



OECD Skills Outlook 2021

Germany

How does Germany compare?

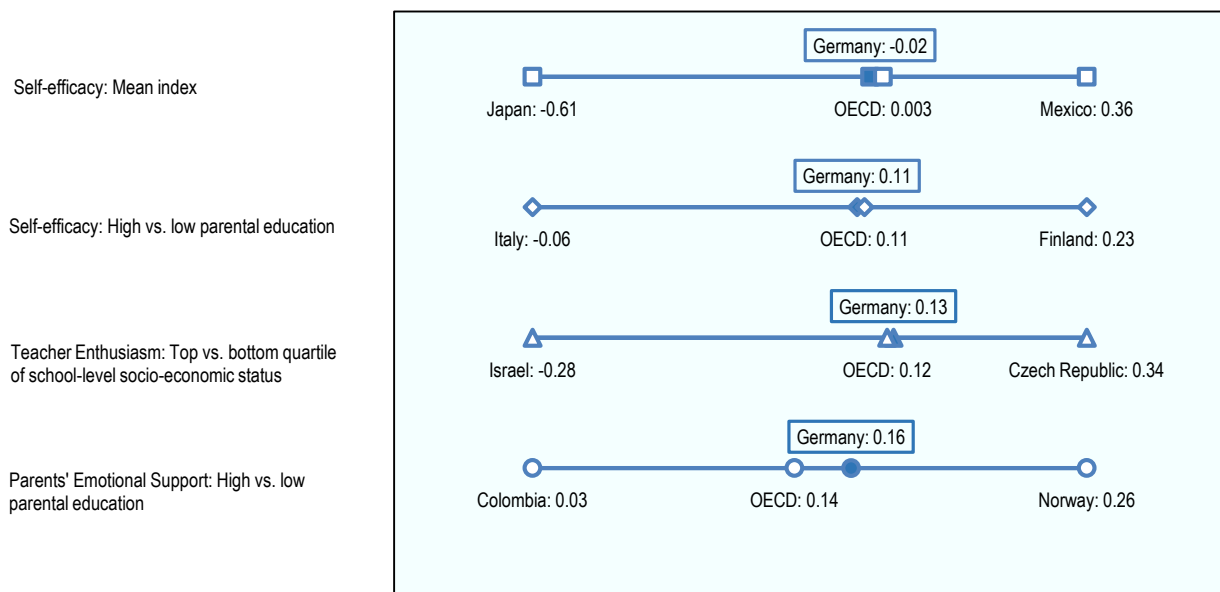
The COVID-19 pandemic, and the resulting need for physical distancing, have caused an unprecedented disruption in the provision of education and training. Now more than ever, supporting people in learning throughout their lives, and equipping them with solid skills that they can use fully and effectively at work and in society, is key to ensuring that both individuals and society thrive in this increasingly complex, interconnected and changing world. Lifelong learning is key for individuals to adapt and succeed in labour markets and societies.

The foundations of lifelong learning

What happens at home, in early-learning centres and schools is important to equip children with strong skills, as well as the readiness and willingness to learn throughout their lives. Positive attitudes towards lifelong learning are associated with higher academic achievement. They prompt children to invest in future learning by participating in post-compulsory education and engaging in careers that offer greater work-based learning opportunities. Teachers' enthusiasm and parents' emotional support have a positive impact on the development of lifelong learning attitudes. One such attitude is self-efficacy, which expresses the degree to which individuals feel confident about performing academic tasks.

In Germany, 15-year-old students reported levels of self-efficacy that were in line with the OECD average. In Germany, students with at least one parent who had obtained a tertiary degree reported higher levels of self-efficacy compared to students with no parent educated at the tertiary level, a difference that was in line with the OECD average. In Germany, students in socio-economically advantaged schools reported that their teachers had greater levels of enthusiasm compared to those attending disadvantaged schools; this difference was in line with the OECD average. Furthermore, 15-year-old students with at least one parent who completed tertiary education reported that their parents provided them with greater support compared to students whose parents were not educated at the tertiary level; this difference was in line with the OECD average.

Figure 1: Self-efficacy, teacher enthusiasm and parents' emotional support



Note: How to read the data? Self-efficacy: Mean index = standardised index of self-efficacy. Self-efficacy: High vs. low parental education = difference in index of self-efficacy between students with highly educated parents (where at least one parent has completed tertiary education) and students with less-educated parents (where no parent has completed tertiary education); positive signs indicate higher levels of self-efficacy among students with highly educated parents. Teacher Enthusiasm: Top vs. bottom quartile of schools' socio-economic status = difference in index of teacher enthusiasm between schools in the top quartile of socio-economic background and schools in the bottom quartile of socio-economic background; positive signs indicate higher teacher enthusiasm among schools in the top quartile. Parents' Emotional Support: High vs. low parental education = difference in parental emotional support between parents with a high level of education (at least one parent has completed tertiary education) and parents with a low educational background (neither parent has completed tertiary education); positive signs indicate higher emotional support among the more highly educated parents.

