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COMPARATIVE ANALYSIS OF UKRAINIAN AND GERMAN HIGHER EDUCATION SYSTEMS: EXPLORING CONTRASTS AND POTENTIAL COLLABORATIVE ENDEAVORS IN PROFESSIONAL PEDAGOGY

ABSTRACT

This research article presents a comprehensive comparative analysis of the Ukrainian and German higher education systems, examining their distinctive characteristics and potential for collaboration in the field of professional pedagogy. The study delves into the structural variances, global rankings, admission requirements, tuition fees, research and innovation landscapes, internationalization efforts, and partnership prospects. By critically examining these aspects, this research contributes to the scholarly discourse on comparative education and professional pedagogy, shedding light on the significance of cross-national collaboration in shaping the future of higher education.

In this article, we conducted a comprehensive review of academic literature, reports, studies, and relevant documents on the Ukrainian and German higher education systems, examined official documents, policies, and regulations from relevant governmental and educational bodies in both countries, utilized statistical data available from official sources, educational institutions, and international organizations to quantify and compare various aspects of the education systems, such as enrolment numbers, program offerings, research output, and internationalization efforts.

In a larger scholarly context, this research makes a significant contribution to the discourse on comparative education and professional pedagogy. By adroitly navigating and dissecting the multifaceted domains of both systems, the research lays bare the underlying dynamics that shape their educational paradigms. The illumination of cross-national collaboration as an instrumental force in shaping the trajectory of higher education underscores the article's scholarly import. To sum up, this research advances the understanding of both systems, envisages novel collaborative trajectories, and underscores the scholarly imperative of cross-nation cooperation in shaping the future contours of higher education.

Keywords: *comparative analysis, Ukrainian higher education system, German higher education system, collaboration, internationalization, research, professional pedagogy.*

ПОРІВНЯЛЬНИЙ АНАЛІЗ УКРАЇНСЬКОЇ ТА НІМЕЦЬКОЇ СИСТЕМ ВИЩОЇ ОСВІТИ: ДОСЛІДЖЕННЯ КОНТРАСТІВ ТА ПОТЕНЦІЙНОЇ СПІВПРАЦІ У ПРОФЕСІЙНІЙ ПЕДАГОГІЦІ

АНОТАЦІЯ

У статті представлено комплексний порівняльний аналіз української та німецької систем вищої освіти, розглянуто їх відмінні риси та потенціал співпраці у сфері професійної педагогіки. Дослідження розкриває структурні відмінності систем



вищої освіти, їхні міжнародні рейтинги, вимоги до вступу, плати за навчання, дослідження та інновації, політику інтернаціоналізації та перспективи партнерства. Критично розглядаючи ці аспекти, наше дослідження сприяє науковому дискурсу з порівняльної освіти та професійної педагогіки, проливаючи світло на значення міжнаціонального співробітництва у формуванні майбутнього вищої освіти.

У цій статті ми провели комплексний огляд наукової літератури, звітів, досліджень та відповідних документів про українську та німецьку системи вищої освіти, вивчили офіційні документи, політику та положення відповідних урядових та освітніх органів обох країн, використали статистичні дані, доступні з офіційних джерел, навчальних закладів та міжнародних організацій, щоб кількісно оцінити та порівняти різні аспекти систем освіти, такі як кількість студентів, програми навчання, результати досліджень та політику інтернаціоналізації.

У більш широкому науковому контексті це дослідження робить значний внесок у дискурс про порівняльну освіту та професійну педагогіку. У результаті аналізу багатогранних аспектів функціонування обох систем, дослідження виявляє основну динаміку, яка формує їхні освітні парадигми. Висвітлення міжнаціональної співпраці як інструментарію у формуванні траєкторії вищої освіти підкреслює наукове значення статті. Підсумовуючи, це дослідження покращує розуміння обох систем освіти, передбачає нові траєкторії міжнародної співпраці та підкреслює її науковий імператив у формуванні майбутнього вищої освіти.

Ключові слова: порівняльний аналіз, українська система вищої освіти, німецька система вищої освіти, співробітництво, інтернаціоналізація, дослідження, професійна педагогіка.

INTRODUCTION

Education in the modern world has grown into a global sphere of human activity, and the educational system consists of a large set of educational components: from participants in the educational process to educational institutions and other subjects of educational activity. The development of the state and society directly depends on the effectiveness and focus of education. In turn, higher education plays a key role in social and economic progress of the country.

On 19 May 2005, at a conference in Bergen, Norway, Ukraine officially joined the Bologna Process (The Common European Higher Education Area, 2005), which requires structural reforms of Ukrainian higher education according to an agreed system of criteria, standards and characteristics.

Currently, 48 European countries are included in the Bologna Process, and each country's higher education system has its own specific features.

To study foreign experience of higher education systems, we have chosen Germany, a country with a high level of education and a developed economic and political system.

