UNESCO National Commission Policy Report Template

Under the World Higher Education Conference (WHEC 2022)

Higher Education Policy Report: Germany

German Commission for UNESCO in consultation with the German authorities and the German Rectors' Conference

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Executive Summary

The German HE system consists of three types of institutions: Universities, Universities of Applied Sciences and Universities of Art and Music. In total there are 390 universities, most of them being public institutions. The number of students enrolled in HEIs has been growing constantly to now more than 2.9 million students. HEIs are either state or state-recognised institutions. Both are subject to higher education legislation. The responsibility for higher education lies with the sixteen federal states which have their own laws governing higher education. Basic principles have been agreed upon within the framework of the Standing Conference of the Ministers of Education and Cultural Affairs of the Länder in the Federal Republic of Germany to ensure the same conditions of study and mobility between the states.

The COVID-19 pandemic has been posing enormous challenges to HEI, as regards the continuation of teaching, learning, research and exams as well as the international exchange of students. In this situation numerous measures have been taken to maintain teaching and research operations while avoiding disadvantages for students. In addition to flexible lecture schedules and application phases these include measures to expand digital options and cushion the social impact on students.

A particular challenge for international cooperation in higher education is to safeguard academic freedom and institutional autonomy in all countries worldwide.

Recommendations:

1. Use digital innovations in research and learning
2. Anchor sustainability in higher education and establish HEIs as drivers for a sustainable future
3. Support for vulnerable student groups
4. Safeguarding academic freedom
5. Strengthen higher education around the world

Content

Acronyms

FH = Fachhochschulen

HAW = Hochschulen für Angewandte Wissenschaften

U = Universities

UAS = Universities of Applied Sciences

HE = Higher Education

HEI = Higher Education Institution

SDG = Sustainable Development Goals

ESD = Education for Sustainable Development

Presentation

This report has been prepared in consultation with the federal government level and with the states level as well as with the German Rectors' Conference. Due to the federal system in Germany, responsibility for education, including higher education, in general lies with the sixteen federal states. The states are responsible for the basic funding and organisation of HEIs. In the past years both the states and the federal government have increased their financing in the field of higher education.

Current situation of higher education

1.1 Historical enrolment and graduation rates

Table 1: Historical development: enrolment rate

winter semester	Students (overall)	thereof: students enrolled at universities	Thereof: students enrolled at colleges of arts and music	Thereof: students enrolled at universities of applied sciences
1975/1976	836,002	675,257	15,343	145,402
1980/1981	1,031,590	818,458	18,044	195,088
1990/1991	1,712,608	1,313,260	28,360	370,988
2000/2001	1,799,338	1,310,990	30,159	458,189
2010/2011	2,217,604	1,470,910	32,929	713,765
2019/2020	2,891,049	1,777,758	36,547	1,076,744
2020/2021	2,944,145	1,780,562	37,473	1,126,110
2021/2022*	2,947,495	1,752,689	38,366	1,156,440

- Provisional data, Nov. 2021.

Comment: Data before the winter semester of 1990/1991 only refers to the former territory of West Germany including West-Berlin.

Source: German Federal Bureau of Statistics, Fachserie 11, R 4.1 of the corresponding semesters

Most current data:

- Overall student number: 2.9 million (winter semester 2021/2022; provisional)
- Student number by type of institution:
  - Universities 1.75 million
  - Universities of Applied Sciences 1.16 million
  - Colleges of Arts and Music 38,366

Table 2: Historical development graduation rate

Academic year (Prüfungsjahr)	Graduates (overall)	thereof: graduates at universities	thereof: graduates at colleges of arts and music	thereof: graduates at universities of applied sciences
1990	164,357	107,220	2,876	53,895
2000	214,473	143,841	4,646	65,566
2010	361,697	231,277	6,064	124,220
2020	476,913	279,827	6,380	190,449

Comment: Data for the different types of HEI unavailable for 1960, 1970 and 1980.

