

Education at a Glance 2023

OECD Indicators



Netherlands

This country note provides an overview of the key characteristics of the education system in the Netherlands. It draws on data from *Education at a Glance 2023*. In line with the thematic focus of this year's *Education at a Glance*, it emphasises vocational education and training (VET), while also covering other parts of the education system. Data in this note are provided for the latest available year, Readers interested in the reference years for the data are referred to the corresponding tables in *Education at a Glance 2023*.

Highlights

- Vocational education and training (VET) plays a significant role in upper secondary education system of the Netherlands. In the Netherlands, 69% of upper secondary students are enrolled in vocational programmes, which is much higher than the OECD average of 44%.
- In the Netherlands, a country with a strong apprenticeship tradition, 69% of 20–24-year-olds with vocational upper secondary or post-secondary non-tertiary education obtain at least seven months' work experience during their studies. However, only 28% of these young adults across OECD countries with available data, have at least seven months of work experience on average.
- Among OECD countries, the Netherlands has the second-highest share of 18-24-year-olds in formal education either full-time or part-time at 71% and the lowest share of NEET individuals (those are not in education, employment or training) at 4.1% compared to the OECD averages of 55% and 14.6%, respectively.
- In 2020, OECD countries devoted 5.1% of their gross domestic product (GDP) on primary to tertiary educational institutions. The corresponding share in the Netherlands was slightly higher than the OECD average with 5.4% of GDP.
- In OECD countries, private sources contributed approximately 10% of the expenditure on general and vocational programmes at the upper secondary level. However, in the Netherlands, the private sector funded 41% of vocational upper secondary programmes, compared to only 7% for general programmes.
- The Netherlands has substantially higher staff expenditure per full-time equivalent student in vocational upper secondary education than in general upper secondary education. It spends nearly USD 4 000 per student more on staff in VET programmes compared to the OECD average of USD 815.
- Women dominate the early childhood education and care (ECEC) workforce. In the Netherlands, the share of male teachers among pre-primary teaching staff is only 12%, however, it is still much higher than the OECD average of 4%.
- On average across OECD countries, there are 14 students per teaching staff member in general upper secondary programmes and 15 students per staff member in vocational upper secondary

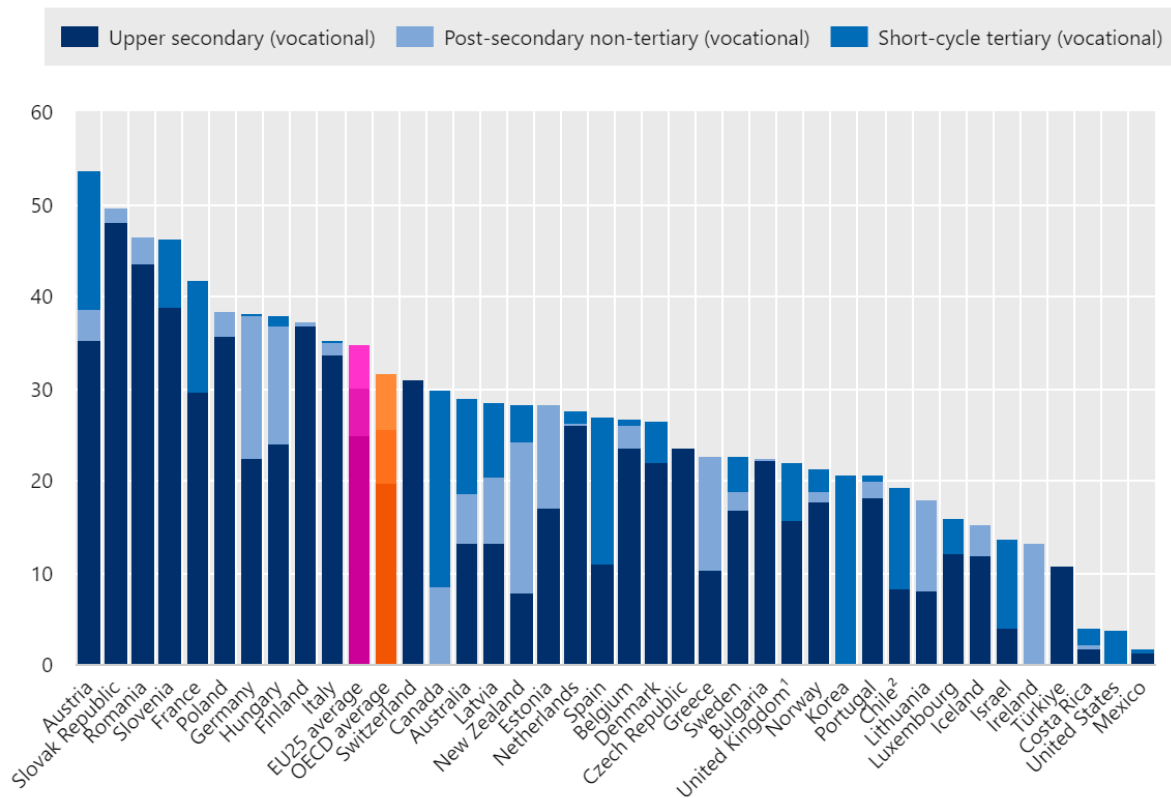
programmes. In the Netherlands, the ratios are slightly higher than the OECD average at 16 and 18, respectively.