The relevance of the chosen topic is due to the need to study the process of interaction and mutual influence of the educational systems of Ukraine and Germany.

THE AIM OF THE STUDY

The goal of the article is to compare the higher education systems of Ukraine and Germany, in particular to characterize their differences and the potential for cooperation.

THEORETICAL FRAMEWORK AND RESEARCH METHODS

At the present stage, the problem under study has not yet found a special coverage in Ukrainian pedagogical science. However, German and Ukrainian higher educational



systems are reflected in the studies of such domestic and foreign scholars as N. Abashkina (1998), R. Arnold (1990), H. Benner (1987), I. Boichevska (2009), P. Denbostel (1988), H. Fuhr (1996), H. Grüner (1983), I. Hlaskova (2019), I. Khyzhnyak (2019), T. Kozak (2011), A. Lipsmeyer (1983), J. Munh (1994), O. Ogienko (2012), K.W. Stratmann (1982) and others.

Aspects of Ukrainian-German cooperation, in particular political, economic, cultural, as well as the justification of the need for cooperation for the further development of both states are covered in the works of E. Heiken (1996), H. Khoruzhyi (2014), A. Kudriachenko (2020), V. Soloshenko (2019) and others.

Therefore, higher education is evolving rapidly, driven by globalization and the need for cross-cultural collaboration. In this context, understanding the divergent features and opportunities for collaboration between different systems is crucial. This article focuses on the Ukrainian and German higher education systems, providing an extensive examination of their unique characteristics and exploring potential avenues for fruitful cooperation in the realm of professional pedagogy.

For our research, we used a range of general scientific methods, in particular pedagogical observation, study of documents and Internet resources of educational institutions, analysis of the best practices and innovative experience, processing of sociological and statistical materials, as well as systematization and generalization of the collected data.

RESULTS

Ukrainian higher education system follows a traditional model, consisting of bachelor's, master's, and doctoral degrees. In contrast, German system embraces a dual education approach that combines theoretical knowledge with practical training through apprenticeships.

Ukrainian higher education system, despite early efforts, has experienced periods of suppression and Russification under Soviet rule, followed by efforts to align with European standards after gaining independence in 1991.

German higher education system has a longer history, with roots tracing back to medieval universities. It has gone through phases of humanistic learning, Enlightenment influence, and Humboldtian reforms, leading to a strong emphasis on research and innovation.

Both countries have integrated Bologna Process principles into its higher education legal framework. The process led to reforms such as introducing the Bachelor's and Master's degree structure, credit transfer, and quality assurance mechanisms.

As a result, the structure of higher educational system is almost identical with the differences in the practical approach.

Types of higher education institutions in Ukraine. The former accreditation levels have been abolished in favor of a classification based on types of higher education institutions: the university with the entire range of subjects and degrees with doctoral and habilitation rights; the academy or institute with a specialisation (e.g. art, economics) with the right to award doctorates and post-doctoral degrees; the college with a subject area and training up to the bachelor's degree or a two-year training to become a "junior bachelor".

Generally, Ukrainian higher education system follows a 4-year Bachelor's degree, a 2-year Master's degree, and a 3-4-year Doctorate (Ph.D.) structure. Some specialized programs might have different durations.

Germany typically follows a 3-year Bachelor's degree, a 2-year Master's degree, and a 3-4-year Doctorate (Ph.D.) structure. The Bachelor's degree often follows a more focused and structured curriculum, while the Master's degree offers more specialization.



There are several types of higher education establishments in Germany (Table 1).

Table 1

Terms for German higher education institutions

German term	English translation	Meaning	Additional information
Hochschule	Higher education institution	General term for all higher education institutions, i.e. all three university types	Colloquially, Hochschule is often used to talk about University of applied sciences only
Universität (Uni)	(Research driven) university	Term for one of the three university types: more theory-driven university	Comprehensive research-oriented institutions offering a wide array of academic disciplines and research-focused programs at all degree levels
Technische Universität (TU)	Technical university	Sub-type of a research-driven university: Focus on the STEM subject group	Specialized institutions focusing on engineering, technology, and natural sciences, offering in-depth technical education
Pädagogische Hochschulen (PH)	University of education	Sub-type of a research-driven university: focus on educational and pedagogical subjects	Focusing on training future educators and teachers, offering programs in education and pedagogy
Hochschule für angewandte Wissenschaften (HAW)/Fachhochschule (FH)	University of applied sciences (UAS)	Term for one of the three university types: more practice oriented university	Emphasizing practical education and industry collaboration, offering programs in fields like business, engineering, and social sciences.
Duale Hochschulen	Dual studies institution	Offer a combination of vocational training and academic education	Combining academic study with practical vocational training, particularly in business-related disciplines

The main differences can be seen through the legal frameworks that govern Ukrainian and German higher education systems. They play a crucial role in shaping the structure, organization, funding, quality assurance, and other aspects of these systems. Here's an overview of the legal frameworks for both countries:

Ukrainian higher education system is shaped by the following legal doctrines:

1. Law of Ukraine “On Higher Education” (2002, amended): This law is the primary legal framework for higher education in Ukraine. It outlines the principles, organization, and governance of higher education institutions (HEIs), degree programs, quality assurance, and academic freedoms. The law also defines the roles and responsibilities of the government, Ministry of Education and Science, and HEIs.

