



Brussels, 18.11.2022
SWD(2022) 751 final

PART 20/28

COMMISSION STAFF WORKING DOCUMENT

Education and Training Monitor 2022

Accompanying the document

**Communication from the Commission to the European Parliament, the Council, the
European Economic and Social Committee and the Committee of the Regions**

on progress towards the achievement of the European Education Area

{COM(2022) 700 final} - {SWD(2022) 750 final}

Education and Training Monitor 2022

NETHERLANDS



The Education and Training Monitor's country reports present and assess the main recent and ongoing policy development at all education levels in EU Member States. They provide the reader with more in-depth insight of the performance of countries with regard to the EU level targets agreed within the EEA. They are based on the most up-to-date quantitative and qualitative evidence available.

Section 1 presents a statistical overview of the main education and training indicators. Section 2 focuses on how the Member State has addressed or is addressing one of its education challenges. Section 3 covers early childhood education and care. Section 4 deals with school education policies. Section 5 covers vocational education and training and adult learning. Finally, Section 6 discusses measures in higher education.

The Education and Training Monitor's country reports were prepared by the European Commission's Directorate-General for Education, Youth, Sport and Culture (DG EAC), with contributions from the Directorate-General for Employment, Social Affairs and Inclusion (DG EMPL).

The document was completed on 30 September 2022

More background data at:

<https://op.europa.eu/webpub/eac/education-and-training-monitor-2022/en/>



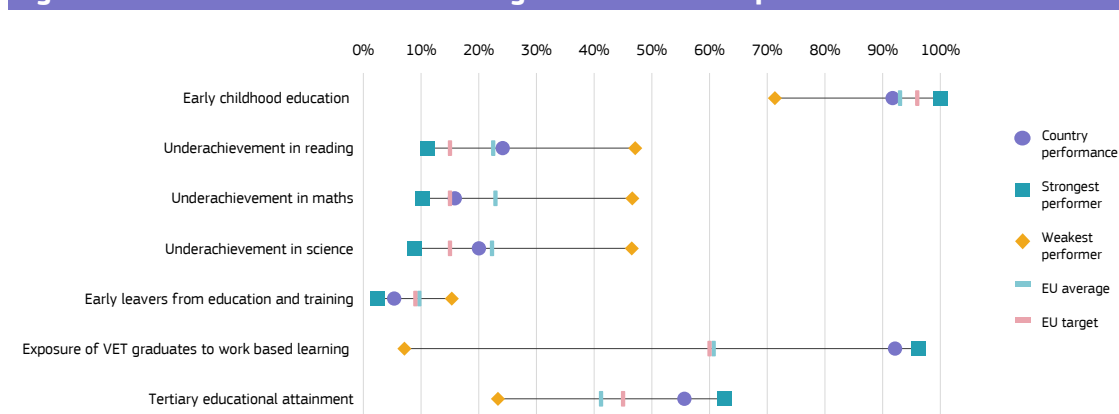
1. Key indicators

Figure 1: Key indicators overview

			Netherlands		EU	
			2011	2021	2011	2021
EU-level targets			2030 target			
Participation in early childhood education (from age 3 to starting age of compulsory primary education)	≥ 96 %		94.1% ¹³	91.7% ²⁰	91.8% ¹³	93.0% ²⁰
Low achieving eighth-graders in digital skills	< 15%		26.4% ¹³	:	:	:
Low achieving 15-year-olds in:	Reading	< 15%	14.3% ⁰⁹	24.1% ¹⁸	19.7% ⁰⁹	22.5% ¹⁸
	Maths	< 15%	13.4% ⁰⁹	15.8% ¹⁸	22.7% ⁰⁹	22.9% ¹⁸
	Science	< 15%	13.2% ⁰⁹	20.0% ¹⁸	18.2% ⁰⁹	22.3% ¹⁸
Early leavers from education and training (age 18-24)	< 9 %		9.2%	5.3% ^b	13.2%	9.7% ^b
Exposure of VET graduates to work-based learning	≥ 60 % (2025)		:	92.1%	:	60.7%
Tertiary educational attainment (age 25-34)	≥ 45 %		40.0% ^b	55.6% ^b	33.0%	41.2% ^b
Participation of adults in learning (age 25-64)	≥ 47 % (2025)		:	:	:	:
Other contextual indicators						
Equity indicator (percentage points)			:	14.5 ¹⁸	:	19.30 ¹⁸
Early leavers from education and training (age 18-24)	Native		9.2%	5.0% ^b	11.9%	8.5% ^b
	EU-born		12.9%	10.8% ^b	25.3%	21.4% ^b
	Non EU-born		10.0%	7.5% ^b	31.4%	21.6% ^b
Upper secondary level attainment (age 20-24, ISCED 3-8)			78.1% ^b	87.5% ^b	79.6%	84.6% ^b
Tertiary educational attainment (age 25-34)	Native		42.0%	56.2% ^b	34.3%	42.1% ^b
	EU-born		41.9%	53.3% ^b	28.8%	40.7% ^b
	Non EU-born		25.2%	51.5% ^b	23.4%	34.7% ^b
Education investment	Public expenditure on education as a percentage of GDP		5.5%	5.3% ²⁰	4.9%	5.0% ²⁰
	Public expenditure on education as a share of the total general government expenditure		11.8%	11.0% ²⁰	10.0%	9.4% ²⁰

Sources: Eurostat (UOE, LFS, COFOG); OECD (PISA). Further information can be found in Annex I and at [Monitor Toolbox](#). Notes: The 2018 EU average on PISA reading performance does not include ES; the indicator used (ECE) refers to early-childhood education and care programmes which are considered by the International Standard Classification of Education (ISCED) to be 'educational' and therefore constitute the first level of education in education and training systems – ISCED level 0; the equity indicator shows the gap in the share of underachievement in reading, mathematics and science (combined) among 15-year-olds between the lowest and highest quarters of socio-economic status; b = break in time series, u = low reliability, : = not available, 09 = 2009, 13 = 2013, 18 = 2018, 20 = 2020.