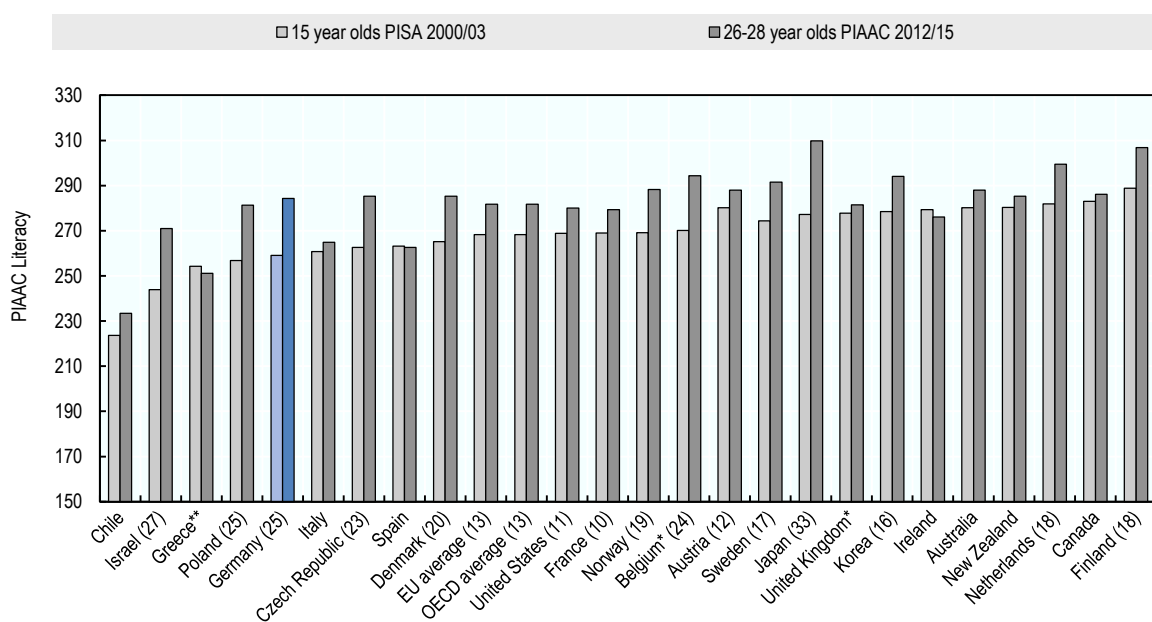
Source: OECD (2018), *PISA database 2018*, <http://www.oecd.org/pisa/data/2018database/>.¹

Effective transitions into further education, training and the labour market

The early years spent in compulsory schooling represent a crucial period for developing foundation skills, during which schools tend to equalise the learning opportunities to which individuals are exposed. By contrast, learning trajectories become increasingly differentiated in the years marking the transition between adolescence and early adulthood as individuals can choose for the first time to participate in different forms of education and training, as well as engage in informal and non-formal learning opportunities in the workplace. Across OECD countries, overall literacy achievement grows between ages 15 and 26-28, but growth differs across countries and population groups.

Between 2000 and 2018, the average literacy achievement of students at age 15 increased by 14 points in the original PISA scale. When comparing the literacy achievement of the cohort of individuals who were 15-year-old students in 2000 and 26-28-year-old adults in 2012, literacy achievement in Germany grew by 25 points on the PIAAC scale, which was higher than the OECD average growth of 13 points. In Germany, the literacy proficiency level of the cohort of students who were 15 years old in 2000 was 259 points on the PIAAC scale, which is below the OECD average of 268 points. Among individuals whose parents completed tertiary education, literacy achievement at ages 26 to 28 grew compared to the literacy level at age 15 by 12 points; the OECD average growth was 14 points. Among individuals whose parents did not complete tertiary education, literacy achievement at ages 26 to 28 grew compared to the literacy level at age 15 by 24 points; the OECD average growth was 10 points.

Figure 2: Achievement growth in literacy between ages 15 and 27, by country



Notes: Countries are sorted in ascending level of achievement among 15-year-olds. Differences in literacy achievement between age 15 and ages 26-28 that are statistically significant at the 5% level are reported in parenthesis next to the country name. PISA reading scores are expressed in PIAAC literacy scores. PISA data for Chile and Greece refer to 2003. PIAAC data for Chile, Greece, Israel, New Zealand refer to 2015. How concordance scores between PISA and PIAAC were derived is described in Box 3.1 of the report.

