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Teenage career development in Norway: Insights from PISA

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Teenage career development in Norway

Insights from a PISA

Authorised by Andreas Schleicher, Director of the Directorate for Education and Skills, OECD Anthony Mann, Jonathan Diaz



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Abstract

This paper explores the state of teenage career development in Norway. It sets out findings from the OECD Programme for International Student Assessment (PISA), a comparative international survey of young people in secondary education. PISA 2022 notably provides considerable data on young people's engagement in, and perceptions of, career development, including information on occupational and educational intentions and participation in career development activities. This paper compares student responses in Norway to averages across the OECD, disaggregated by student characteristics, including gender, socio-economic background, academic proficiency, migrant status and geographic location. Levels of career uncertainty in Norway, as across the OECD, are now very high. Students in Norway who express an occupational expectation are very strongly focused on a small number of occupations, but these are spread more widely across the labour force than is found in most OECD countries. Interest in the skilled trades is notably strong. While the occupational expectations of students in Norway are less constrained by gender than is typical, job and educational aspirations are strongly shaped by the social background. By international comparison, students in Norway consistently engage more frequently in guidance interventions, notably with regard to speaking with a career advisor, but in some important fields of exploration which bring students into contact with workplaces, most still do not engage by the age of 15.

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Introduction

This paper explores the state of teenage career development in Norway. It sets out findings from the OECD Programme for International Student Assessment (PISA), a comparative international survey of young people in secondary education. It reviews data from a large representative sample of teenagers aged 15-16 in Norway collected primarily in 2022, offering a snapshot of the career development of students as they progress through secondary education. This introductory narrative describes the data and how it was collected. It also highlights key findings from the analysis, which is presented in the series of tables that follow. While any such snapshot has its limitations, PISA data provide important insights of value to policy makers and practitioners. Growing international evidence finds that the character of teenage career development around the age of 15 links strongly with the quality of later engagement in the labour force. Longitudinal studies (Covacevich et al., 2021_[1]; _[2]; Mann, Denis and Percy, 2020_[3]) identify specific forms of career development which generally predict better employment outcomes. The PISA questionnaires provide data on a number of these indicators and for comparisons to be made of teenage career development between national education systems and, in some cases, within the same education system over time. Moreover, as it includes considerable information on the characteristics of students, including their academic ability and social backgrounds, it provides substantial insight into how equitably students engage in career development. Key insights from the analysis are highlighted at the end of this narrative introduction. To aid understanding of the data, the paper includes a description of the Career Guidance System in Norway prepared by the Norwegian Directorate for Higher Education and Skills (Box 1). A growing number of such country notes which follow the same general structure and approach, including from England (Mann, Diaz and Zapata Posada, 2024_[4]), Malta (Mann and Diaz, 2024_[5]) and Spain (Mann and Diaz, 2024_[6]), allow for detailed comparisons of guidance provision in light of 2022 PISA data. In the absence of a strong contextual understanding of provision across primary and especially secondary education in Norway which would follow a full OECD Career Readiness review, the paper does not present recommendations for enhanced provision.

A framework for understanding teenage career development: insights from longitudinal data

A primary reason that societies introduce programmes of career guidance within secondary schooling is the belief that they will help young people progress better in the early labour market than would have been possible without such support. However, historically it has been difficult to assess whether this assumption was correct due to a lack of longitudinal data exploring the relationships between teenage participation in guidance activities and ultimate employment outcomes. Over recent years, however, longitudinal evidence exploring the links between career development in secondary education and adult employment has become more available (Mann, Denis and Percy, 2020[3]). OECD analysis of national longitudinal datasets in ten countries notably assesses whether forms of teenage career development can be positively associated with better long-term employment outcomes (Covacevich et al., 2021[1]). Longitudinal studies (Covacevich et al., 2021[1]; [2]; Mann, Denis and Percy, 2020[3]) follow large numbers of young people from their time in education into adulthood, commonly between the ages of 15 and 25. A range of studies ask teenagers about their engagement in different forms of career development whilst in secondary education and then later collect information on the same people after they have left education and entered the labour force (Covacevich et al., 2021[1]; [2]; Mann, Denis and Percy, $2020_{[3]}$). Controlling statistically for factors which typically influence the employment outcomes of individuals (gender, socio-economic background, academic achievement, migrant status etc.), analysts explore differences in the employment status, earnings and career satisfaction of young adults who had and had not taken part in different forms of career development as teenagers (Mann, Denis and Percy, 2020[3]).

Drawing on insights from dozens of new and existing longitudinal studies, the OECD Career Readiness project (<u>https://www.oecd.org/en/about/projects/career-readiness.html</u>) has identified three broad forms of teenage career development that can typically be expected to link with better employment outcomes in adulthood (Covacevich et al., 2021_[1]; OECD, 2021_[7]). The three groupings relate to how students:

- *Explore potential futures in work* through such activities as engaging in career talks, workplace visits or job shadowing, career conversations and learning how to apply for jobs.
- *Experience potential futures in work* by participating in part-time work, volunteering and/or internships.
- *Think about potential futures in work* by demonstrating clearer career thinking, more ambitious and informed planning for the future, based on an expectation that investments in education and training will help them to succeed.

Longitudinal datasets provide important insights into the relationship between adult employment success and participation in career development, allowing for statistical comparisons to be made between comparable students who did and did not engage in guidance activities. In terms of the size of the impacts detected in longitudinal analyses, while variation is considerable, teenagers taking part in career development activities commonly earn 5-10% more around age 25 than comparable peers who did not take part in the activity (Covacevich et al., 2021_[1]). However, analysis has limitations. Data is inevitably old and it is restricted to a small number of countries which have commissioned what are expensive research tools. Questionnaires vary considerably in the extent to which they ask questions of relevance and questions overwhelmingly focus on specific activities, such as participating in an internship or attending a job fair, rather than participation in coherent multi-year programmes of career education. Some important questions such as whether students have spoken with a guidance counsellor are surprisingly rarely included. Analysis of the impact of combinations of activities that would provide insight into more typical experiences of career development within secondary schools are often compromised by low response numbers, compromising statistical analysis. In the absence however of multiple randomised control trials involving large numbers of students in multiple countries, longitudinal datasets remain the best available means of establishing whether different forms of guidance can typically be seen to make a difference to the employment outcomes of young people. Considering results alongside qualitative, crosssectional and retrospective studies (which ask young adults to reflect on their participation in school guidance activities in light of their labour force participation (Moote et al., $2024_{[8]}$; OECD, $2023_{[9]}$) allow for deeper understanding of how forms of career development can be most confidently expected to enhance outcomes for students (Mann, Denis and Percy, $2020_{[3]}$).

PISA 2022 and teenage career development

Since the year 2000, OECD members and a growing number of non-member countries and economic areas have participated in the Programme for International Student Assessment (PISA). In 2022, the PISA survey gathered data from some 690 000 students, representing about 29 million 15-year-olds in schools in the 81 participating countries and economies. Within PISA, students undertake tests on mathematics, reading and science and complete a background questionnaire, providing information about themselves, their attitudes, dispositions and beliefs, their homes, and their school and learning experiences. School principals also complete a questionnaire about school management, organisation, and the learning environment. In Norway, PISA 2022 data were collected from 6 611 students in 265 schools.¹ Additionally, principals from each school provided questionnaire responses to complement the data. The PISA 2022 surveys ask students questions related to their occupational and educational plans, their participation in career development activities, their perceptions of barriers and enablers in career development and, in some countries (not Norway), about their participation in part-time working. Table 1 maps these questions from the PISA 2022 survey against specific longitudinal predictors of better ultimate employment outcomes (Covacevich et al., $2021_{[1]}$). To minimize the time burden on students, not all questionnaire items were presented to every participant. Specifically, for the section on career development activities, students were typically asked about four or five of the eleven available questions. On a randomised basis, between 2226 and 2385 students in Norway responded to the questions. For some countries, PISA data on student participation in career development activities is also available for 2012 and 2018, but this is not the case for Norway.

¹ By comparison, the average (mean) student sample size among OECD countries participating in PISA 2022 was 7977, a figure inflated by a small number of countries choosing to sample large numbers of students. The median OECD sample size was 6403. The PISA 2022 student sample from Norway is the 16th largest sample among the 37 PISA-participating OECD countries. While great effort is made to maximise the representativeness of the PISA sample, it is possible that certain groups may be underrepresented in the data collected. As is common practice in survey analysis, in PISA, adjustments are made to ensure that the survey results accurately reflect the broader population of 15-year-olds in the participating countries, not just the students surveyed. This adjustment is achieved through the use of student weights, which correct for any biases in the sample and account for differences in selection methods and non-response rates. These weights are critical to ensuring that the findings are representative of the entire student population, rather than just the specific group of students included in the sample. Each student is assigned a weight based on factors such as their likelihood of being selected and adjustments for non-response. Students from certain regions or socio-economic backgrounds who might be underrepresented in the sample are given higher weights to ensure their perspectives are adequately represented. By incorporating these weights, the analysis ensures that aggregated results, such as averages or trends, reflect the true distribution of the population. In more complex statistical analyses, the weights enhance the accuracy and fairness of the findings, minimising bias and ensuring that the conclusions drawn are valid for all students across the participating countries. As a result, the percentages presented in the analysis are adjusted to reflect the weighted contributions of different student subgroups.

Table 1. Data availability in PISA 2022 in relation to longitudinal career development predictors of better employment outcomes for youth

Explo	ring the future	Experienci	Experiencing the future		bout the future
Predictor Engaging in	PISA 2022 Engaging in	Predictor Participating in	PISA 2022 Participating in	Predictor Demonstrating	PISA 2022 Demonstrating
Career talks	Job fairs (ST330Q03WA)	Part-time work	Part-time work*	Career certainty	Career certainty (ST329)
Workplace visits/job shadowing	Work-site visits/job shadowing (ST330Q02WA)	Volunteering	Not available	Career ambition	Career ambition (ST329)
Career pathway programmes	Not available			Career alignment	Career alignment (ST329; ST327)
Application/ Interview skills	Not available			Instrumental motivation	Instrumental motivation (ST324Q10JA; ST324Q11JA; ST324Q13JA)
Career conversations	Speaking with parents about future education (ST300Q09JA)				
		Partial	predictors		
Career Reflection activities	Questionnaires (ST330Q06WA) Speaking with a guidance counsellor (ST330Q04WA)	Internships/ Work placements	Internships (ST330Q01WA)	Career originality	Career originality (ST329)

Note: * PISA data on student participation in part-time work is available for some countries (not including Norway) within the PISA Financial Literacy Questionnaire. Source: (Covacevich et al., 2021_[1]; OECD, 2022_[10])

PISA provides sufficient data to categorise respondents by their personal and social characteristics which provides insights into their equity of career development. In the tables that follow, data from Norway are compared with OECD averages and disaggregated by the following student characteristics:

- All students: Includes the full sample of students.
- Gender (Female vs. Male)
- Economic Social and Cultural Status (Disadvantaged vs. Advantaged):
 - Socio-economic status is measured using the PISA Index of Economic, Social, and Cultural Status (ESCS) which draws on composite analysis of parental occupational status, parental educational attainment and household possessions (an indicator of household income and educational resources).
 - Advantaged: Students in the top quartile of ESCS within their country or economy.

- **Disadvantaged**: Students in the bottom quartile of ESCS within their country or economy.
- Performance Level (High vs. Low Performers):
 - Performance is assessed using PISA scores in reading, mathematics, and science.²
 - **High Performers**: Students achieving at least Level 4 proficiency in one core subject while maintaining at least Level 2 proficiency in the other two.
 - Low Performers: Students scoring below Level 2 proficiency in any subject.
- Immigrant background (Native-Born vs. Foreign-Born):
 - Native-Born: Students completing the PISA test in their country of birth.
 - Foreign-Born: Students born outside the country where they completed the test.
- Geographic Location (Urban vs. Rural):
 - Urban: Defined as areas with populations of 100,000 or more.
 - **Rural**: Defined as areas with populations of up to 3,000.

In this country note, analysis of PISA data is undertaken in light of sixteen key questions designed to provide insight into the effectiveness, efficiency and equity of career development:

1. **Career certainty and uncertainty**. Do students have a clear idea about their career plans?

- 2. **Occupational expectations**. What are the jobs that students expect to have?
- 3. **Career concentration**. How original are the career plans of students?

4. **Career signalling**. How much do the occupational plans of students have in common with actual patterns of labour market demand?

5. **Skilled employment (Craft & Related Skills)**. What is the demographic spread of teenage career interest in major category 7 of the International Standardized Classification of Occupations (ISCO)?

6. **Occupational ambition**. How ambitious are students for their future careers?

Proficiency Level	Reading	Science	Mathematics
Level 1 (1c)	189.33 to < 262.04		233.17 to < 295.47
Level 1 (1b)	262.04 to < 334.75	260.54 to < 334.94	295.47 to < 357.77
Level 1 (1a)	334.75 to < 407.47	334.94 to < 409.54	357.77 to < 420.07
Level 2	407.47 to < 480.18	409.54 to < 484.14	420.07 to < 482.38
Level 3	480.18 to < 552.89	484.14 to < 558.73	482.38 to < 544.68
Level 4	552.89 to < 625.61	558.73 to < 633.33	544.68 to < 606.99
Level 5	625.61 to < 698.32	633.33 to < 707.93	606.99 to < 669.30
Level 6	698.32 or greater	707.93 or greater	669.30 or greater

² The table below outlines the proficiency level thresholds for each subject in the PISA assessment.

7. Occupational ambition of high and low academic performers by Economic, Social, and Cultural Status (ESCS). To what extent are student career ambitions distorted by social class?

8. Educational ambition. What are the post-secondary educational plans of students?

9. Educational ambition of high and low academic performers by ESCS. To what extent are the educational plans for students distorted by social class?

10. **Career alignment and misalignment**. Do students have a clear idea of what they need to do to achieve their career plans?

11. **Instrumental motivation**. Do students think that their schools are helping them to achieve their career plans?

12. **Career development activities**. To what extent are students engaged in career development?

13. Career attitudes. Are students confident about their career progression?

14. **Strategically important careers**. How interested are students in occupational areas of high strategic importance?

15. **Occupational risk**. How many students are expecting to work in occupations at high risk of automation?

16. **Comparative synthesis**. How does the career development of students within the jurisdiction compare with that in other relevant countries and territories?

The results of these analyses are provided in tables 1 to 50 presented below. The remainder of this introductory text highlights some key findings from the analysis.³

³ In addition, analysis was undertaken which explored the possible statistical relationships between student participation in different types of career development activities and forms of career thinking which can be linked in longitudinal analyses with better ultimate employment outcomes. Controlling for student academic proficiency in the PISA academic assessments, the economic, social and cultural status of students (ESCS), their gender and migrant status, it is possible to see significant relationships between student participation in development activities and clear, more informed career thinking when reviewing combined data for all OECD countries (see (Mann, Diaz and Zapata Posada, 2024_[4]). However, in Norway, such statistical relationships are not generally apparent. A likely explanation is that sample sizes, reduced as it is for student participation in specific career development activities, were too small to allow for such analysis to produce reliable results.

Context Introduction

Box 1. The Career Guidance System for young people in Norway

The career guidance system in Norway is intended to support people of all ages in making informed choices about education and careers, as well as to develop career competencies to handle transitions in a changing labour market. A key foundation of the Norwegian system is its focus on lifelong learning and the idea that career guidance is not something one receives only once but rather follows the individual through different stages of life. For Norwegian 15-year-olds, this means laying a foundation for making choices that not only suits their current interests and situation but also provides flexibility for future opportunities.

Career guidance in school

In Norway, students start primary school at age 6 and move on to lower secondary school at age 13, before they enter upper secondary school from the year they turn 16. Primary and secondary education in Norway normally lasts for 13 years. Everyone who completes primary and lower secondary education is entitled to upper secondary education qualifying for further studies or a vocation.

Career guidance in schools is regulated by the Education Act of 2023 and gives municipalities and county authorities the responsibility to ensure that students in primary and secondary education receive the career guidance they need regarding educational and career choices. Schools must actively assess what kind of guidance each individual student requires and provide such guidance.

The county authorities must also ensure that access to career guidance is provided for those serving apprenticeship as part of vocational education, and for youth who have dropped out o -school or work, provided by the follow-up service (Oppfølgingstjenesten).

Career learning in lower secondary schools

Throughout lower secondary school career learning is strengthened by students attending a mandatory subject called "Educational Choice" (Utdanningsvalg). The purpose of the subject is to give the student an opportunity to develop career competencies (Career Management Skills) like the ability to make choices, manage transitions and see the connections between education and job opportunities. The subject should also help students develop a stronger sense of identity, enabling them to make choices based on their own interests and abilities. Another purpose is to help the students understand the opportunities and demands of both the education system and the labour market.

