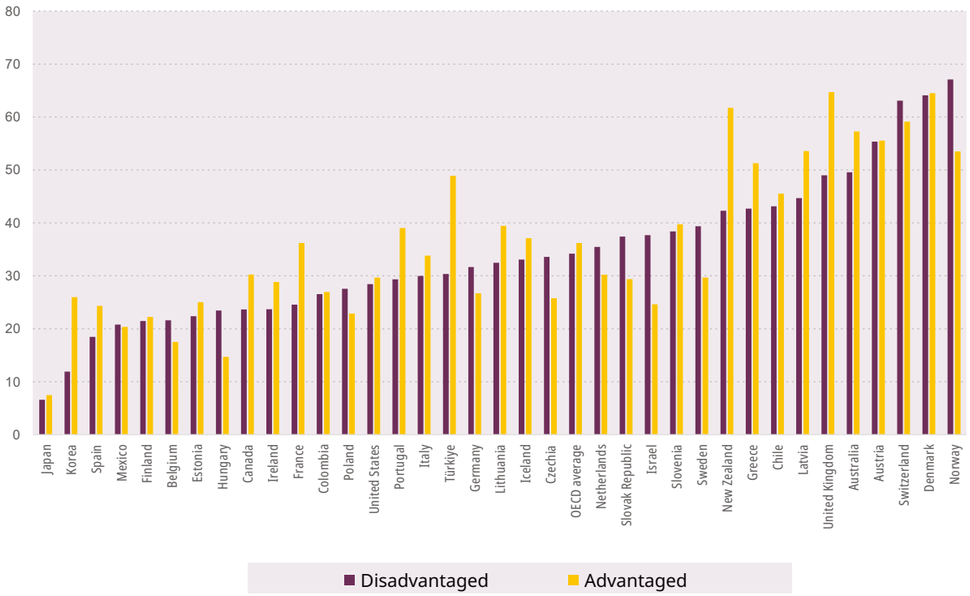
Source. OECD PISA database 2022.

Figure 6.2. Student participation in job shadowing/workplace visits by economic, social and cultural status (ESCS), high and low quartiles. OECD countries, PISA 2022



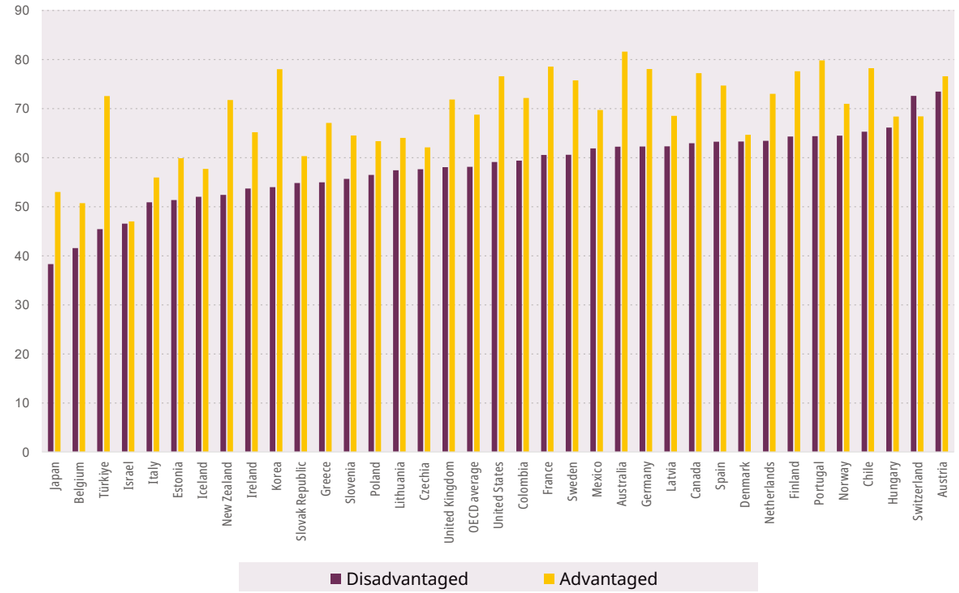
Source: OECD PISA database 2022.

Figure 6.3. Student participation in job fair by economic, social and cultural status (ESCS), high and low quartiles. OECD countries, PISA 2022



Source. OECD PISA database 2022.

Figure 6.4. Student participation in career questionnaire by economic, social and cultural status (ESCS), high and low quartiles. OECD countries, PISA 2022



Source. OECD PISA database 2022.

"The most important things that I learned from career guidance in school is that it is never too late to change the career you want to pursue and that you never know what you really want to do until you try multiple things out.

- Huda,17

7

Strategic career development. Can strategically important occupational areas expect to recruit well from among underrepresented groups?

The interest of students in occupational fields of strategic importance where their gender is underrepresented has changed little over the last generation.

Across the OECD, several occupational fields have been highlighted as being both of particular strategic importance and suffering from skills shortages. These include healthcare, information technology, the skilled crafts and trades, and teaching. PISA provides considerable insight into the attitudes of students towards work in these areas. Drawing on data from 2000 onward, it is possible to see if interest in these occupations has changed over the last generation. Moreover, it is possible to explore how attractive jobs are to students from different backgrounds. Notably, workforces across the four fields are all characterised by gender imbalance.

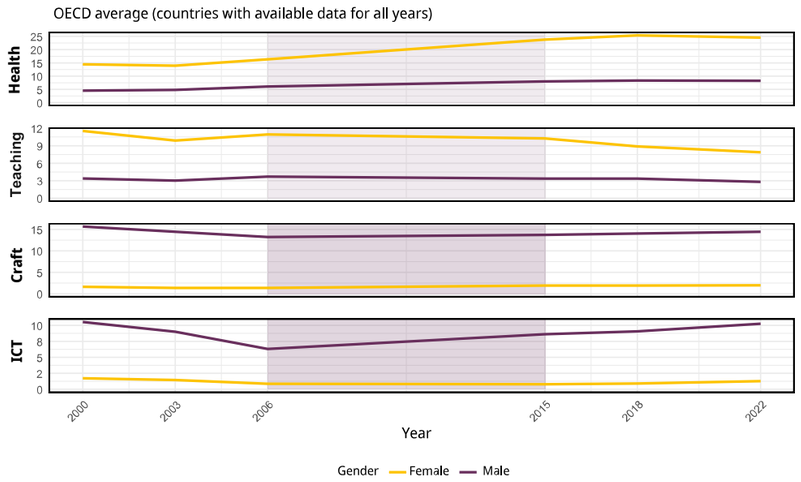
Figure 7.1 tracks the occupational expectations of students from 2000 to 2022 in the occupational areas by gender. It shows the average interest levels of 15 year old girls and boys from the 13 OECD countries which participated in all PISA studies which asked respondents about their occupational expectations. It reveals that the gender gap in aspiration has only strongly closed in one area, teaching, and this is due to falling interest among young women, rather than increases in the expectations of young men. Girls were as unlikely to anticipate a career in information technology or in the skilled trades in 2022 as they were in 2000. The interest of boys in working in healthcare has increased since 2000, but modestly. Combining results for girls and boys, over this period expectation levels have fallen for teaching, changed little for information technology and the skilled trades and risen for careers in healthcare.