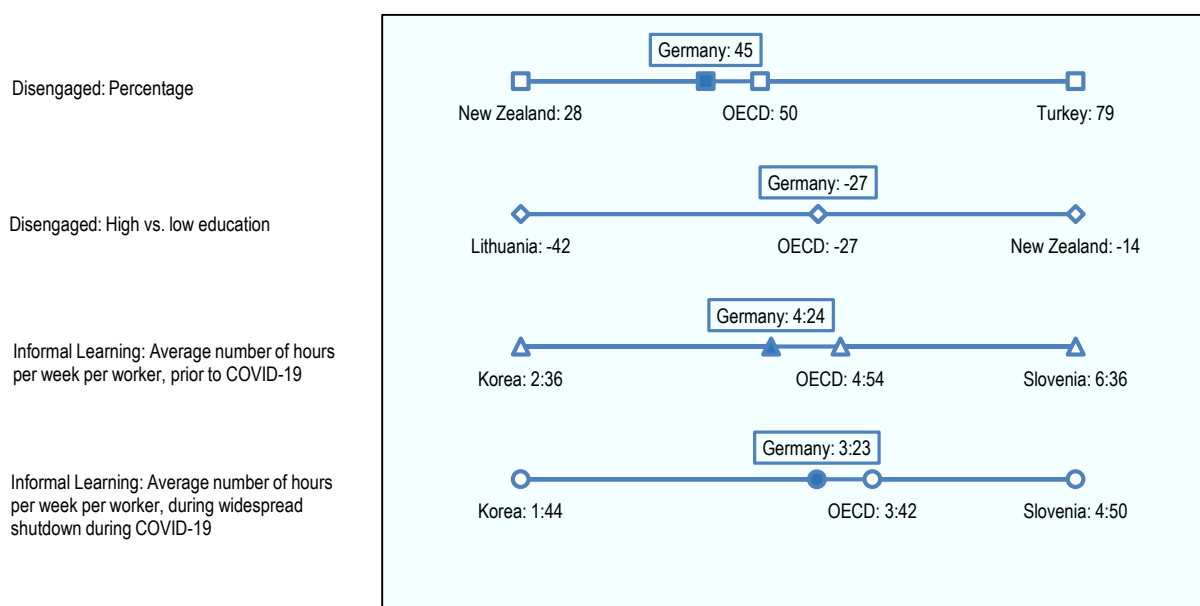
Source: OECD (2000), *PISA database 2000*; <https://www.oecd.org/pisa/data/database-pisa2000.htm>; OECD (2003), *PISA database 2003*; <https://www.oecd.org/pisa/data/database-pisa2003.htm>; OECD (2012), (2015), *Survey of Adult Skills (PIAAC) databases*; <http://www.oecd.org/skills/piaac/publicdataanalysis/>.

Engaging adults in learning

Engagement in adult learning can reduce the loss of foundation skills owing to ageing. It can help individuals acquire new skills and knowledge so that they can remain engaged in the labour market and society, despite technological and social transformations. Adult learning encompasses learning occurring in formal settings, such as vocational training and general education, as well as through participation in other forms of non-formal and informal training. Participation and willingness to participate in the available adult learning opportunities were already low before the pandemic. COVID-19 mitigation strategies had a strong impact on the availability of learning opportunities, especially derived from informal and non-formal learning.

In Germany, 45% of adults do not participate in adult learning and report being unwilling to participate in the learning opportunities that are currently available to them (“i.e. they are disengaged from adult learning”). This rate is lower than the 50% average disengagement rate across all OECD countries. Workers who obtained a tertiary qualification (“highly educated”) are 27 percentage points less likely to be disengaged than workers without a tertiary qualification, which is in line with the OECD average. Estimates indicate that before the pandemic, workers in Germany spent on average 4 hours per week engaged in informal learning, compared to 5 hours per week in OECD countries. Estimates indicate that in the presence of widespread shutdowns of economic activities, workers might have spent 1 hour less per week on informal learning, compared to the OECD average of 1 hour and 15 minutes.