For the students the subject involves different career-learning activities such as:

- Self-reflection and skills training: Students learn to critically analyze their own interests, skills, and values, which can help them set goals for the future.
- Work experience weeks or job shadowing: Students take part in work placement to gain insight into various jobs and understand what working life demands.

• Visits to upper secondary schools: This provides insight into different study programmes to provide knowledge and prepare them for their educational and occupational choices.

Career guidance in school is supplemented by two digital services: 1. A National Digital Career Guidance Service (karriereveiledning.no) that gives access to professional career guidance for all citizens (both young people and adults), using chat, telephone and email. 2. A national career information website (utdanning.no) that gives access to up-to-date and quality assured information on education, work and other career-related topics and tools.

National systems responsibility

The Norwegian career guidance system is decentralized, meaning responsibility is divided among local, regional, and national authorities. At national level, the Norwegian Directorate for Higher Education and Skills has a national systems responsibility for career guidance. The aim is to increase access to these services, improve their quality, and ensure equitable provision for young people and adults at all stages of life. The responsibility includes, among other things:

- Disseminating and supporting the implementation of the National Quality Framework for Career Guidance across various sectors, as well as developing digital tools and methods for using the framework.
- Operating karriereveiledning.no, the free of charge digital career guidance service for all citizens. And operating utdanning.no, the national career information website that gives access to information on education, occupations, and other career-related information and tools.
- Collaborating with relevant stakeholders in the education sector, the Public Employment Service, and others to promote a high-quality lifelong guidance system.
- Giving policy advice to the government and providing knowledge and input for policymaking.

Note: This description of the career guidance system in Norway is authored by the Norwegian Directorate for Higher Education and Skills.

Career plans. What are the occupational expectations of students in Norway?

Since 2000, students who complete the PISA survey have been asked 'What kind of job do you expect to have when you are about 30 years old?'. Students are invited to write in responses which are then codified using the 2008 edition of International Standardised Classification of Occupations (ISCO).⁴ In PISA 2022, 45% of students in Norway can be classified as uncertain about their future career plans (compared to 38% of students on average across the OECD) (Table 3) as they failed to write in an answer, said they did not know or their response was too vague for classification.⁵ Teenage career uncertainty, defined as the inability or unwillingness to articulate an occupational expectation at 15, is associated in national longitudinal studies with poorer employment outcomes than would otherwise be expected (OECD, $2024_{[11]}$). It is not essential that students have reached a final decision about their career plans by the age of 15, but the ability to name an expectation suggests that students are active thinking about their futures in work and how they might relate to their educational plans. Since 2015, when 21% of students in Norway were classified as uncertain, career uncertainty has risen substantially, a pattern that is also seen across many OECD countries. In 2018, the share of uncertain students in Norway had already increased to 26%, before rising even more sharply to 45% in 2022. Career uncertainty is particularly high (above 50%) in Norway among socially advantaged students and low performers on the PISA academic assessments (Table 4). Compared to its Scandinavian neighbours, uncertainty in Norway is higher than in Sweden (41%), but lower than in Denmark (52%) or Finland (53%). While it is not always the case, international longitudinal studies which have explored relationships between teenage career uncertainty, typically around the age of 15, and employment in young adulthood have routinely found that uncertainty is linked with poorer transitions into the labour market (Covacevich et al., $2021_{[1]}$; OECD, $2024_{[11]}$). Consequently, more effective systems will monitor the career planning of students and provide support to help students in greater need to more actively explore the labour market (OECD, 2024[11]).

Where students do write in the type of job that they expect to have around the age of 30 in a form that can be classified, their occupational expectations tend to be concentrated among a small number of possible professions (**Table 2** and **Table 5**). In Norway, among students who expressed an occupational expectation, half of all respondents planned on working in one of the most ten popular career choices among their peers, slightly higher than the OECD average (Table 3). Broken down by gender, levels of concentration are higher. In Norway, 62% of girls expect to work in one of ten popular jobs as do 54% of boys

⁴ For more information, see the **International Standard Classification of Occupations (ISCO)** provided by ILOSTAT: https://ilostat.ilo.org/resources/concepts-and-definitions/classificationoccupations/. For Norwegian translations, refer to **Standard for yrkesklassifisering** by Statistics Norway: <u>https://www.ssb.no/klass/klassifikasjoner/7</u>. ISCO is based around ten major groups which are then subdivided into two-, three- and four-digit increasingly granular occupational codes. Coding is done on the best match for the written in occupation. Coding at three digits provides consistency in comparisons.

⁵ PISA data is reviewed to ascertain whether student failure to write in an answer to this question reflects genuine uncertainty or a simple unwillingness to write in an answer to a question. On average, three-quarters of students who failed to write in an answer about their occupational expectation did write in answers concerning parental occupations, suggesting occupational uncertainty to be genuine. Levels of uncertainty vary between OECD countries, being less than 20% in PISA 2022 for example in Costa Rica and Türkiye.

(Table 6). Levels of concentration are higher among high performing students, foreignborn students and students living in urban areas. At the age of 15, when data are collected by PISA, students have progressed significantly within their secondary education. In many educational systems, this is around the age when students select specialist programmes of study related in part to their career plans. International evidence on career concentration is limited, but points towards its being negatively associated with good transitions (Covacevich et al., $2021_{[1]}$) in that many students will need to adapt their plans in light of limited opportunity to follow progression pathways in tertiary education and/or demand for their preferred employment, potentially reducing student opportunity to optimise their choices and engagement in secondary education.

	Girls				Boys			
	Norway		OECD		Norway		OECD	
Rank	Occupation	%	Occupation	%	Occupation	%	Occupation	%
1	Medical Doctors	10.1	Medical Doctors	12.2	Electrical equipment installers and repairers	9.0	Sports and fitness workers	7.4
2	Legal professionals	8.8	Legal professionals	7.3	Sports and fitness workers	7.9	Software and Applications Developers and Analysts	6.7
3	Social and religious professionals	8.8	Social and religious professionals	6.9	Engineering Professionals (excluding Electrotechnology)	7.5	Engineering Professionals (excluding Electrotechnology)	6.6
4	Nursing and Midwifery Professionals	8.2	Nursing and Midwifery Professionals	5.8	Machinery mechanics and repairers	5.0	Medical Doctors	5.2
5	Architects, Planners, Surveyors and Designers	5.6	Architects, Planners, Surveyors and Designers	5.2	Ship and Aircraft Controllers and Technicians	4.5	Architects, Planners, Surveyors and Designers	4.7
6	Other health professionals	4.6	Other health professionals	4.9	Software and Applications Developers and Analysts	4.3	Creative and performing artists	3.7
7	Other Health Associate Professionals	4.3	Creative and performing artists	4.3	Building Frame and Related Trades Workers	4.3	Machinery mechanics and repairers	3.4
8	Protective Services Workers	4.2	Hairdressers, Beauticians and Related Workers	3.3	Medical Doctors	4.0	Protective Services Workers	3.3
9	Secondary Education Teachers	3.9	Veterinarians	2.9	Protective Services Workers	3.6	Legal professionals	3.1
10	Creative and performing artists	3.3	Teaching Professionals	2.7	Legal professionals	3.6	Other health professionals	2.5
	Total	61.8	Total	55.6	Total	53.7	Total	46.5

Table 2. Career expectations of students (10 most popular expectations), by gender in Norway and the OECD

Note: Occupations are classified using the International Standard Classification of Occupations (ISCO - 08) Source: OECD PISA 2022 database

How teenage career plans align with actual patterns of labour market demand

High levels of concentration in the career expectations of students imply a poor alignment between young people's plans and actual levels of demand for workers within the economy. Where this is the case, it suggests that employers are not signalling well to students about the availability and desirability of potential employment. **Figure 1** maps the occupational expectations of students in Norway against the actual distribution of labour across the Norwegian economy. While the occupational expectations of students in Norway are more

concentrated than is typical across the OECD, greater variation is found when looking at the fields in which students expect to work. ISCO groups occupations into ten major categories. As is overwhelmingly the case across OECD countries, a majority of students in Norway (who state an occupational expectation) plan on working in one field: the professions. Across the OECD, an average of 58% of students expect to work as a doctor, engineer, teacher, lawyer, or in another professional occupation. In Norway, this applies to 51% of students (Table 9). This is a low figure comparatively. Of 38 OECD countries, Norway ranks 32nd in terms of such levels of concentrated student interest in the professions. By contrast, in Denmark 58% and in England 67% of students expect to work as a professional (Mann, Diaz and Zapata Posada, 2024[4]). The lowest levels of professional expectations are found among students in Switzerland (47%), Finland (47%), Germany (45%) and the Czech Republic (43%). In all OECD countries, demand for jobs in the professions are higher than the actual availability of employment. However, in Norway the gap between demand and supply is lower than in many countries. For example, while in Norway 51% of students expect to work in jobs occupied by 29% of workers (Table 9), in England 67% of students plan on working in fields which employer 21% of the labour force (Mann, Diaz and Zapata Posada, 2024[4]).

In Norway, students show greater expectation than is commonly found elsewhere in technical and skilled employment. In contrast to many OECD countries, for example, one in eight students in Norway expect to work in the skilled trades (ISCO major category 7), one of the highest levels of interest found in PISA across all participating jurisdictions. Across the OECD, on average, one in thirteen students expect to work in such a profession (**Table 9**). As a consequence, the proportion of students in Norway planning on working in occupations at the highest risk of automation is higher than the OECD average (**Table 38**).



Figure 1. Occupational expectations and actual labour market (Norway)

20 |

Note: Occupations are classified using the International Standard Classification of Occupations (ISCO - 08) Source: OECD PISA 2022 database

TEENAGE CAREER DEVELOPMENT IN NORWAY © OECD 2025

Disaggregating student interests in relation to the skilled trades (ISCO 7), shows particularly high levels of occupational expectation among students who perform highly on the PISA academic assessments and who are drawn from the most socially advantaged quartile of students. Compared to other OECD countries, in Norway a wide range of students show interest in the skilled trades. The proportion of girls in PISA 2022 expecting to work in such employment (3.9%) is one of the highest across the OECD and more than twice the OECD average: one student in five in Norway who expects to work in an ISCO 7 profession is female, compared to an average ratio of 1 in 8 which across the OECD (**Table 10**). Female student expectations of working in ISCO 7 careers have also increased notably since 2015, rising from 1.5% in that year. Over the same period, interest levels have also risen strongly among other groups of students who in many countries express very low levels of expectation of working in the skilled trades, including socially advantaged students, high academic performers, and foreign-born students (**Table 37**).

Looking at trends in interest in the skilled trades alongside five other occupational areas identified as being of strategic importance in Norway, generally positive results are identified. The proportion of students expecting to work in Information and Communications Technology (ICT) also grew strongly between 2015 and 2022 with the interest of girls also increasing. However, levels of interest remain substantially lower than across the average of OECD countries (**Table 31**). Interest in Primary School teaching and Nursing and Midwifery has also increased since 2015, including among boys (**Table 29**). In the field of Engineering however, interest levels have fallen sharply since 2015, including among girls, although in these areas for 2022, interest levels remain above OECD averages (**Table 33**). Interest in science-related professions has shown variation overall, but a notable trend is evident among girls: their interest nearly doubled between 2015 and 2022, reaching levels comparable to those expressed by boys. This pattern is observed both in Norway and across the OECD (**Table 35**).

Occupational and educational aspirations. How ambitious, equitable and aligned are the educational and occupational plans of students?

Studies of national longitudinal datasets commonly find that students who express career aspirations to work as a senior manager or professional (ISCO major categories 1 and 2) as a teenager while still in secondary school can expect to enjoy better ultimate employment outcomes (in earnings for example) than comparable peers even with similar levels of educational achievement (Covacevich et al., 2021_[1]). In Norway, these occupational ambitions are common and are shared by 53% of students (who express a career plan), but less pronounced than is common across the OECD where 63% of students on average express such career intentions (**Table 11**). Across Norway, strong variations in occupational expectations linked to these two ISCO major categories are identified with girls, socially advantaged students, high academic performers, foreign-born and urban students substantially more likely than boys, social disadvantaged students, low performers, native-born and rural students to express such plans (**Table 13**).

In both Norway and across the OECD, social background is linked to occupational ambitions even among students with similar levels of academic achievements. In Norway, high performing students from the most socially advantaged social quartile are 14 percentage points more likely to plan on working in an ISCO 1 or 2 profession than their high performing peers from most socially disadvantaged quartile of the PISA sample, a gap that is comparable to the OECD average of 15 percentage points (**Table 13**). A similar pattern is apparent in the educational ambitions of students in Norway where 61% of students expect to complete tertiary education, compared to the OECD average of 69%) (**Table 14**). Among high performers on the PISA academic assessments, a 25-percentage point gap is apparent between the highest achievers from different social backgrounds. Whereas 53% of high performing disadvantaged students have such educational plans, the figure among their socially advantaged peers is 78%. Across the OECD, this 'aspiration gap' is slightly lower at 21% (**Table 16**).

The alignment of occupational and educational plans

Where students expect to work in an occupation which is typically entered through tertiary education (notably, senior management, professional and associate professional occupations classified within ISCO major categories 1, 2 and 3), but do not plan on completing tertiary education, they can be categorised as being 'misaligned' in their future planning. A range of longitudinal studies in different countries have followed 'aligned' and 'misaligned' students into the labour market and commonly found misalignment to be associated with worse employment outcomes than would be expected given student characteristics (OECD, $2024_{[12]}$). In Norway, levels of misalignment are slightly higher than the OECD average at 23% (**Table 17**). In Norway, as across the OECD, misalignment is concentrated among low performers and social disadvantaged students: around one in three of both groups exhibit misalignment (**Table 18**), suggesting many potentially vulnerable students are confused about the links between educational achievement and access to careers of interest and in need of greater support (OECD, $2024_{[11]}$).

Schools and career development. How do students engage in career development activities?

Box 1 provides an overview of career guidance in secondary education in Norway. PISA shows that students from Norway are consistently more likely than their peers across the OECD to engage in Career Development Activities, often participating in very high proportions (Figure 2).⁶ They are notably more likely to have participated in a job fair, to have spoken with a Careers Advisor and to have taken part in an organised tour of a ISCED 3-7 institution (**Table 21**). In a further area, measured by a question only asked in Norway, three-quarters of students agree that they had been present when a school visitor talked about educational/career opportunities (Table 21). Through such career talks as well as through a job fair students have opportunity to engage directly with people in work as they explore their career options, a form of career development which is associated with improved long-term outcomes in longitudinal studies (OECD, 2023[13]). However, in two significant areas, attending job shadowing or a worksite visit and in undertaking an internship, while participation levels are higher than found elsewhere on average, still fewer than half of students say that they have participated by the age of 15. These forms of career development engage young people directly with workplaces and provide important opportunities for students to explore and investigate potential futures in employment, gaining opportunities to develop career insights, social contacts and skills of value within ultimate transitions into work (Table 21) (OECD, 2021[14]).

- I did an internship. Jeg hadde en praksisplass.
- I attended [job shadowing or work-site visits]. Jeg deltok på et bedriftsbesøk.
- I visited a [job fair]. Jeg besøkte en utdannings- og yrkesmesse.
- I spoke to a [career advisor] at my school. Jeg snakket med utdannings- og yrkesrådgiver på skolen.
- I spoke to a [career advisor] outside of my school. Jeg snakket med en utdannings- og yrkesrådgiver utenfor skolen.
- I completed a questionnaire to find out about my interests and abilities. Jeg fylte ut et spørreskjema for å finne ut mer om mine interesser og ferdigheter.
- I researched the internet for information about careers. Jeg søkte på internett etter informasjon om forskjellige yrker.
- I went to an organised tour in an [ISCED 3-7] institution. Jeg dro på en organisert tur til en videregående skole, høgskole eller universitet.
- I researched the internet for information about [ISCED 3-7] programmes. Jeg søkte på internett etter informasjon om videregående skole, høgskole eller universitet.
- I researched information on student financing (e.g. student loans or grants). Jeg søkte etter informasjon om studiefinansiering (f.eks. studielån eller stipend).
- I was present when a school visitor talked about educational/career opportunities. Jeg var til stede da en person som besøkte skolen vår, snakket om utdannings- og yrkesmuligheter.

⁶ In PISA 2022, students in Norway were asked about their participation in career development activities. Below are the questions presented in both English and Norwegian:



Figure 2. Participation in Career Development Activities (Norway and OECD average)

Source: OECD PISA 2022 database

Career development is a process of cumulative engagement in activities and experiences which build over time to support career visualisation, planning and practical preparation for ultimate transitions into work. PISA 2022 provides limited opportunity to compare the engagement of students in multiple guidance activities related to career exploration (**Table 40**). Figure 3 shows the proportion of students who report having taken part in two important exploration activities enabled by educational institutions (participation job shadowing/work-site visits and job fairs) (Covacevich et al., $2021_{[1]}$) as well as speaking with a Careers Advisor in school, providing opportunity to plan and reflect on such activities to optimise benefit. In Norway, 38% of students report having engaged in all three core activities by the age of 15, a higher percentage than eight other comparative jurisdictions. Only in Denmark do more students engage.