Figure 2: Position in relation to strongest and weakest performers



Source: DG Education, Youth, Sport and Culture, based on data from Eurostat (LFS 2021, UOE 2020) and OECD (PISA 2018).

2. A focus on tackling teacher shortages

The Netherlands faces growing teacher shortages in all sectors.

The share of online vacancies¹ for teaching posts in primary education rose from 6% in 2018/2019 to 8.6% in 2020/2021 (Inspectorate, 2022). In secondary education, the increase over the same period was from 10.5% to 16.9%. Vacancies are much higher in the five biggest urban areas (G5: Amsterdam, The Hague, Rotterdam, Utrecht and Almere). Here the vacancy rate was 14.3% in primary schools against 8% outside the G5. The shortage might be even bigger as not all schools publish vacancies online when they have unfilled posts. There is also a shortage of school heads: 12.9% in primary schools and 11% in secondary schools. Shortages are also more pronounced in special education, in schools where pupil weighting is higher² and in

schools that were assessed as very weak by the Inspectorate. The lack of qualified staff varies by subject and is the most pronounced for mathematics, IT, science, Dutch and foreign languages (Figure 3). Shortages often oblige schools to use emergency solutions such as the employment of unqualified teachers (OCW, 2021). Although the financing system should allow schools with more at-risk populations to hire more staff, it is unclear to what degree this possibility has been used and to what effect (Driessen, 2019).

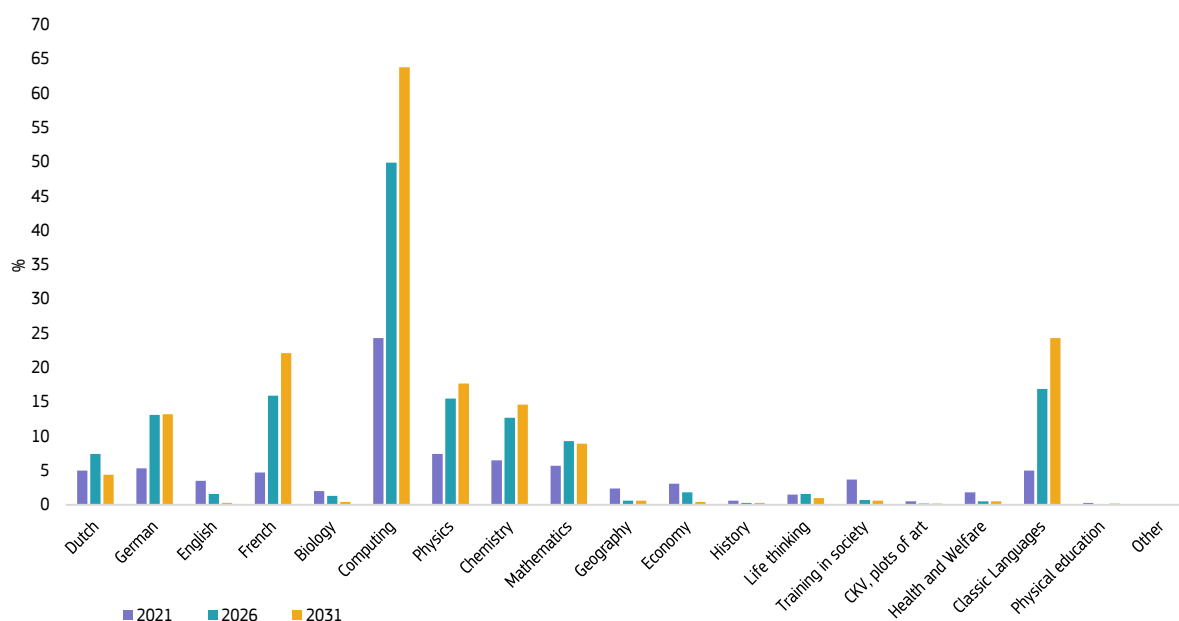
The Dutch government announced new measures and investments to make the teaching profession more attractive. The Education Agreement of April 2022 between the Ministry of Education, Culture and Sciences (OCW) and the trade unions and sectoral

¹ The number of vacancies divided by the total number of posts.

² The pupil weighting system allocates additional budgets to schools with pupils that are at risk of developing severe learning deficits right from their first day of

school. Since 2019/2020, the pupil weight indicators have been: educational level of both father and mother; country of birth of mother; length of stay in the Netherlands of mother; mean level of education of all mothers at school; whether the parents are repaying debt.