Figures 7.2 to 7.4 unpack the 2022 PISA data related to expectation of working in the crafts and skilled trades (ISCO major group 7). This includes many occupations which are commonly entered through programmes of vocational education and training, including: builders, carpenters, electricians, fitters, insulation workers, motor vehicle mechanics, plumbers, printers and welders. On average across the OECD, PISA 2022 shows that 13.7% of boys and 1.8% of girls expect to work in such a trade. While in all countries, it is more often boys who expect such employment, in some countries such as Hungary and Norway 4-5% of girls share the job ambition, outnumbering the total percentage of interested boys in Colombia, Israel, Korea, Turkey, Costa Rica, Japan and Mexico. Student interest in such professions will respond to genuine or perceived fears that workplaces may be unwelcoming to the minority gender, but also reflect socially constructed assumptions about the forms of work which are reasonable for girls and boys to pursue and the extent to which education and training systems actively seek to attract and accommodate all potential learners.

Attitudes also reflect the status and quality of jobs. In some countries, programmes of vocational education and training are perceived to be of poor quality and to provide limited opportunities in work. Figure 7.3 shows that it is rare for students from the most advantaged social backgrounds to expect to work in the skilled trades. On average, they are more than four times less likely to express this job plan than peers from the most disadvantaged backgrounds. However, national variations are again apparent: 6% of socially advantaged students in Denmark and 7.1% in Norway anticipate working in a skilled trade. Equally, as seen in Figure 7.4, while across the OECD the skilled trades remain predominantly the expectation of lower academic performers (13.1% of whom anticipate working in the field, compared to 3.5% of high performers), in some countries, high performers on the PISA assessments demonstrate strong interest. This is the case in Finland (7.8%), Germany (8.1%), Iceland (7.0%) and Switzerland (7.3%). PISA data shows that it not impossible to design a VET system that is found to be attractive to a broad range of students, but that it is certainly unusual.

Figures 7.5 to 7.7 explore the occupational expectations of students with regard to careers in information technology (IT). As with the skilled trades, student interest is highly gendered. Across the OECD in 2022, on average 11.2% of boys say that they will work in the field around the age of 30 compared to 1.5% of girls. As Figure 7.5 illustrates, in every OECD country this pattern of expectation is apparent. In many OECD countries, including Iceland, Italy and Norway fewer than one girl in 200 with a job plan expects it to be in the field of information technology. PISA data also show that students anticipating working in IT tend to be from more socially advantaged backgrounds (Figure 7.6) and especially to be higher achievers on the PISA academic assessments (Figure 7.7). This analysis combines student expectations to work as both IT professionals (ISCO group 25) and as IT technicians (ISCO group 35).

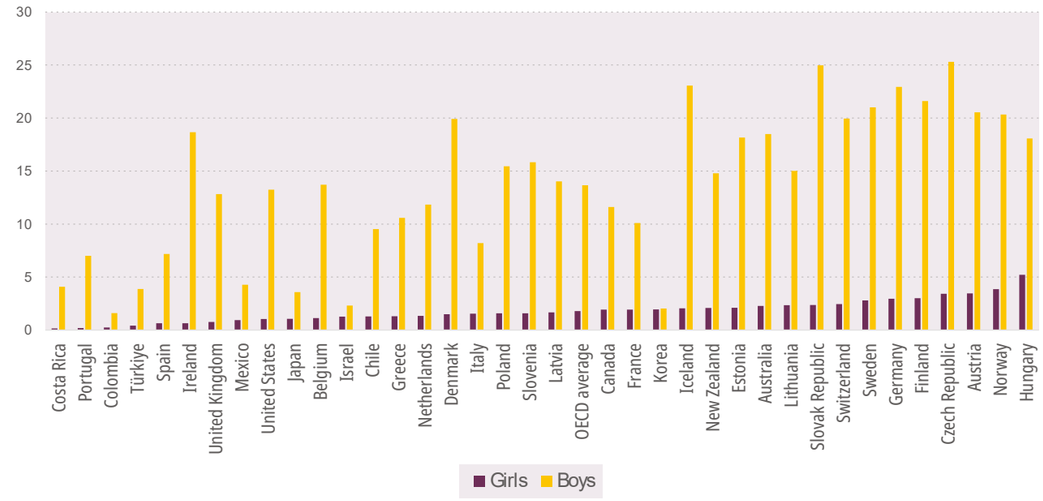
Figure 7.1. Student interest in careers in healthcare, IT, the skilled crafts and trades and teaching, OECD average by gender 2000 to 2022 (12-13 countries)



Source. OECD PISA databases 2000-2022.