2. National Qualifications Framework of Ukraine (2011): This framework provides a common reference point for qualifications and their levels in the Ukrainian education



system. It aligns with the European Qualifications Framework (EQF) and supports the implementation of the Bologna Process.

3. Accreditation Procedures: Ukrainian HEIs need to undergo accreditation to ensure the quality of education. Accreditation involves external evaluation of institutions and programs. Accreditation decisions influence funding and recognition.

4. Constitution of Ukraine: Ukrainian Constitution lays the foundation for the country's legal and political framework. While it doesn't directly address higher education, it provides the broader context within which laws related to education are formulated.

German Higher Education System is formed by the following legal documents:

1. Higher Education Acts of Federal States: Germany's higher education system is decentralized, with each federal state (Bundesland) responsible for its higher education regulations. Higher Education Acts outline the structure, governance, funding, and quality assurance mechanisms for universities within each state.

2. Hochschulrahmengesetz (HRG – Framework Act for Higher Education) (1976): This federal law sets basic standards for higher education across Germany, providing guidelines for cooperation between federal and state governments. While it does not directly regulate universities, it plays a role in shaping higher education policies.

3. Quality Assurance Agencies: Independent agencies, such as the German Accreditation Council (Akkreditierungsrat) and the German Council of Science and Humanities (Wissenschaftsrat), play a role in ensuring quality and providing recommendations.

4. Higher Education Pact (Hochschulpakt): This funding program between federal and state governments aims to improve study conditions and increase capacity in higher education institutions.

5. Basic Law for the Federal Republic of Germany (Grundgesetz): While not specific to higher education, the Basic Law guarantees academic freedom and autonomy for universities.

These frameworks influence everything from admissions and curricula to governance and quality assurance, making them essential components of the higher education systems in both Ukraine and Germany.

The global landscape of higher education is marked by a diversity of institutions striving for excellence and innovation. In this context, both Ukrainian and German higher educational establishments have garnered recognition for their contributions to academia and research. While Ukrainian universities are making strides towards international prominence, German institutions have long held a reputation for academic excellence.

With Karasin University in Kharkiv, a Ukrainian university is in the top 500 of the QS World University Rankings for the first time (491st place in 2021).

Five other higher education institutions are placed in the top 1000:

651–700 – Taras Shevchenko University of Kyiv: This is one of the oldest and most prestigious universities in Ukraine, often ranked among the top universities in the country.

651–700 – National Technical University “Kharkiv Polytechnic Institute”: Known for its strong technical and engineering programs, this university has gained recognition in certain subject-specific rankings.

701–750 – Ihor Sikorsky Technical University of Kyiv (KPI): Another prominent technical university in Ukraine that has been recognized in subject-specific rankings.

801–1000 – Sumy State University: It is known for its comprehensive academic offerings, research initiatives, and contributions to the education system in Ukraine.



801–1000 – National University “Lvivska Polytechnika”: This university has been known for its contributions to engineering and technology fields and has earned a place in other certain rankings.

Underrepresented due to its small number of students and its social science orientation is the Kiev Mohyla Academy, also known as the National University of Kyiv-Mohyla Academy (NaUKMA), which is considered a leader especially in the Bachelor’s field and is therefore also in second position in the leading Ukrainian ranking ZNO-Ranking. Kyiv Mohyla Academy holds a unique place in Ukraine’s higher education system, celebrated for its historical significance, dedication to quality education, and commitment to nurturing critical thinkers who contribute to the advancement of knowledge and societal progress.

Germany is known for its strong higher education system and is well-represented in various global rankings. In the latest QS World University Rankings, 11 German universities ranked within the top 200.

49 – Technical University of Munich (TUM): TUM is a highly regarded technical university with a strong emphasis on science, engineering, and innovation.

59 – Ludwig Maximilian University of Munich (LMU Munich): Often ranked as one of the best universities in Germany and the world. LMU Munich is known for its research and academic excellence.

65 – Ruprecht-Karls-Universität Heidelberg: This university is renowned for its research contributions and is consistently among the top-ranked universities in Germany.

118 – Freie Universität Berlin: Known for its research-oriented approach and strong programs in various disciplines.

131 – Humboldt-Universität zu Berlin: One of the oldest universities in Berlin, Humboldt-Universität is known for its comprehensive research and academic programs.