Figure 3. Comparative synthesis: proportion of students engaging in three core Career Development Activities (job shadowing/work-site visits; job fairs; speaking with a career advisor in school) in Norway and nine other OECD countries.

Note: The percentages presented reflect the proportion of students who were asked and confirmed their involvement in three specific activities: job shadowing, attending a job fair, and consulting with a career advisor in school. In PISA 2022, a representative sample of students were asked if they participated in 4 or 5 career development activities.

Source: OECD PISA 2022 database.

Equity and participation in Career Development Activities

Across important activities where students have the opportunity to engage directly with people from the world of work (job shadowing/work-site visits, job fairs, internships, school visitors) (OECD, 2021_[15]), students from the most socially disadvantaged backgrounds participate at rates that are equal to or higher than their more socially advantaged peers (**Figure 4**). However, in other forms of career development it is the most socially advantaged quartile of students who can expect to engage more deeply in guidance activities (**Table 22** and **Table 23**). More equitable guidance systems ensure that students from more disadvantaged backgrounds consistently engage more frequently in guidance through their schools, responding to what is commonly more limited access to information, resources and experiences through their family networks (OECD, 2024_[16]; Payne and Gollings, 2024_[17]).





Source: OECD PISA 2022 database

Do students think that their schools are helping them to achieve their career plans?

In spite of their stronger than average levels of engagement in Career Development Activities, many young people in Norway express scepticism about the extent to which their schooling is preparing them well for their lives in work.⁷ Belief in the extrinsic value of education, or instrumental motivation, represents a further form of career development that has been associated with better ultimate employment outcomes, indicating that students are confidently engaging in education (Covacevich et al., 2021[1]). Students in Norway (54.4%) are 5.4 percentage points more likely than OECD peers (49%) to agree that 'school has done little to prepare me for adult life when I leave school', 7 percentage points more likely to agree that 'school has been a waste of time' (31.2% compared to an OECD average of 24.2%) and 10.8% percentage points more likely to disagree that 'school has taught me things which will be useful in a job' (43.4% v. 32.6%) (Table 19). Such sceptical attitudes are most common among students from the most socially disadvantaged quartile and lower performers (Table 20). Looking at other attitudes towards career development however, students in Norway are more likely than their OECD peers to agree that 'school has given me confidence to make decisions' (54.6% v. 46%) and that they 'feel well-prepared for my future path after the final year of compulsory education' (45% v. 41.5%) (Table 24).

- I worry that I am not prepared for life after the final year of compulsory education. Jeg er bekymret for at jeg ikke er forberedt på livet etter ungdomsskolen.
- I feel well-informed about possible paths for me after the final year of compulsory education. Jeg føler meg godt informert om de mulighetene jeg har etter ungdomsskolen.
- I feel pressure from my family to follow a specific path (e.g. go to college, work in the family business, learn a trade) after the final year of compulsory education. Jeg føler press fra familien om å følge en bestemt vei (f.eks. gå på høgskole, arbeide I familiebedriften, lære et håndverk) etter ungdomsskolen.
- I worry that I won't have enough money to do what I'd like to do after the final year of compulsory education.
 Jeg er bekymret for at jeg ikke vil ha nok penger til å gjøre det jeg liker etter ungdomsskolen.
- School has done little to prepare me for adult life when I leave school. Skolen har gjort lite for å forberede meg til voksenlivet etter skolen.
- School has been a waste of time. Skolen har vært bortkastet tid.
- School has helped give me confidence to make decisions. Skolen har gitt meg selvtillit til å ta avgjørelser.
- School has taught me things which could be useful in a job. Skolen har lært meg ting som kan bli nyttige i en jobb.
- I feel well-prepared for my future path after the final year of compulsory education. Jeg føler meg godt forberedt på det jeg skal gjøre etter ungdomsskolen.

⁷ In PISA 2022, students in Norway were asked about their career attitudes and instrumental motivation. Below are the questions presented in both English and Norwegian:

Takeaways from data

This analysis of OECD PISA data for Norway highlights strengths within the national guidance system, but also areas for further enhancement.

- As in all OECD countries, students in Norway are increasingly uncertain about their career plans. Uncertainty is an indicator of poorer ultimate outcomes in employment.
- Where students in Norway do express occupational expectations, their plans are more concentrated than is common across OECD countries, but their interests are spread across a wider range of employment sectors than is typically found.
- Students are less narrowly focused on the professions than is the case across the OECD and interest in the skilled trades is notably strong, even among girls, high academic performers and foreign-born students.
- Since 2015, student interest in other strategically important occupational areas has largely increased.
- Students with 'higher' levels of occupational and educational ambition tend to enjoy better employment outcomes than comparable peers. In Norway these ambitions are strongly related to the economic, social and cultural status of students. This is particularly the case with regard to interest in tertiary education. Comparable 'aspiration gaps' are found across the OECD.
- As is common across the OECD, around one-third of low performing and socially disadvantaged students in Norway expect to work in a profession that typically requires a tertiary qualification, but they do not plan to pursue education beyond the secondary level. This raises concerns over potentially vulnerable students who may be confused about what they need to do to achieve their ambitions and whose misaligned plans are related to penalties in later employment.
- Students in Norway consistently engage in greater proportions in important career development activities than their peers across the OECD, often considerably more so. This is a strength of the guidance system. However, in some activities, notably with regard to first-hand experiences of workplaces, fewer than half of students had participated by the time they had completed the PISA assessment.
- While students from the most socially disadvantaged backgrounds are more likely than peers from the most socially advantaged backgrounds to take part in key guidance activities that provide opportunity to engage directly with employers and people in work (in ways which are predictive of better outcomes), with other activities it tends to be more advantaged students who engage more commonly. More equitable guidance systems ensure that students from more disadvantaged backgrounds consistently engage more frequently in guidance through their schools, responding to what is commonly more limited access to information, resources and experiences through their family networks.

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Annex. Supplementary tables

1. Career certainty and uncertainty. Do students have a clear idea about their career plans?

Table 3. Career certainty in students

Percentage of students with a named occupational expectation ("What kind of job do you expect to have when you are about 30 years old?")

Norway	OECD average
55.1	61.2

Note: The base sample size for Norway is 6,111 in 2022. Source: OECD PISA 2022 database.

Table 4. Career certainty in students, by student characteristics

Percentage of students who can name an occupation that they expect to have at age 30.

Stuc	ent characteristics	Norway	OECD average
Gender	Girls	56.0	63.6
	Boys	54.3	58.8
ESCS	Disadvantaged	57.4	60.2
	Advantaged	46.9	57.7
Performance	Low performers	49.8	56.2
	High performers	59.7	66.0
Immigrant background	Native-born	58.5	63.5
	Foreign-born	56.3	58.2
Geographic location	Urban	52.1	61.5
	Rural	56.7	59.8

Note: The base sample size for Norway is 6,111 in 2022. Source: OECD PISA 2022 database.

2. Occupational expectations. What are the jobs that students expect to have?

Table 5. Career expectations of students (10 most popular expectations)

Percentage of students who, among those who named an occupation, expect to work in one of the ten most common career expectations among young people in their country.

	Norway	OECD				
Rank	Occupation	%	Occupation	%		
1	Medical Doctors	7.0	Medical Doctors	8.9		
2	Legal professionals	6.2	Legal professionals	5.3		
3	Social and religious professionals	6.1	Architects, Planners, Surveyors and Designers	5.0		
4	Sports and fitness workers	4.9	Social and religious professionals	4.4		
5	Electrical equipment installers and repairers	4.9	Creative and performing artists	4.0		
6	Engineering Professionals (excluding Electrotechnology)	4.7	Engineering Professionals (excluding Electrotechnology)	4.0		
7	Nursing and Midwifery Professionals	4.3	Sports and fitness workers	4.0		
8	Architects, Planners, Surveyors and Designers	4.1	Other health professionals	3.8		
9	Protective Services Workers	3.9	Software and Applications Developers and Analysts	3.7		
10	Machinery mechanics and repairers	3.2	Nursing and Midwifery Professionals	3.4		
	Total	49.4	Total	46.4		

Note: The base sample size for Norway is 3,639 in 2022. Occupations are classified using the International Standard Classification of Occupations (ISCO - 08). Source: OECD PISA 2022 database.

Table 6. Career expectations of students (10 most popular expectations), by student characteristics

Percentage of students who, among those who named an occupation, expect to work in one of the ten most common career expectations among young people in their country.

		Girls				Boys				
		Norway		OECD		Norway		OECD		
Student characteristic	Rank	Occupation	%	Occupation	%	Occupation	%	Occupation	%	
Gender	1	Medical Doctors	10.1	Medical Doctors	12.2	Electrical equipment installers and repairers	9.0	Sports and fitness workers	7.4	
	2	Legal professionals	8.8	Legal professionals	7.3	Sports and fitness workers	7.9	Software and Applications Developers and Analysts	6.7	
	3	Social and religious professionals	8.8	Social and religious professionals	6.9	Engineering Professionals (excluding Electrotechnology)	7.5	Engineering Professionals (excluding Electrotechnology)	6.6	
	4	Nursing and Midwifery Professionals	8.2	Nursing and Midwifery Professionals	5.8	Machinery mechanics and repairers	5.0	Medical Doctors	5.2	
	5	Architects, Planners, Surveyors and Designers	5.6	Architects, Planners, Surveyors and Designers	5.2	Ship and Aircraft Controllers and Technicians	4.5	Architects, Planners, Surveyors and Designers	4.7	
	6	Other health professionals	4.6	Other health professionals	4.9	Software and Applications Developers and Analysts	4.3	Creative and performing artists	3.7	
	7	Other Health Associate Professionals	4.3	Creative and performing artists	4.3	Building Frame and Related Trades Workers	4.3	Machinery mechanics and repairers	3.4	
	8	Protective Services Workers	4.2	Hairdressers, Beauticians and Related Workers	3.3	Medical Doctors	4.0	Protective Services Workers	3.3	
	9	Secondary Education Teachers	3.9	Veterinarians	2.9	Protective Services Workers	3.6	Legal professionals	3.1	
	10	Creative and performing artists	3.3	Teaching Professionals	2.7	Legal professionals	3.6	Other health professionals	2.5	
		Total	61.8	Total	55.6	Total	53.7	Total	46.5	
			Disadva	antaged			Advar	ntaged		
ESCS	1	Electrical equipment installers and repairers	6.7	Medical Doctors	6.9	Legal professionals	10.6	Medical Doctors	12.0	
	2	Medical Doctors	6.6	Legal professionals	5.0	Medical Doctors	8.7	Legal professionals	6.5	
	3	Machinery mechanics and repairers	6.4	Architects, Planners, Surveyors and Designers	4.2	Engineering Professionals (excluding Electrotechnology)	7.9	Architects, Planners, Surveyors and Designers	5.9	
	4	Nursing and Midwifery Professionals	6.1	Nursing and Midwifery Professionals	4.1	Social and religious professionals	7.5	Engineering Professionals (excluding Electrotechnology)	5.7	

background	2	Social and religious professionals	6.2	Legal professionals	5.3	Sports and fitness workers	6.6	Architects, Planners, Surveyors and Designers	6.2		
Immigrant	1	Medical Doctors	6.5	Medical Doctors	8.6	Medical Doctors	11.1	Medical Doctors	14.6		
	_	Native-born				Foreign-born					
	10	Other health professionals	3.0	Engineering Professionals (excluding Electrotechnology)	2.9 43.7	Creative and performing artists	3.1	Life Science Professionals	2.6		
	9	Legal professionals	4.1	Hairdressers, Beauticians and Related Workers	3.3	Software and Applications Developers and Analysts	3.4	Nursing and Midwifery Professionals	2.7		
	8	Protective Services Workers	4.1	Creative and performing artists	3.8	Electrical equipment installers and repairers	3.6	Creative and performing artists	4.3		
	7	Building Frame and Related Trades Workers	4.2	Protective Services Workers	3.8	Secondary Education Teachers	3.7	Other health professionals	4.4		
	6	Machinery mechanics and repairers	5.2	Social and religious professionals	3.8	Sports and fitness workers	4.0	Social and religious professionals	4.8		
	5	Social and religious professionals	5.2	Nursing and Midwifery Professionals	3.8	Architects, Planners, Surveyors and Designers	4.9	Legal professionals	5.0		
	4	Medical Doctors	5.3	Architects, Planners, Surveyors and Designers	4.0	Social and religious professionals	6.6	Engineering Professionals (excluding Electrotechnology)	5.4		
	3	Electrical equipment installers and repairers	5.7	Legal professionals	5.3	Legal professionals	8.1	Software and Applications Developers and Analysts	5.5		
	2	Nursing and Midwifery Professionals	5.8	Sports and fitness workers	5.3	Engineering Professionals (excluding Electrotechnology)	8.2	Architects, Planners, Surveyors and Designers	5.7		
Performance	1	Sports and fitness workers	6.0	Medical Doctors	7.7	Medical Doctors	9.3	Medical Doctors	10.0		
	Low performers					High performers					
		Total	49.4	(excluding Electrotechnology) Total	41.5	Developers and Analysts Total	55.3	Total	54.1		
	10	Building Frame and Related	3.3	Engineering Professionals	2.9	Software and Applications	2.6	Life Science Professionals	2.2		
	9	Protective Services Workers	3.4	Hairdressers, Beauticians and Related Workers	3.4	Other health professionals	2.6	Sports and fitness workers	3.4		
	8	Legal professionals	3.5	Protective Services Workers	3.5	Secondary Education Teachers	2.7	Social and religious professionals	4.3		
	7	Sports and fitness workers	3.7	Creative and performing artists	3.5	Protective Services Workers	3.5	Creative and performing artists	4.4		
	6	Architects, Planners, Surveyors and Designers	4.4	Social and religious professionals	4.0	Architects, Planners, Surveyors and Designers	3.8	Software and Applications Developers and Analysts	4.7		
	5	Social and religious professionals	5.5	Sports and fitness workers	4.1	Sports and fitness workers	5.3	Other health professionals	5.1		

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	3	Legal professionals	6.2	Architects, Planners, Surveyors and Designers	4.9	Architects, Planners, Surveyors and Designers	6.1	Creative and performing artists	4.8
	4	Electrical equipment installers and repairers	4.9	Social and religious professionals	4.5	Legal professionals	5.7	Legal professionals	4.8
	5	Engineering Professionals (excluding Electrotechnology)	4.8	Engineering Professionals (excluding Electrotechnology)	4.0	Social and religious professionals	5.1	Engineering Professionals (excluding Electrotechnology)	4.4
	6	Sports and fitness workers	4.7	Sports and fitness workers	4.0	Nursing and Midwifery Professionals	4.5	Software and Applications Developers and Analysts	4.4
	7	Nursing and Midwifery Professionals	4.3	Creative and performing artists	3.9	Engineering Professionals (excluding Electrotechnology)	4.1	Social and religious professionals	3.9
	8	Protective Services Workers	4.1	Other health professionals	3.8	Ship and Aircraft Controllers and Technicians	4.0	Sports and fitness workers	3.4
	9	Architects, Planners, Surveyors and Designers	3.9	Software and Applications Developers and Analysts	3.7	Other health professionals	4.0	Other health professionals	3.3
	10	Machinery mechanics and repairers	3.2	Nursing and Midwifery Professionals	3.4	Software and Applications Developers and Analysts	3.8	Nursing and Midwifery Professionals	2.9
		Total	49.0	Total	46.1	Total	55.1	Total	52.7
		Urban				Rural			
Geographic location	1	Medical Doctors	9.2	Medical Doctors	9.3	Electrical equipment installers and repairers	6.6	Medical Doctors	8.0
	2	Legal professionals	8.6	Legal professionals	5.6	Machinery mechanics and repairers	6.0	Legal professionals	4.5
	3	Social and religious professionals	8.2	Architects, Planners, Surveyors and Designers	5.4	Nursing and Midwifery Professionals	5.1	Engineering Professionals (excluding Electrotechnology)	3.7
	4	Engineering Professionals (excluding Electrotechnology)	5.8	Creative and performing artists	4.5	Secondary Education Teachers	4.6	Social and religious professionals	3.6
	5	Sports and fitness workers	5.8	Sports and fitness workers	4.5	Ship and Aircraft Controllers and Technicians	4.1	Software and Applications Developers and Analysts	3.3
	6	Nursing and Midwifery Professionals	5.3	Social and religious professionals	4.4	Sports and fitness workers	4.0	Nursing and Midwifery Professionals	3.3
	7	Architects, Planners, Surveyors and Designers	4.4	Software and Applications Developers and Analysts	4.4	Architects, Planners, Surveyors and Designers	3.9	Other health professionals	3.2
	8	Protective Services Workers	4.0	Engineering Professionals (excluding Electrotechnology)	4.2	Medical Doctors	3.9	Architects, Planners, Surveyors and Designers	3.1

9	Creative and performing artists	3.8	Other health professionals	4.1	Social and religious professionals	3.6	Machinery mechanics and repairers	3.1
10	Other health professionals	3.6	Nursing and Midwifery Professionals	3.5	Fishery Workers, Hunters and Trappers	3.6	Life Science Professionals	2.9
	Total	58.7	Total	49.9	Total	45.5	Total	38.7

Note: The base sample size for Norway is 3,639 in 2022. Occupations are classified using the International Standard Classification of Occupations (ISCO - 08). Source: OECD PISA 2022 database.