Figure 3: Forecast of unfilled teacher positions by subject as percentage of the total available positions by subject (2021-2031)



Source: Trendrapportage Arbeidsmarkt Leraren po, vo en mbo 2021

Organisations involves closing the salary gap between primary and secondary school teachers, with the government setting aside EUR 919 million each year for this on a regular basis (OCW, 2022a). In primary education, new salary scales have also been introduced in the image of secondary education so that pay reaches the same level in the two sectors. The agreement also contains commitments for additional funding to reduce the workload in secondary education (EUR 300 million) and more funding for continuous professional development (EUR 118 million). Additional funding for schools with a disadvantaged profile has become available so they can offer teaching staff a more attractive salary. OCW and the sectoral representatives in higher education have agreed to make initial teacher education more flexible for people who come from jobs in other areas. This will include the recognition of previously acquired skills, a modular curriculum and new academic training routes in primary education.

The Teacher Scholarship programme has been found to promote professionalisation.

In addition to regular continuous professional development, teachers can apply for a teacher scholarship. This enables them to obtain a Bachelor's or Master's degree so they can improve their qualifications. An evaluation of the scheme in terms of efficiency and effectiveness has yielded positive feedback (CAOP, MOOZ en Centerdata, 2022). On average, nearly 80% of all scholarship recipients have completed their education with a degree. School leaders indicated that the scheme promotes the professionalisation of teachers within their organisation.

3. Early childhood education and care

Participation in early childhood education and care (ECEC) from age 3 is below the EU average; recent investment aims to improve quality and participation time. From age 3, 91.7% of children in the Netherlands participate in ECEC, below the EU average (93.0%) and the EU-level target (96%) set for 2030. According to the

2020 sectoral report for ECEC (Kinderopvang, 2021), staff shortages is currently the biggest concern, both in terms of teaching staff and qualified personnel for other positions. To make up for the delays in pre-school education linked to the pandemic, municipalities receive EUR 300 million from the national education programme both in 2021/2022 and 2022/2023 (Kinderopvang total, 2021).

A compensation scheme is being worked out for the victims of discrimination in childcare support.

A parliamentary committee report of December 2020 revealed that the administration used unduly extra scrutiny with families from an immigrant background and claimed back childcare support payments from some 26 000 parents between 2013 and 2019. This resulted in severe financial problems for these families. The government apologised for the tax office's methods and set aside more than EUR 500 million in compensation, around EUR 30 000 for each family. The government eventually resigned in January 2021, assuming political responsibility for the scandal. The compensation scheme is still being finalised and is expected to start from the beginning of 2023. The new cabinet has decided to reform the childcare support system: support will gradually increase to cover 95% of childcare costs and will be paid directly to the childcare facility instead of to the parents.

The early childhood education scheme for disadvantaged children helps reduce learning gaps.

This scheme³ uses a specially developed programme. It is mainly intended to stimulate the cognitive, socio-emotional and motor development of children from around 2 years old until they start primary school. Targeted children either have (i) a migration background; (ii) parents with low education levels; (iii) families who do not speak Dutch at home; or (iv) a combination of the above. A national study showed that the educational

³ Early childhood education (Voor en vroegschoolse educatie) is part of the policy to eliminate educational disadvantages. It aims to help toddlers with a possible language or other developmental delay catch up and start primary school without any delay.

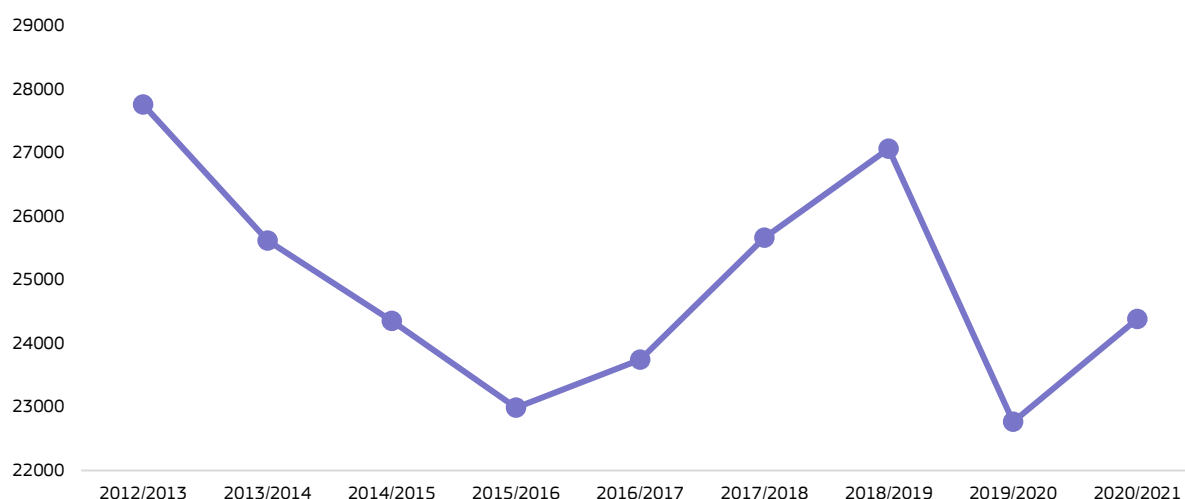
disadvantage of participating children compared to non-target group children decreases during pre-school. The gap observed by the end of pre-school is smaller, although still significant. Nevertheless, participating children catch up in particular on vocabulary, verbal short-term memory and selective attention. The study also showed that development at a younger age, in the pre-school period, is greater than at a later age in the early years of schooling and that the programme also has positive effects in the medium and long term (Veen and Leseman, 2022). There is international evidence that participation in a pre-school education scheme contributes in the long term to higher educational attainment, better labour participation, higher salaries and a healthier lifestyle as adults (Havnes and Mogstad, 2009; Thompson, 2018).

