Since 2001, the DAAD has been analysing data on the internationalisation of studies, research and higher education from Germany as well as from particularly relevant countries and regions such as the USA, the United Kingdom or Asia. The current edition presents the most important results and graphics.

These include figures on international students in Germany, data on mobility behaviour, an overview of students’ countries of origin and host countries as well as developments in the field of doctorates. Special data analyses shed light on the status quo and trends at universities and research institutes during the Covid-19 pandemic.

The study integrates international data from OECD and UNESCO as well as national data from the Federal Statistical Office in Germany. In combination with other indicators, it provides a valid basis for long-term analyses.
How many international students remain in their respective host country after completing their degree? And how big are the differences between the various host countries? The OECD discussed these questions as part of its “International Migration Outlook”, published in late 2022, particularly in light of the skills shortages lamented by many of the OECD member countries reviewed therein. It should be noted that not all OECD countries were able to provide the corresponding data, including the US. Moreover, the calculated quotas for all EU countries refer only to international students from non-EU countries as EU students do not require a residence permit due to the freedom of movement within the EU and are thus not included in the respective register data.

The OECD analysis compares the shares of international first-year students in the OECD countries under review who were still resident in that country after five and ten years respectively. First, the two five-year retention rates were calculated for the first-year cohorts of 2010 and 2015, followed by the ten-year retention rate for the first-year cohort of 2010. A comparison of the findings by country reveals that Canada and Germany report by far the highest retention rates. By contrast, the lowest retention rates are found in the US and Japan.

"It is no coincidence that Canada tops the league, along with Germany, regarding the retention rates of international students. This is also the result of a positive culture of welcome with specific opportunities for well-qualified international students who want to stay. A territorial state with a high quality of life and a globally networked economy, Canada is a traditional immigration country that is in sore need of highly qualified specialists. In the past, the Canadian government has consistently organised strategic programmes aimed at retaining international students, outlining specific routes with clear requirements and advisory services. One requirement is that, in addition to living expenses, international students have to pay substantial tuition fees, which the universities then invest in ensuring a sound infrastructure, with excellent teaching and support. Canada’s International Education Strategy 2019–2024 aims to increase the number of international students, clearly stating that well-qualified students will be given opportunities to stay. However, the success of this policy has also created new problems: on occasion, Canadian authorities were unable to issue visas on time and the questionable practices of some consulting agencies, who made dubious promises, came to light."

Benedikt Brisch, Director of the DAAD Regional Office in New York and Director of the German Center for Research and Innovation New York

"For many international students, Australia is the country of their dreams. Offering a high quality of life, it is considered extremely safe. In addition to breathtaking natural scenery and vibrant, multicultural metropolises like Sydney and Melbourne, students discover a higher education system with an international outlook and a high quality of teaching. It therefore comes as no surprise that the retention rate of students is high by OECD standards. One major factor is the enormous demand for skilled workers, which the government has addressed by introducing graduate visas and adequate labour legislation, both of which facilitate the migration of specialised personnel. The excellent quality of life in Australia is another compelling reason. The country has earned a reputation for being extremely safe, with spectacular scenery and multicultural cosmopolitan cities offering a wealth of recreational activities. While at university, international students forge ties and establish networks that prove to be invaluable for their career opportunities and employment prospects, often serving as a catalyst for their decision to remain in Australia. They gain work experience, secure long-term employment contracts and undertake further training to improve their chances on the labour market. In turn, this lays the foundations for obtaining permanent residence."

Silke Schoppe, Educational Project Manager of the DAAD Information Centre in Sydney

Database as the method of calculation

The OECD analysis on the retention of international students is based on national data on the study-related residence permits issued to these students. These data show in what year an individual first received a residence permit for the purpose of studying in a particular country. To calculate the retention rates, the OECD defined the initial group as all students who were issued a residence permit for the first time in a specific year for the purpose of studying. The second step was to check how many members of this initial group were still resident in the country in question after five or ten years. Accordingly, the retention rates refer to a first-year student cohort, not a graduate cohort, as the corresponding register data in most countries do not document whether a course of study was successfully completed. For example, the data source for Germany was the Central Register of Foreigners (Ausländerzentralregister, AZR), which records the residence permits of all visitors from non-EU and non-EEA countries. This group requires a residence document or permit if they wish to stay in Germany for more than 90 days. However, visitors from EU or EEA countries do not require a residence permit and are thus not registered in the AZR.
rates can be observed in Denmark, Norway and Italy, while the quotas in the United Kingdom and the Netherlands are only slightly higher. Other major host countries such as Australia, New Zealand and France rank somewhere in between.