Other Top-Universities, according to QS, are: 141 – KIT, Karlsruhe Institute of Technology, 147 – RWTH Aachen University, 158 – Technische Universität Berlin (TU Berlin), 169 – Eberhard Karls Universität Tübingen, 189 – Albert Ludwigs-Universität Freiburg, 200 – Technische Universität Dresden (QS World University Rankings, 2023).

The global rankings of Ukrainian and German higher educational establishments reveal distinctive trajectories in their pursuit of academic excellence. While Ukrainian universities are on their way towards greater international recognition, German institutions have established themselves as stalwarts of higher education globally. Ukraine’s universities, with their historical legacies and evolving modernization efforts, are striving to enhance research output and accessibility. On the other hand, Germany’s well-established institutions boast a strong emphasis on research, innovation, and internationalization. Both countries, each with its unique strengths and challenges, contribute to the global academic system by fostering diverse educational environments that shape the future of knowledge and learning.

Admission requirements. Admission processes serve as pivotal gateways to higher education institutions. Ukrainian and German university admission requirements can significantly impact student diversity and its inclusivity by influencing who has access to higher education and the extent to which different groups are represented within universities.

Admission to Ukrainian universities often relies on a centralized testing system, where graduates take standardized exams – the External Independent Evaluation (ZNO) in mandatory subjects as well as subjects relevant to their chosen field of study. High scores



on these exams are often a key criterion for admission. This can lead to a more merit-based system, where students are selected based on their test scores. However, this approach might disadvantage students from underprivileged backgrounds who may not have access to test preparation resources.

Admission to German universities varies based on the chosen institution and program. Generally, German universities use the Abitur (secondary school leaving certificate) as a primary admission requirement. Some programs also have Numerus Clausus (NC), where only a certain number of students with the highest grades are admitted. Sometimes students need to meet other specific academic requirements and may need to submit additional documents like letters of motivation or references.

Ukraine and Germany can collaborate to promote diversity and inclusivity in their higher education systems through various strategies and initiatives. By sharing experiences, best practices, and resources, both countries can work together to create more equitable opportunities for students, discuss potential reforms that could enhance fairness and widen participation.

Tuition fees and financial models. Ukrainian higher education system boasts an affordable framework with nominal fees for domestic students, albeit international students often face higher tuition fees. In stark contrast, Germany offers free tuition at public universities for both domestic and international students, with administrative fees in some specific cases.

Ukrainian citizens are entitled to free higher education that may be received at state-owned and municipal higher education institutions on a competitive basis according to the high education standards if a citizen pursues a certain higher education degree for the first time using the funds from the state or local budget.

Ukrainian citizens who have not completed their study pursuing a certain education degree by means of state or local budget funds shall have the right to pursue the same higher education degree free of charge once again, provided that they return to the state or local budget the money spent on services of training specialists, according to a procedure approved by Resolution No. 658 of the Cabinet of Ministers of Ukraine dated 26 August 2015 (Higher education levels and scientific degrees, 2023). However, there might be nominal fees for administrative purposes, and some specialized programs might have tuition fees.

International students study on a paid basis in Ukraine. Tuition fees vary from 1 000 to 3 000 USD per year for most of majors and 2 000 to 6 000 USD for medical sciences. Tuition fees at preparatory courses are from 1 000 to 2 000 USD.

International students awarded Ukrainian state scholarships (according to international agreements, state programs of Ukraine, and other international liabilities of Ukraine) are enrolled in a higher educational institution according to the assignments of the Ministry of Education and Science of Ukraine under respective programs and agreements.

The majority of higher education institutions in Germany are financed by the state. There are generally no fees for courses or most courses at state higher education institutions. They may have to be paid for certain continuing education Master's programs, but they are not particularly high compared to other countries. Private higher education institutions may demand more substantial fees for their degree programs. However, starting from 2014, some federal states introduced tuition fees for non-EU international students.

The living costs are expenses that arise in the course of leading a normal life, i.e. for accommodation, food, clothing and recreational activities. They are about average in



Germany compared to other European countries, but rather high compared to Ukraine. That makes Ukraine more attractive in the forms of affordability for international students, for example from India or Arabic countries, at the same time Germany is more attractive for the European students.

Research and innovation. German higher education institutions have garnered global recognition for their research-oriented approach and emphasis on innovation, whereas Ukrainian universities have made notable advancements in fields such as information technology and engineering.

Traditionally, in Ukraine, research takes place at the National Academy of Sciences; 50 % of state research funds are allocated there. They report directly to the Cabinet of Ministers. In addition to the National Academy of Sciences, there are some other specialised academies.

In January 2016, a law was passed to reorganise the research system. An important innovation was the formation of a National Council for Science and Technology, which accompanies strategy development. Foreign scientists were also involved in identifying the members of the council. It forms a certain counterweight to the Academy of Sciences.

Following the example and with the support of the German Research Foundation, the National Research Fund was launched in 2018. Its tasks range from research funding, including the promotion of international research cooperation, to the development of a research infrastructure. Special attention is given to supporting young researchers. A total of 40 % of the research funds are to be awarded on a competitive basis. For the time being, however, the funding of the National Research Fund is far from sufficient.