4. School education

The national education programme to compensate for the learning loss linked to the pandemic was extended by 2 years. This extraordinary additional investment of

EUR 8.5 billion was launched in February 2021 at all education levels. Of the total amount, approximately EUR 5.8 billion is for school education, and EUR 2.7 billion for vocational training and higher education. Schools with a higher proportion of disadvantaged pupils receive proportionally more money. In February 2022, the programme was extended until the school year 2024/2025; the allocations per secondary school pupil have been increased and the monitoring of the use of the funds has been strengthened (OCW, 2022b). Schools were requested to carry out a 'school scan' and on that basis to choose activities for the next years from a list the government published. Schools are responsible for the design, implementation and monitoring of the projects. In addition, the Netherlands will invest EUR 180 million from the Recovery and Resilience Facility to establish a National Education Laboratory for artificial intelligence (AI); support secondary school pupils in their final year and the integration of newly arrived migrants in education and provide disadvantaged learners with IT equipment (Government, 2022b).

Figure 4: Dropouts from education, 2012-2021⁴



Source: <https://www.ocwincijfers.nl/themas/voortijdig-schoolverlaten>

⁴ Data for 2021 is not final yet.

The share of early school leavers has dropped to a historical low. The Netherlands has already reached the EU-level target (less than 9%) for early leavers from education and training, and this decreased further in 2021 to 5.3%. However, the absolute number of young people who left education without an upper secondary qualification in 2020/2021 increased by more than 1 600 from the previous year to 24 385. The related target set in the regional strategy against early school leaving for 2020-2024 is to reduce the number of dropouts during a school year to below 20 000. Most early leavers dropped out of vocational education and training (VET). According to the Ministry of Education, the underlying reasons include mental problems linked to the pandemic and the fact that due to the cancellation of the central 'end of primary' exam, there were many new entrants to VET who would have not tried it otherwise (OCW, 2022c).

The proportion of young people aged 15-29 who are not in education, employment, education or training (NEETs) is one of the smallest in Europe. In 2021, the Netherlands had a 5.5% share of NEETs, the lowest across Europe (EU average 13.1%)⁵. However, young graduates with a non-western migration background are less often in employment and are more affected by the coronavirus crisis than their peers without a migration background (Inspectorate, 2022). This same group also faces labour market discrimination, including during their studies when finding an internship. To this end, the government has launched an action plan to combat internship and labour market discrimination.

Basic skills and key competences have deteriorated since the outbreak of the pandemic. At the end of 2020/2021, students in primary education performed less well at reading comprehension, mathematics and spelling than before the pandemic (Inspectorate, 2022). There was also a decline in all forms of secondary education. The following pupil groups faced the

biggest challenges in learning: pupils with parents having a lower education attainment, pupils from single-parent families or families with low incomes. Learning delays were on average lower in large schools. School leaders and administrators are, however, more concerned about the socio-emotional well-being of students than about their cognitive development. There is evidence of an increase in motivation problems, loneliness, stress, anxiety and sadness, especially among VET students (Inspectorate, 2022).

The government launched a new programme to improve basic skills. Over the long term, a downward trend in pupils' basic skills has been observed in various national and international surveys, including the OECD Programme for International Student Assessment (PISA). In the 2022 Coalition Agreement, the cabinet committed itself to investing EUR 1 billion each year in education quality (Government, 2022a). Against this background, it launched a 'basic skills master plan' for early childhood education, primary, secondary and vocational education in May 2022. The plan promotes Dutch reading and writing skills, mathematics, citizenship education and digital literacy. While the details of the plan will be defined at a later stage, funding is available for schools that already wish to start related activities from September 2022.

The diversity of primary school tests and compensatory measures in secondary school exams make comparisons with earlier years and between schools difficult. Unlike in 2020, the final tests in primary and special education did take place in 2021. Central exams in secondary schools were also held, with a number of adjustments linked to the exceptional circumstances. This makes it difficult to compare the results with previous years. Despite an overall decline in Dutch and maths skills, more pupils succeeded than in 2018/2019 thanks to the 'thumb rule' (the possibility of not including one of the exam subjects in the final result). Exam success increased particularly among pupils with a non-western migration background (91% versus 86% in 2019) (Inspectorate, 2022). In primary education, there used to be one single final test,

⁵ [EDAT_LFSE_18]

which gave an overview of the performance of the system. In 2015, the market was opened to several test providers, which made new standardisation efforts necessary in 2022, to keep results comparable.