3. Career concentration. How original are the career plans of students?

Table 7. Career concentration of students

Percentage of students who, among those who named an occupation, expect to work in one of the ten most common career expectations among young people in their country.

Norway	OECD average
49.4	46.4

Note: The base sample size for Norway is 3,639 in 2022. Occupations are classified using the International Standard Classification of Occupations (ISCO - 08). Source: OECD PISA 2022 database.

Table 8. Career concentration of students, by student characteristics

Percentage of students who, among those who named an occupation, expect to work in one of the ten most common career expectations among young people in their country.

Student characteris	Norway	OECD average	
Gender	Girls	61.8	55.6
	Boys	53.7	46.5
ESCS	Disadvantaged	49.4	41.5
	Advantaged	55.3	54.1
Performance	Low performers	48.7	43.7
	High performers	54.9	50.5
Immigrant background	Native-born	49.0	46.1
	Foreign-born	55.1	52.7
Geographic location	Urban	58.7	49.9
	Rural	45.5	38.7

Note: The base sample size for Norway is 3,639 in 2022. Occupations are classified using the International Standard Classification of Occupations (ISCO - 08). Source: OECD PISA 2022 database.

4. Career signalling. How much do the occupational plans of students have in common with actual patterns of labour market demand?

Table 9. Student career ambitions and actual labour market segmentation

		OECD	
ISCO Major Group	Expectation	Actual labour market	Expectation
1 Managers	1.9	8.3	4.4
2 Professionals	51.3	29.2	58.2
3 Technicians and Associate Professionals	18.2	15.5	14.3
4 Clerical support workers	0.7	5.8	1.6
5 Services and sales workers	8.7	20.0	9.6
6 Skilled agricultural, forestry and fishery workers	2.4	1.8	1.0
7 Craft and related trades workers	12.2	8.4	7.6
8 Plant and machine operators, and assemblers	2.9	5.9	1.0
9 Elementary occupations	0.3	3.5	0.4
0 Armed forces occupations	1.4	0.3	1.9

Percentage of students who, among those who named an occupation, expect to work in each of the following ISCO Major Groups.

Note: The base sample size for Norway is 3,639 in 2022. 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. Available at: https://www.ilo.org/shinyapps/bulkexplorer54/?lang=en&id=EMP_TEMP_SEX_AGE_OCU_NB_A.

5. Skilled employment (the trades). What is the demographic spread of teenage career interest in ISCO major category 7?

Table 10. Student interest in skilled trades, by student characteristics

Percentage of students who, among those who named an occupation, expect to work in an occupation within ISCO Major Group 7 (Craft and related trades workers).

Student characterist	Norway	OECD	
Gender	Girls	3.9	1.8
	Boys	20.3	13.7
ESCS	Disadvantaged	18.4	12.2
	Advantaged	7.3	3.4
Performance	Low performers	17.9	13.1
	High performers	6.7	3.5
Immigrant background	Native-born	12.4	7.8
	Foreign-born	9.5	6.4
Geographic location	Urban	6.1	5.1
	Rural	17.5	11.8

Note: The base sample size for Norway is 438 in 2022. Occupations are classified using the International Standard Classification of Occupations (ISCO - 08). Source: OECD PISA 2022 database.

6. Occupational ambition. How ambitious are students for their future careers?

Table 11. Career ambition of students

Percentage of students who, among those who named an occupation, expect to pursue managerial or professional careers (ISCO Major Groups 1 and 2).

Norway	OECD average
53.2	62.6

Note: The base sample size for Norway is 3,639 in 2022. Occupations are classified using the International Standard Classification of Occupations (ISCO - 08). Source: OECD PISA 2022 database.

Table 12. Career ambition of students, student characteristics

Percentage of students who, among those who named an occupation, expect to pursue managerial or professional careers (ISCO Major Groups 1 and 2).

Student characteris	tics	Norway	OECD average
Gender	Girls	65.8	70.7
	Boys	40.8	54.1
ESCS	Disadvantaged	45.1	50.3
	Advantaged	62.0	76.2
Performance	Low performers	41.0	46.4
	High performers	66.3	76.9
Immigrant background	Native-born	52.4	62.3
	Foreign-born	61.5	66.3
Geographic location	Urban	64.5	68.5
	Rural	41.3	51.6

Note: The base sample size for Norway is 3,639 in 2022. Occupations are classified using the International Standard Classification of Occupations (ISCO - 08). Source: OECD PISA 2022 database.

7. Occupational ambition of high and low academic performers by ESCS. To what extent are student career ambitions distorted by social class?

Table 13. Career ambition of high and low academic performers by ESCS. To what extent are student career ambitions distorted by social class?

	ESCS	Performance	%
Norway	Disadvantaged	Low performers	39.5
	Disadvantaged	High performers	56.7
	Advantaged	Low performers	45.7
	Advantaged	High performers	70.9
OECD average	Disadvantaged	Low performers	41.1
	Disadvantaged	High performers	68.0
	Advantaged	Low performers	56.8
	Advantaged	High performers	82.9

Percentage of students who, among those who named an occupation, expect to work in ISCO Major Group 1 or 2 occupations, disaggregated by academic performance—high performers (high & low ESCS quartiles) and low performers (high & low ESCS quartiles).

Note: The base sample size for Norway is 3,639 in 2022. Occupations are classified using the International Standard Classification of Occupations (ISCO - 08). Source: OECD PISA 2022 database.

8. Educational ambition. What are the post-secondary educational plans of students?

Table 14. How many students expect to pursue tertiary education?

Percentage of students that expect to pursue tertiary education.

Norway	OECD average
61.1	69.4

Note: The base sample size for Norway is 5,146 in 2022. Education levels are classified according to the International Standard Classification of Education (ISCED). Tertiary education corresponds to ISCED levels 5 through 8. Source: OECD PISA 2022 database.

Table 15. How many students expect to pursue tertiary education?, by student characteristics

		-	
Student characteristics		Norway	OECD average
Gender	Girls	66.0	73.1
	Boys	56.0	65.6
ESCS	Disadvantaged	49.1	54.7
	Advantaged	71.6	82.7
Performance	Low performers	55.7	57.6
	High performers	69.0	79.5
Immigrant background	Native-born	60.5	69.2
	Foreign-born	67.0	72.1
Geographic location	Urban	66.8	73.6
	Rural	52.2	61.8

Percentage of students that expect to pursue tertiary education.

Note: The base sample size for Norway is 5,146 in 2022. Education levels are classified according to the International Standard Classification of Education (ISCED). Tertiary education corresponds to ISCED levels 5 through 8. Source: OECD PISA 2022 database.

9. Educational ambition of high and low academic performers by ESCS. To what extent are the educational plans for students distorted by social class?

Table 16. Educational ambition of high and low academic performers by ESCS. To what extent are the educational plans for students distorted by social class?

	low ESCS quartiles).		
	ESCS	Performance	%
Norway	Disadvantaged	Low performers	48.6
	Disadvantaged	High performers	53.4
	Advantaged	Low performers	63.9
	Advantaged	High performers	77.5
OECD average	Disadvantaged	Low performers	49.2
	Disadvantaged	High performers	65.6
	Advantaged	Low performers	70.6
	Advantaged	High performers	86.8

Percentage of students expecting to attend tertiary education by academic performance - high performers (high & low ESCS quartiles) and low performers (high & low ESCS quartiles).

Note: The base sample size for Norway is 5,146 in 2022. Source: OECD PISA 2022 database.

10. Career alignment and misalignment. Do students have a clear idea of what they need to do to achieve their career plans?

Table 17. Misalignment between career expectations and educational plans

Percentage of students who, among those who named an occupation, have misaligned career expectations and educational plans.

Norway	OECD average
23.4	20.9

Note: The base sample size for Norway is 2,485 in 2022. Students are classified as misaligned if they expect to work in occupations typically requiring tertiary education (ISCO major categories 1, 2, and 3) but do not plan to complete education beyond ISCED level 4. Source: OECD PISA 2022 database.

Table 18. Misalignment between career expectations and educational plans, by student characteristics

Student characteris	tics	Norway	OECD average
Gender	Girls	21.2	18.6
	Boys	26.3	24.0
ESCS	Disadvantaged	33.3	33.0
	Advantaged	15.1	11.6
Performance	Low performers	30.5	32.0
	High performers	17.0	14.3
Immigrant background	Native-born	23.4	21.0
	Foreign-born	23.4	20.2
Geographic location	Urban	23.0	19.0
	Rural	26.8	26.8

Percentage of students who, among those who named an occupation, have misaligned career expectations and educational plans.

Note: The base sample size for Norway is 2,485 in 2022. Students are classified as misaligned if they expect to work in occupations typically requiring tertiary education (ISCO major categories 1, 2, and 3) but do not plan to complete education beyond ISCED level 4. Source: OECD PISA 2022 database.

11. Instrumental motivation. Do students think that their schools are helping them to achieve their career plans?

Student responses to the following statements:		1	Norway		OECD average						
	Strongly agree	Agree	Disagree	Strongly disagree	Strongly agree	Agree	Disagree	Strongly disagree			
School has done little to prepare me for adult life when I leave school.	15.8	38.6	34.1	11.5	14.2	34.8	39.3	11.7			
School has been a waste of time.	7.8	23.4	49.8	19.0	6.3	17.9	49.6	26.2			
School has taught me things which could be useful in a job.	9.3	47.3	30.5	12.9	13.4	54.0	23.1	9.5			

Table 19. Instrumental motivation. Do students think that their schools are helping them to achieve their career plans?

Note: For this set of variables, the base sample size for Norway ranges from 2,756 to 2,823 in 2022. Source: OECD PISA 2022 database.

Table 20. Instrumental motivation. Do students think that their schools are helping them to achieve their career plans?, by student characteristics

					PISA state	ment:			
			School has done litt	le to prepare me for adult life when I leave school.	School has	been a waste of time.	School has taught me things which could be useful in a job.		
Student char	acteristics	Student responses	Norway	OECD average	Norway	OECD average	Norway	OECD average	
Gender	Girls	cs Student responses Strongly agree Agree Disagree Strongly disagree Strongly agree Agree Disagree Strongly disagree Strongly disagree Vantaged Strongly agree Agree	13.5	13.8	5.3	4.4	7.4	12.6	
		Agree	42.8	35.3	20.3	14.7	52.4	56.5	
		Disagree	33.9	40.3	54.9	52.1	29.9	23.0	
		Strongly disagree	9.8	10.6	19.5	28.7	10.3	7.9	
	Boys	Strongly agree	18.2	14.6	10.3	8.2	11.2	14.2	
		Agree	34.4	34.3	26.6	21.2	42.2	51.5	
		Disagree	34.3	38.3	44.6	47.1	31.1	23.2	
		Strongly disagree	13.2	12.8	18.4	23.6	15.5	11.1	
ESCS	Disadvantaged	Strongly disagree Strongly agree	16.3	13.1	9.8	7.4	9.6	13.0	
		Agree	38.0	34.7	26.8	19.9	43.8	53.4	
		Disagree	34.4	40.1	47.3	49.4	34.1	23.7	

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		Strongly disagree	11.3	12.1	16.2	23.3	12.6	9.8
	Advantaged	Strongly agree	14.5	15.2	7.2	5.3	10.0	14.3
		Agree	38.0	34.9	19.6	15.3	52.6	54.8
		Disagree	36.0	38.2	50.8	48.9	24.5	21.5
		Strongly disagree	11.5	11.7	22.4	30.5	13.0	9.4
Performance	Low performers	Strongly agree	17.4	13.4	11.4	9.6	10.2	14.3
		Agree	36.7	34.8	29.5	23.8	40.4	50.0
		Disagree	32.2	37.9	43.8	45.0	31.1	23.8
		Strongly disagree	13.7	13.9	15.4	21.7	18.3	11.8
	High	Strongly agree	14.2	15.3	4.7	3.8	10.4	13.1
	performers	Agree	39.1	35.6	17.8	13.1	52.6	56.6
		Disagree	36.3	39.2	53.1	52.1	29.2	22.7
		Strongly disagree	10.5	9.9	24.4	31.0	7.9	7.5
Immigrant	Native-born	Strongly agree	15.8	14.2	7.4	6.2	9.3	13.3
background		Agree	38.8	34.8	22.9	17.8	47.1	54.2
		Disagree	33.9	39.3	50.5	49.8	30.8	23.2
		Strongly disagree	11.5	11.6	19.2	26.2	12.8	9.3
	Foreign-born	Strongly agree	14.6	13.7	9.2	7.1	7.9	14.5
		Agree	38.5	34.6	30.0	19.6	52.0	53.2
		Disagree	37.3	39.9	43.2	47.7	28.4	21.7
		Strongly disagree	9.5	11.8	17.6	25.6	11.7	10.7
Geographic location	Urban	Strongly agree	16.4	15.5	9.3	6.0	9.8	13.6
		Agree	41.9	35.4	21.2	17.0	50.0	53.7
		Disagree	35.0	38.4	48.7	49.6	28.4	23.3
		Strongly disagree	6.8	10.7	20.8	27.4	11.7	9.5
	Rural	Strongly agree	15.3	12.9	5.2	7.2	8.0	12.8
		Agree	34.7	35.0	24.3	20.7	46.9	55.9
		Disagree	38.7	40.5	55.8	49.0	33.3	22.1
		Strongly disagree	11.3	12.0	14.6	23.1	11.8	9.2

Note: For this set of variables, the base sample size for Norway ranges from 2,756 to 2,823 in 2022 Source: OECD PISA 2022 database

12. Career development activities. To what extent are students engaged in career development?

PISA statement: To learn about future study/work, have you:		No	orway	OECD average				
	Yes	Yes, once	Yes, more than once	Yes	Yes, once	Yes, more than once		
I did an internship.	43.0	27.9	15.2	35.3	20.8	14.5		
I attended job shadowing or work-site visits.	46.4	29.0	17.4	45.3	24.2	21.1		
I visited a job fair.	60.0	40.3	19.7	35.4	20.9	14.6		
I spoke to a career advisor at my school.	79.4	38.0	41.4	48.9	25.2	23.7		
I spoke to a career advisor outside of my school.	40.7	21.5	19.2	33.4	17.1	16.3		
I spoke to a career advisor at all.	83.4	27.0	56.4	55.2	18.2	37.0		
I completed a questionnaire to find out about my interests and abilities.	68.1	37.2	30.9	63.7	31.9	31.8		
I researched the internet for information about careers.	84.6	28.1	56.4	79.3	27.6	51.7		
I went to an organised tour in an ISCED 3-7 institution.	71.7	44.4	27.4	39.9	21.2	18.7		
I researched the internet for information about ISCED 3-7 programmes.	84.5	31.1	53.3	72.0	26.9	45.2		
I researched information on student financing (e.g. student loans or grants).	48.0	23.6	24.5	46.3	21.6	24.7		
I was present when a school visitor talked about educational/career opportunities.	72.2	35.7	36.5	m	m	m		

Table 21. Student participation in career development activities

Note: For this set of variables, the base sample size for Norway ranges from 2,226 to 2,385 in 2022. The symbol "m" denotes missing or unavailable data. This may occur for several reasons: the data were not observed in the sample, the country or economy did not collect the data, or the data were collected but later excluded from the publication due to technical considerations.

Source: OECD PISA 2022 database.