Source: German Federal Bureau of Statistics, Fachserie 11, R 4.2 of the corresponding semesters

Most current data:

- Overall number of graduates: 476,913 (2020)
- Graduates by type of institution:
  - Universities 279,827
  - Universities of Applied Sciences 190,449
  - Colleges of Arts and Music 6,380

1.2 Quantity and types of higher education institutions

Higher education studies in Germany are offered at different types of higher education institutions (HEI).

- Universitäten (Universities) including various specialised institutions, offer the whole range of academic disciplines. In the German tradition, universities focus in particular on basic research so that advanced stages of study have mainly theoretical orientation and research-oriented components.
- Fachhochschulen (FH)/Hochschulen für Angewandte Wissenschaften (HAW) (Universities of Applied Sciences, UAS) mainly concentrate their study programs in engineering and other technical disciplines, business-related studies, social work, health and nursing sciences, and design areas. The UAS' mission of applied research and development implies an application-oriented focus of studies, which includes integrated and supervised work assignments in industry, enterprises or other relevant institutions.
- Kunst- und Musikhochschulen (Universities of Art/Music) offer studies for artistic careers in fine arts, performing arts and music; in such fields as directing, production, writing in theatre, film, and other media; and in a variety of design areas, architecture, media and communication.

Currently, there are 390 universities in Germany with a combined student population of approximately 2.9 million. Of these, 120 are universities, 213 are universities of applied sciences or similar institutions and 57 are colleges of art or music.

Despite the increasing presence of private HEIs public HEIs remain clearly in the majority. There are 240 government-funded institutions of higher education, compared with 150 private. These are often small institutions offering a limited range of subjects, e. g. Business Administration, Media Studies, Design. They offer a wide range of study programs such as part-time or distance learning and studying while in employment. Roughly 90 per cent of all students in Germany are matriculated at a public higher education institution.

Studies in all types of institutions have traditionally been offered in integrated "long" (one-tier) programs leading to Diplom- or Magister Artium degrees or completed by a Staatsprüfung (State Examination). Within the framework of the Bologna-Process one-tier study programmes have successively been replaced by a two-tier study system. Since 1998, two-tier degrees (Bachelor's and Master's) have been introduced in almost all study programmes. This change is designed to enlarge variety and flexibility for students in planning and pursuing educational objectives; it also enhances international compatibility of studies.

The German Qualifications Framework for Higher Education Qualifications (HQR) describes the qualification levels as well as the resulting qualifications and competences of the graduates. The three levels of the HQR correspond to the levels 6, 7 and 8 of the German Qualifications Framework for Lifelong Learning and the European Qualifications Framework for Lifelong Learning. Table 3 provides a synoptic summary.