Digital education is profiting from further investment. During the pandemic, the government promoted the development of online learning by providing additional financial support and digital devices to both schools and households in need. Through the Dutch recovery and resilience plan an additional EUR 24 million is invested to equip pupils with laptops or tablets in primary and secondary education. The ongoing curriculum reform in primary and secondary education envisages a more comprehensive approach to digital literacy education, in which coding is taught alongside media literacy, information and computing skills (European Commission, 2022a). In 2021, the government allocated EUR 80 million for setting up a National Education Lab for Artificial Intelligence (AI) to use AI technology for educational purposes in a safe and ethical manner. The project, whose first half will be financed from the Recovery and Resilience Facility, will bring together schools, entrepreneurs and students and allow participating schools to access well-developed public research infrastructure on AI for the first time in the Netherlands. The interested partners will start developing AI technology to improve the quality of education and integrate the use of technology in the education curricula, while adhering to ethical and responsible usage principles. Thanks to the National Growth Fund, another EUR 140 million will be invested in the digitalisation impulse education programme, in which educational institutions work together to improve the quality of education, make it more flexible and improve the digital skills of teachers and learners. This programme will benefit from an additional investment of EUR 209 million under the Dutch recovery and resilience plan.

Box 1: Services for the integration of newly arrived migrants in education have been extended in the face of the Ukrainian crisis.

In the Netherlands, newly arrived migrants and refugees are usually placed in separate classes for 1-2 years. The focus is on the language of schooling; teaching is provided by teachers specialised in teaching the language of schooling as a second language. Moreover, it is recommended that, within this approach, the first language be taught and used for the teaching of other curriculum subjects. Learners attending separate classes can obtain additional learning support if needed, and they generally also spend a certain amount of time (1 day a week or certain school subjects such as arts, music and sports) in regular classes with other peers (European Commission, 2022b). These classes prepare pupils for state education.

In September 2022, there were around 21.000 pupils enrolled in primary and secondary education who had arrived from Ukraine. As there is currently not enough capacity in normal schools and preparatory classes for them, temporary education facilities were opened in April. Their curriculum content varies, but must meet certain requirements. At least part of it must be focused on Dutch as a second language, and another part on other subjects, which must include at least mathematics, citizenship education and physical education. A third part of the curriculum content can be used for other education-related activities, such as sports, cultural activities and psychosocial support.

Collaboration between schools is strongly encouraged, especially with experienced newcomer schools and international bridging classes. The government issued an 'Education manual for children and young people from Ukraine', which offers expertise and assistance on the integration of children and young people from Ukraine in schools (Government, 2022d). Schools that take in refugee children receive extra funding. The website of LOWAN – the government-funded support organisation for the integration of refugee children in education – assists with the education of Ukrainian children in secondary education and provides practical examples of the different forms of newcomer education and temporary facilities.

Ukrainian teachers without knowledge of the



Dutch language can be employed as educational support staff in preparatory classes. In secondary education, they can have their professional qualifications as a teacher recognised and be formally employed as a teacher. A proposed change to the law will also make this possible for teachers in primary education. If this is passed, Ukrainian teachers without Dutch language skills can get a temporary recognition of their qualifications so they can teach in preparatory classes at primary school level.

5. Vocational education and training and adult learning

Targeted and continued support in basic, technical and digital skills could improve access to the labour market while promoting equal opportunities and active inclusion.

Participation in vocational education and training (VET) and adult learning remains significantly higher in the Netherlands than the EU average. In 2020, 68.1%⁶ of upper secondary pupils were enrolled in VET programmes (EU average 48.7%). After several years of weak growth, adult participation in learning decreased slightly in 2020, but much less than in most countries, and at 18.8% was still more than double the EU average (9.1%). Following a break in time series, the participation rate increased to 26.6% in 2021 (v EU 10.8%). A recent instrument introduced to boost adult learning is the public individual learning and development account (*Stimulans Arbeidsmarktpositie* or STAP) launched in March 2022. Anyone with a link to the Dutch labour market can apply for a subsidy of up to EUR 1 000 to cover their personal development and employability training costs. The measure has an annual budget of EUR 200 million and will replace the previous option of tax deductions for educational expenses. Participating in learning is a challenge for those in a vulnerable labour market situation because of their uncertain employment

condition and in certain cases low education level. More targeted support, including focusing on increasing cross-sector mobility, may be required to reach people at the margins of the labour market more effectively. The Dutch recovery and resilience plan covers some investments related to VET and adult learning via the 'Regional Mobility Teams' (EUR 25 million) and the 'Netherlands continues to learn' programme (EUR 95 million) to strengthen up- and reskilling opportunities, for instance through the provision of career advice.

Strengthening VET is a priority of the new government. The new coalition agreement refers to adult learning, especially in targeting groups that are poor and vulnerable to the impact of digitalisation, robotisation and globalisation. In July 2022, the government published the outline for a new agenda for VET. It focuses on ensuring equal opportunities, improving the connection between education and the labour market and boosting quality, research and innovation.

Lifelong learning and tackling low literacy remain a priority. A lifelong learning strategy and multiannual action plan, including a detailed roadmap, was adopted by the previous government. Key actions in this policy cover both labour market measures and education reforms. The new government is expected to announce its updated plans on lifelong learning in autumn 2022. To tackle low literacy, a lifelong learning initiative for 'low-educated and low-literate people' was launched on top of the existing programme called 'Tel mee met Taal 2020-2024'⁷. It aims to develop a new sustainable regional training offer for low-skilled and low-literate people that leads to a smooth transition to vocational education or the labour market.