The output of educational institutions and the impact of learning

- High-quality VET programmes integrate learners into labour markets and open pathways for further personal and professional development. However, the quality and importance of VET programmes differ greatly across countries. In some countries, half of all young adults (25-34 year-olds) have a vocational qualification as their highest level of educational attainment, while the share is less than 5% in other countries. In the Netherlands, 28% of 25-34 year-olds have a VET qualification as their highest level of attainment: 26% at upper secondary level and 1% at short-cycle tertiary level (Figure 1). The share of 25-34 year-olds whose highest level of education that has a vocational orientation is marginally lower in the Netherlands, compared to the OECD average.

Figure 1. Share of 25-34 year-olds whose highest level of education has a vocational orientation, by level of educational attainment (2022)

In per cent



1. Data for upper secondary attainment include completion of a sufficient volume and standard of programmes that would be classified individually as completion of intermediate upper secondary programmes (9% of adults aged 25-34 are in this group).

2. Year of reference differs from 2022. Refer to the source table for more details.

Countries are ranked in descending order of the share of 25-34 year-olds who attained vocational upper secondary, vocational post-secondary non-tertiary or vocational short-cycle tertiary education.

Source: OECD (2023), Table A1.3. For more information see Source section and [Education at a Glance 2023 Sources, Methodologies and Technical Notes](#) (OECD, 2023_[1]).

- VET students may gain practical work experience as part of their curriculum, allowing them to acquire relevant skills and knowledge alongside their studies. In the OECD countries participating in the European Labour Force Survey (EU-LFS), on average, only 28% of 20–24-year-olds with vocational upper secondary or post-secondary non-tertiary educational attainment obtained at least seven months of work experience during their studies. In the Netherlands, a country with a strong apprenticeship tradition, 69% of these young adults (20–24-year-olds with vocational upper secondary or post-secondary non-tertiary educational attainment) indicate having at least seven months' work experience during their studies. In general, longer work experience tend to be paid, however, in the Netherlands, 16% of individuals aged 20-24 with vocational upper secondary or post-secondary non-tertiary education report unpaid work experience of seven months or more during their studies.
- Across the OECD, unemployment rates for 25-34 year-olds with vocational upper secondary attainment are lower than for their peers with general upper secondary or post-secondary non-tertiary attainment. This is also the case in the Netherlands, where 2.4% of young adults with vocational upper secondary attainment are unemployed, which is the lowest among OECD countries and other participants. In comparison, the unemployment rate is 6.9% for those with general upper secondary attainment.
- Although an upper secondary qualification is often the minimum attainment needed for successful labour-market participation, some 25-34 year-olds still leave education without such a qualification. On average across the OECD, 14% of young adults have not attained an upper secondary qualification. In the Netherlands, the share is lower than the OECD average (10%).
- Workers in the Netherlands aged 25-34 with vocational upper secondary or post-secondary non-tertiary attainment earn 12% more than those without upper secondary attainment, whereas the earning advantage for workers with general upper secondary or post-secondary non-tertiary attainment is 20%. 25-34 year-old workers with bachelor's attainment (or equivalent) earn 34% more than their peers without upper secondary attainment, while those with master's or doctoral attainment (or equivalent) earn 58% more. In almost all OECD countries, tertiary degrees provide a significantly larger earnings advantage.
- Tertiary attainment continues to increase among the working age population. On average across the OECD, tertiary attainment is becoming as common as upper secondary or post-secondary non-tertiary attainment among 25-64 year-olds. In the Netherlands, 45% of 25-64 year-olds have tertiary attainment, a larger share than those that have upper secondary or post-secondary non-tertiary attainment (37%).
- Greater educational attainment is mostly associated with lower unemployment. However, among OECD countries, the Netherlands is one of the exceptions where 25-34 years-olds with vocational upper secondary or post-secondary non-tertiary attainment have lower unemployment rates (2.4%) than their peers with a bachelor's or equivalent degree (3.2%).
- On average across OECD countries, 14.7% of young adults aged 18-24 are NEET, while in the Netherlands the corresponding figure is 4.1%, the lowest among the countries with data. Reducing NEET rates among young adults is a particularly important challenge in all countries because those who become NEET face worse labour-market outcomes later in life than their peers who remained in education or training at this age.
- As the demand for skills in the workplace changes ever more quickly, the importance of lifelong learning continues to grow. In the Netherlands, the share of adults who participated in non-formal job-related education over a four-week reference period is 12% among 25-64 year-olds with vocational upper secondary or post-secondary non-tertiary attainment, 10% among those with general upper secondary or post-secondary non-tertiary attainment and 17% among those with tertiary attainment. This compares to average shares of 7% (vocational upper secondary or post-