			Inte	ernship	Job s	hadowing	Jo	b Fair	Adviso	r (School)	Adviso so	or (Out-of- chool)	Advi	sor (All)
Student cha	racteristics	Student responses	Norway	OECD average	Norway	OECD average	Norway	OECD average	Norway	OECD average	Norway	OECD average	Norway	OECD average
Gender	Girls	Yes	36.6	30.4	40.8	40.9	56.1	32.0	79.5	48.9	37.0	31.4	83.8	55.6
		Yes, once	24.0	18.4	26.1	22.0	37.6	19.4	38.4	25.4	19.5	16.5	32.9	20.0
		Yes, more than once	12.6	12.0	14.7	18.9	18.5	12.6	41.0	23.5	17.5	14.9	50.9	35.6
	Boys	Yes	49.4	40.2	51.7	49.7	63.8	38.9	79.4	48.9	44.3	35.3	83.1	54.8
		Yes, once	31.7	23.2	31.7	26.3	42.9	22.4	37.6	25.0	23.4	17.7	21.0	16.4
		Yes, more than once	17.7	16.9	20.0	23.4	20.9	16.5	41.8	23.9	20.9	17.7	62.1	38.5
ESCS	Disadvantaged	Yes	44.4	35.6	45.2	42.8	67.1	33.8	75.8	49.1	45.1	33.4	81.8	54.8
		Yes, once	30.0	20.4	25.7	22.7	43.5	19.5	36.3	24.7	21.5	16.4	22.7	16.4
		Yes, more than once	14.4	15.1	19.5	20.1	23.6	14.2	39.5	24.4	23.5	17.0	59.0	38.4
	Advantaged	Yes	38.6	33.9	45.6	46.2	52.6	35.6	83.0	48.0	37.9	32.3	86.5	55.2
		Yes, once	25.0	20.7	29.7	25.1	36.3	21.5	41.8	25.4	22.0	17.0	30.0	19.8
		Yes, more than once	13.6	13.1	15.9	21.1	16.3	14.1	41.2	22.6	16.0	15.3	56.5	35.4
Performance	Low performers	Yes	52.2	43.6	52.5	51.6	68.4	41.9	74.7	53.6	49.9	42.6	79.0	59.1
		Yes, once	32.1	24.6	30.4	26.7	43.1	23.0	35.1	26.4	25.8	20.5	19.2	14.0
		Yes, more than once	20.2	19.0	22.1	24.9	25.4	19.0	39.5	27.2	24.1	22.1	59.9	45.1
	High	Yes	36.2	27.1	42.3	39.6	51.3	30.2	84.9	44.7	30.6	25.6	87.2	51.7
	performers	Yes, once	25.8	17.1	29.3	21.9	37.6	19.3	41.3	23.9	15.9	14.0	34.5	21.9
		Yes, more than once	10.5	10.0	13.0	17.7	13.8	11.0	43.6	20.8	14.7	11.6	52.7	29.9
Immigrant	Native-born	Yes	42.5	35.0	46.7	45.1	59.7	35.1	79.7	48.7	38.6	32.8	83.1	55.1
background		Yes, once	27.5	20.6	29.6	24.1	40.1	20.8	38.3	25.2	20.8	16.8	27.9	18.5

Table 22. Student participation in career development activities, by student characteristics (1/2)

TEENAGE CAREER DEVELOPMENT IN NORWAY © OECD 2025

		Yes, more than once	15.0	14.4	17.1	21.1	19.6	14.4	41.4	23.6	17.9	16.0	55.3	36.7
	Foreign-born	Yes	47.1	39.3	40.6	47.4	60.6	39.0	79.1	49.9	56.6	39.8	86.5	56.3
		Yes, once	29.1	22.8	22.2	25.6	43.7	21.8	36.9	24.7	26.5	20.3	21.5	16.4
		Yes, more than once	18.0	16.5	18.4	21.8	16.9	17.3	42.2	25.2	30.1	19.5	65.0	40.0
Geographic	Urban	Yes	30.7	32.6	32.5	42.0	47.5	33.8	76.8	45.3	36.3	31.6	79.8	51.8
location		Yes, once	20.0	19.5	22.3	23.0	31.7	20.5	36.4	23.6	18.9	16.2	23.7	17.3
		Yes, more than once	10.7	13.1	10.2	19.1	15.9	13.3	40.4	21.8	17.4	15.4	56.0	34.6
	Rural	Yes	59.8	41.6	62.1	49.5	75.3	39.2	78.5	53.4	47.4	36.2	84.7	60.2
		Yes, once	39.1	23.5	36.7	24.9	52.8	22.9	37.9	26.3	23.7	18.7	22.1	20.6
		Yes, more than once	20.7	18.1	25.4	24.6	22.5	16.2	40.6	27.1	23.8	17.5	62.7	39.7

Note: For this set of variables, the base sample size for Norway ranges from 2,226 to 2,385 in 2022. The symbol "m" denotes missing or unavailable data. This may occur for several reasons: the data were not observed in the sample, the country or economy did not collect the data, or the data were collected but later excluded from the publication due to technical considerations.

Source: OECD PISA 2022 database.

			Ques	tionnaire	Research	hed Careers	Tour I	nstitution	Rese Prog	earched rammes	Studen	t financing	Schoo	ol Visitor
Student cha	racteristics	Student responses	Norway	OECD average	Norway	OECD average	Norway	OECD average	Norway	OECD average	Norway	OECD average	Norway	OECD average
Gender	Girls	Yes	72.0	67.2	87.2	83.3	71.9	38.0	87.9	77.5	46.2	48.4	72.9	m
		Yes, once	38.3	32.6	26.3	26.7	43.8	20.6	28.7	26.9	21.8	22.0	35.5	m
		Yes, more than once	33.7	34.6	60.9	56.6	28.1	17.4	59.2	50.6	24.5	26.3	37.4	m
	Boys	Yes	64.3	60.2	81.9	75.2	71.6	41.9	81.0	66.6	49.8	44.2	71.5	m
		Yes, once	36.1	31.2	29.9	28.6	44.9	21.9	33.6	26.9	25.3	21.2	35.9	m
		Yes, more than once	28.2	29.0	52.0	46.6	26.7	20.0	47.4	39.7	24.5	22.9	35.6	m
ESCS	Disadvantaged	Yes	64.5	58.4	83.1	75.6	68.8	37.6	79.9	66.3	49.8	44.3	70.7	m
		Yes, once	38.1	29.8	28.3	27.7	42.8	20.2	31.7	26.5	25.2	20.6	34.2	m
		Yes, more than once	26.4	28.5	54.8	47.8	26.0	17.4	48.2	39.8	24.6	23.7	36.5	m
	Advantaged	Yes	70.1	68.0	85.0	81.8	74.4	41.6	88.4	76.3	49.4	47.8	73.3	m
		Yes, once	36.2	32.6	29.0	26.5	45.4	21.7	32.3	26.6	23.2	22.4	35.3	m
		Yes, more than once	33.8	35.4	56.0	55.3	28.9	19.9	56.0	49.7	26.3	25.4	38.0	m
Performance	Low performers	Yes	63.3	60.4	77.1	73.6	67.0	44.0	78.2	65.7	54.4	49.3	66.1	m
		Yes, once	34.2	30.5	31.3	30.0	36.4	21.9	33.9	28.0	26.1	23.1	34.6	m
		Yes, more than once	29.1	29.9	45.7	43.6	30.5	22.0	44.3	37.7	28.3	26.2	31.4	m
	High	Yes	73.1	67.0	91.5	84.1	76.5	36.4	89.9	77.3	43.9	44.3	77.1	m
	performers	Yes, once	38.7	32.5	25.4	24.4	51.0	20.2	27.3	25.1	22.0	20.0	35.2	m
		Yes, more than once	34.4	34.5	66.1	59.7	25.5	16.2	62.6	52.2	22.0	24.3	42.0	m
Immigrant	Native-born	Yes	67.8	63.7	84.6	79.2	71.6	39.8	84.3	72.0	46.0	45.6	72.5	m
background		Yes, once	37.2	31.9	28.0	27.5	44.6	21.2	30.8	26.8	23.1	21.3	36.1	m
		Yes, more than once	30.5	31.8	56.6	51.7	27.0	18.6	53.5	45.2	22.9	24.3	36.5	m

Table 23. Student participation in career development activities, by student characteristics (2/2)

TEENAGE CAREER DEVELOPMENT IN NORWAY © OECD 2025

	Foreign-born	Yes	70.9	64.0	85.2	81.3	75.2	41.3	85.5	71.8	66.0	52.6	69.8	m
	J J	Yes, once	37.4	32.7	28.4	29.3	44.3	21.8	33.9	26.9	28.2	24.6	31.4	m
		Yes, more than once	33.5	31.3	56.8	52.0	30.9	19.5	51.6	44.9	37.9	28.0	38.4	m
Geographic	Urban	Yes	67.9	63.1	85.2	79.6	64.6	37.1	83.5	71.7	47.2	45.8	65.8	m
location		Yes, once	35.7	31.3	27.3	27.0	47.6	19.6	29.4	26.1	24.7	21.4	35.6	m
		Yes, more than once	32.2	31.8	57.9	52.6	17.0	17.5	54.2	45.7	22.5	24.4	30.2	m
	Rural	Yes	67.1	62.8	86.4	77.1	75.0	41.9	86.1	70.2	52.4	46.4	78.8	m
		Yes, once	36.3	31.2	25.5	26.4	41.3	21.3	31.9	25.4	21.8	20.2	33.7	m
		Yes, more than once	30.8	31.6	60.9	50.7	33.7	20.6	54.1	44.8	30.6	26.1	45.1	m

Note: For this set of variables, the base sample size for Norway ranges from 2,226 to 2,385 in 2022. The symbol "m" denotes missing or unavailable data. This may occur for several reasons: the data were not observed in the sample, the country or economy did not collect the data, or the data were collected but later excluded from the publication due to technical considerations. Source: OECD PISA 2022 database.

13. Career attitudes. Are students confident about their career progression?

Student responses to the following statements:		Norwa	ау		OECD average				
	Strongly disagree	Disagree	Agree	Strongly agree	Strongly disagree	Disagree	Agree	Strongly agree	
I worry that I am not prepared for life after the final year of compulsory education.	13.1	34.0	34.6	18.3	13.3	34.1	35.6	17.0	
I feel well-informed about possible paths for me after the final year of compulsory education.	18.2	53.6	20.1	8.1	14.1	52.0	26.0	8.0	
I feel pressure from my family to follow a specific path (e.g. go to college, work in the family business, learn a trade) after the final year of compulsory education.	6.3	20.2	39.9	33.6	7.8	24.7	40.7	26.7	
I worry that I won't have enough money to do what I'd like to do after the final year of compulsory education.	10.7	25.2	40.8	23.3	12.2	31.4	38.5	17.9	
School has helped give me confidence to make decisions.	6.1	39.3	39.8	14.8	8.5	45.4	33.4	12.6	
I feel well-prepared for my future path after the final year of compulsory education.	11.3	43.6	32.4	12.7	12.5	45.9	31.2	10.3	

Table 24. Career attitudes. Are students confident about their career progression?

Note: For this set of variables, the base sample size for Norway ranges from 2,708 to 2,857 in 2022. Source: OECD PISA 2022 database.

								PISA s	statement:					
			I worry th prepare after the f comp educ	hat I am not ed for life final year of pulsory cation.	l feel w about po for me a year of edu	I feel well-informed about possible paths for me after the final year of compulsory education.		I feel pressure from my family to follow a specific path (e.g. go to college, work in the family business, learn a trade) after the final year of compulsory education.		at I won't have money to do ike to do after nal year of ory education.	School ha me confid deo	as helped give lence to make cisions.	I feel well-prepared for my future path after the final year of compulsory education.	
Student ch	naracteristics	Student responses	Norway OECD average		Norway	OECD average	Norway	OECD average	Norway	OECD average	Norway	OECD average	Norway	OECD average
Gender	Girls	Strongly agree	17.6	16.3	16.7	13.6	6.0	8.1	12.3	14.6	4.6	7.3	9.1	10.6
		Agree	40.6	37.6	55.5	52.2	19.7	23.6	27.1	32.5	38.9	45.2	43.4	44.3
		Disagree	30.9	33.0	21.2	27.2	41.2	40.6	41.5	37.1	42.8	35.1	35.9	34.3
Boys		Strongly disagree	10.9	13.0	6.6	7.1	33.1	27.8	19.1	15.9	13.7	12.3	11.7	10.8
	Boys	Strongly agree	8.8	10.3	19.8	14.6	6.6	7.5	9.3	9.8	7.5	9.7	13.6	14.4
		Agree	27.7	30.4	51.7	51.8	20.8	25.9	23.3	30.2	39.7	45.6	43.8	47.6
		Disagree	38.1	38.2	19.1	24.7	38.7	40.9	40.0	40.0	36.9	31.7	28.9	28.1
		Strongly disagree	25.4	21.1	9.5	8.9	34.0	25.7	27.5	19.9	15.9	12.9	13.7	9.9
ESCS	Disadvantaged	Strongly agree	14.7	13.5	17.3	12.3	8.3	7.9	13.2	13.4	6.1	8.6	11.7	11.8
		Agree	36.4	35.7	54.6	51.4	18.5	25.3	28.6	34.4	39.5	45.5	42.5	44.9
		Disagree	32.4	34.4	19.9	27.0	41.5	41.1	38.5	37.1	39.8	32.8	33.7	32.0
		Strongly disagree	16.5	16.4	8.3	9.2	31.6	25.7	19.6	15.1	14.5	13.1	12.1	11.4
	Advantaged	Strongly agree	14.2	13.2	18.8	16.7	5.0	8.0	9.1	11.0	4.9	8.6	11.6	14.2
		Agree	30.6	32.5	53.7	51.6	22.3	23.8	23.7	27.2	42.2	45.0	47.4	46.3
		Disagree	34.6	36.2	18.3	24.6	38.3	40.3	41.7	39.7	38.6	33.7	28.5	29.9
		Strongly disagree	20.7	18.1	9.1	7.1	34.4	27.8	25.5	22.1	14.3	12.7	12.6	9.6
Performance	Low	Strongly agree	14.7	13.7	16.7	13.0	8.8	8.7	11.8	12.3	6.8	10.6	12.4	14.2
performers	Agree	33.5	34.2	50.1	50.5	24.9	29.2	27.4	33.7	36.9	44.9	39.2	45.1	

Table 25. Career attitudes. Are students confident about their career progression?, by student characteristics

TEENAGE CAREER DEVELOPMENT IN NORWAY © OECD 2025

		Disagree	31.9	33.0	20.2	25.5	36.1	38.9	39.1	36.4	38.5	30.6	31.2	28.7
		Strongly disagree	19.9	19.1	13.1	11.1	30.3	23.3	21.7	17.6	17.8	13.9	17.2	12.0
	High	Strongly agree	11.5	13.8	20.3	15.2	4.3	6.8	8.6	12.9	6.4	7.1	11.8	11.9
	performers	Agree	32.9	33.8	55.6	52.0	16.8	20.6	22.2	29.3	39.2	44.7	46.3	45.6
		Disagree	36.7	36.7	18.9	26.8	41.9	41.9	44.1	39.9	41.7	36.6	32.3	33.3
		Strongly disagree	18.9	15.7	5.2	6.0	37.0	30.6	25.1	18.0	12.7	11.7	9.6	9.2
Immigrant	Native-born	Strongly agree	13.1	13.2	18.7	14.1	6.1	7.6	10.7	12.2	6.3	8.4	11.2	12.4
background		Agree	34.1	34.0	53.5	52.0	19.7	24.4	25.0	31.3	38.4	45.3	43.6	46.0
		Disagree	34.2	35.8	19.9	26.1	39.7	40.9	40.7	38.6	40.5	33.8	32.7	31.4
		Strongly disagree	18.6	17.0	7.9	7.8	34.4	27.1	23.6	17.9	14.9	12.6	12.5	10.2
	Foreign-born	Strongly agree	13.0	14.2	15.4	14.3	6.2	9.4	10.1	13.8	4.5	9.5	11.6	13.7
		Agree	35.2	36.1	57.0	51.4	26.4	28.8	27.3	32.9	49.6	46.0	46.4	45.6
		Disagree	38.9	33.2	20.4	25.1	43.2	39.6	41.5	36.4	33.8	31.1	30.2	29.8
		Strongly disagree	12.9	16.5	7.3	9.1	24.2	22.3	21.0	16.9	12.1	13.5	11.8	10.8
Geographic	Urban	Strongly agree	16.1	14.4	19.2	14.1	7.4	8.5	12.5	13.0	7.7	8.6	11.6	12.3
location		Agree	35.2	34.3	53.1	51.0	22.3	24.8	24.2	31.1	37.9	44.1	43.8	44.8
		Disagree	32.4	35.3	19.5	26.8	38.8	40.4	41.3	38.3	41.7	34.3	32.5	32.2
		Strongly disagree	16.3	16.0	8.2	8.1	31.5	26.3	22.0	17.7	12.7	13.0	12.0	10.7
	Rural	Strongly agree	10.4	12.3	17.7	13.0	2.9	6.8	10.6	10.5	5.0	8.3	12.1	12.3
		Agree	34.5	35.0	53.8	53.4	20.5	24.9	26.6	33.0	38.2	47.3	44.6	48.0
		Disagree	36.7	36.4	21.1	26.0	37.7	42.2	42.1	39.8	41.6	32.4	29.9	29.5
		Strongly disagree	18.3	16.8	7.4	7.7	38.9	26.7	20.8	17.9	15.3	12.5	13.4	10.5

Note: For this set of variables, the base sample size for Norway ranges from 2,708 to 2,857 in 2022. Source: OECD PISA 2022 database.