The pool of ICT graduates does not meet the market demand for labour. The Netherlands continues to score very well in the share of the population with at least basic digital skills and is

⁶ [educ_uoe_enrs05]

⁷ An action programme promoting the development of adults' language, maths and digital skills, with an annual budget of EUR 60 million regular and EUR 25 million temporary additional budget.

among the top EU countries when it comes to individuals with advanced digital skills. It also features in the top five of EU countries for the share of ICT specialists as a percentage of the workforce. However, it faces a severe shortage of digital technology experts and ICT staff. While the share of new graduates in natural sciences, mathematics and statistics (at 6.8%) surpasses the EU average (6.2%), it is below the EU average (3.9%) in ICT (at 3.4%)⁸. The difficulty for companies to find qualified ICT specialists – over 70% of Dutch businesses reported difficulties in 2020 – could slow down progress in other aspects of the digital transition (European Commission, 2022a).



Box 2: Employment guidance for youth in special and practical education

From the start of the 2014-2020 European Social Fund (ESF) programming period, the Dutch government invested in the active inclusion of pupils from practical and special education (VSO/Pro). The Foodvalley Region used ESF resources to improve the employment guidance and sustainable work adaptation and integration for around 800 pupils per year, thereby increasing their job opportunities.

Given the vulnerable labour market position of this target group exacerbated by the pandemic, additional resources from the REACT-EU programme were made available for 2021/2022 to invest in their transition from school to work. Some 220 pupils were given the opportunity to participate in sector-specific courses such as working as kitchen staff, shop assistants or gardeners. Participants could also follow practical courses relevant to work and were offered the opportunity of an internship.

From these participants, it is estimated that 40% of them found work, 50% progressed to further education and 10% will continue with (occupational) daytime activities.

⁸ [educ_uoe_grad02]

Budget: EUR 400 430, of which EUR 273 800 from the ESF.

<https://www.hetstreek.nl/het-streek-college-pro-ontvangt-esf-subsidie-voor-arbeidstoeleiding/>

<https://www.pantarijn.nl/nieuwsflits-pro>

6. Higher education

Tertiary attainment and graduate employment rates are well above the EU average. 55.6% of the population aged 25-34 holds a tertiary degree (EU: 41.2%). The proportion of highly skilled women in this age group exceeds that of men by 9.7 percentage points (EU average: 11.1 percentage points). The attainment rate among the EU-born population from outside the Netherlands (53.3%) is close to that of the native population (56.2%) and is also relatively high among the non-EU-born (51.5%; EU average 34.7%). The employment rate of recent tertiary graduates is very high, at 95.2% (EU average 84.9%).

Enrolments in higher education continue to increase. In 2020, there was a sharp increase in the number of enrolments and fewer students dropped out. This was partly linked to the fact that fewer young people took a gap year because of the travel restrictions and uncertainties resulting from the pandemic. The other likely reason is the fact that the 'binding study advice' – which is issued to students who fail to meet the requirements associated with the first year of their study programme – was abolished exceptionally for 2019/2020. The increase in entrant numbers continued in 2021/2022, though was less for higher professional education (HBO) (+0.5%) than for university education (+4%). International students accounted for 58% of the new HBO Master's, almost 30% of university Bachelor's and 33% of university Master's enrolments (Inspectorate, 2022).

The number of graduates continues to increase. In 2020/2021, more students obtained a degree than in 2019/2020, both in HBO programmes and university education. This is in line with the trend for the past 10 years. Graduating within the nominal study time + 1 year

has been stable in the last 5 years. For higher professional education this has been around 56-58%, and for scientific education around 68% (Inspectorate, 2022).

The quality of programmes is good and most students are satisfied. In the Dutch accreditation system, the quality of each programme is assessed every 6 years. For many years now, the accreditation organisation NVAO has reached a positive accreditation decision for about 95% of the programmes, with only 4-5% of the programmes needing to carry out improvement activities in part (Inspectorate, 2022). The accreditation decision and the underlying assessment report are available for the public on the NVAO website. However, the way data is stored by the NVAO seems not to be accessible and useful for deeper, country-level analysis, which could help evaluations of policies and investments. According to the National Student Survey involving some 330 000 students, 71% are (very) satisfied with their education in general and only 9% (very) dissatisfied. The NVAO and the Inspectorate presented their analysis of the quality of higher education during COVID in a special report (NVAO-Inspectorate, 2022). They found that despite the pandemic, Dutch higher education institutions had been able to maintain the overall quality of education. However, study progress remained at a low level, the student learning experience decreased, and student well-being came under pressure. The general picture of the quality of education at the time of the COVID-19 measures is therefore mixed.