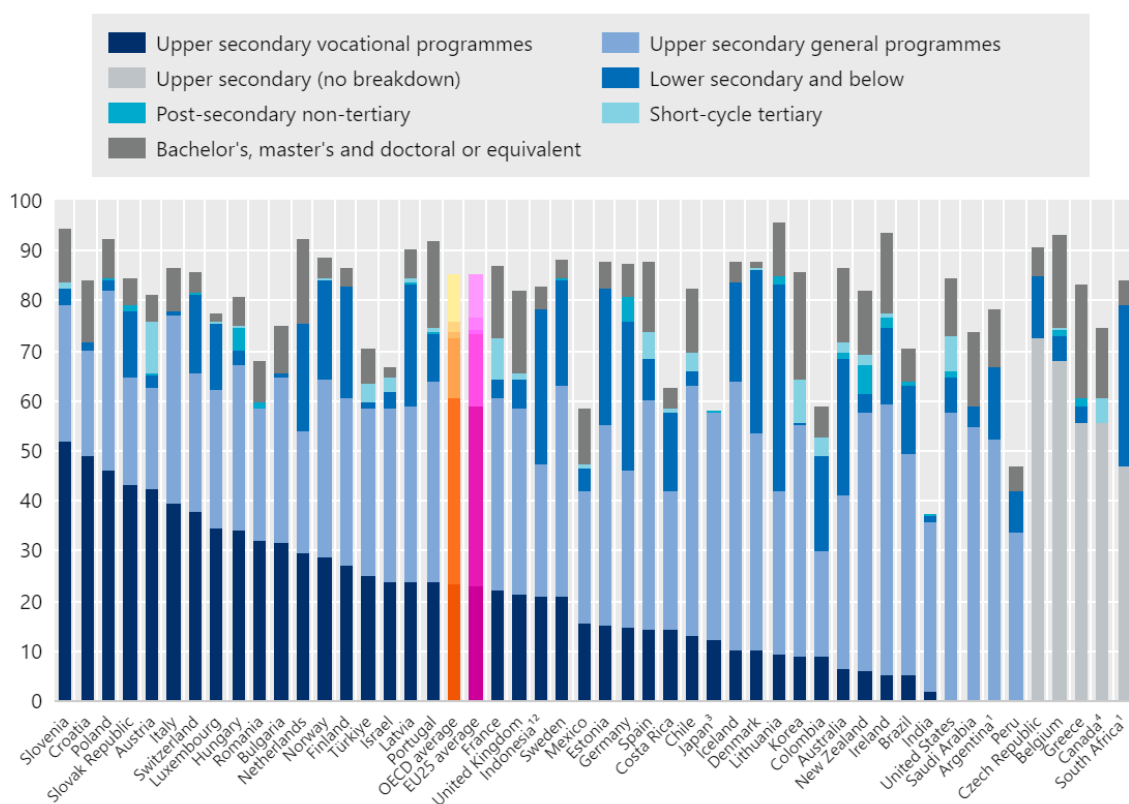
secondary non-tertiary attainment), 7% (general upper secondary or post-secondary non-tertiary attainment) and 14% (tertiary) across the OECD.

Access to education, participation and progress

- Participation in high-quality early childhood education (ECE) has a positive effect on children's well-being, learning and development in the first years of their lives. In the Netherlands, 85% of 3-year-olds, 95% of 4-year-olds and 99% of 5-year-olds are enrolled in ECE.
- Compulsory education in the Netherlands starts at the age of 5 and continues until the age of 17. Students typically graduate between the ages of 16 and 18 from general upper secondary programmes. Young people aged from 16 to 18 are required to obtain a basic qualification, in Dutch known as a *startkwalificatie*, before leaving school. Without this qualification, they must continue to attend school until they are 18 years old. The age range for completing vocational programmes is wider, with students typically graduating from vocational upper secondary programmes between 18 and 21. This is similar to most OECD countries, where graduates from vocational upper secondary programmes have a wider age range, reflecting the greater diversity of pathways into these programmes than for general ones.
- The large majority of 15-19 year-olds across the OECD are enrolled in education. In the Netherlands, 24% of this age group are enrolled in general upper secondary education and 30% in vocational upper secondary education. A further 21% are enrolled in lower secondary programmes and 17% in tertiary programmes. This compares to an OECD average of 37% enrolled in general upper secondary programmes, 23% in vocational upper secondary programmes, 12% in lower secondary programmes and 12% in tertiary programmes (Figure 2).
- In some countries, VET graduates have access to some but not all bachelor's level programmes. For example, in the Netherlands, they have direct access to professional bachelor's programmes, but not academic ones. Countries have established different approaches to provide bridging pathways from restricted VET programmes. Although VET graduates in the Netherlands only have direct access to professional bachelor's programmes, completing the first year of a professional bachelor's programme yields access to the first year of studies in an academic programme at a university.
- The average age of vocational students at different levels may reflect the function of programmes in different countries. In many countries vocational upper secondary programmes serve both teenagers in initial education and adults seeking occupational training, and the average age of upper secondary VET students is higher, between 20 and 30. In the Netherlands around half of 15–19-year-olds in upper secondary education are in VET and the average age of upper secondary VET students is 23.
- In the Netherlands, the vast majority (96%) of new students enters in the bachelor's programmes while these programmes attract 76% of all new entrants on average across OECD countries. Short-cycle tertiary programmes are the second most common level of education for new entrants into tertiary education among OECD countries, but their importance differs widely across countries. In the Netherlands, they are chosen by only 4% of all new entrants.
- Perhaps surprisingly, the share of international students at tertiary level has not been negatively affected by the COVID-19 pandemic in many OECD countries. However, a few countries experienced declines in the share of international students by more than 10%. The Netherlands is not one of them, as the share of international students increased from 13% of all tertiary students in 2019 to 14% in 2021.