The focus of Ukrainian research is on physics and astronomy, material sciences, chemistry, engineering, mathematics and geosciences.

There are clear tendencies to move more towards project-based funding, which, at least in theory, could also give universities greater access to research funds. Individual researchers also rely heavily on project funding to generate their salaries. Ukraine has also been participating in Horizon 2020 (EU Framework Programme for Research & Innovation) since 2016.

The BMBF has announced funding for so-called “cores of excellence”. Within the framework of this initiative, it is planned to fund up to four research collaborations based in Ukraine, each of which will be led by a foreign scientist. The aim is, among other things, to involve the academic diaspora in Ukrainian research, as it is assumed that the leading positions are particularly interesting to them. A pre-selection of twelve collaborations was made at the end of 2020; after a one-year conception phase, approximately four projects were selected from these for further four-year funding. In Diagram 1, the development of the share of research expenditure in GDP is shown in percentage.

According to research from 2020, the development of the share of research expenditure in GDP in Germany lies by 3,14 %, whereas in Ukraine it lies by 0,41 %. It shows that research at Ukrainian universities is to be strengthened.

Another interesting comparison is the number of patents in science and technology: in Ukraine (2019) it lies by 2,097 % whereas in Germany (2019) it lies by 6,632 % (DAAD-Bildungssystemanalyse – Daten und Diagramme, 2022).

According to research from 2022, the number of scientific publications in Germany (2012) lies by 208,210 % whereas in Ukraine it lies by 19,357 % (DAAD-Bildungssystemanalyse – Daten und Diagramme, 2022), diagram 2.

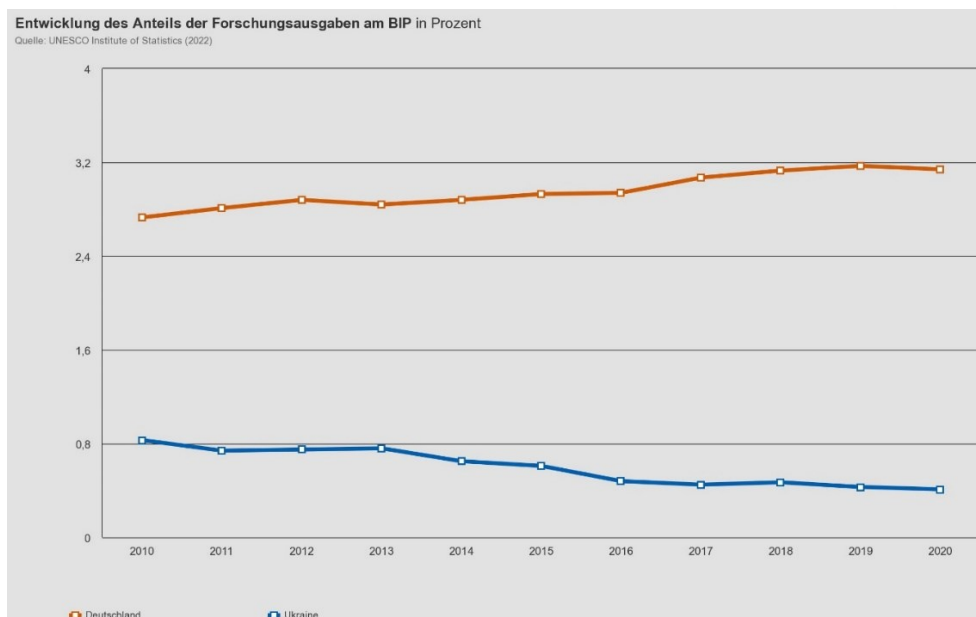


Diagram 1. Development of the share of research expenditure in GDP in percentage

Source: German Academic Exchange Service, 2023.