7. References

- CAOP, MOOZ en Centerdata (2022): CAOP, MOOZ en Centerdata: Professionalisering van leraren en docenten - Onderzoek naar professionalisering in brede zin en evaluatie van de Lerarenbeurs.
<https://open.overheid.nl/repository/ronl-892067c2ecb1ab8fe4106461fb681d70d8847515/1/pdf/evaluatieonderzoek-lerarenbeurs-en-professionalisering.pdf>
- Driessen (2019): Geert Driessen: The pupil weighting system in the Netherlands, Encyclopaedia.
<https://encyclopedia.pub/161>
- European Commission (2022a): European Commission: Digital Economy and Society Index (DESI) 2022. The Netherlands: <https://digital-strategy.ec.europa.eu/en/policies/desi>
- European Commission (2022b): European Commission: Supporting refugee learners from Ukraine in schools in Europe 2022 – Eurydice report.
<https://eurydice.eacea.ec.europa.eu/publications/supporting-refugee-learners-ukraine-schools-europe-2022>
- Finance Ministry (2022): Ministry of Finance: Wetsvoorstel kindregeling en andere aanvullende regelingen rond de zomer naar de Tweede Kamer.
<https://services.belastingdienst.nl/toeslagen-herstel/wetsvoorstel-kindregeling-en-andere-aanvullende-regelingen-rond-de-zomer-naar-de-tweede-kamer/>
- Government (2022a): Government of the Netherlands: Looking out for each other, looking ahead to the future - 2021-2025 Coalition agreement.
<https://www.government.nl/documents/publications/2022/01/10/appendix-finances-2021-2025-coalition-agreement>
- Government (2022b): Government of the Netherlands: Opvangcapaciteit vluchtelingen uit Oekraïne onder druk.
<https://www.rijksoverheid.nl/onderwerpen/opvang-vluchtelingen-uit-oekraïne/nieuws/2022/07/29/opvangcapaciteit-vluchtelingen-uit-oekraïne-onder-druk>
- Government (2022c): Government of the Netherlands: Handreiking onderwijs voor kinderen en jongeren uit Oekraïne.
<https://www.rijksoverheid.nl/onderwerpen/opvang-vluchtelingen-uit-oekraïne/documenten/publicaties/2022/04/19/handreiking-onderwijs-voor-kinderen-en-jongeren-uit-oekraïne>
- Havnes and Mogstad (2009): No child left behind: Universal child care and children's long-run outcomes, Discussion Papers No. 582, Statistics Norway, Oslo.
<https://www.ssb.no/a/publikasjoner/pdf/DP/dp582.pdf>
- Inspectorate (2022): Inspectorate of Education: The State of Education 2021.
<https://www.onderwijsinspectie.nl/documenten/rapporten/2022/04/13/de-staat-van-het-onderwijs-2022>
- Kinderopvang (2021): Waarborgfonds & Kenniscentrum Kinderopvang: Sectorrapport Kinderopvang – Jaarcijfers 2020.
https://www.waarborgfondskinderopvang.nl/sites/default/files/bestanden/sectorrapport/Sectorrapport_jaarcijfers_2020.pdf
- Kinderopvang total (2021): Kinderopvang total: Extra geld voor aanpak vertragingen voorschoolse educatie.

<https://www.kinderopvangtotaal.nl/extra-geld-voor-aanpak-van-vertragingen-in-voorschoolse-educatie/>

NRO (2022): National Education Research Agency: National Education Cohort Survey.
<https://www.nationaalcohortonderzoek.nl/actueel/factsheets-mei-2022>

NVAO-Inspectorate (2022): NVAO and Inspectorate of Education: De kwaliteit van het hoger onderwijs ten tijde van Covid-19.
<https://www.nvao.net/files/attachments/6101/Onderzoeksrapport-De-kwaliteit-van-het-hoger-onderwijs-ten-tijde-van-COVID-19.pdf>

OCW (2021): Ministry of Education, Culture and Science: Trendrapportage Arbeidsmarkt Leraren po, vo en mbo 2021.
<https://www.rijksoverheid.nl/documenten/rapporten/2021/12/09/trendrapportage-arbeidsmarkt-leraren-po-vo-en-mbo-2021>

OCW (2022a): Ministry of Education, Culture and Science: Onderwijsakkoord: 1,5 miljard voor goed onderwijs.
<https://www.rijksoverheid.nl/ministeries/ministerie-van-onderwijs-cultuur-en-wetenschap/nieuws/2022/04/22/onderwijsakkoord-15-miljard-voor-goed-onderwijs>

OCW (2022b): Ministry of Education, Culture and Science: Bijsturing NP Onderwijs: verdeling middelen en verlenging van de bestedingstermijn.

<https://www.rijksoverheid.nl/documenten/kamerstukken/2022/02/25/bijsturing-np-onderwijs-verdeling-middelen-en-verlenging-van-de-bestedingstermijn>

OCW (2022c): Ministry of Education, Culture and Science: Kamerbrief over cijfers voortijdig schoolverlaten (VSV) 2020-2021.
<https://www.rijksoverheid.nl/documenten/kamerstukken/2022/03/14/cijfers-voortijdig-schoolverlaten-vsv-2020-2021>

Parliament (2022): Tweede Kamer: Wetvoorstel Wet tijdelijke onderwijsvoorzieningen bij massale toestroom van ontheemden.
<https://www.tweedekamer.nl/kamerstukken/wetsvoorstel/detail?cfg=wetsvoorstel%3A36106&qry=wetsvoorstel%3A36106>

Regeling Regionale aanpak voortijdig schoolverlaten 2020-2024.
<https://wetten.overheid.nl/BWBR0043356/2022-01-01>