Figure 2. Enrolment rates of 15-19 year-olds, by level of education (2021)

In percent



1. Year of reference differs from 2021: 2020 for Argentina and South Africa; 2018 for Indonesia.

2. Excludes students enrolled at tertiary levels.

3. Breakdown by age not available after 15 years old.

4. Excludes post-secondary non-tertiary education.

Countries are ranked in descending order of the share of students enrolled in upper secondary vocational education.

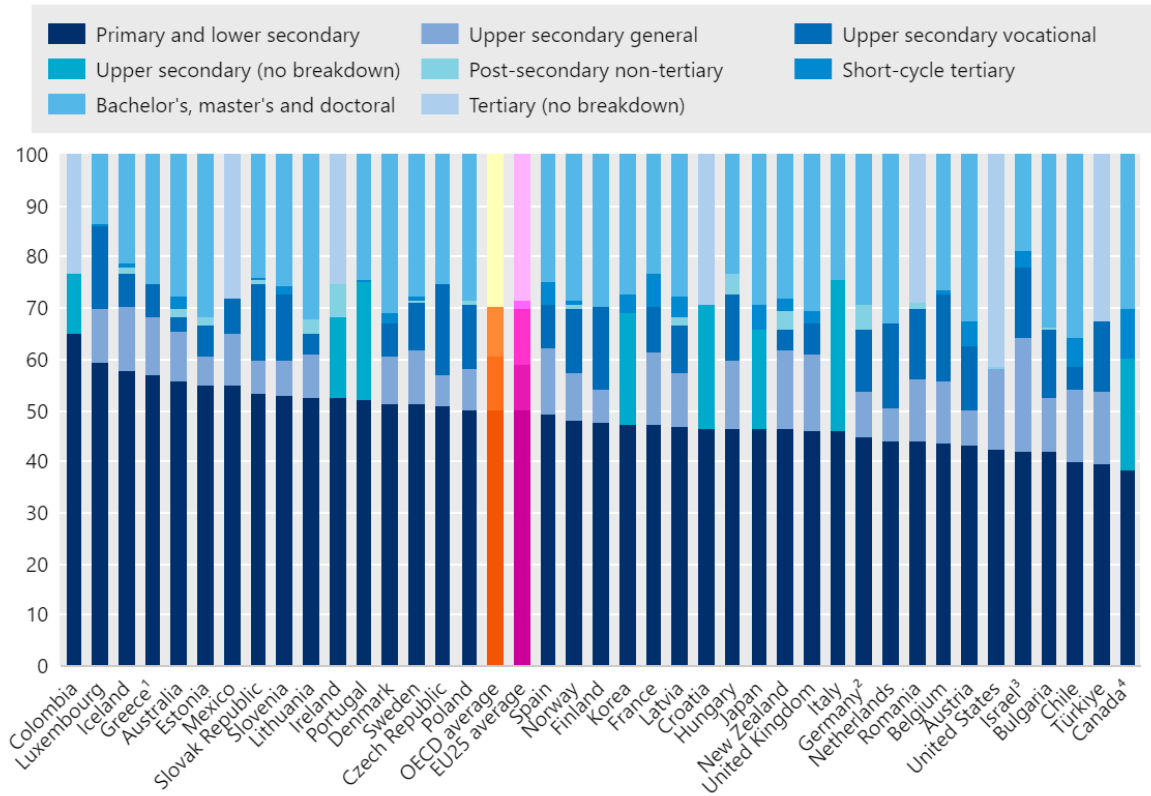
Source: OECD/UIS/Eurostat (2023), Table B1.2. For more information see *Source* section and [Education at a Glance 2023 Sources, Methodologies and Technical Notes](#) (OECD, 2023^[1]).