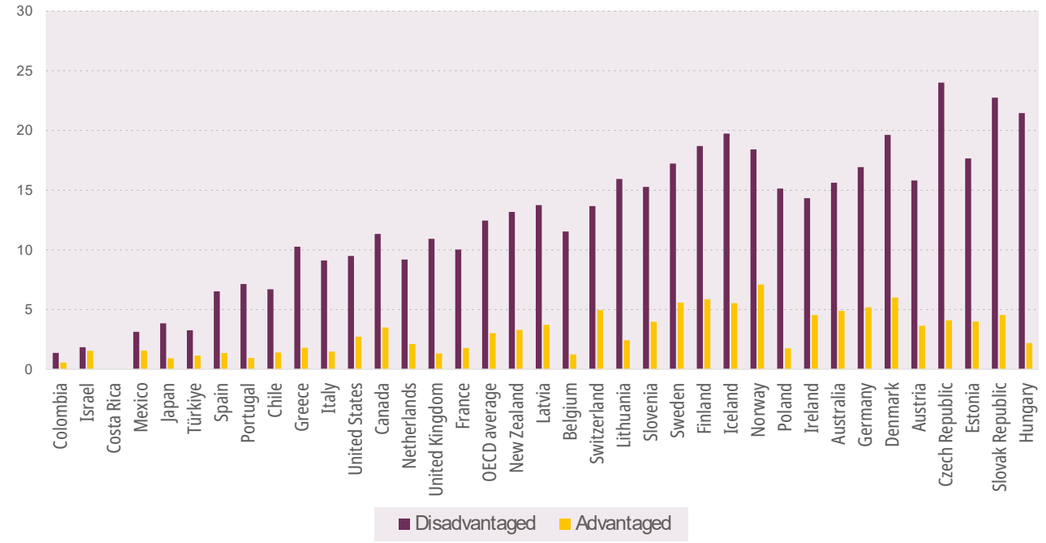
Note. The figure shows the average percentage of students (expressing an occupational expectation) in the profession from among PISA participants in Australia, Austria, Czechia, France, Germany, Greece, Hungary, Ireland, Italy, Mexico, Portugal, South Korea and the United Kingdom. In the PISA surveys of 2009 and 2012 students were not asked about their occupational expectations. Health careers are captured by ISCO groups 22 and 32, information technology (25 and 35), the skilled trades (group 7) and teaching (group 23).

Figure 7.2. Percentage of students expecting to work in the skilled trades (ISCO 7) by gender. PISA 2022. OECD countries



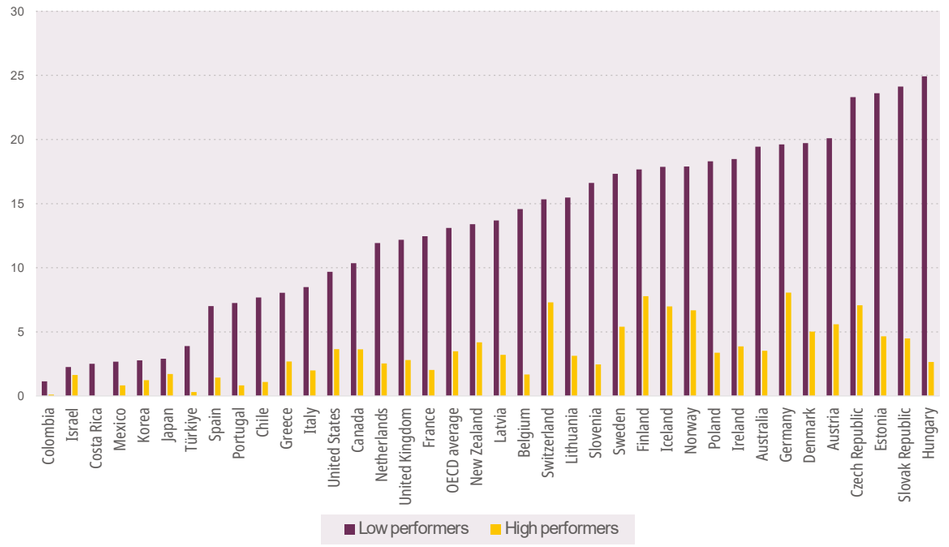
Source. OECD PISA database 2022

Figure 7.3. Percentage of students expecting to work in the skilled trades (ISCO 7) by economic, social and cultural status (ESCS), high and low quartiles. OECD countries, PISA 2022



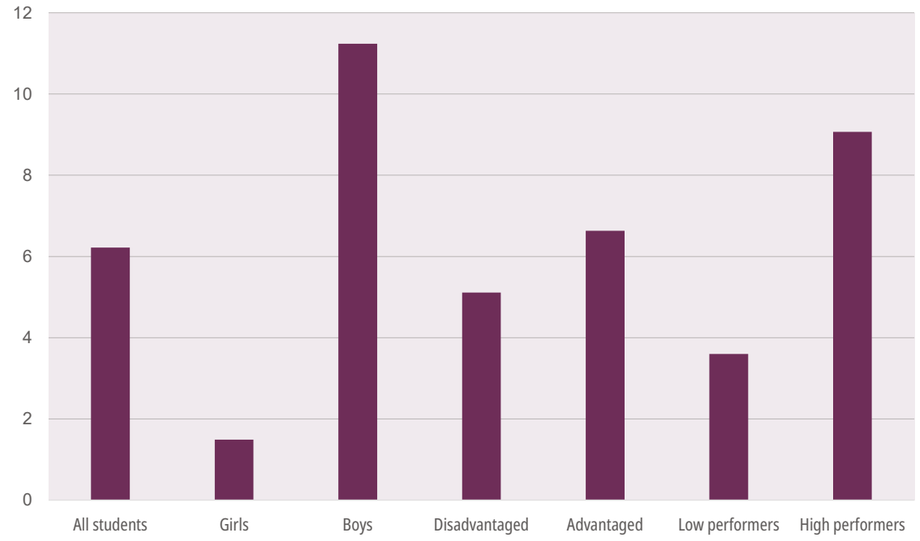
Source. OECD PISA database 2022

Figure 7.4. Percentage of students expecting to work in the skilled trades (ISCO 7) by academic performance. OECD countries, PISA 2022