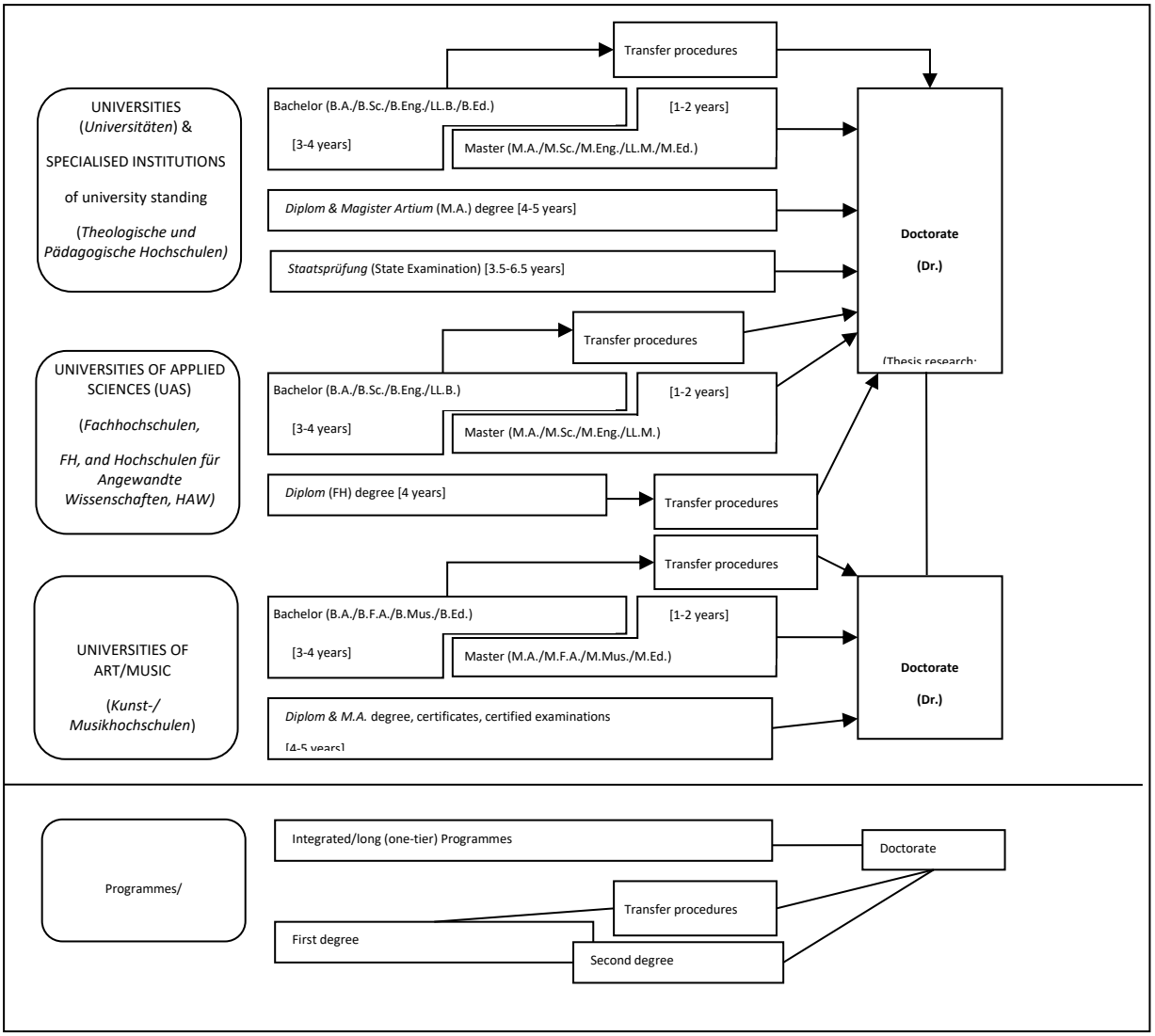

Table 3: Institutions, Programs and Degrees in German Higher Education

In total, there are approximately 9,400 undergraduate programmes and a further 11,100 postgraduate degree programmes on offer at higher education institutions throughout Germany.

Universities as well as specialised institutions of university standing, some of the FH/HAW/UAS and some Universities of Art/Music are doctorate-granting institutions. Formal prerequisite for admission to doctoral work is a qualified Master's degree (UAS and U), a Magister degree, a Diplom, a Staatsprüfung, or a foreign equivalent. Comparable degrees from universities of art and music can in exceptional cases (study programs such as music theory, musicology, pedagogy of arts and music, media studies) also formally qualify for doctoral work. Particularly qualified holders of a Bachelor's degree or a Diplom (FH) degree may also be admitted to doctoral studies without acquisition of a further degree by means of a procedure to determine their aptitude. The universities respectively the doctorate-granting institutions regulate entry to a doctorate as well as the structure of the procedure to determine aptitude. Admission further requires the acceptance of the Dissertation research project by a professor as a supervisor. The doctoral degree corresponds to level 8 of the German Qualifications Framework/ European Qualifications Framework.

1.3 Legal and institutional framework of higher education

Higher education institutions (HEI) are either state or state-recognized institutions. In their operations, including the organization of studies and the designation and award of degrees, they are both subject to higher education legislation.

Due to the federal system in Germany, responsibility for education, including higher education, lies entirely with the sixteen federal states. The states are responsible for the basic funding and organisation of HEIs. Each state has its own laws governing higher education. Therefore, the actual structure and organisation of the various systems of higher education may differ from state to state. The management structures of HEIs vary, as do the regulations governing the accreditation of new degree programmes.