Financial resources invested in education

- All OECD and partner countries devote a substantial share of their domestic output to education. In 2020, OECD countries spent on average 5.1% of their gross domestic product (GDP) on primary to tertiary educational institutions. In the Netherlands, the corresponding share was 5.4% of GDP, of which 23% was dedicated to primary education, 21% to lower secondary education, 23% to upper secondary education and 33% to bachelor's, master's and doctoral or equivalent programmes (Figure 3).
- Funding for education in absolute terms is strongly influenced by countries' income levels. Countries with higher per capita GDP tend to spend more per student than those with lower per capita GDP. Across all levels from primary to tertiary education, the Netherlands spends USD 15 714 annually per full-time equivalent student (adjusted for purchasing power), compared to the OECD average of USD 12 647. Expenditure per student is equivalent to 26% of per capita GDP, which is slightly below the OECD average of 27%.

Figure 3. Total expenditure on primary to tertiary educational institutions, by level of education (2020)

In percent



1. Year of reference differs from 2020. Refer to the source table for more details.

2. Upper secondary vocational programmes include lower secondary vocational programmes.

3. Upper secondary programmes include lower secondary programmes.

4. Primary education includes pre-primary programmes.

Countries are ranked in descending order of total expenditure on primary and lower secondary institutions.

Source: OECD/UIS/Eurostat (2023), Table C2.1. For more information see Source section and [Education at a Glance 2023 Sources, Methodologies and Technical Notes](#) (OECD, 2023^[1]).

- The COVID-19 pandemic has created unprecedented challenges for education systems across the world. On average across the OECD, expenditure on primary to tertiary educational institutions per full-time equivalent student (including expenditure on research and development) grew by 0.4% from 2019 to 2020 (the first year of the pandemic and the latest period with available data). In the Netherlands, it increased by 0.6%. This change in expenditure per student is the result of total expenditure on educational institutions increasing by 1% and the total number of full-time equivalent students increasing by 0.4%.
- The Netherlands has substantially higher staff expenditure per full-time equivalent student in vocational upper secondary education than in general upper secondary education. It spends nearly USD 4 000 per student more on staff in VET programmes compared to staff in general programmes while the gap in spending on staff by programme orientation is USD 815 in OECD countries on average.
- Government sources dominate non-tertiary education funding in all OECD countries, while the private sector contributes 9% of the total expenditure on educational institutions on average.

Private funding in the Netherlands accounted for 13% of expenditure at primary, secondary and post-secondary non-tertiary levels.

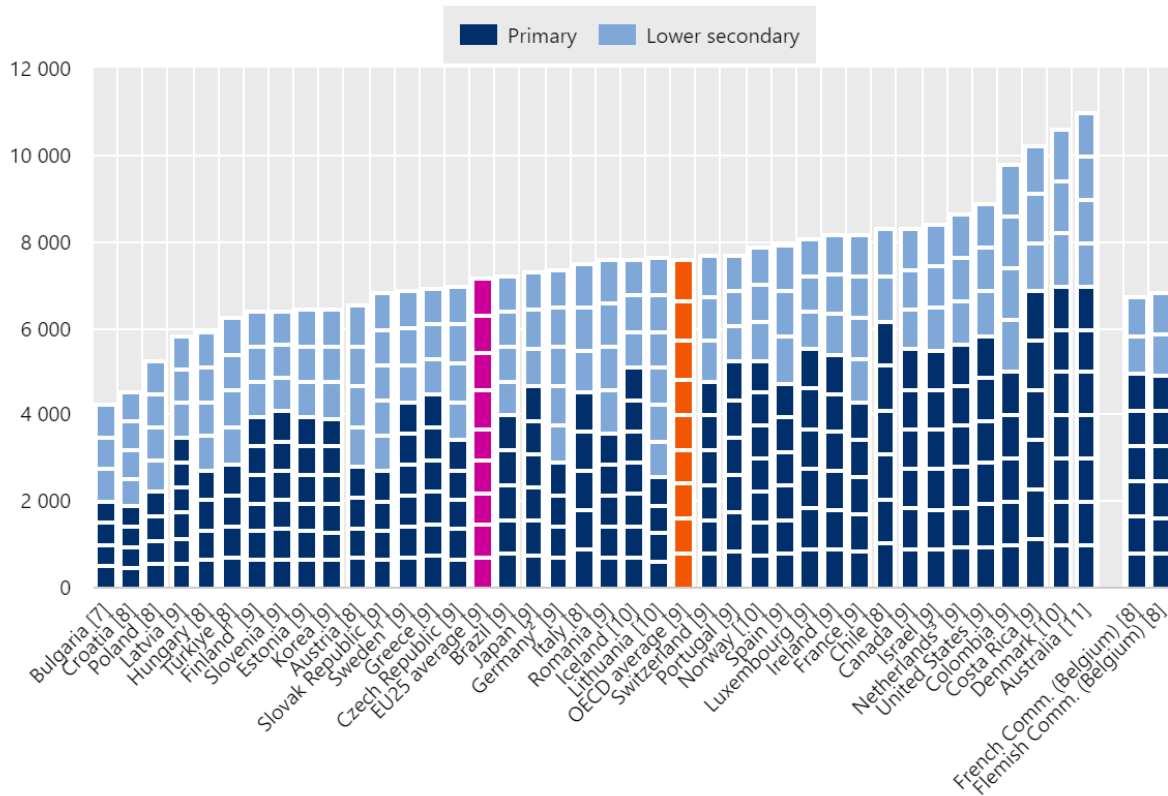
- The amount of resources allocated to public and private institutions varies widely across educational levels, although on average across OECD countries, total expenditure on public and private institutions from primary to tertiary level is close to each other. It amounts to about USD 12 600 per student in public institutions, compared to under USD 13 000 in private ones. However, the differences are more substantial in the Netherlands, where expenditure per student on private institutions is at least 70% higher than expenditure on public ones.
- Most private expenditure on primary to post-secondary non-tertiary levels of education comes from households. At upper secondary level, households and other private entities each provide 5% of the total funding for vocational programmes on average across the OECD. Private entities other than households (e.g. companies and non-profit organisations) make a significant contribution to the financing of vocational programmes in some countries. This is the case in the Netherlands where 34% of total expenditure for upper secondary VET comes from private sources other than households. The situation is slightly different for general programmes at the same level, where households account for a larger share on average (9%) and other private entities contribute only 2%.
- In most countries, private sources accounted for similar shares of expenditure on general and vocational programmes at upper secondary level. However, in a few countries the differences in the share of private funding between general and vocational programmes were wider. In the Netherlands, the private sector is responsible for 7% of expenditure on general upper secondary programmes and 41% of expenditure on vocational upper secondary programmes.
- On average across OECD countries, more than half of government expenditure on primary to post-secondary non-tertiary education comes from subnational governments. In the Netherlands, 92% of the funding comes from the central government, after transfers between different levels of government. The remaining 8% of funding is provided by the local level.