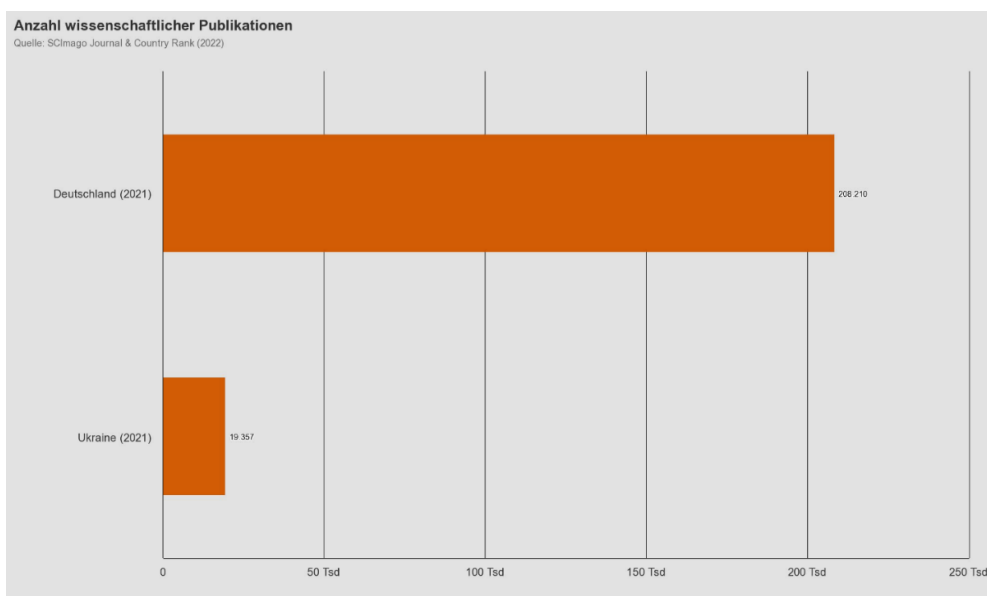


Diagram 2. Number of scientific publications

Source: German Academic Exchange Service, 2023.



As we can see from the diagrams, in Ukraine, research and innovation have been growing in importance, but there is potential for further development in terms of research funding and international collaboration. The cooperation with the industry will be an advantage.

Germany is internationally renowned for its strong emphasis on research and innovation. Universities collaborate with industries, and research is a significant trigger of the country's economy.

Internationalization and student exchange. Both Ukrainian and German higher education systems acknowledge the significance of internationalization and intercultural experience in nurturing well-rounded graduates. German universities have established robust international exchange programs, while Ukrainian institutions are progressively offering courses in English.

Ukrainian higher education policy focuses on promoting internationalisation and mobility. There is now a strong orientation towards Europe, also within the Bologna process: alongside Poland and the Baltic countries, Germany is a sought-after partner.

The interest in studying abroad is high. According to the Ukrainian Ministry of Education, the number of Ukrainian students studying abroad tripled between 2007 and 2017. The reasons are, on the one hand, integration into the European labour market, but on the other hand, dissatisfaction with the quality of domestic universities. In its strategy for higher education until 2030, the Ministry of Education calls “educational emigration” “the greatest threat to the formation of intellectual, cultural and professional social capital and to the innovative development of the country's economy” (Kremen, 2016).

Diagram 3 shows the number of students studying abroad as of 2019:

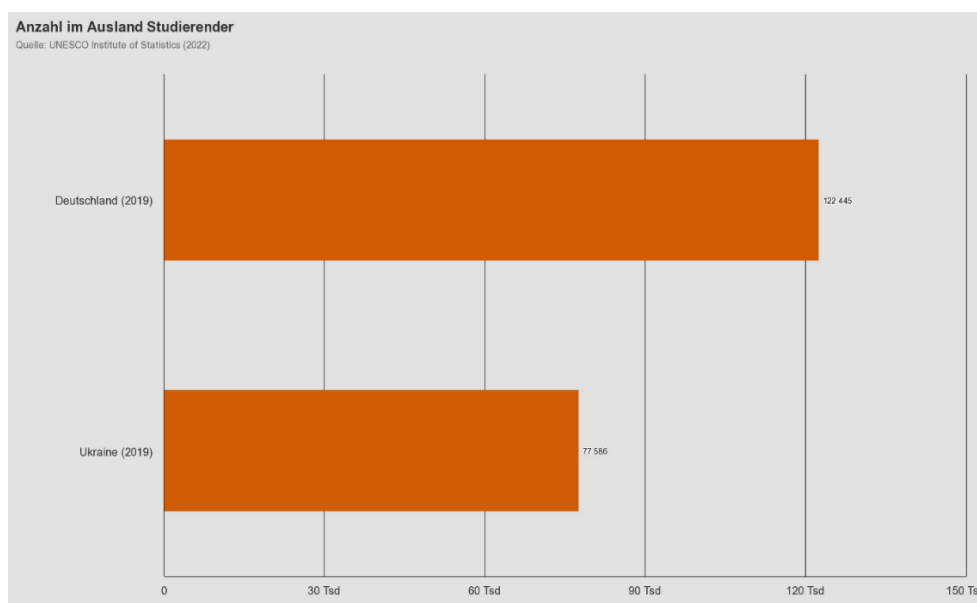


Diagram 3. Number of students studying abroad (2019)

Source: German Academic Exchange Service, 2023.



According to research from 2022, the number of German students studying abroad (2019) is 122.445, while the number of Ukrainian students studying abroad (2019) is 77.586 (DAAD-Bildungssystemanalyse – Daten und Diagramme, 2022).

The percentage of students studying abroad in Ukraine (2019) is around 4,5 % whereas in Germany (2019) this number is around 3,9 %. The recent years show the increase of Ukrainian students studying abroad.