Figure 3: Adult learning



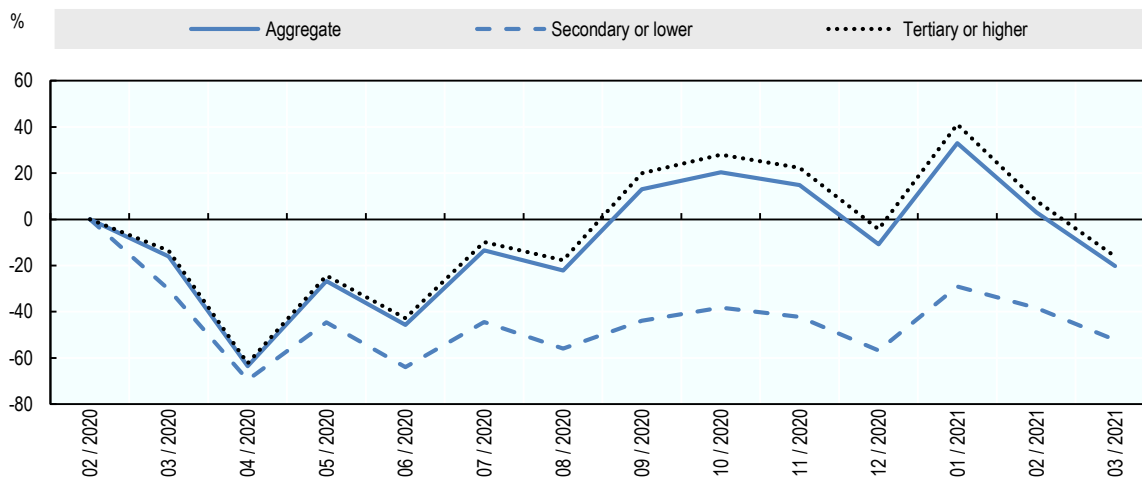
Note: How to read the data? Disengaged: Percentage = percentage of 25-65 year-olds who do not participate or want to participate in adult learning. Disengaged: High vs. low education: difference in share of disengaged between workers who obtained tertiary qualifications (highly educated) and workers who did not obtain a tertiary education (low-educated). Informal learning: average number of hours per week per worker prior to COVID-19: Average weekly hours of informal learning per worker (e.g. learning from others, learning by doing and learning new things at work) prior to the COVID-19 pandemic. Informal learning: Average number of hours per week per worker, during widespread shutdown owing to COVID-19 = average weekly hours of informal learning per worker (e.g. learning from others, learning by doing and learning new things at work) during the COVID-19 pandemic under the assumption of a widespread lockdown.

Source: OECD (2012), (2015), (2019), *Survey of Adult Skills (PIAAC) databases*; <http://www.oecd.org/skills/piaac/publicdataandanalysis/>.

Impact of COVID-19 on labour markets

COVID-19 caused major disruptions to labour markets worldwide. Uncertainty caused by the pandemic, fear of infection, and mitigation and suppression policies leading to the suspension or closure of economic activities caused large contractions in the volume of job vacancies advertised on line. In Germany, online job vacancies declined in 2020, but increased between January and March 2021. As a result, the overall volume of vacancies posted on line was 40% lower in March/April 2020 than in January-February 2020. Like in most other countries, the volume of online job vacancies in Germany requiring at most secondary qualifications declined more than the volume of jobs requiring tertiary qualifications during the first period of the pandemic (March/April 2020). In Germany, the five occupations showing the strongest decline in vacancies posted on line over March-July 2020 compared to January-February 2020 were: Personal service workers, Food preparation assistants; Customer services clerks; Refuse workers and other elementary workers, Sales workers.

Figure 4: Evolution of online vacancies in Germany



Note: The figure shows the percentage change in the number of vacancies posted online compared to the reference period (January and February 2020). Aggregate refers to all vacancies. Secondary or lower refers to vacancies requiring candidates to hold secondary qualifications or less. Tertiary or higher refers to vacancies requiring candidates to hold tertiary qualifications or higher.

Source: OECD calculations based on data from Burning Glass Technologies, May 2021.

OECD Skills Outlook 2021

Learning for Life

Country Profile: Germany



Notes

¹ The Programme for International Student Assessment (PISA) is a standardised, low-stakes international assessment administered to 15-year-old students since 2000 every three years. Key assessment domains are reading literacy, mathematics and science literacy. For more information visit www.oecd.org/pisa.

* Data for Belgium refer only to Flanders and data for the United Kingdom refer to England and Northern Ireland jointly.

** The data for Greece include a large number of cases (1 032) in which there are responses to the background questionnaire but where responses to the assessment are missing. Proficiency scores have been estimated for these respondents based on their responses to the background questionnaire and the population model used to estimate plausible values for responses missing by design derived from the remaining 3 893 cases.

The statistical data for Israel are supplied by and under the responsibility of the relevant Israeli authorities. The use of such data by the OECD is without prejudice to the status of the Golan Heights, East Jerusalem and Israeli settlements in the West Bank under the terms of international law.

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Please cite this country note as: OECD (2021), *Germany Country Note - Skills Outlook 2021: Learning for Life*, OECD, Paris, <https://www.oecd.org/germany/Skills-Outlook-Germany-EN.pdf>

Source: OECD (2021), *OECD Skills Outlook 2021: Learning for Life*, OECD Publishing, Paris, <https://doi.org/10.1787/0ae365b4-en>.

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