To ensure the same conditions of study and to guarantee mobility within Germany certain basic principles have been agreed on by the responsible state ministers within the framework of the Standing Conference of the Ministers of Education and Cultural Affairs. State governments must take these into account when formulating their laws and regulations.

HEIs have a certain degree of autonomy as regards organisation and in deciding on any academic issues. In the last two decades institutional autonomy has increasingly broadened to include issues related to human resources and budget control.

To ensure quality and comparability of qualifications, the organisation of studies and general degree requirements must conform to principles and regulations established by the Standing Conference of the Ministers of Education and Cultural Affairs of the Länder in the Federal Republic of Germany (see above). In 1999, a system of accreditation for Bachelor's and Master's programmes has become operational. All new programmes must be accredited under this scheme; after a successful accreditation they receive the seal of the Accreditation Council. Accreditation is obligatory for Bachelor and Master programs. Institutions can choose between programme accreditation, system accreditation (i. e. the accreditation of the internal quality management system in teaching and learning, comparable to a "self-accrediting" institution) or alternative forms of accreditation that have to comply with the the Interstate study accreditation treaty and the Specimen decree of the treaty. Internal quality assurance, therefore, is performed in different ways but on a regular basis. The accreditation period is 8 years for all types of accreditation.

Current challenges in higher education

Challenge 1. Coping with the COVID-19 pandemic in higher education.

Starting in the spring of 2020, the COVID-19 pandemic posed challenges of a new extent to higher education institutions, university administrators, faculties, students, and the entire system of higher education in Germany. Despite the restrictions necessitated by the pandemic, it was necessary to be able to continue to hold or attend university courses, maintain exchanges between teachers and students, conduct examinations online and continue research projects. The pandemic also had a considerable impact on the international exchange of students and scientists due to travel restrictions.

In this situation, the universities, with the support of the states and the federal government, have taken numerous successful measures to maintain teaching and research operations while avoiding disadvantages for students. In addition to flexible lecture schedules and application phases, these include measures to expand digital options and cushion the social impact on students.

Digitalisation

All stakeholders in the German science system, including higher education institutions, were well on the way to advancing digitalisation before the COVID-19 pandemic. Digitalisation has played an important role in the strategic orientation of Germany as a hub for research and innovation in recent years. At no point was and is the aim to convert the higher education institutions into online universities but the intention is to make the specific added value of digitalisation usable for the universities.

By using and expanding existing digital options and creating additional ones, the onset of restrictions in the wake of the outbreak of the COVID-19 pandemic made it possible to switch almost all events in teaching and examinations to digital or online-supported ones starting in the summer semester of 2020. By April 2020, faculty, with the support of higher education institutions and governmental and non-governmental stakeholders, have made great efforts to create the prerequisites for holding digital formats instead of face-to-face courses.

The universities have been and will continue to be supported by the states and the federal government. Numerous special programmes of the states have been used to promote digitalisation in teaching and university administration, to finance licenses for software such as video conferencing systems, to improve and expand the digital equipment in libraries and the stock of e-media, to improve the digital infrastructure at higher education institutions, such as

Wi-Fi and equipping academic staff with devices, and to modernize learning and campus management systems. This has enabled students to continue their studies without interruption.

It was only possible to maintain teaching and learning, research and (international) scientific exchange to a large extent thanks to the enormous effort made by all stakeholders - universities, students, faculty, scientists, the federal and state governments, and many other organizations. The commitment in coping is as diverse as it is considerable. In order to use the opportunities of digitalisation in studies and teaching in the long term, it is now important to build on the experience that students, academic staff and university administrators gained during the pandemic. Digitalisation can contribute to increasing the quality of teaching and improving academic education overall.

Social impact on students

In addition to more difficult contact with fellow students and lecturers and the associated lack of opportunities for academic exchange and discourse, students were particularly confronted with social impacts from the onset of the pandemic. The main economic effects were job and income losses, for example due to the pandemic-related lockdown and contact restrictions, for example in the catering industry, the worsening of the financial situation due to pandemic-related income losses of parents, as well as financial consequences due to the extension of the study period with regard to educational funding.