In addition to the deficiencies of the Ukrainian higher education system, which are certainly perceived in the strategy, educational migration is also attributed to an “aggressive recruitment policy” of foreign universities. German higher education institutions should be aware of this rather critical attitude towards the perceived brain drain, especially among university administrations, and strive for cooperation on an equal footing.

For Ukrainian students Poland is the number one destination country. Ukrainians make up half of all international students there. In recent years, Germany took second place among the destination countries.

Work with incoming and outgoing students is strictly separated administratively at Ukrainian universities, and there is no internationalization strategy. This is also due to the fact that there is a strong reliance on project-driven funding, i.e. working where funding opportunities are seen. Since 2019, the German Academic Exchange Service (Deutscher Akademischer Austauschdienst – DAAD) has been supporting the internationalization and digitalization of Ukrainian higher education institutions with a program line funded by the Federal Ministry of Education and Research (BMBF) (Support for the internationalization of Ukrainian universities, 2023). As part of this initiative, the University of Hannover and Münster University of Applied Sciences and Arts also offer training for the staff of the International Offices.

On the one hand, internationalization focuses very strongly on research. PhDs and university lecturers with “lecturer status” are required to prove that they have spent time abroad. In addition, in the past, academics have had to give up their jobs for one-semester international research stays and reapply to their home university after returning. Changes in the Higher Education Act now make it easier to take a leave of absence for research sabbaticals.

On the other hand, Ukrainian higher educational institutions are also interested in attracting paying foreign students. There are about 80,000 foreign students in Ukraine, by far the majority of them studying medicine. Among the ten universities with the most foreign students are eight medical universities. The main country of origin is India, which accounts for 24 %, almost a quarter of the international students. Morocco is second with 12 %, followed by Turkmenistan and Azerbaijan with seven and six per cent respectively. Overall, however, applications from post-Soviet countries have decreased by almost a third between 2017 and 2020, as Russian-language degree programs have been discontinued.

In comparison, in Germany, the share of foreign students in 2019 was 11,1 % while in Ukraine it was 3,45 %.

Student exchange programs between Ukraine and Germany provide invaluable opportunities for cross-cultural learning, personal growth, and academic enrichment. These programs foster collaboration between universities in both countries, allowing students to experience different educational systems, languages, and cultures. Here is an overview of the most successful exchange programs and projects between the two countries:

International mobility between Germany and Ukraine is funded by the German DAAD, the Alexander von Humboldt Foundation (Alexander-von-Humboldt Stiftung – AvH) and the German Research Foundation (Deutsche Forschungsgemeinschaft – DFG).



The ERASMUS Plus program promotes mobility in both directions, even though the numbers are still relatively small: between 2018 – 2021, 22 students, interns and 75 university lecturers and members of university staff from Germany received funding for a stay in Ukraine. In return, ERASMUS funding for stays in Germany benefited 214 and 122 grantees from Ukraine, respectively.

In 2021, the DAAD awarded funding under its own programs for a stay in Ukraine to 84 (252) students and graduates (incl. doctoral candidates, status groups I – III) and 66 (124) academics and university teachers (incl. post-docs, status group IV) from Germany. In the same categories, 905 (912) and 675 (314) grantees from Ukraine received DAAD support to fund an activity in their own country or a stay abroad, including stays in Germany.

In recent years, Germany provided educational opportunities for refugee students from Ukraine, as well as started the numerous foundations for supporting them.

In the future, student exchange programs between Ukraine and Germany will contribute to internationalization efforts at both universities, promoting mutual understanding and collaboration. They play a crucial role in nurturing globally competent graduates who are prepared to tackle the challenges of an interconnected world.

Collaboration and partnerships. Collaboration between Ukrainian and German higher education institutions hold substantial potential for productive partnerships, joint research ventures, faculty exchanges, and the establishment of dual degree programs. So far, in modern history of Ukraine Germany has participated and helped with processes of redefining of higher education in Ukraine.

One of the first projects made by the BMBF is the TRANSFORM-program to support the reform states of Eastern Europe in establishing a social market economy and democratic structures. The focal points of the measures are economic policy advice on improving the framework conditions for a market economy and the promotion or development of an effective economic administration (The history of the Federal Ministry of Economics and Climate Protection, 2023).

In this context, projects in the area of vocational training are also promoted through multilateral vocational training cooperation. The Federal Institute for Vocational Education and Training (das Bundesinstitut für Berufsbildung – BIBB) was largely commissioned to carry out the concrete advisory work.

The following are the main areas of focus for the promotion of vocational education and training: observation and analysis of change processes in vocational education and training policy and practice; development of occupational field structures, occupational profiles, vocational curricula, qualification concepts and teaching and learning materials as well as their testing and, if necessary, revision for various target groups; further training of staff in technical, didactic-methodical, organisational and administrative aspects, the preparation of multipliers and decision-makers in VET practice; design, equipment and use of training centres/model centres as complex implementation examples of renewed vocational education and training; supporting the dissemination and transfer of project results beyond the respective pilot project and their institutional anchoring.