Teachers, the learning environment and the organisation of schools

- The total compulsory instruction time throughout primary and lower secondary education varies widely from country to country (Figure 4). Across the OECD, over the course of primary and lower secondary education, compulsory instruction time totals an average of 7 634 hours, distributed over nine grades. In the Netherlands, the total compulsory instruction time is higher, at 8 640 hours, over nine grades.
- On average across OECD countries, 25% of the compulsory instruction time in primary education is devoted to reading, writing and literature and 16% to mathematics. In lower secondary education, the share is 15% for reading, writing and literature and 13% for mathematics. The Netherlands is one of the few countries where there is no fixed share of instruction time spent on reading, writing and literature or mathematics at one or both of these levels.
- Teachers' salaries are an important determinant of the attractiveness of the teaching profession, but they also represent the single largest expenditure category in formal education. In most OECD countries, the salaries of teachers in public educational institutions increase with the level of education they teach, and also with experience. On average, annual statutory salaries for upper secondary teachers (in general programmes) with the most prevalent qualification and 15 years of experience are USD 53 456 across the OECD. In the Netherlands, the corresponding salary adjusted for purchasing power is USD 84 862, which is equivalent to EUR 72 127. Upper secondary teachers in vocational programmes in the Netherlands have different statutory salaries depending on their qualification levels: for those with the most prevalent qualification and 15 years of experience, salaries amount to USD 80 628.

Figure 4. Compulsory instruction time in general education (2023)

In hours, in primary and lower secondary education, in public institutions



Note: Instruction hours for each grade refer to average hours per grade for the level of education. Numbers in square brackets refer to the total number of years for primary and lower secondary education.

1. Estimated number of hours by level of education based on the average number of hours per year, as for some subjects, the allocation of instruction time across multiple levels is flexible.

2. Year of reference 2022.

3. The number of grades in lower secondary education is three or four, depending on the track. The fourth year of pre-vocational secondary education was excluded from the calculation.

Countries and other participants are ranked in ascending order of the total number of compulsory instruction hours.

Source: OECD (2023), Table D1.1. For more information see *Source* section and [Education at a Glance 2023 Sources, Methodologies and Technical Notes](#) (OECD, 2023^[11]).

- Besides average teacher salaries themselves, annual teaching time requirements, annual hours of compulsory instruction time for students, and class size also impact total spending on teacher salaries. When combined, these factors can be used to estimate an average cost of salaries per student and show the relative impact of each individual factor on total salary spending. Total teacher salary costs per primary student are USD 4 015 in the Netherlands, higher than the OECD average of USD 3 614. This difference can be broken down into these four factors: Higher teacher salaries compared to the OECD average result in an increase in costs by USD 1,282. Teaching hours that exceed the OECD average reduce costs by USD 816. Similarly, an increase in student instruction time above the OECD average leads to an increase in costs by USD 626. On the other hand, larger class sizes compared to the OECD average result in a reduction in costs by USD 692. Between 2015 and 2021, the salary cost of teachers per student increased by 13% in the Netherlands (from USD 3 567 to USD 4 015).