Source. OECD PISA database 2022

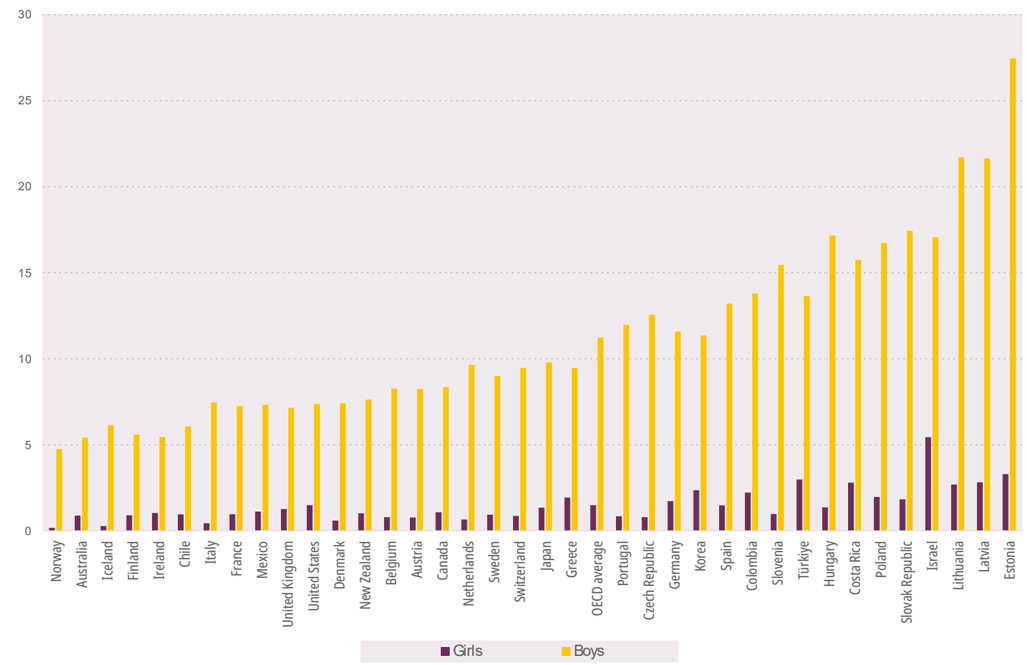
Figure 7.5. Percentage of students expecting to work in information technology by gender. OECD countries, PISA 2022



Source. OECD PISA database 2022.

Note. ISCO 25 and 35.

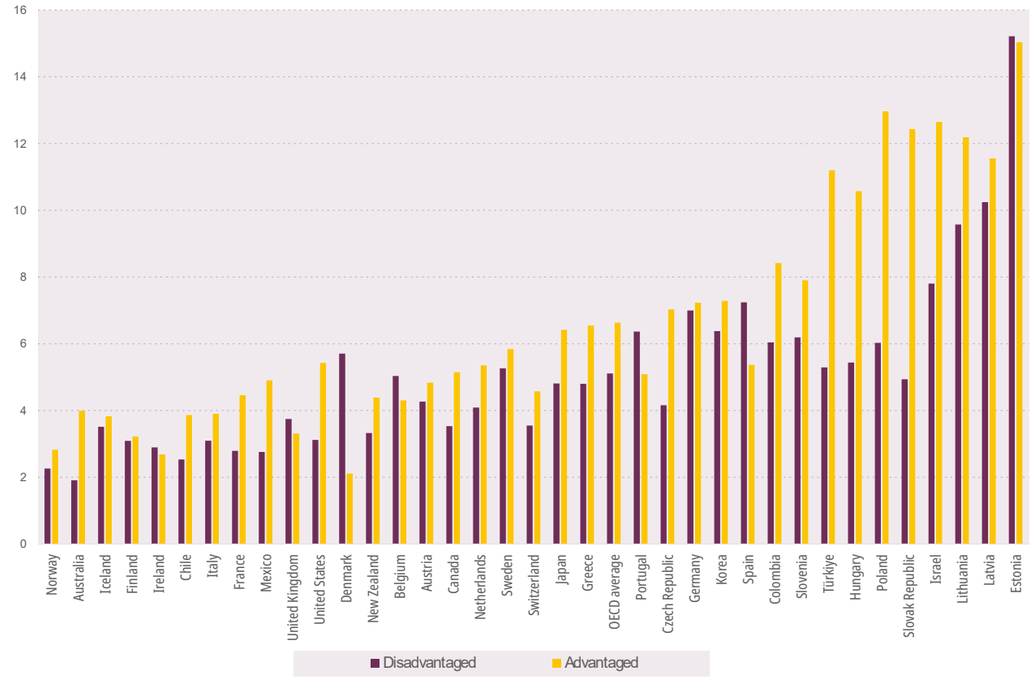
Figure 7.6. Student interest in IT, OECD countries 2022 by economic, social and cultural status (ESCS), high and low quartiles. OECD countries, PISA 2022



Source. OECD PISA database 2022.

Note. ISCO 25 and 35.

Figure 7.7. Student interest in IT, by low and high academic performance. OECD countries, PISA 2022



Source. OECD PISA database 2022.

Note. ISCO 25 and 35.

"The most important thing that I've learned from career guidance in school is that a lot more women are now doing male dominant careers.

- Nadine, 17

8 Fears for the future. What do students think about the state of their career preparation?

Key takeaways

47.3%	of students agree that they worry that they are not prepared for life after compulsory education, 13.3% agreeingly strongly (Figure 8.1).
34%	of students do not agree that they feel well-informed about possible paths after compulsory education, 8% disagreeing strongly (Figure 8.2).
43.6%	of students agree that they worry that they will not have enough money to do what they would like after compulsory education, 12.2% agreeing strongly (Figure 8.3)
49%	of students agree that school has done little to prepare them for adult life, 14.2% agreeing strongly (Figure 8.4).
24.2%	of students agree that school has been a waste of time, 6.3% agreeing strongly (Figure 8.5)
46.1%	of students do not agree that school has helped give them confidence to make decisions, 12.6% disagreeing strongly (Figure 8.6).
32.6%	of students do not agree that school has taught them things which could be useful in a job, 9.5% disagreeing strongly (Figure 8.7).
41.5%	of students do not agree they feel well-prepared for their future path, with 10.3% disagreeing strongly (Figure 8.8).

Many students feel poorly prepared for their futures and doubt that their schools are helping them in their career preparation.