Comparing the ten-year retention rates between 2010 and 2020 in the countries studied, Germany just beats Canada to first place, with 45% and 44% respectively, followed by Australia (29%), New Zealand (27%), Sweden (22%) and Japan (21%).

The corresponding shares are relatively low in the United Kingdom (16%), Switzerland (14%), the Netherlands (12%) and Italy (11%). It is also striking that, in many countries, the five-year retention rate found among the 2015 first-year

1 In Canada, for example, international students’ study-related residence permits may be extended by up to 36 months on obtaining their degree, while in Germany, students from non-EU countries are granted the right to stay for 18 months after graduating to look for employment.

2 Only students from non-EU countries of origin.

Germany is a popular host country for international students and tops the ranking of non-English speaking countries. However, Germany does not traditionally define itself as an immigration country and has long struggled to attract international students for recruitment onto the German labour market. Instead, its focus was on developing the respective countries of origin. The regulations for obtaining a work permit make this clear: for a long time, those graduating in Germany were subject to the same rigid immigration rules as any other applicants. At first glance, then, the high retention rate is astonishing. Key factors probably include the robust German labour market, the high standard of living and employers’ ever-increasing interest in international skilled workers. A shortfall of some 240,000 specialists is anticipated by 2026 alone – and demographic development will only exacerbate the situation. Compare this to the 75,000 international students embarking on their studies in Germany every year, a disproportionately high number of whom drop out of their studies, however. Therefore, the DAAD recently published a position paper, putting forward specific proposals of how to inspire even more young people to study in Germany, how to improve the academic success of these students and facilitate their transition into the workforce.

Stephan Fuchs, Head of DAAD Section for Strategic Development and Higher Education Policy

Footnotes
Retention of international students in major host countries

A further finding of the OECD analysis clearly shows that the retention rates of international students vary considerably, not just from one host country to another, but also from one country of origin to another. These rates were compared in the two key countries of origin, China and India. Almost all host countries reported an above-average retention rate among Indian students, as opposed to a below-average retention rate for Chinese students.
Efforts are also being made to attract skilled personnel to the United Kingdom. Analyses suggest that Brexit has made the skills shortage even more acute. Two aspects probably play a crucial role in explaining the exceptionally low retention rates in the OECD evaluation, despite the skills shortage: firstly, unlike in Australia and Japan, for example, all EU citizens can be disregarded as they did not require a visa to settle and take up employment there prior to Brexit, in line with EU legislation on freedom of movement. Studies indicate that, before Brexit came into force, EU students certainly considered the United Kingdom an attractive base from which to work. Moreover, the declining retention rate of international students compared to that from 2010 to 2015 is linked to a change in legislation under then Home Secretary Theresa May. In 2012, she suspended the simplified visa process for international students. As a result, all non-EU students had to leave the country within four months of graduating. The Graduate visa scheme was re-introduced in April 2021, offering international bachelor’s and master’s graduates the opportunity to work in the United Kingdom for two years after successfully completing their course.

Ruth Krahe, Director of the DAAD Regional Office in London

Japan is facing daunting demographic challenges. A shortfall of no less than 6.4 million specialised personnel, approximately 9% of the working population, is predicted by 2030. Since 2008, therefore, the government has been reinforcing its efforts to recruit international students for integration in the workforce. To date, the conservative government has struggled with opening up the labour market for foreign workers. International students who have spent several years at a Japanese university are considered to be better acculturated. In fact, the number of students from abroad who extend their stay in Japan after graduating almost quadrupled between 2010 and 2019, soaring to just under 30,000 students. The rise in OECD retention rates between 2015 and 2020 reveals international graduates’ increased interest in employment. Nonetheless, the drop in the rate of those remaining after ten years also highlights the challenges involved, such as the high demands for fluency in the workplace and problems with social integration. Japanese employers also indicate that insufficient language and workplace skills are obstacles to employment. It is thus doubtful whether international students will truly be able to help alleviate the skills shortage.

Axel Karpenstein, Director of the DAAD Regional Office in Tokyo and Director of the German Centre for Research and Innovation Tokyo