14. Strategically important careers. How interested are students in occupational areas of high strategic importance?

	Percen	tage of stud	ents who, a	among mose	who name	a an occup	bation, expec	t to nav	e uns occu	pation at age 50.		
Student characteristics		Norway	Canada	Denmark	Finland	France	Germany	Italy	Sweden	United Kingdom	United States	OECD average
All students		5.7	4.2	3.5	2.4	1.0	0.0	0.0	2.2	3.4	5.6	2.1
Gender	Girls	11.2	7.2	6.7	4.5	1.8	0.0	0.0	4.0	6.4	9.5	3.7
	Boys	0.2	0.8	0.1	0.3	0.2	0.0	0.0	0.5	0.1	1.2	0.3
ESCS	Disadvantaged	8.3	5.6	4.7	4.0	1.5	0.0	0.0	3.1	5.3	6.4	2.8
	Advantaged	2.7	2.7	2.5	1.3	0.2	0.0	0.0	1.1	2.2	3.9	1.5
Performance	Low performers	7.4	5.4	4.6	2.6	1.0	0.0	0.0	3.5	4.9	8.5	2.5
	High performers	4.2	3.1	2.3	1.4	0.7	0.0	0.0	1.4	2.1	3.8	1.6
Immigrant background	Native-born	5.9	4.2	3.6	2.5	1.0	0.0	0.0	2.1	3.5	5.7	2.1
	Foreign-born	3.4	4.0	1.4	2.2	0.6	0.0	0.0	3.4	3.2	5.3	2.1
Geographic location	Urban	m	4.0	3.0	2.2	0.3	0.0	0.0	m	3.1	5.2	1.8
	Rural	m	4.5	5.8	2.6	0.0	0.0	0.0	m	2.8	5.5	2.2

Table 26. Career expectations in Nursing and Midwifery (2018), by student characteristics

Percentage of students who, among those who named an occupation, expect to have this occupation at age 30.

Note: The base sample sizes in 2018 are as follows: Norway (4,313), Canada (15,762), Denmark (4,559), Finland (3,857), France (4,726), Germany (3,338), Italy (8,497), Sweden (4,088), the United Kingdom (10,413), and the United States (3,809). Occupations are classified using the International Standard Classification of Occupations (ISCO - 08). Source: OECD PISA 2018 database.

Student characteristics		Norway	Canada	Denmark	Finland	France	Germany	Italy	Sweden	United Kingdom	United States	OECD average
All students		4.3	3.1	2.2	0.0	0.4	0.0	0.1	1.3	2.6	5.6	1.9
Gender	Girls	8.2	5.1	4.7	0.0	0.7	0.0	0.1	2.5	4.9	9.7	3.3
	Boys	0.5	0.9	0.1	0.0	0.1	0.0	0.0	0.1	0.1	0.9	0.4
ESCS	Disadvantaged	6.1	3.6	3.3	0.0	0.6	0.0	0.0	2.1	3.8	6.6	2.6
	Advantaged	1.9	2.0	2.0	0.0	0.2	0.0	0.0	1.1	1.6	3.5	1.4
Performance	Low performers	5.8	4.8	3.5	0.0	0.6	0.0	0.1	1.8	5.1	7.1	2.6
	High performers	2.9	2.1	1.6	0.0	0.3	0.0	0.0	0.8	1.2	4.1	1.3
Immigrant background	Native-born	4.3	3.0	2.2	0.0	0.5	0.0	0.1	1.3	2.6	5.6	1.9
	Foreign-born	4.5	3.3	3.1	0.0	0.0	0.0	0.0	1.3	2.1	5.9	2.1
Geographic location	Urban	5.3	3.0	1.5	0.0	0.7	0.0	0.2	0.0	2.3	5.1	1.9
	Rural	5.1	4.5	2.6	0.0	0.0	0.0	0.0	0.0	1.8	5.4	2.6

Table 27. Career expectations in Nursing and Midwifery (2022), by student characteristics

Percentage of students who, among those who named an occupation, expect to have this occupation at age 30.

Note: The base sample sizes in 2022 are as follows: Norway (3,639), Canada (13,114), Denmark (2,846), Finland (4,501), France (4,019), Germany (3,114), Italy (6,699), Sweden (3,602), the United Kingdom (7,506), and the United States (3,116). Occupations are classified using the International Standard Classification of Occupations (ISCO - 08).

Source: OECD PISA 2022 database.

	1 01001	luge of stat	ients whee,	among mose	who ham	a an occuj	pation, expe	or to nu	ve uns secu	pution at age 50.		
Student characteristics		Norway	Canada	Denmark	Finland	France	Germany	Italy	Sweden	United Kingdom	United States	OECD average
All students		0.8	0.6	4.2	1.1	1.3	1.1	1.4	4.1	1.4	0.6	2.3
Gender	Girls	1.3	1.2	5.8	2.0	2.2	2.1	2.8	5.9	2.6	1.1	4.0
	Boys	0.3	0.1	2.6	0.1	0.4	0.3	0.1	2.3	0.1	0.0	0.7
ESCS	Disadvantaged	0.8	0.9	5.3	0.8	1.0	0.3	1.6	4.7	1.4	0.3	2.6
	Advantaged	0.7	0.6	2.6	1.3	1.1	1.5	1.2	3.4	0.9	0.6	1.9
Performance	Low performers	0.9	0.7	4.7	0.7	0.7	0.4	1.7	4.8	1.9	0.8	2.5
	High performers	0.6	0.5	3.2	1.4	1.3	1.5	0.8	3.7	1.0	0.5	1.9
Immigrant background	Native-born	0.8	0.7	4.1	1.2	1.3	1.2	1.4	4.1	1.5	0.6	2.4
	Foreign-born	0.7	0.4	6.8	0.6	1.0	0.9	1.6	4.2	0.8	0.3	1.9
Geographic location	Urban	m	0.6	3.2	1.0	1.0	0.7	1.7	m	1.2	0.2	2.0
	Rural	m	1.2	6.3	1.9		4.8	0.2	m	1.9	0.8	2.6

Table 28. Career expectations in Primary School and Early Childhood Teachers (2018), by student characteristics

Percentage of students who, among those who named an occupation, expect to have this occupation at age 30.

Note: The base sample sizes in 2018 are as follows: Norway (4,313), Canada (15,762), Denmark (4,559), Finland (3,857), France (4,726), Germany (3,338), Italy (8,497), Sweden (4,088), the United Kingdom (10,413), and the United States (3,809). Occupations are classified using the International Standard Classification of Occupations (ISCO - 08).

Source: OECD PISA 2018 database.

Student characteristics		Norway	Canada	Denmark	Finland	France	Germany	Italy	Sweden	United Kingdom	United States	OECD average
All students		0.7	1.1	1.7	0.7	1.1	1.1	2.0	3.6	1.4	0.7	1.9
Gender	Girls	1.1	1.7	2.4	1.1	1.9	2.2	3.8	5.2	2.6	1.1	3.2
	Boys	0.3	0.4	1.1	0.2	0.3	0.0	0.1	2.0	0.2	0.2	0.6
ESCS	Disadvantaged	0.4	1.1	2.2	0.5	1.2	0.9	2.5	3.7	1.7	0.5	2.2
	Advantaged	0.4	1.3	2.0	0.6	0.9	1.9	1.6	3.6	0.9	0.5	1.7
Performance	Low performers	0.6	0.9	1.6	0.2	0.6	0.3	2.5	3.8	1.8	0.6	2.0
	High performers	0.6	1.2	1.9	0.8	1.3	1.7	1.5	3.2	1.0	0.6	1.6
Immigrant background	Native-born	0.8	1.3	1.8	0.7	1.1	1.2	2.0	3.9	1.5	0.8	2.0
	Foreign-born	0.0	0.3	0.8	0.5	1.4	0.0	1.6	1.5	0.6	0.0	1.4
Geographic location	Urban	0.3	1.2	2.2	0.4	0.6	0.6	0.9	0.0	1.8	0.7	1.4
	Rural	0.5	1.4	2.2	0.4	0.0	0.8	0.0	0.0	0.4	3.1	2.7

Table 29. Career expectations in Primary School and Early Childhood Teachers (2022), by student characteristics

Percentage of students who, among those who named an occupation, expect to have this occupation at age 30.

Note: The base sample sizes in 2022 are as follows: Norway (3,639), Canada (13,114), Denmark (2,846), Finland (4,501), France (4,019), Germany (3,114), Italy (6,699), Sweden (3,602), the United Kingdom (7,506), and the United States (3,116). Occupations are classified using the International Standard Classification of Occupations (ISCO - 08).

Source: OECD PISA 2022 database.

Table 30. Career expectations in Information and Communications Technology Professionals and Information and Communications Technicians (2018), by student characteristics

Student characteristics		Norway	Canada	Denmark	Finland	France	Germany	Italy	Sweden	United Kingdom	United States	OECD average
All students		2.3	4.1	3.7	3.6	3.7	5.1	4.4	4.6	4.0	4.4	5.0
Gender	Girls	0.3	1.0	0.3	0.6	0.3	1.1	0.4	0.9	0.7	1.3	1.0
	Boys	4.3	7.6	7.2	6.9	7.2	8.8	8.3	8.5	7.8	7.8	9.2
ESCS	Disadvantaged	2.0	4.2	4.7	2.5	3.9	5.3	5.8	5.2	4.6	2.2	4.3
	Advantaged	2.2	4.3	3.3	4.3	4.0	6.2	3.4	4.5	4.0	6.0	5.4
Performance	Low performers	1.9	2.3	2.8	2.6	1.8	2.6	2.7	3.3	2.9	2.8	3.2
	High performers	3.0	5.2	4.5	4.4	5.6	7.5	5.5	5.2	5.1	5.8	6.6
Immigrant background	Native-born	2.2	3.7	3.6	3.7	3.6	5.1	4.2	4.8	4.0	4.1	5.0
	Foreign-born	3.4	5.8	4.0	2.1	4.4	5.6	8.3	3.8	4.3	7.8	5.5
Geographic location	Urban	m	4.7	4.0	3.5	3.5	7.7	5.0	m	3.3	4.7	5.6
	Rural	m	3.1	3.6	3.5	3.6	3.0	4.1	m	5.2	2.8	4.7

Percentage of students who, among those who named an occupation, expect to have this occupation at age 30.

Note: The base sample sizes in 2018 are as follows: Norway (4,313), Canada (15,762), Denmark (4,559), Finland (3,857), France (4,726), Germany (3,338), Italy (8,497), Sweden (4,088), the United Kingdom (10,413), and the United States (3,809). Occupations are classified using the International Standard Classification of Occupations (ISCO - 08).

Source: OECD PISA 2018 database.

Table 31. Career expectations in Information and Communications Technology Professionals and Information and Communications Technicians (2022), by student characteristics

Student characteristics		Norway	Canada	Denmark	Finland	France	Germany	Italy	Sweden	United Kingdom	United States	OECD average
All students		2.5	4.5	4.2	3.1	3.8	6.7	3.8	4.9	4.1	4.2	6.2
Gender	Girls	0.2	1.1	0.6	0.9	1.0	1.7	0.4	0.9	1.3	1.5	1.5
	Boys	4.8	8.4	7.4	5.6	7.2	11.6	7.5	9.0	7.2	7.4	11.2
ESCS	Disadvantaged	2.3	3.5	5.7	3.1	2.8	7.0	3.1	5.3	3.7	3.1	5.2
	Advantaged	2.7	5.1	2.1	3.2	4.3	7.4	3.9	6.0	4.2	5.4	6.8
Performance	Low performers	1.2	2.9	1.9	1.5	2.1	3.3	1.9	2.9	2.5	1.7	3.6
	High performers	3.6	6.0	6.3	4.0	5.1	10.0	6.0	7.5	5.7	6.5	9.1
Immigrant background	Native-born	2.4	4.1	4.0	3.2	3.9	6.7	3.6	4.7	3.5	4.2	6.1
	Foreign-born	3.8	6.2	7.8	2.2	3.6	6.7	8.8	6.4	8.8	6.1	7.0
Geographic location	Urban	3.5	5.4	5.2	4.6	5.0	5.1	4.7	0.0	4.7	4.9	6.9
	Rural	1.2	2.6	4.0	1.3	3.0	6.5	0.1	0.0	4.3	4.3	4.7

Percentage of students who, among those who named an occupation, expect to have this occupation at age 30.

Note: The base sample sizes in 2022 are as follows: Norway (3,639), Canada (13,114), Denmark (2,846), Finland (4,501), France (4,019), Germany (3,114), Italy (6,699), Sweden (3,602), the United Kingdom (7,506), and the United States (3,116). Occupations are classified using the International Standard Classification of Occupations (ISCO - 08).

Source: OECD PISA 2022 database.

Table 32. Career expectations in Engineering Professionals, Electrotechnology Engineers and Physical and Engineering Science Technicians (2018), by student characteristics

Student characteristics		Norway	Canada	Denmark	Finland	France	Germany	Italy	Sweden	United Kingdom	United States	OECD average
All students		7.7	8.9	4.6	2.3	3.0	2.9	3.8	7.7	6.3	6.8	6.1
Gender	Girls	2.9	3.6	1.3	0.1	0.6	0.5	1.1	2.9	2.4	2.3	2.2
	Boys	12.6	14.9	8.2	4.5	5.4	5.1	6.4	12.7	10.6	11.8	10.3
ESCS	Disadvantaged	5.3	6.0	3.8	1.8	2.3	2.1	4.2	5.3	4.7	3.7	5.0
	Advantaged	10.1	11.4	5.4	1.9	4.4	4.9	4.0	10.4	7.2	8.9	7.3
Performance	Low performers	4.3	5.6	3.9	2.3	1.4	2.0	2.3	4.6	4.4	3.6	4.6
	High performers	10.9	11.6	5.8	2.4	3.9	3.9	5.3	10.6	7.6	9.4	8.0
Immigrant background	Native-born	7.7	8.3	4.7	2.3	3.0	2.9	3.8	7.7	6.1	6.7	6.2
	Foreign-born	7.9	12.0	2.4	1.0	3.5	2.8	3.6	7.9	7.7	7.7	6.0
Geographic location	Urban	m	10.3	4.0	1.7	2.4	2.1	3.1	m	6.9	7.0	5.9
	Rural	m	7.0	4.3	4.2	3.4	2.8	0.7	m	5.2	7.1	5.6

Percentage of students who, among those who named an occupation, expect to have this occupation at age 30.

Note: The base sample sizes in 2018 are as follows: Norway (4,313), Canada (15,762), Denmark (4,559), Finland (3,857), France (4,726), Germany (3,338), Italy (8,497), Sweden (4,088), the United Kingdom (10,413), and the United States (3,809). Occupations are classified using the International Standard Classification of Occupations (ISCO - 08).

Source: OECD PISA 2018 database.

Table 33. Career expectations in Engineering Professionals, Electrotechnology Engineers and Physical and Engineering Science Technicians (2022), by student characteristics

Student characteristics		Norway	Canada	Denmark	Finland	France	Germany	Italy	Sweden	United Kingdom	United States	OECD average
All students		6.8	7.8	5.8	3.4	5.0	2.2	3.3	4.1	7.4	5.9	4.7
Gender	Girls	2.6	3.1	1.9	0.7	1.4	0.8	0.9	1.5	2.0	3.4	1.8
	Boys	11.0	12.9	9.2	6.3	9.3	3.6	5.9	6.6	13.3	8.9	7.7
ESCS	Disadvantaged	4.8	5.6	4.3	2.8	2.8	1.2	1.8	2.6	6.6	4.1	3.8
	Advantaged	9.8	10.1	7.0	3.2	9.1	2.5	4.3	6.3	10.0	8.4	5.9
Performance	Low performers	3.5	4.2	2.9	2.9	1.8	1.5	2.3	2.2	4.2	2.8	3.2
	High performers	11.4	10.7	8.3	3.1	9.1	3.1	4.9	6.1	9.1	9.1	6.5
Immigrant background	Native-born	6.9	7.1	5.8	3.4	5.0	2.3	3.4	4.2	7.3	5.9	4.7
	Foreign-born	6.3	10.4	5.9	3.0	5.3	1.4	2.7	2.6	8.8	5.9	5.1
Geographic location	Urban	8.2	8.6	6.2	2.5	6.6	2.4	3.1	0.0	7.2	6.1	4.8
	Rural	5.1	7.0	4.5	5.7	0.7	1.7	15.2	0.0	8.9	3.4	4.5

Percentage of students who, among those who named an occupation, expect to have this occupation at age 30.

Note: The base sample sizes in 2022 are as follows: Norway (3,639), Canada (13,114), Denmark (2,846), Finland (4,501), France (4,019), Germany (3,114), Italy (6,699), Sweden (3,602), the United Kingdom (7,506), and the United States (3,116). Occupations are classified using the International Standard Classification of Occupations (ISCO - 08).

Source: OECD PISA 2022 database.