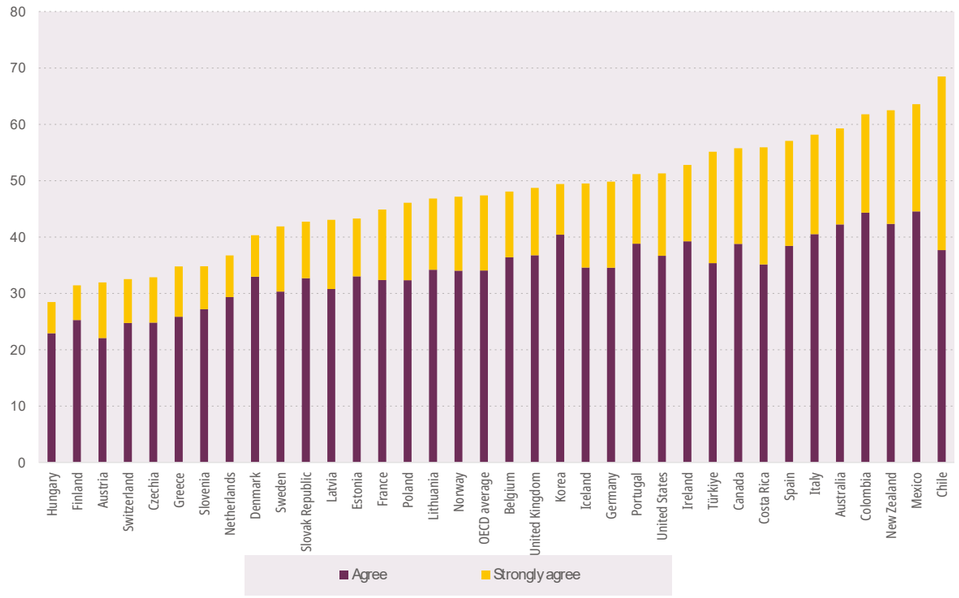
PISA 2022 includes a series of questions exploring student attitudes related to how well prepared they feel for their futures. Responses to questions reveal levels of confidence and concern expressed by students. In some cases, questions provide insight into the instrumental or extrinsic motivations felt by students that influence their engagement in education. While most students do feel confident about their futures, sizeable numbers do not.

In addition, one-third of students say that they feel pressure from their families to follow a specific path after formal education. One in ten say that they feel this pressure very strongly.

Looking across student characteristics, attitudes are comparable across all groups with the exception of two statements. On average, compared to their peers from the highest quartile by economic, social and cultural (ESCS) status, students from the lowest ESCS quartile are 9 percentage points more likely to agree that that worry that lack of money will prevent them from following their interests. They are also 7 percentage points more likely to agree that school has been a waste of time. This statement is often seen as a test of student instrumental motivation: the belief that engagement in education will lead to desirable rewards in work later in life. In many longitudinal studies, this teenage belief is significantly associated with better ultimate employment outcomes. Analysis of PISA data shows that participation in different forms of career development can also be significantly linked with higher or lower levels of instrumental motivation with further research required to understand relationships more deeply.

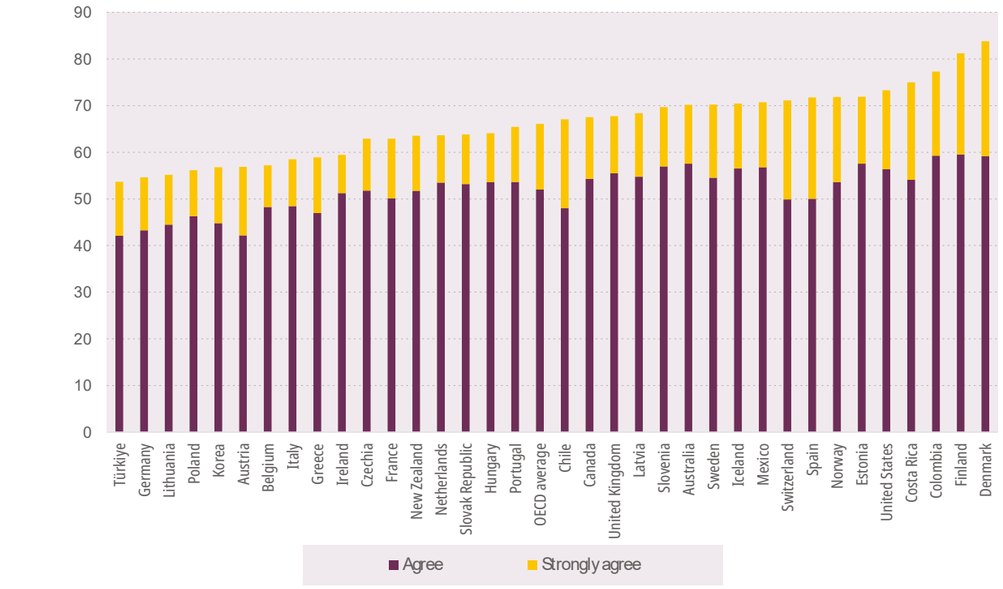
Figures 8.1 to 8.8 set out data from OECD countries in response to statements which reveal widespread anxiety among teenagers about their futures. The data show that on average across the OECD.

Figure 8.1. Percentage of students agreeing with the statement, 'I worry that I am not prepared for life after <the final year of compulsory education>. OECD countries, PISA 2022



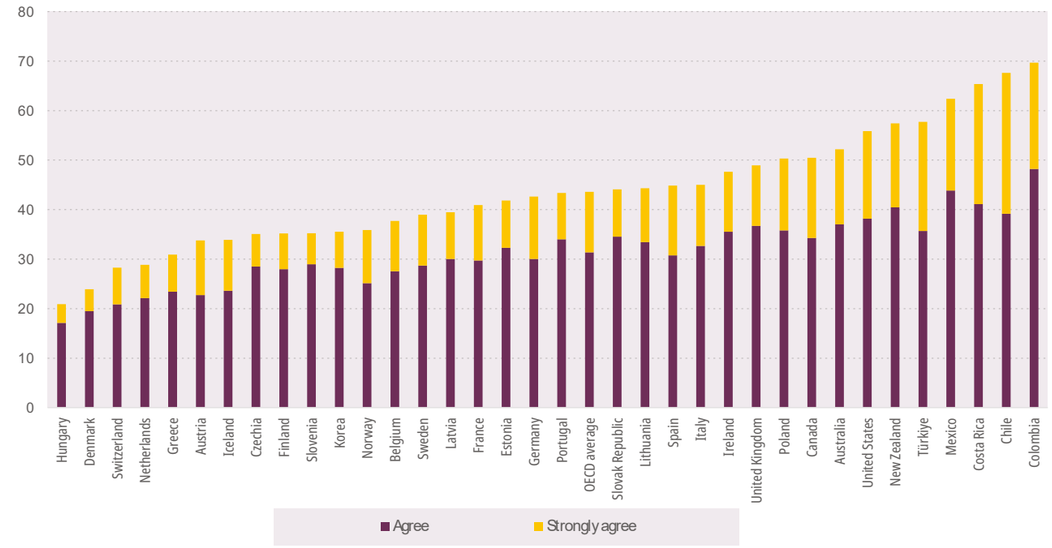
Source. OECD PISA database 2022.