- Between 2015 and 2022, statutory salaries of upper secondary teachers in general programmes (with the most prevalent qualification and 15 years of experience) declined in real terms (after adjusted by inflation) in roughly half of all OECD countries with available data. In the Netherlands, upper secondary teachers' salaries in general programmes increased by 1% between 2015 and 2022.
- On average across OECD countries, in full-time equivalent terms, there are 14 students for every teaching staff member in general upper secondary programmes and 15 students per staff member in vocational upper secondary programmes. In the Netherlands, in full-time equivalent terms, there are 16 students per staff member in general upper secondary programmes, higher than the OECD average. In vocational upper secondary programmes, in full-time equivalent terms, there are 18 students for every teaching staff member (above the OECD average).
- Women dominate the early childhood education and care workforce. Across all OECD countries with available data, 96% of pre-primary teachers are women. Very slow progress has been made towards greater male representation since 2013, when women accounted for 97% of pre-primary teachers. Among OECD countries, the Netherlands has the highest share of male teachers among pre-primary teaching staff at 12%.
- The average age of teachers varies across OECD countries. In some countries, the teaching workforce is much younger than the labour force in general, whereas in others, teachers tend to be older. In the Netherlands, 36% of teachers in general upper secondary programmes are aged 50 or older, compared to the OECD average of 39%. Teachers in vocational programmes are older than teachers in general programmes, with 46% aged 50 or above (43% on average across the OECD).
- National/central assessments (standardised tests with no consequence on students' progression through school or certification) are more common at primary and lower secondary levels than at upper secondary level, while most OECD countries conduct national/central examinations (standardised tests with formal consequence) in the final years of upper secondary education. These national/central assessments and examinations take place at different grades and can be carried out with different periodicities, their contents may vary over years and/or across students and are not necessarily compulsory for students. In the Netherlands, there is one national/central assessment at primary level, and none at lower secondary level. At upper secondary level, there are two national/central examinations that each student may be expected to take.

References

- OECD (2023), *Education at a Glance 2023 Sources, Methodologies and Technical Notes*, OECD Publishing, Paris, <https://doi.org/10.1787/d7f76adc-en>. [1]
- OECD (2023), Education at a Glance Database, <https://stats.oecd.org/>. [2]
- OECD (2023), *Education at a Glance 2023: OECD Indicators*, OECD Publishing, Paris, <https://doi.org/10.1787/e13bef63-en>. [3]

More information

For more information on *Education at a Glance 2023* and to access the full set of indicators, see: <https://doi.org/10.1787/e13bef63-en>.

For more information on the methodology used during the data collection for each indicator, the references to the sources and the specific notes for each country, see *Education at a Glance 2023 Sources, Methodologies and Technical Notes* (<https://doi.org/10.1787/d7f76adc-en>).

For general information on the methodology, please refer to the *OECD Handbook for Internationally Comparative Education Statistics 2018* (<https://doi.org/10.1787/9789264304444-en>).

Updated data can be found on line at <http://dx.doi.org/10.1787/eag-data-en> and by following the *StatLinks* under the tables and charts in the publication.

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Key facts for the Netherlands in *Education at a Glance 2023*

Indicator	Country		OECD average		Source	
Educational attainment of 25-34 year-olds by gender	2022		2022		Table A1.2	
	% Men	% Women	% Men	% Women		
	Below upper secondary	11%	8%	16%		12%
	Upper secondary or post-secondary non-tertiary	36%	31%	44%		35%
	Tertiary	52%	61%	41%	54%	
NEET rates of 18-24 year-olds by gender	2022		2022		OECD (2023 ^[2])	
	% Men	% Women	% Men	% Women		
	4.1%	4.2%	14%	15.5%		
Employment rates of 25-64 year-olds by educational attainment and gender	2022		2022		OECD (2023 ^[2])	
	% Men	% Women	% Men	% Women		
	Below upper secondary	77%	57%	70%		48%
	Upper secondary or post-secondary non-tertiary	89%	79%	84%		69%
	Tertiary	92%	87%	90%	83%	
Enrolment rate of children aged 3 in ECEC	2021		2021		Table B2.1	
	85%		73%			
Enrolment rate of 15-19 year-olds	2021		2021		Table B1.1	
	93%		84%			
Share of upper secondary students enrolled in VET programmes	2021		2021		Table B1.3	
	69%		44%			
Upper secondary completion rates by programme orientation	2021		2021		Table B3.1	
	General	Vocational	General	Vocational		
	By the end of the programme duration	m	m	77%		62%
Two years after the end of the programme duration	m	m	87%	73%		
Expenditure on educational institutions per full-time equivalent student by level of education (in USD PPP)	2020		2020		Table C1.1	
	Primary	USD 11 188	USD 10 658			
	Lower secondary	USD 15 364	USD 11 941			
	Upper secondary	USD 16 324	USD 12 312			
	Tertiary	USD 21 642	USD 18 105			
Total expenditure on primary to tertiary educational institutions as % of GDP	2020		2020		Table C2.1	
	5.4%		5.1%			
Share of total education expenditure on upper secondary educational institutions by programme orientation	2020		2020		Figure C2.2	
	General	Vocational	General	Vocational		
	6%	17%	11%	10%		
Total compulsory instruction time in primary and lower secondary education	2023		2023		Table D1.1	
	8 640 hours		7 634 hours			
Statutory salaries of upper secondary teachers in general programmes with the most prevalent qualifications after 15 years of experience (in USD PPP)	2022		2022		Table D3.1.	
	USD 84 862		USD 53 456			
Change in statutory salaries of upper secondary teachers in general programmes with the most prevalent qualifications after 15 years of experience (in real terms)	2015-2022		2015-2022		Table D3.7	
	1%		4%			
Share of teachers in general upper secondary programmes aged 50 or older	2021		2021		Table D7.2.	
	36%		39%			

Note: The OECD average for completion rates reflects a different country coverage (see Indicator B3).