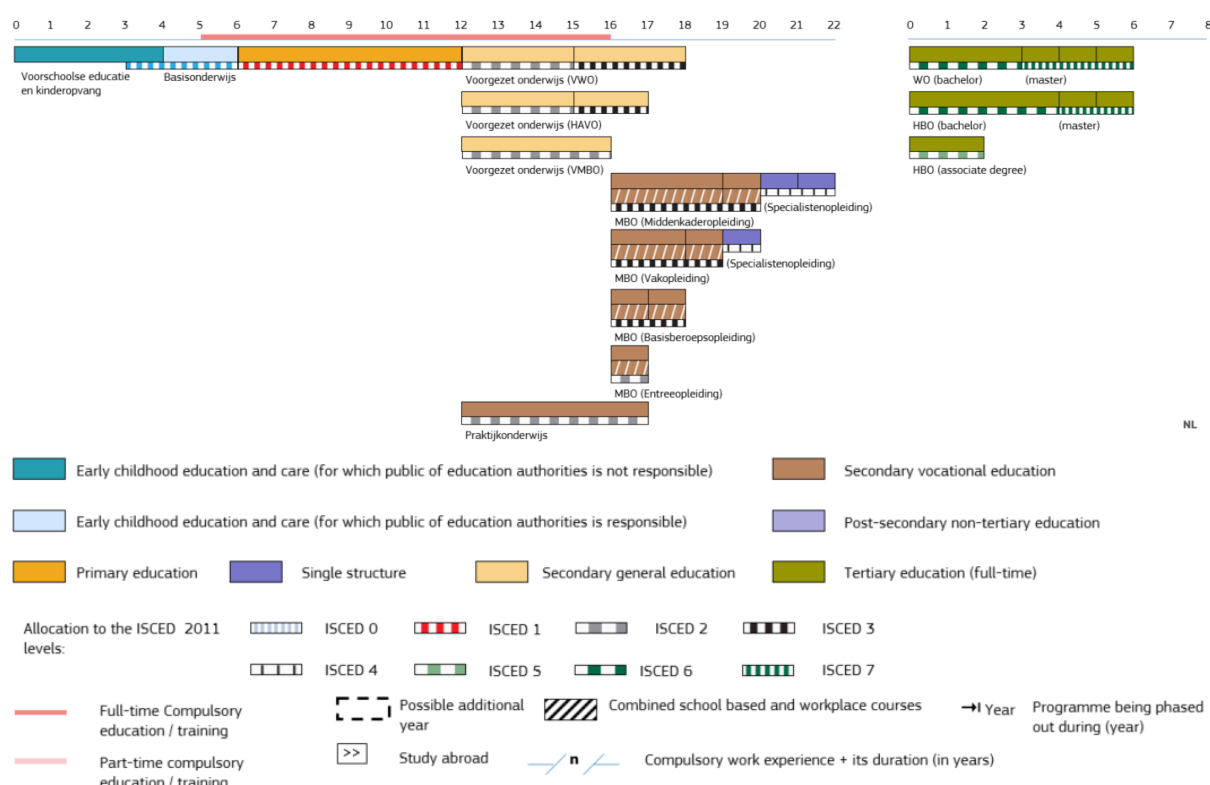
Thompson (2018): Head start's long-run impact: Evidence from the program's introduction. Journal of Human Resources 53(4).
<http://jhr.uwpress.org/content/53/4/1100.short>

Veen and Leseman (2022): Het pre-COOL cohort tot en met groep 8. Ontwikkeling van kinderen en relatie met kwaliteit in de voor- en vroegschoolse periode. Kohnstamm Instituut. In:
<https://www.onderwijskennis.nl/artikelen/de-impact-van-voorschoolse-educatie>

Annex I: Key indicators sources

Indicator	Source
Participation in early childhood education	Eurostat (UOE), educ_uoe_enra21
Low achieving eighth-graders in digital skills	IEA, ICILS
Low achieving 15-year-olds in reading, maths and science	OECD (PISA)
Early leavers from education and training	Main data: Eurostat (LFS), edat_lfse_14 Data by country of birth: Eurostat (LFS), edat_lfse_02
Exposure of VET graduates to work based learning	Eurostat (LFS), edat_lfs_9919
Tertiary educational attainment	Main data: Eurostat (LFS), edat_lfse_03 Data by country of birth: Eurostat (LFS), edat_lfse_9912
Participation of adults in learning	Data for this EU-level target is not available. Data collection starts in 2022. Source: EU LFS.
Equity indicator	European Commission (Joint Research Centre) calculations based on OECD's PISA 2018 data
Upper secondary level attainment	Eurostat (LFS), edat_lfse_03
Public expenditure on education as a percentage of GDP	Eurostat (COFOG), gov_10a_exp
Public expenditure on education as a share of the total general government expenditure	Eurostat (COFOG), gov_10a_exp

Annex II: Structure of the education system



Source: European Commission/EACEA/Eurydice, 2022. The Structure of the European Education Systems 2022/2023: Schematic Diagrams. Eurydice Facts and Figures. Luxembourg: Publications Office of the European Union. Notes: At 16, students who have not obtained a basic qualification (Startkwalificatie) have to continue their education/training until they turn 18 or get a senior general secondary (HAVO) or pre-university (VWO) or VET (at least MBO 2) diploma.

Please email any comments or questions to:
EAC-UNITE-A2@ec.europa.eu