8.2. Percentage of students agreeing with the statement, 'I feel well-informed about possible paths for me after <the final year of compulsory education>. OECD countries, PISA 2022



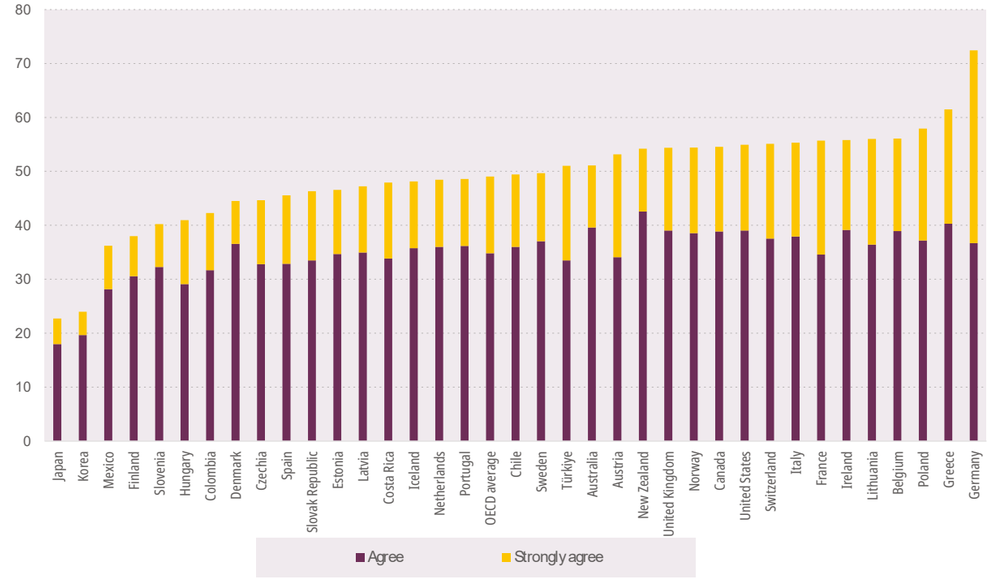
Source. OECD PISA database 2022.

8.3. Percentage of students agreeing with the statement, 'I worry that I won't have enough money to do what I'd like after <the final years of compulsory education>'. OECD countries, PISA 2022



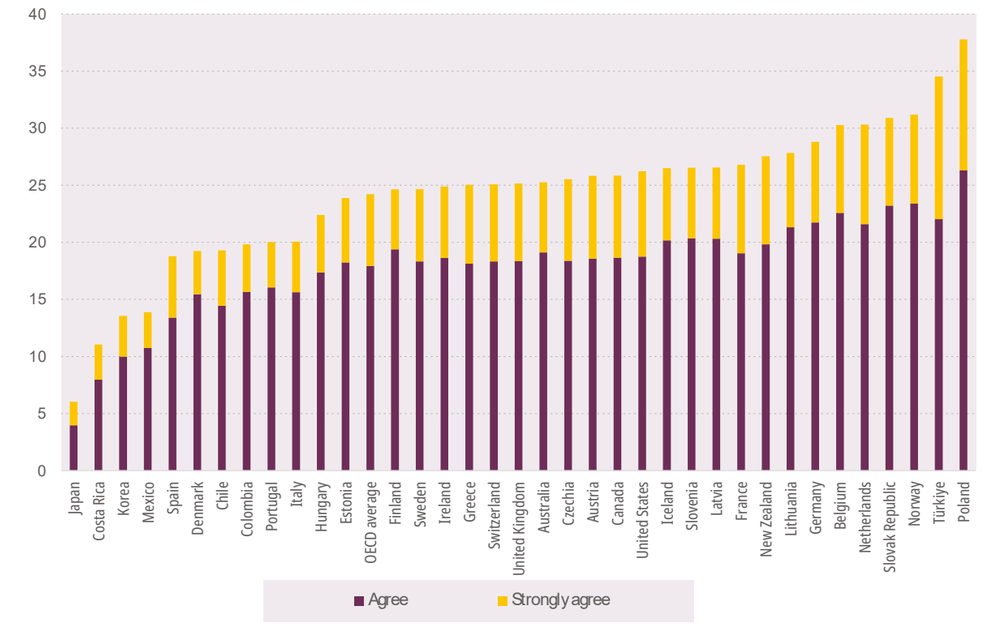
Source. OECD PISA database 2022.

8.4. Percentage of students agreeing with the statement, 'School has done little to prepare me for adult life when I leave school'. OECD countries, PISA 2022



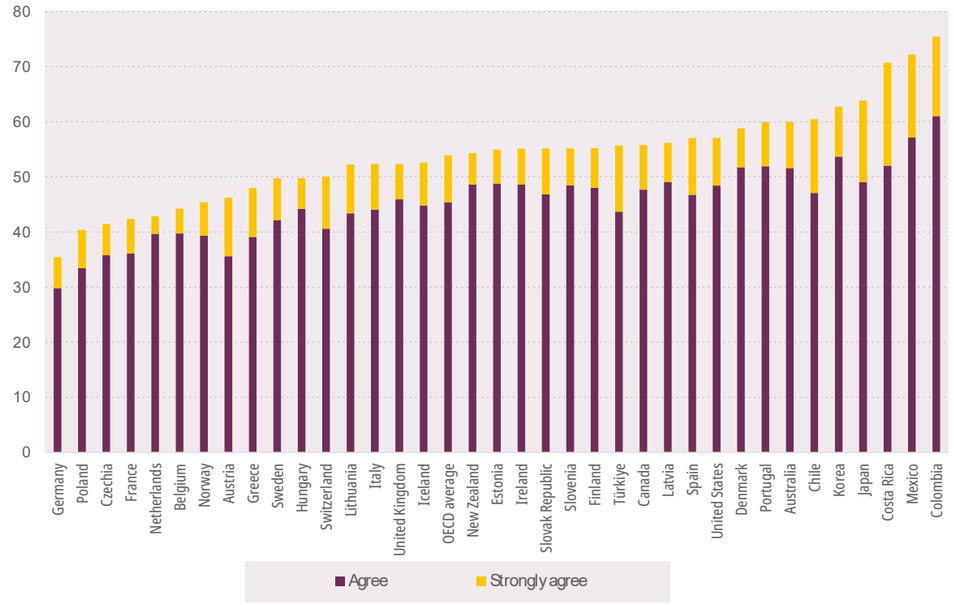
Source. OECD PISA database 2022.