Table 34. Career expectations in Science and Engineering Professionals and Science and Engineering Associate Professionals (2018), by student characteristics

Student characteristics		Norway	Canada	Denmark	Finland	France	Germany	Italy	Sweden	United Kingdom	United States	OECD average
All students		8.3	10.3	12.6	7.3	13.1	12.3	10.4	9.4	11.1	9.9	10.9
Gender	Girls	5.7	8.8	10.7	5.0	9.5	9.9	8.1	8.8	9.9	8.2	8.8
	Boys	11.0	11.9	14.7	9.6	16.8	14.4	12.7	10.0	12.4	12.0	13.0
ESCS	Disadvantaged	5.0	9.4	9.0	3.3	6.8	8.8	9.2	5.0	7.5	8.5	8.1
	Advantaged	10.0	10.3	15.8	10.1	21.7	15.5	12.1	12.4	14.8	12.4	14.0
Performance	Low performers	4.9	7.6	7.5	3.9	7.1	5.2	7.2	5.2	5.9	6.8	7.2
	High performers	11.0	11.3	15.7	9.8	20.1	16.3	14.2	13.3	14.7	11.8	14.3
Immigrant background	Native-born	8.1	10.1	12.7	7.1	13.1	12.3	10.5	9.0	11.0	10.1	10.8
	Foreign-born	11.1	11.1	11.4	11.1	13.7	11.3	10.0	12.7	11.9	9.4	11.6
Geographic location	Urban	m	10.3	12.3	9.3	15.7	12.6	10.7	m	11.4	11.1	12.1
	Rural	m	9.7	11.1	3.7	5.6	7.1	9.7	m	9.5	11.2	8.8

Percentage of students who, among those who named an occupation, expect to have this occupation at age 30.

Note: The base sample sizes in 2018 are as follows: Norway (4,313), Canada (15,762), Denmark (4,559), Finland (3,857), France (4,726), Germany (3,338), Italy (8,497), Sweden (4,088), the United Kingdom (10,413), and the United States (3,809). Occupations are classified using the International Standard Classification of Occupations (ISCO - 08).

Source: OECD PISA 2018 database.

Table 35. Career expectations in Science and Engineering Professionals and Science and Engineering Associate Professionals (2022), by student characteristics

Student characteristics		Norway	Canada	Denmark	Finland	France	Germany	Italy	Sweden	United Kingdom	United States	OECD average
All students		9.2	10.6	8.7	8.1	12.3	11.6	10.1	8.1	12.8	10.9	11.1
Gender	Girls	8.4	10.3	9.9	7.0	9.2	10.5	7.8	8.1	10.7	9.4	10.2
	Boys	10.0	11.0	7.7	9.3	15.9	12.6	12.6	8.2	15.2	12.6	12.1
ESCS	Disadvantaged	8.6	9.7	4.3	5.6	8.0	8.1	8.7	5.7	11.3	9.3	8.3
	Advantaged	9.5	11.5	13.3	10.3	16.7	15.8	12.7	11.7	18.1	14.6	14.0
Performance	Low performers	6.4	7.1	6.0	5.0	6.8	6.9	7.5	5.3	6.7	5.9	7.2
	High performers	12.0	12.6	11.3	11.4	17.3	16.4	13.3	11.2	16.3	15.3	14.8
Immigrant background	Native-born	8.9	10.6	8.6	8.0	12.3	11.6	10.1	7.8	12.6	10.6	11.0
	Foreign-born	12.9	11.1	9.2	9.8	12.8	10.8	9.0	10.3	16.1	16.6	12.7
Geographic location	Urban	8.7	11.0	12.1	10.5	14.7	10.6	11.4	0.0	12.8	11.4	12.4
	Rural	9.9	8.3	6.7	6.4	6.1	7.9	28.4	0.0	15.1	6.9	10.4

Percentage of students who, among those who named an occupation, expect to have this occupation at age 30.

Note: The base sample sizes in 2022 are as follows: Norway (3,639), Canada (13,114), Denmark (2,846), Finland (4,501), France (4,019), Germany (3,114), Italy (6,699), Sweden (3,602), the United Kingdom (7,506), and the United States (3,116). Occupations are classified using the International Standard Classification of Occupations (ISCO - 08).

Source: OECD PISA 2022 database.

Student characteristics		Norway	Canada	Denmark	Finland	France	Germany	Italy	Sweden	United Kingdom	United States	OECD average
All students		12.1	6.6	7.3	10.7	8.1	12.3	6.5	10.6	5.5	4.1	7.3
Gender	Girls	3.0	1.3	1.2	1.7	2.6	2.3	2.3	2.7	0.8	0.6	1.7
	Boys	21.3	12.6	13.7	20.3	13.8	21.3	10.5	18.8	10.6	7.9	13.2
ESCS	Disadvantaged	19.8	11.4	12.5	18.0	13.6	17.4	11.8	16.7	8.3	6.8	12.0
	Advantaged	5.5	2.5	3.6	4.0	3.2	5.3	2.5	4.8	1.8	1.7	2.8
Performance	Low performers	19.8	11.0	14.6	22.3	17.1	21.7	10.5	16.8	9.5	5.9	13.6
	High performers	6.5	4.0	4.0	4.8	2.4	6.5	2.9	5.2	2.7	2.5	3.0
Immigrant background	Native-born	12.6	7.6	7.4	11.0	8.0	12.6	6.3	11.2	5.8	4.2	7.5
	Foreign-born	7.6	2.0	6.2	4.8	9.5	9.1	9.7	5.0	3.0	2.2	5.6
Geographic location	Urban	m	4.5	4.1	5.6	7.8	8.9	5.5	m	3.9	2.2	4.8
	Rural	m	12.5	9.1	17.2	28.5	15.0	10.5	m	6.4	7.4	13.1

Table 36. Career expectations in Craft and related skills (2018), by student characteristics

Percentage of students who, among those who named an occupation, expect to have this occupation at age 30.

Note: The base sample sizes in 2018 are as follows: Norway (4,313), Canada (15,762), Denmark (4,559), Finland (3,857), France (4,726), Germany (3,338), Italy (8,497), Sweden (4,088), the United Kingdom (10,413), and the United States (3,809). Occupations are classified using the International Standard Classification of Occupations (ISCO - 08).

Source: OECD PISA 2018 database.

Student characteristics		Norway	Canada	Denmark	Finland	France	Germany	Italy	Sweden	United Kingdom	United States	OECD average
All students		12.2	6.5	11.3	11.9	5.6	13.0	4.7	11.8	6.5	6.7	7.6
Gender	Girls	3.9	1.9	1.5	3.0	1.9	3.0	1.6	2.8	0.8	1.0	1.8
	Boys	20.3	11.6	19.9	21.6	10.1	22.9	8.2	21.0	12.8	13.2	13.7
ESCS	Disadvantaged	18.4	11.3	19.6	18.7	10.0	16.9	9.1	17.2	10.9	9.5	12.2
	Advantaged	7.3	3.7	6.1	6.6	2.1	6.7	1.5	5.6	2.6	2.9	3.4
Performance	Low performers	17.9	10.4	19.7	17.7	12.5	19.6	8.5	17.3	12.2	9.7	13.1
	High performers	6.7	3.6	5.0	7.8	2.0	8.1	2.0	5.4	2.8	3.7	3.5
Immigrant background	Native-born	12.4	7.4	11.3	12.1	5.7	13.2	4.6	12.5	6.9	7.0	7.8
	Foreign-born	9.5	2.9	11.0	7.6	3.2	9.5	6.6	7.6	2.9	3.2	6.4
Geographic location	Urban	6.1	4.6	5.3	7.3	1.5	10.0	2.7	0.0	3.6	4.5	5.1
	Rural	17.5	13.0	15.5	19.3	15.7	18.6	4.6	0.0	8.1	12.0	11.8

Table 37. Career expectations in Craft and related skills (2022), by student characteristics

Percentage of students who, among those who named an occupation, expect to have this occupation at age 30.

Note: The base sample sizes in 2022 are as follows: Norway (3,639), Canada (13,114), Denmark (2,846), Finland (4,501), France (4,019), Germany (3,114), Italy (6,699), Sweden (3,602), the United Kingdom (7,506), and the United States (3,116). Occupations are classified using the International Standard Classification of Occupations (ISCO - 08).

Source: OECD PISA 2022 database.

Table 38. Student participation in career development activities by career expectations in Nursing and Midwifery (2018)

Career development activity	Norway	Canada	Denmark	Finland	France	Germany	Italy	Sweden	United Kingdom	United States	OECD average
Internship	m	m	57.6	m	m	m	m	m	28.3	m	28.9
Job shadowing	m	m	66.4	m	m	m	m	m	51.5	m	38.6
Job Fair	m	m	72.3	m	m	m	m	m	34.5	m	32.8
Advisor (School)	m	m	85.7	m	m	m	m	m	71.2	m	53.0
Advisor (Out-of-school)	m	m	13.3	m	m	m	m	m	15.5	m	20.5
Advisor (All)	m	m	85.8	m	m	m	m	m	73.7	m	59.3
Questionnaire	m	m	68.3	m	m	m	m	m	59.2	m	61.4
Researched Careers	m	m	77.5	m	m	m	m	m	84.1	m	73.4
Tour Institution	m	m	91.8	m	m	m	m	m	61.9	m	46.7
Researched Programmes	m	m	83.6	m	m	m	m	m	81.2	m	63.7
Student Financing	m	m	m	m	m	m	m	m	m	m	m

Percentage of students who participated in career development activities, among those expect to have this occupation at age 30.

Note: The base sample sizes in 2018 are as follows: Norway (4,313), Canada (15,762), Denmark (4,559), Finland (3,857), France (4,726), Germany (3,338), Italy (8,497), Sweden (4,088), the United Kingdom (10,413), and the United States (3,809). Occupations are classified using the International Standard Classification of Occupations (ISCO - 08). The symbol "m" denotes missing or unavailable data. This may occur for several reasons: the data were not observed in the sample, the country or economy did not collect the data, or the data were collected but later excluded from the publication due to technical considerations. Source: OECD PISA 2018 database.

Career development activity	Norway	Canada	Denmark	Finland	France	Germany	Italy	Sweden	United Kingdom	United States	OECD average
Internship	34.9	15.7	72.7	m	m	m	m	m	50.8	12.8	33.8
Job shadowing	45.2	32.0	63.9	m	m	m	m	m	26.0	35.8	44.8
Job Fair	60.6	23.9	64.5	m	m	m	m	m	66.7	37.0	40.2
Advisor (School)	77.9	60.3	85.8	m	m	m	m	m	75.2	54.1	60.9
Advisor (Out-of-school)	44.5	34.8	47.6	m	m	m	m	m	44.2	30.2	45.3
Advisor (All)	82.2	68.3	67.3	m	m	m	m	m	91.6	58.2	69.5
Questionnaire	76.7	74.3	67.0	m	m	m	m	m	56.5	69.1	71.7
Researched Careers	87.3	86.2	82.4	m	m	m	m	m	92.8	80.0	86.4
Tour Institution	67.3	25.3	83.7	m	m	m	m	m	70.5	35.3	40.9
Researched Programmes	86.6	89.6	77.5	m	m	m	m	m	90.3	84.2	82.9
Student Financing	52.8	55.6	39.8	m	m	m	m	m	49.0	62.2	55.0

Table 39. Student participation in career development activities by career expectations in Nursing and Midwifery (2022)

Percentage of students who participated in career development activities, among those expect to have this occupation at age 30.

Note: The base sample sizes in 2022 are as follows: Norway (3,639), Canada (13,114), Denmark (2,846), Finland (4,501), France (4,019), Germany (3,114), Italy (6,699), Sweden (3,602), the United Kingdom (7,506), and the United States (3,116). Occupations are classified using the International Standard Classification of Occupations (ISCO - 08). The symbol "m" denotes missing or unavailable data. This may occur for several reasons: the data were not observed in the sample, the country or economy did not collect the data, or the data were collected but later excluded from the publication due to technical considerations. Source: OECD PISA 2022 database.

Table 40. Student participation in career development activities by career expectations in Primary School and Early Childhood Teachers (2018)

Career development activity	Norway	Canada	Denmark	Finland	France	Germany	Italy	Sweden	United Kingdom	United States	OECD average
Internship	m	m	56.5	m	m	73.1	18.3	m	19.1	m	29.8
Job shadowing	m	m	58.9	m	m	32.9	30.8	m	51.2	m	36.5
Job Fair	m	m	79.4	m	m	31.6	17.7	m	39.7	m	33.6
Advisor (School)	m	m	89.3	m	m	35.2	35.0	m	68.6	m	48.7
Advisor (Out-of-school)	m	m	17.0	m	m	12.6	21.3	m	26.9	m	23.9
Advisor (All)	m	m	90.5	m	m	40.4	49.5	m	76.8	m	56.7
Questionnaire	m	m	61.3	m	m	59.4	42.7	m	65.7	m	59.5
Researched Careers	m	m	83.8	m	m	87.6	59.0	m	93.4	m	73.1
Tour Institution	m	m	87.9	m	m	51.1	35.5	m	45.4	m	44.2
Researched Programmes	m	m	83.8	m	m	43.3	55.6	m	86.0	m	60.3
Student Financing	m	m	m	m	m	m	m	m	m	m	m

Percentage of students who participated in career development activities, among those expect to have this occupation at age 30.

Note: The base sample sizes in 2018 are as follows: Norway (4,313), Canada (15,762), Denmark (4,559), Finland (3,857), France (4,726), Germany (3,338), Italy (8,497), Sweden (4,088), the United Kingdom (10,413), and the United States (3,809). Occupations are classified using the International Standard Classification of Occupations (ISCO - 08). The symbol "m" denotes missing or unavailable data. This may occur for several reasons: the data were not observed in the sample, the country or economy did not collect the data, or the data were collected but later excluded from the publication due to technical considerations. Source: OECD PISA 2018 database.

Table 41. Student participation in career development activities by career expectations in Primary School and Early Childhood Teachers (2022)

Career development activity	Norway	Canada	Denmark	Finland	France	Germany	Italy	Sweden	United Kingdom	United States	OECD average
Internship	m	5.9	60.7	m	m	m	18.1	64.5	42.9	m	36.6
Job shadowing	m	18.5	87.5	m	m	m	16.0	54.4	28.0	m	44.5
Job Fair	m	34.3	64.0	m	m	m	15.9	35.1	62.9	m	37.3
Advisor (School)	m	48.5	80.1	m	m	m	28.7	87.8	68.3	m	54.2
Advisor (Out-of-school)	m	19.1	39.1	m	m	m	27.2	42.3	32.0	m	32.2
Advisor (All)	m	28.3	65.4	m	m	m	30.6	85.9	74.0	m	58.9
Questionnaire	m	84.1	87.3	m	m	m	34.9	74.5	75.6	m	69.0
Researched Careers	m	92.1	91.8	m	m	m	71.5	81.3	91.6	m	81.1
Tour Institution	m	23.5	90.9	m	m	m	11.7	49.5	63.2	m	39.4
Researched Programmes	m	81.0	91.1	m	m	m	62.5	76.4	73.4	m	77.3
Student Financing	m	60.0	25.3	m	m	m	29.4	29.2	36.9	m	45.7

Percentage of students who participated in career development activities, among those expect to have this occupation at age 30.

Note: The base sample sizes in 2022 are as follows: Norway (3,639), Canada (13,114), Denmark (2,846), Finland (4,501), France (4,019), Germany (3,114), Italy (6,699), Sweden (3,602), the United Kingdom (7,506), and the United States (3,116). Occupations are classified using the International Standard Classification of Occupations (ISCO - 08). The symbol "m" denotes missing or unavailable data. This may occur for several reasons: the data were not observed in the sample, the country or economy did not collect the data, or the data were collected but later excluded from the publication due to technical considerations. Source: OECD PISA 2022 database.
Table 42. Student participation in career development activities by career expectations in Information and Communications Technology Professionals and Information and Communications Technicians (2018)

Career development activity	Norway	Canada	Denmark	Finland	France	Germany	Italy	Sweden	United Kingdom	United States	OECD average
Internship	m	m	50.4	m	m	86.3	20.0	m	16.8	m	32.4
Job shadowing	m	m	57.4	m	m	36.3	26.4	m	50.3	m	39.8
Job Fair	m	m	71.3	m	m	46.8	25.8	m	36.4	m	36.4
Advisor (School)	m	m	85.6	m	m	41.9	36.5	m	64.4	m	47.5
Advisor (Out-of-school)	m	m	19.8	m	m	26.9	23.8	m	22.3	m	23.8
Advisor (All)	m	m	86.1	m	m	51.6	44.5	m	68.1	m	54.1
Questionnaire	m	m	63.2	m	m	64.3	49.9	m	66.1	m	59.0
Researched Careers	m	m	83.5	m	m	87.7	53.8	m	85.6	m	74.7
Tour Institution	m	m	82.5	m	m	42.9	43.2	m	54.7	m	42.7
Researched Programmes	m	m	77.4	m	m	58.1	52.7	m	78.1	m	60.8
Student Financing	m	m	m	m	m	m	m	m	m	m	m

Percentage of students who participated in career development activities, among those expect to have this occupation at age 30.