The TRANSFORM-program took place until 2000. The cooperation was an exciting learning and experience for all involved. The most important experience is that, contrary to some initial expectations, the transformation processes of vocational education and training that need to be set in motion are long-term (What next after TRANSFORM?, 2001).



On 19 May 2005, at a conference in the Norwegian city of Bergen, Ukraine officially joined the Bologna Process (The Common European Higher Education Area, 2005), which requires structural reforms of Ukrainian higher education according to an agreed system of criteria, standards and characteristics. A strong orientation towards Europe is now taking place; alongside Poland and the Baltic countries, Germany is an attractive partner.

This was the beginning of current collaborations. It helped to identify prospective areas for further cooperation, emphasizing the benefits of knowledge exchange, intercultural dialogue, and the creation of extensive global academic networks.

The Higher Education Compass of the German Rectors' Conference (der Hochschulrektorenkonferenz – HRK) currently (as of 08/2022) shows 266 official higher education cooperations between German and Ukrainian partners. 113 German higher education institutions cooperate with 82 Ukrainian higher education institutions and 5 other institutions (Overview of cooperation with Germany: Ukraine, 2020).

The most successful collaborative initiatives are:

1. Bavarian-Ukrainian higher education cooperation is supported by the Bavarian Higher Education Centre for Central, Eastern and South Eastern Europe (BAYHOST – Ukraine) at the University of Regensburg. The BAYHOST Competence Atlas on Ukraine makes it possible to find out about the most important Ukrainian higher education institutions with the help of short profiles.

2. Since 2019, the DAAD has been implementing the funding program “Shaping the Digital Future Together – German-Ukrainian Higher Education Cooperation” with funding from the BMBF. Funding is available for measures that promote internationalization at Ukrainian higher education institutions with the inclusion of digital components, including support for the exchange of people and the creation of networks between German and Ukrainian higher education institutions as well as continuing education programs for staff at Ukrainian higher education institutions.

3. The Max Planck Society, which has a cooperation agreement with the National Academy of Sciences (NAdWU), recorded 12 cooperation projects with partners in Ukraine for 2021. In the Pre-Covid phase, more than 100 young and visiting scientists from Ukraine were regularly employed at MPG institutes (2016: 118; 2017: 121; 2018: 126; 2019: 119). In 2021, the number was 82.

4. The Helmholtz Centre Dresden-Rossendorf, which conducts research in the fields of energy, health and matter, and the Physical Engineering Teaching-and-Research Center at NAdWU are receiving funding from the BMBF and the Ukrainian Ministry of Education and Science (MBS) to establish a German-Ukrainian center for large-scale experiments.

5. The Federal Ministry for Economic Affairs and Energy supported the establishment of a German-Ukrainian Chamber of Industry and Commerce, which was opened in October 2016. The Kreditanstalt für Wiederaufbau (KfW) has been supporting Ukraine since the 1990s in several fields that also have points of contact with research, development and innovation. This concerns the modernization of the energy sector, the conservation of nature reserves and the promotion of small and medium-sized enterprises (SMEs). Between 1996 and 2018, the German-Ukrainian Fund (GUF) granted 150,000 loans to SMEs (KfW Development Bank – Ukraine). The Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH is active in Ukraine on behalf of five German ministries, for the European Union (EU) and the British and Swiss governments. Here, too,



there are points of contact with R&D and innovation, for example in energy efficiency consulting for companies (What next after TRANSFORM, 2001).

As we see, universities of applied sciences are welcomed partners, although cooperation with companies is less of a priority. If dual university education was to develop, there would undoubtedly be interesting potential here. With the increased autonomy of Ukrainian universities, impulses for a more application-oriented curriculum could be implemented, but changes sometimes can still only be implemented with massive bureaucratic effort.

Nevertheless, collaboration between Ukrainian and German higher education institutions strengthens academic ties, fosters cross-cultural competence, and contributes to the advancement of knowledge. It also supports the broader goal of internationalization, preparing students and researchers to engage with global challenges and opportunities (Zimmermann & Schwaika, 2021).

CONCLUSIONS AND PROSPECTS OF FURTHER RESEARCH

This comprehensive comparative analysis of the Ukrainian and German higher education systems accentuates the contrasting characteristics and potential avenues for collaboration. By comprehensively understanding these unique aspects and actively exploring opportunities for cooperation, high educational establishments in both countries can elevate educational quality, promote internationalization efforts, and foster innovation. The findings of this research contribute to the scholarly discourse on comparative education and professional pedagogy, underscoring the indispensable role of cross-national collaboration in shaping the future of higher education.

Prospects for further research are seen in the analysis and clarification of the teacher's role in the development of students' personal, civic, social and learning competence in higher education institutions, on the example of Germany, which is associated with the practical improvement of the content of teacher education in terms of balancing its components.

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