The proportion of students with mental health impairments was already steadily increasing prior to the COVID-19 pandemic, and with it the need for support and counselling. The prolonged restrictions on face-to-face classes and reduced opportunities for social interaction for students as a result of the pandemic resulting in psychological stress created additional needs for the utilization of the corresponding counselling services at the higher education institutions and the student services organisations. The universities and the student services organisations have responded to this increased need. Also, the federal and state governments have taken numerous measures to improve the social situation of students and to enable them to complete their studies. For example, the states have introduced regulations to extend the standard period of study for each student, and these have been directly implemented in education funding.

Challenge 2. The threats to academic freedom

A particular challenge for international cooperation in higher education is to safeguard academic freedom and institutional autonomy in all countries worldwide. The latest update of the

Academic Freedom Index (AFI, OPUS FAU | Academic Freedom Index – 2022 Update (kobv.de)) shows that academic freedom is under pressure. It has declined in 19 of 177 countries under consideration. Improvements could be seen in only two cases. Germany ranked first in this new study. Even higher education in countries with a relatively high level of academic freedom can experience pressure, according to the authors of the AFI update. Therefore, violations and restrictions of academic freedom and other fundamental values need to be discussed and, if necessary, consequences must follow.

Towards 2030 and beyond: recommendations for the future

Recommendation 1. Use digital innovations in research and teaching

The dictum of harnessing the specific added value of digitalisation for universities without converting them from face-to-face universities into online universities remains valid even against the background of the COVID-19 pandemic. With the extensive return to face-to-face studies in the winter semester 2021/2022, which was made possible due to the advanced vaccination rate and with assured medical care, taking into account the respective hygiene measures and circumstances on site, it is now a matter of meaningfully integrating the digital innovations whose benefits have been demonstrated in the crisis into teaching and research, but also into administration, and thus further developing the interplay of virtual and face-to-face formats and promoting sustainable ways of working. However, due to the worsening of the pandemic face-to-face studies were unfortunately limited over the course of the winter semester 2021/2022 resulting again in a shift towards more digital options. Hence, the universities aim at an extensive return to face-to-face studies in the summer semester 2022.

The flexibilization associated with digitalisation and the use of digital elements and hybrid teaching formats can help to make higher education more inclusive by promoting the opening of HEIs to target groups whose individual life situations make it difficult to follow exclusively face-to-face studies. These include non-traditional students such as those who combine study and work, students with family responsibilities, or those with disabilities.

The international exchange of students, university lecturers and researchers can and will also benefit from the digital possibilities tested during the crisis. For example, online-supported preparatory courses for international students can make it easier to prepare for a stay abroad, or digital administration can simplify the recognition and crediting of academic achievements. Hybrid and blended mobility options may also make international experiences more inclusive, resilient, and sustainable. Digital tools also hold great potential to support and enhance international partnerships among HEIs in developed and developing countries alike.

In order to anchor digitalisation in the universities in the long term, it is important to enable university staff to implement local solutions on the one hand and to develop joint solutions in network structures on the other. Small investments can have a big impact through cooperation, e.g. by jointly setting up and using infrastructures or by organizing the further training of academic staff across universities. In addition, subject-specific digital teaching concepts and formats can be jointly developed and used.

Against the background of the German commitment to Open Educational Resources (OER) within the UNESCO, it is important to ensure the quality of the teaching and learning materials and to increase the willingness to make OER available. The development towards OER is embedded in a general trend towards open access, e.g. in scientific publications, which should also be supported and promoted.