Note: The base sample sizes in 2018 are as follows: Norway (4,313), Canada (15,762), Denmark (4,559), Finland (3,857), France (4,726), Germany (3,338), Italy (8,497), Sweden (4,088), the United Kingdom (10,413), and the United States (3,809). Occupations are classified using the International Standard Classification of Occupations (ISCO - 08). The symbol "m" denotes missing or unavailable data. This may occur for several reasons: the data were not observed in the sample, the country or economy did not collect the data, or the data were collected but later excluded from the publication due to technical considerations. Source: OECD PISA 2018 database.

Table 43. Student participation in career development activities by career expectations in Information and Communications Technology Professionals and Information and Communications Technicians (2022)

Career development activity	Norway	Canada	Denmark	Finland	France	Germany	Italy	Sweden	United Kingdom	United States	OECD average
Internship	40.1	10.7	65.2	36.4	68.3	68.6	11.4	55.9	23.8	9.0	33.9
Job shadowing	47.6	27.0	73.0	42.5	73.1	30.5	32.5	56.8	30.2	21.4	42.4
Job Fair	62.7	22.0	61.8	14.3	38.6	24.1	41.2	30.0	59.3	23.7	34.0
Advisor (School)	86.3	40.5	89.4	90.8	44.4	49.9	36.7	84.7	69.1	38.5	48.4
Advisor (Out-of-school)	39.1	23.2	31.8	49.1	27.8	27.5	36.9	28.2	25.1	18.4	30.2
Advisor (All)	89.7	39.3	86.4	m	62.1	44.5	64.2	77.4	66.2	34.7	55.4
Questionnaire	78.8	66.6	68.0	69.1	71.3	66.7	56.5	60.9	59.6	68.9	61.4
Researched Careers	95.0	95.1	92.5	87.6	96.6	93.3	80.4	74.6	84.7	90.7	82.0
Tour Institution	78.4	20.2	77.0	38.2	38.3	23.9	31.6	53.8	65.4	30.8	39.7
Researched Programmes	96.0	85.8	87.9	75.2	90.8	70.9	71.9	87.9	78.1	73.1	74.7
Student Financing	66.8	55.3	33.7	38.5	52.2	42.1	37.2	44.8	22.5	50.0	44.5

Percentage of students who participated in career development activities, among those expect to have this occupation at age 30.

Table 44. Student participation in career development activities by career expectations in Engineering Professionals, Electrotechnology Engineers and Physical and Engineering Science Technicians (2018)

Career development activity	Norway	Canada	Denmark	Finland	France	Germany	Italy	Sweden	United Kingdom	United States	OECD average
Internship	m	m	56.5	m	m	87.9	26.6	m	27.1	m	36.9
Job shadowing	m	m	63.8	m	m	35.8	37.5	m	65.0	m	47.5
Job Fair	m	m	72.9	m	m	59.7	33.5	m	43.3	m	43.5
Advisor (School)	m	m	81.1	m	m	60.3	39.3	m	74.7	m	53.3
Advisor (Out-of-school)	m	m	16.5	m	m	26.1	30.8	m	26.0	m	28.5
Advisor (All)	m	m	81.2	m	m	73.2	48.6	m	77.5	m	61.0
Questionnaire	m	m	69.4	m	m	67.5	44.3	m	65.8	m	61.4
Researched Careers	m	m	80.7	m	m	91.1	64.7	m	91.1	m	77.0
Tour Institution	m	m	82.8	m	m	45.3	54.3	m	57.6	m	47.3
Researched Programmes	m	m	78.6	m	m	55.4	58.9	m	76.8	m	62.5
Student Financing	m	m	m	m	m	m	m	m	m	m	m

Percentage of students who participated in career development activities, among those expect to have this occupation at age 30.

Note: The base sample sizes in 2018 are as follows: Norway (4,313), Canada (15,762), Denmark (4,559), Finland (3,857), France (4,726), Germany (3,338), Italy (8,497), Sweden (4,088), the United Kingdom (10,413), and the United States (3,809). Occupations are classified using the International Standard Classification of Occupations (ISCO - 08). The symbol "m" denotes missing or unavailable data. This may occur for several reasons: the data were not observed in the sample, the country or economy did not collect the data, or the data were collected but later excluded from the publication due to technical considerations. Source: OECD PISA 2018 database.

Table 45. Student participation in career development activities by career expectations in Engineering Professionals, Electrotechnology Engineers and Physical and Engineering Science Technicians (2022)

Career development activity	Norway	Canada	Denmark	Finland	France	Germany	Italy	Sweden	United Kingdom	United States	OECD average
Internship	45.7	10.8	67.0	69.4	58.9	83.6	20.3	51.0	36.1	9.3	37.8
Job shadowing	47.5	31.8	69.8	67.6	60.3	40.5	31.9	56.6	42.1	31.7	50.5
Job Fair	56.1	27.9	70.4	31.6	26.5	41.8	47.6	28.7	54.6	29.5	39.7
Advisor (School)	88.6	53.6	85.0	92.2	44.9	54.5	30.5	86.8	68.0	46.5	51.4
Advisor (Out-of-school)	48.4	26.8	32.9	40.6	23.6	32.2	33.6	36.2	41.6	18.7	34.3
Advisor (All)	93.6	58.3	90.6	93.5	45.9	40.3	53.9	88.5	82.8	54.1	59.5
Questionnaire	60.6	74.8	70.9	75.7	76.4	64.7	65.4	67.6	63.4	71.7	63.8
Researched Careers	91.4	88.5	94.7	93.8	90.0	96.5	85.3	87.9	87.9	94.9	83.7
Tour Institution	73.8	23.5	86.5	69.2	26.4	33.8	23.7	72.3	55.0	39.7	45.0
Researched Programmes	80.0	80.9	89.8	92.8	91.9	85.1	59.5	95.8	88.9	85.3	78.6
Student Financing	43.2	55.2	29.2	70.2	54.0	41.4	44.8	38.5	47.9	67.1	49.8

Percentage of students who participated in career development activities, among those expect to have this occupation at age 30.

Table 46. Student participation in career development activities by career expectations in Science and Engineering Professionals and Science and Engineering Associate Professionals (2018)

Career development activity	Norway	Canada	Denmark	Finland	France	Germany	Italy	Sweden	United Kingdom	United States	OECD average
Internship	m	m	57.7	m	m	84.1	19.8	m	20.4	m	31.2
Job shadowing	m	m	68.5	m	m	30.6	37.7	m	45.4	m	40.3
Job Fair	m	m	69.7	m	m	42.2	31.2	m	37.2	m	38.6
Advisor (School)	m	m	82.6	m	m	32.0	39.4	m	65.1	m	48.1
Advisor (Out-of-school)	m	m	15.0	m	m	20.0	30.8	m	22.4	m	24.4
Advisor (All)	m	m	83.2	m	m	43.1	48.5	m	69.3	m	55.9
Questionnaire	m	m	69.8	m	m	72.0	49.3	m	71.9	m	63.1
Researched Careers	m	m	89.9	m	m	86.2	66.0	m	91.9	m	76.7
Tour Institution	m	m	86.6	m	m	42.2	52.9	m	53.7	m	45.4
Researched Programmes	m	m	88.1	m	m	49.3	58.8	m	80.8	m	63.4
Student Financing	m	m	m	m	m	m	m	m	m	m	m

Percentage of students who participated in career development activities, among those expect to have this occupation at age 30.

Note: The base sample sizes in 2018 are as follows: Norway (4,313), Canada (15,762), Denmark (4,559), Finland (3,857), France (4,726), Germany (3,338), Italy (8,497), Sweden (4,088), the United Kingdom (10,413), and the United States (3,809). Occupations are classified using the International Standard Classification of Occupations (ISCO - 08). The symbol "m" denotes missing or unavailable data. This may occur for several reasons: the data were not observed in the sample, the country or economy did not collect the data, or the data were collected but later excluded from the publication due to technical considerations. Source: OECD PISA 2018 database.

Table 47. Student participation in career development activities by career expectations in Science and Engineering Professionals and Science and Engineering Associate Professionals (2022)

Career development activity	Norway	Canada	Denmark	Finland	France	Germany	Italy	Sweden	United Kingdom	United States	OECD average
Internship	43.0	12.5	66.5	60.0	61.0	63.1	19.2	50.9	32.5	14.6	33.3
Job shadowing	45.0	28.6	63.1	50.5	61.8	41.6	34.6	62.3	31.9	29.5	43.6
Job Fair	57.2	23.7	56.2	20.6	37.1	32.8	39.3	29.2	51.2	26.8	35.2
Advisor (School)	81.4	50.5	88.6	91.5	51.4	37.6	28.7	89.2	69.2	34.8	48.1
Advisor (Out-of-school)	47.9	29.5	42.2	45.4	33.8	20.1	28.6	36.5	25.6	20.3	32.1
Advisor (All)	87.1	54.8	88.4	89.5	59.3	42.6	32.6	97.0	74.2	43.9	56.2
Questionnaire	75.5	73.0	66.3	79.1	71.2	68.5	50.9	80.1	65.3	76.2	65.8
Researched Careers	86.9	91.9	90.9	93.9	90.7	85.5	78.6	90.7	89.9	93.9	85.2
Tour Institution	70.5	28.0	88.6	52.9	32.2	21.9	29.9	59.4	61.7	38.8	40.8
Researched Programmes	92.1	86.0	94.4	84.4	86.0	71.1	63.1	96.3	83.7	86.1	78.5
Student Financing	58.2	58.0	30.8	57.5	56.4	41.0	42.6	41.3	44.1	54.7	49.3

Percentage of students who participated in career development activities, among those expect to have this occupation at age 30.

Table 48. Student participation in career development activities by career expectations in Craft and related skills (2018) Percentage of students who participated in career development activities, among those expect to have this occupation at age 30.

Career development activity	Norway	Canada	Denmark	Finland	France	Germany	Italy	Sweden	United Kingdom	United States	OECD average
Internship	m	m	64.9	m	m	94.1	30.8	m	36.3	m	48.1
Job shadowing	m	m	73.1	m	m	36.6	40.8	m	61.9	m	51.6
Job Fair	m	m	77.5	m	m	65.6	44.1	m	39.5	m	44.9
Advisor (School)	m	m	86.1	m	m	59.1	46.7	m	67.9	m	53.8
Advisor (Out-of-school)	m	m	23.4	m	m	30.5	39.7	m	30.7	m	32.9
Advisor (All)	m	m	87.4	m	m	69.4	60.4	m	74.5	m	62.3
Questionnaire	m	m	60.3	m	m	72.9	49.1	m	61.4	m	55.5
Researched Careers	m	m	75.5	m	m	82.8	54.1	m	79.5	m	67.2
Tour Institution	m	m	77.2	m	m	38.9	45.2	m	53.4	m	44.8
Researched Programmes	m	m	72.2	m	m	43.6	43.4	m	68.3	m	51.6
Student Financing	m	m	m	m	m	m	m	m	m	m	m

Note: The base sample sizes in 2018 are as follows: Norway (4,313), Canada (15,762), Denmark (4,559), Finland (3,857), France (4,726), Germany (3,338), Italy (8,497), Sweden (4,088), the United Kingdom (10,413), and the United States (3,809). Occupations are classified using the International Standard Classification of Occupations (ISCO - 08). The symbol "m" denotes missing or unavailable data. This may occur for several reasons: the data were not observed in the sample, the country or economy did not collect the data, or the data were collected but later excluded from the publication due to technical considerations. Source: OECD PISA 2018 database.

Career development activity	Norway	Canada	Denmark	Finland	France	Germany	Italy	Sweden	United Kingdom	United States	OECD average
Internship	58.3	20.4	77.1	66.5	81.1	89.4	26.9	76.9	42.6	15.0	48.9
Job shadowing	62.3	42.6	88.3	64.1	87.2	49.4	61.1	75.7	40.0	41.1	59.5
Job Fair	75.8	32.5	76.3	30.0	34.0	39.7	54.0	54.2	61.4	30.1	43.8
Advisor (School)	78.6	48.9	93.4	89.8	63.5	49.2	46.3	87.4	63.5	38.7	52.0
Advisor (Out-of-school)	48.9	35.5	43.7	50.1	49.8	35.4	43.2	46.4	43.2	22.0	40.9
Advisor (All)	84.6	49.8	94.4	91.6	73.4	58.3	65.5	90.5	72.3	41.4	59.8
Questionnaire	65.5	62.5	65.3	72.1	69.9	69.2	61.6	67.1	59.4	52.6	59.3
Researched Careers	83.2	77.2	76.4	75.1	79.2	82.4	73.8	81.0	75.0	81.9	74.8
Tour Institution	71.1	35.2	81.0	55.1	56.9	34.3	48.0	56.4	58.3	24.6	44.1
Researched Programmes	83.1	66.3	75.5	71.3	76.3	58.0	55.6	81.5	73.8	59.8	63.8
Student Financing	49.6	51.9	35.6	47.0	58.0	27.7	44.2	36.0	41.0	46.5	45.6

Table 49. Student participation in career development activities by career expectations in Craft and related skills (2022)

Percentage of students who participated in career development activities, among those expect to have this occupation at age 30.

15. Occupational risk. How many students are expecting to work in occupations at high risk of automation?

Table 50. Occupational risk. How many students are expecting to work in occupations at high risk of automation?

Percentage of students who, among those who named an occupation, expect to work in occupations at high risk of automation based on analysis of PIAAC
disaggregation of tasks comprising occupations.

	Student characteristics	Norway	OECD average
	All students	22.1	17.4
Gender	Girls	11.2	12.1
	Boys	32.8	23.1
ESCS	Disadvantaged	32.4	27.7
	Advantaged	14.1	8.1
Performance	Low performers	31.8	29.3
	High performers	12.6	8.2
Immigrant background	Native-born	22.4	17.5
	Foreign-born	17.2	15.4
Geographic location	Urban	10.9	12.7
	Rural	37.5	26.9
CDA participation	Internship	28.5	22.2
	Job shadowing	28.7	21.4
	Job Fair	26.3	20.5
	Advisor (School)	22.0	18.6
	Advisor (Out-of-school)	23.3	19.9
	Advisor (All)	21.5	17.9
	Questionnaire	20.9	15.9
	Researched Careers	19.1	15.7
	Tour Institution	21.9	18.8
	Researched Programmes	21.5	15.2
	Student Financing	22.9	16.1

Note: The base sample size for Norway is 3,589 in 2022. High risk - >=0.50 mean probability of automation.

Source: OECD PISA 2022 database. Nedelkoska, L. and G. Quintini (2018), "Automation, skills use and training", OECD Social, Employment and Migration Working Papers, No. 202, OECD Publishing, Paris, https://doi.org/10.1787/2e2f4eea-en.

Table 51. Career expectations of students (10 most popular expectations) – High risk

Rank	Occupation	Norway	OECD
1	Electrical equipment installers and repairers	4.9	0.8
2	Machinery mechanics and repairers	3.2	1.7
3	Building frame and related trades workers	2.6	0.5
4	Fishery Workers, Hunters and Trappers	1.3	0.0
5	Mobile Plant Operators	1.1	0.1
6	Cooks	0.9	0.6
7	Mining and Mineral Processing Plant Operators	0.8	0.0
8	Mixed crop and animal producers	0.7	0.0
9	Hairdressers, Beauticians and Related Workers	0.7	2.0
10	Shop salespersons	0.6	1.3

Percentage of students who, among those who named an occupation, expect to work in one of the ten most common career choices classified as high risk.

Note: The base sample size for Norway is 3,589 in 2022. High risk - >=0.50 mean probability of automation.

Source: OECD PISA 2022 database. Nedelkoska, L. and G. Quintini (2018), "Automation, skills use and training", OECD Social, Employment and Migration Working Papers, No. 202, OECD Publishing, Paris, https://doi.org/10.1787/2e2f4eea-en.

16. Comparative synthesis. How does the career development of students within the jurisdiction compare with that in other relevant countries and territories?

Table 52. Students who participated in each of these three career development activities: job shadowing, attending a job fair, and consulting with a career advisor in school.

Norway	Canada	Denmark	Finland	France	Germany	Italy	Sweden	United Kingdom	United States	OECD average
37.9	13.7	49.0	19.3	10.9	7.5	11.1	26.2	20.6	12.9	19.1

Note: The base sample sizes in 2022 are as follows: Norway (300), Canada (1,397), Denmark (251), Finland (485), France (325), Germany (236), Italy (755), Sweden (401), the United Kingdom (549), and the United States (338). The percentages presented reflect the proportion of students who were asked and confirmed their involvement in three specific activities: job shadowing, attending a job fair, and consulting with a career advisor in school. In PISA 2022, a representative sample of students were asked if they participated in 4 or 5 career development activities. Source: OECD PISA 2022 database.

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