8.5. Percentage of students agreeing with the statement, 'School has been a waste of time'. OECD countries, PISA 2022



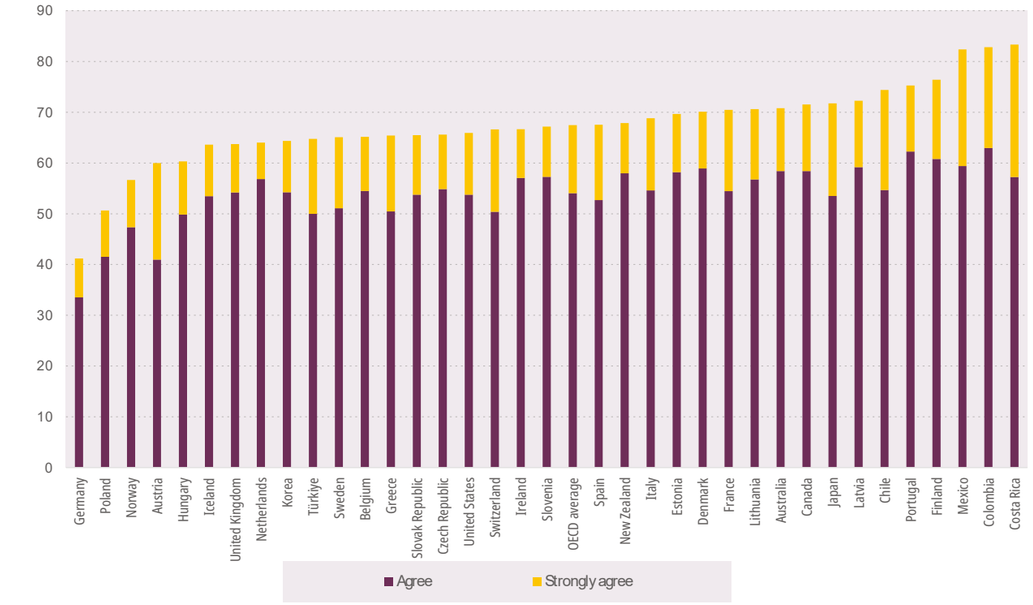
Source. OECD PISA database 2022.

8.6. Percentage of students agreeing with the statement, 'School has helped give me confidence to make decisions'. OECD countries, PISA 2022



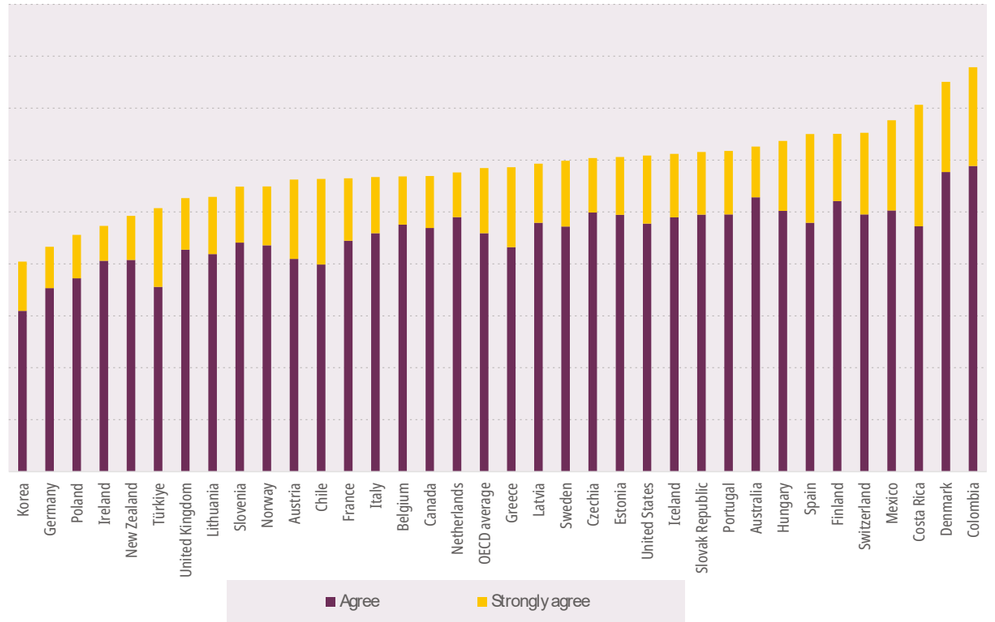
Source. OECD PISA database 2022.

8.7. Percentage of students agreeing with the statement, 'School has taught me things which could be useful in a job'. OECD countries, PISA 2022



Source. OECD PISA database 2022.

8.8. Percentage of students agreeing with the statement, "I feel well-prepared for my future path after <the final year of compulsory education>". OECD countries, PISA 2022



Source. OECD PISA database 2022.

"I don't feel anxious about going into work, but fairly confident that I will find something for me. I feel this way because there are many opportunities waiting. The only problem is that I don't know what they are.

- Mahmoud, 17

Afterword

Engaging employers and people in work in school guidance activities

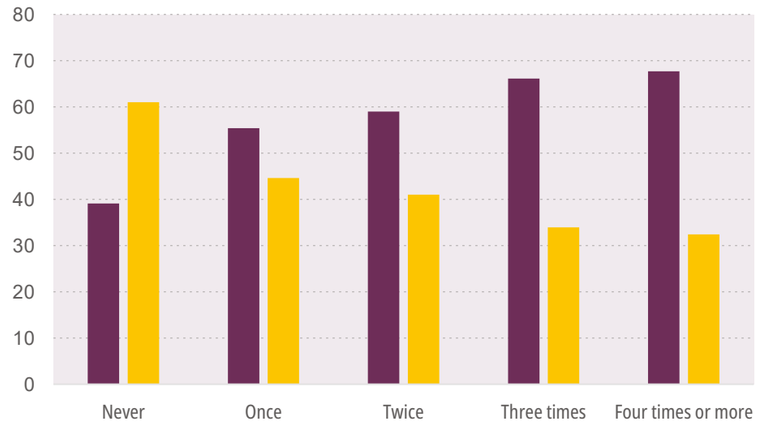
The engagement of employers and people in work is at the heart of effective teenage career development. Their involvement provides students with opportunities for gaining information and experience which are very difficult to replicate without their participation. Such activities are strongly associated with better outcomes for both young people – and their employers. Research studies provide valuable insight into how benefits can be maximised and how the connections between schools and employers can be most effectively, efficiently and equitably delivered.