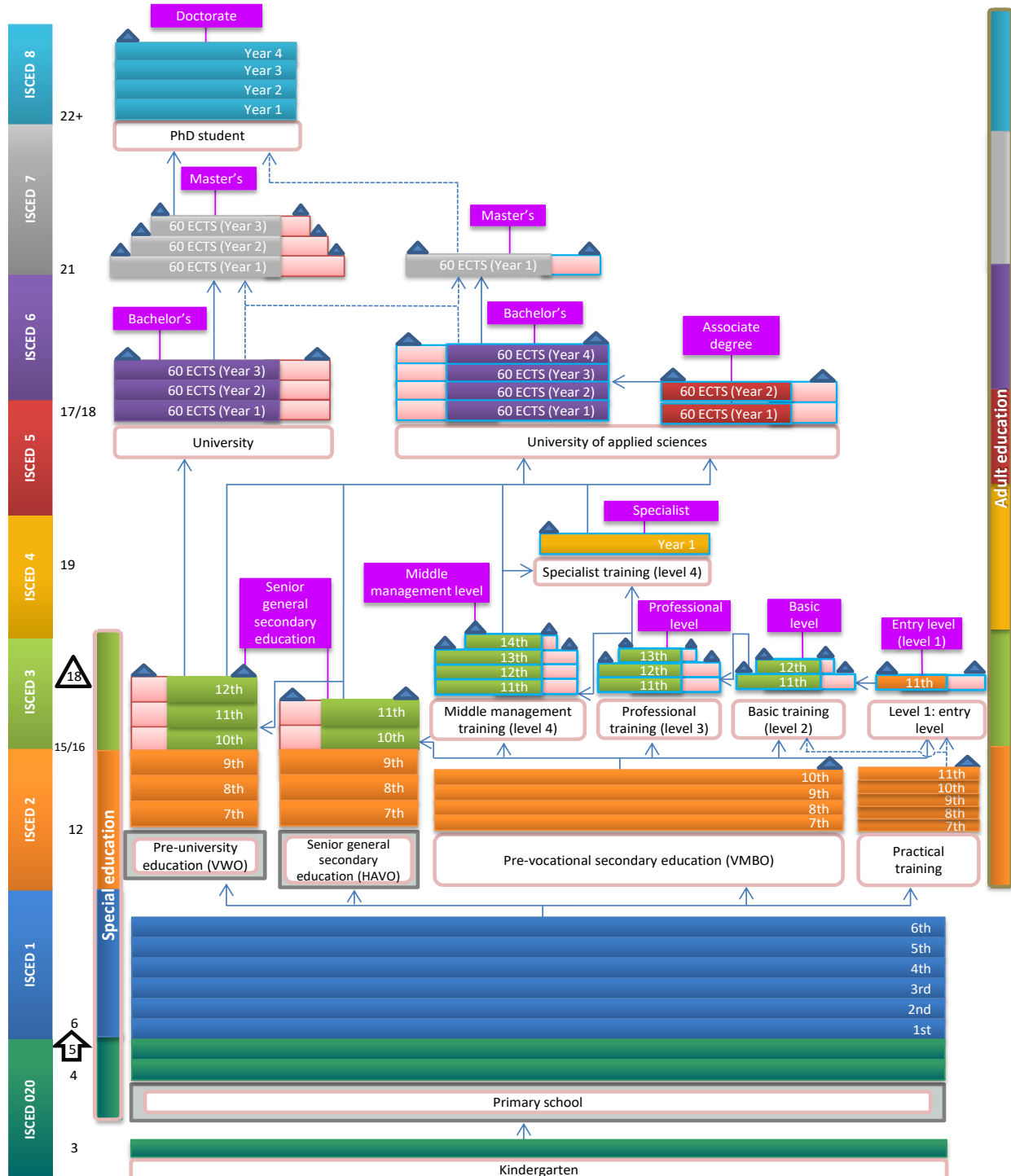
Source: OECD (2023^[2])

Diagram of the education system

Theoretical starting age

Netherlands

2023



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Source: OECD (2023), "Netherlands: Diagram of education system", OECD Education GPS, http://gpseducation.oecd.org/Content/MapOfEducationSystem/NLD/NLD_2011_EN.pdf
 Please refer to "Netherlands: Diagram of education system" for information on the keys.