Recommendation 2. Anchor sustainability in higher education and establish HEIs as drivers for a sustainable future

As research and educational institutions, HEIs worldwide are central to sustainable development. Through research and teaching, universities develop and convey knowledge, skills, competencies and values and train multipliers and future leaders. Higher education institutions are one of the most important levers for promoting social change towards sustainability, for example through the training of pedagogical specialists and teachers but also as local incubators for innovation and places of interdisciplinary and international exchange. Through their research activities, universities generate the knowledge and innovations needed to shape sustainable development. Through their ongoing dialogue with society HEIs can pave the way towards social transformation based on science. International collaboration of HEIs based on values and principles will support the transfer of knowledge not only locally but globally.

The German federal states take part in the realisation of the measures of the National Platform on Education for Sustainable Development, which have been set out in implementation of the UN SDGs.

In the German federal government and the states, there are a large number of strategies and measures whose further development and updating are intended to raise awareness on the relevance of ESD and sustainability and to promote their anchoring at universities. These include sustainability strategies of the Länder, target and performance agreements with the universities and financing and incentive systems.

These measures are being implemented on an ongoing basis. Tried and tested measures will be further developed - also considering international developments and in cooperation with the HEIs in particular - and the necessary consideration of sustainability aspects in the further development of the German higher education and science system will be ensured.

Global problems, such as man-made climate change or worldwide pandemics, require the global development and implementation of solutions. With their strength in innovation, HEIs and scientific institutions play a special role here. In order to incorporate this potential into joint work on solutions to global problems, academic cooperation with universities and research institutions in emerging and developing countries should be further expanded and intensified.

Recommendation 3. Support for vulnerable student groups

Vulnerable student groups need targeted support in order to be able to carry out their studies and also complete them successfully. The psychosocial counseling needs for students also in the aftermath of the COVID19 pandemic should be answered in a coordinated manner by actors in the health care system and the higher education system.

Recommendation 4. Safeguarding academic freedom

With a view to the current political crises around the world, the global higher education community needs to underline the „importance of education and educational cooperation in the development and strengthening of stable, peaceful and democratic societies“, as stated by the Ministers of Education in the Bologna Declaration in 1999. As was decided by the Ministers of the European Higher Education Area (EHEA) in 2020, we need to continue “promoting and protecting our shared fundamental values through intensified political dialogue and cooperation as the necessary basis for quality learning, teaching and research as well as for democratic societies” (Rome Declaration, 2020).

Germany will continue to advocate the role of international cooperation in higher education for understanding among nations, peaceful togetherness, equality, critical thinking and tolerance based on academic freedom in a number of international fora. For example, Germany intends to use its G7 Presidency in 2022 to further strengthen cooperation among the G7 countries in protecting the freedom, security and integrity of science and research.

Within the Bologna process, the Working Group on Fundamental Values will develop a comprehensive framework to further the monitoring and implementation of the fundamental values of the EHEA in the higher education systems of its members: academic freedom and integrity, institutional autonomy, participation of students and staff in higher education governance, and public responsibility for and of higher education. The system should foster self-

reflection, constructive dialogue and peer-learning, while also making it possible to assess the degree to which these fundamental values are honoured and implemented in the EHEA. Germany is one of the four co-chairs of this group.

On the European level, Germany has initiated the Bonn Declaration on Freedom of Scientific Research in 2020, which was signed by all EU member states, the European Commission and endorsed by a number of international partners. Further international partner countries are invited to endorse the Bonn Declaration as a sign of their commitment to protection of freedom of scientific research based on a common understanding. The European Union is developing a monitoring report of the freedom of scientific research in the Member States. The monitoring creates the necessary transparency for potential future measures to protect freedom of scientific research.

Recommendation 5. Strengthen higher education around the world

HEIs contribute to innovative solutions for local and global challenges. As qualified specialists and potential bearers of responsibility, students, lecturers and researchers are important actors for social change processes. The 2030 Agenda for Sustainable Development therefore explicitly calls for the expansion of higher education and research in SDG 4. In order to reach all goals included in the 2030 Agenda, it is crucial to address the policy, institutional and individual levels worldwide to improve equal opportunities and the quality and relevance of higher education.

In emerging economies and developing countries, there is a high demand for labour market-oriented higher education and applied research. Due to their great transfer potential and close cooperation with stakeholders in business and society, German HEIs can serve as models in this regard.