The impact of employment engagement in teenage career development

Analysis of large-scale datasets that explore the links between teenage career development and adult employment outcomes identify compelling evidence of benefits to young people. Of the nine forms of teenage career exploration and experience where international longitudinal datasets are sufficient to allow an assessment of long-term impact, seven either require students to engage with employers or are commonly enhanced (and delivered) through employer engagement. These include: career insight talks and job fairs, workplace visits and job shadowing, career conversations, career pathway programmes, application and interview skills development activities, part-time working, volunteer work and internships. Across all these areas, positive impacts can be identified linked to the later likelihood of being in employment, education or training, earnings and/or job satisfaction. Such career activities are also associated with more beneficial forms of teenage career thinking (clear, ambitious, aligned plans that recognise the value of education in employment transition).

Retrospective user studies have also found strong relationships between more successful transitions after secondary school, including lower unemployment rates and (if in work) higher wages, and teenage participation in forms of career development that require students to connect with employers and people in work. Figure 9.1 illustrates descriptive results from a recent survey of young adults aged 19-26 educated in the community of Madrid, Spain. The figure compares the agreement of respondents that their schools had prepared them well for adult life and their recollections of the number of times that their secondary schools had connected them with employers and people in work in the context of career development. It finds that whereas two-thirds of young adults who recalled no interactions felt that their schools had prepared them poorly, this applied to only one-third of their peers who recalled four or more engagements. Similar results have been found in surveys of young adults in the UK. Higher levels of recalled employer engagement have been significantly linked with lower rates of young adults being Not in Education, Employment or Training (NEET).

Figure 9.1. Perceptions of young adults (aged 19-26) on how well or poorly secondary schools prepared them for adult working life by volume of recalled employer career engagement activities undertaken during secondary education (on scale of 0-4+ occasions). Madrid, Spain 2024.



Note. Survey of 1 015 young adults (aged 19-26) who had attended secondary education in the Community of Madrid, Spain. The survey was undertaken in the summer of 2024.

Source. OECD survey of young adults in Madrid, Mann, A. et al. (2025), Career Readiness in Madrid (Spain): insights from a survey of young adults (19-26), OECD Publishing, Paris.

Why employer engagement makes a difference?

Studies of the role of employer engagement in teenage career development highlight its capacity to provide students with information and experiences which are new, useful, and difficult to ignore. Students are especially likely to trust insights gained from employer engagement. They see first-hand experiences as being authentic and up to date. Studies show too that they frequently use their experiences to build up resources that enable more confident navigation through education and training and support successful ultimate transitions into work. Episodes of employer engagement are seen to enhance the knowledge and skills of students and to build their social networks, gaining access to useful career-related information and often recommendations or job offers. Perhaps most importantly, students are seen to increase both their understanding of potential careers and confidence in how they can best be secured, allowing them to invest their time more strategically and with greater certainty in schooling. These benefits are often conceptualised as forms of human, social and cultural capital that are ultimately assessed by recruiters in deciding the suitability of candidates applying for jobs.

Why employers have much to gain from working with schools?

Surveys show that the primary reason why employers engage with schools is to enhance short-term or long-term recruitment. As noted in this paper, the career ambitions of young people are strongly concentrated around a small number of traditional careers. Employer engagement programmes, such as career talks, workplace visits, and job fairs can be very effective means of broadening (as well as deepening) career aspirations. Studies also show that employers value working with schools because it provides opportunity for staff development, increases staff happiness at work and allows them to work with young people on business questions. Many also are determined to contribute to their communities and do social good. More than this however, a larger more significant benefit is apparent. Many studies find evidence of adult wage premiums linked to teenage participation in career development activities which engage employers. This means that such students often go on to earn more than comparable peers who did not engage in such a way while in school. It is an orthodox economic assumption, that higher wages reflect higher individual productivity. It is not difficult to imagine that students who progress through education into employment with a deep understanding of a working area of interest will be more likely to thrive in a field of employment that is well-matched with their interests and abilities.

For employers in sectors which are experiencing skills shortages, employer engagement with schools is particularly important. This is especially the case where shortages are accentuated by gender or other disparities and there is determination to create more balanced workforces (so increasingly opportunity to attract interested and able young people). Surveys of young adults show that large minorities wished their schools had provided opportunity to explore occupations where people like them are poorly represented, but such opportunities through schools is commonly limited. Young people considering such occupations need to be able to see for themselves whether such workplaces would be welcoming and supportive.

How to maximise the benefits of employer engagement in career development?

As summarised in the OECD paper, Meet the Future: How employers gain from helping young people get career ready (2022), reviews of multiple studies of employer involvement in career development show that more effective provision will be seen as authentic and trustworthy by young people. It will be frequent and often mandatory for students whose perceptions of its usefulness should be taken seriously. In effective practice, students will have opportunity to engage in a variety of different employer-related opportunities. Particularly through lower secondary education (but beginning in primary schooling), career exploration with people in work is especially valuable. As students get older, it is important for them to gain first-hand experience of undertaking tasks under supervision within workplaces of interest for extended periods of time. This could be through volunteer work, part-time employment or through internships/work placements. Effective provision is personalised to the needs and interests of the student. Effective schools will encourage a culture of active curiosity in the world of work, linking learning with the world of work to help students see the relevance of the subjects they are studying. It will also encourage and enable learners to reflect on positive and negative attributes of the working world from their own individual perspectives.

How can employer engagement be effectively, efficiently and equitably delivered?

Effective programmes of employer engagement will ensure that school staff and students will have extensive opportunity to engage with the world of work, enabling them to connect with working professionals and workplaces which match most closely with their emerging interests. The primary costs involved in enabling employer engagement with schools are in finding the right people to support the right activities at the right time.

More efficient systems will draw on intermediary organisations to identify individuals and workplaces open to engaging. Intermediaries can also enable more equitable provision by ensuring that schools serving students in greatest need (and where parental and local contacts may be limited) are prioritised. Online mechanisms can pre-identify thousands of workplaces and professionals open to working with schools, making them available to schools to select based on students' needs.

> ***I have been extremely indecisive about my job plans because I'm not sure what job pays well without mentally draining you at the same time. I'm still in the process of deciding.***
>
> **- Noora, 17**

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