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INTERNATIONALIZATION OF HIGHER EDUCATION IN THE CONTEXT DIGITAL TRANSFORMATION: THE CASE OF THE UKRAINIAN-GERMAN EDUBA PROJECT

The article explores the transformation of international academic cooperation within the framework of the Ukrainian-German partnership, focusing on the EDUBA Project (Erfolgreiches Deutsch-Ukrainisches Bildungsnetzwerk Ausbauen), implemented by Anhalt University of Applied Sciences (Hochschule Anhalt, HSA) in collaboration with leading Ukrainian universities. Building upon previous initiatives such as DigIn.Net 1-2, IDEA-East Hub, DigiJED 1-3, Study Visits, FIT4Ukraine, GLS Computer Systems and Networks/ Internet of Things (IoT) and INTEGRA, the study evaluates the efficiency, sustainability, and scalability of cross-border higher education projects in times of crisis. Drawing on German Academic Exchange Service (DAAD) and Erasmus+ reports (2020–2024), the research applies a mixed-method approach combining factor analysis, institutional surveys, and comparative ranking to identify the key determinants of success in digital internationalization and blended learning. The findings demonstrate that EDUBA achieved DAAD recognition for its systemic contribution to digital transformation, partnership sustainability, and measurable capacity-building. The project highlights the strategic role of Double Degree Programs, hybrid mobility formats, and virtual learning ecosystems strengthen institutional adaptability, inclusion, and innovation, positioning itself as a model for resilient transnational cooperation in higher education.

Key words: *Internationalization, EDUBA project, DAAD cooperation, blended learning, digital transformation, Ukrainian-German partnership.*

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ІНТЕРНАЦІОНАЛІЗАЦІЯ ЗАКЛАДІВ ВИЩОЇ ОСВІТИ В УМОВАХ ЦИФРОВОЇ ТРАНСФОРМАЦІЇ: КЕЙС УКРАЇНСЬКО-НІМЕЦЬКИЙ ПРОЄКТ EDUBA

Статтю присвячено дослідженню трансформації міжнародної академічної спільноти закладів вищої освіти України та Німеччини в умовах цифровізації та геополітичних викликів на прикладі проєкту EDUBA (Erfolgreiches Deutsch-Ukrainisches Bildungsnetzwerk Ausbauen – Розширення успішної німецько-української освітньої мережі), що реалізується Університетом прикладних наук Анхальт (Hochschule Anhalt, HSA) у партнерстві з провідними університетами України. Актуальність цього дослідження зумовлена необхідністю модернізації і реорганізації міжнародних освітніх коопераций в умовах геополітичної нестабільності та пришвидшення технологічних змін. Вона підкріплена новими політиками та партнерствами, що вказують на важливість таких ініціатив, як EDUBA, для забезпечення сталості освітніх процесів. Метою статті є дослідження впливу цифрової трансформації на розвиток міжнародного партнерства у сфері вищої освіти та визначення її ролі в забезпеченні сталості та якості освітнього процесу на прикладі українсько-німецьких проєктів.

Спираючись на попередні ініціативи – DigIn.Net 1-2, IDEA-East Hub, DigiJED 1-3, FIT4Ukraine, GLS IoT, INTEGRA, автори дослідження оцінюють ефективність, сталість і масштабованість транскордонних освітніх мереж у кризових умовах. Робота ґрунтується на звітах DAAD та Erasmus+ (2020–2024) і використовує змішану методологію: факторний аналіз, порівняльне рейтингування та інституційні опитування, що охопили понад 2000 респондентів з більш ніж 150 університетів України та Європи. Отримані результати доводять, що проєкт EDUBA стає системним прикладом цифрової трансформації, розвитку двосторонніх партнерств і нарощування інституційної спроможності закладів вищої освіти. На його основі створюється Центр координації програм подвійних дипломів (ZeKoD), що забезпечує уніфікацію навчальних програм, контроль якості та розширення гібридних форматів мобільності.

Дослідження підтверджує, що успішність міжнародного співробітництва у вищій освіті визначається синергією інституційних стратегій, технологічної готовності та політичної підтримки. Аналіз показав позитивну кореляцію між рівнем цифрової інтеграції та інституційною стійкістю, що засвідчує прямий вплив цифровізації на адаптивність і ефективність освітніх систем. Проєкт EDUBA ілюструє перехід від мобільності до «цифрової стійкості», поєднуючи віртуальне навчання, спільні дослідницькі ініціативи та розвиток людського капіталу.

Новизна роботи полягає в концептуалізації моделі цифрової інтернаціоналізації, яка інтегрує педагогічні, технологічні та управлінські аспекти в єдину екосистему міжнародної співпраці. Результати мають стратегічне значення для реалізації Цілей сталого розвитку ООН (SDG 4), Європейського плану цифрової освіти (2021–2027) та стратегії DAAD 2030. Доведено, що системна цифровізація освіти сприяє підвищенню інклюзивності, якості навчання і безперервності академічної взаємодії навіть під час війни. Проєкт EDUBA пропонує масштабовану модель післякризової академічної стійкості, яка може бути застосована в ширшому європейському контексті.

Ключові слова: інтернаціоналізація закладів вищої освіти, цифрова трансформація, EDUBA, DAAD, німецько-українське партнерство, гібридна мобільність, подвійні дипломи, академічна стійкість.

The transformation of international academic cooperation has become one of the defining trends of higher education in the 21st century. Accelerated by digitalization and reinforced by geopolitical crises, global universities are rethinking not only how they collaborate but also why such cooperation must be restructured to ensure continuity, equity, and sustainability. The Ukrainian-German academic partnership represents a particularly revealing example of this global shift.

Over the past decade, Anhalt University of Applied Sciences (HSA) has become a central player in promoting digital internationalization through numerous international projects within programs administered by the German Academic Exchange Service (DAAD) and funded by the Federal Ministry of Research, Technology and Space (BMFTR). These initiatives demonstrate how technology-driven cooperation can preserve and even expand academic collaboration under war.

In this context, the present study aims to conceptualize the evolution of international academic cooperation through the case of EDUBA – a project that consolidates digital transformation, Double Degree Programs, and institutional resilience into a unified model of sustainable partnership. The research situates project within broader European and global educational agendas, including the DAAD 2030 Strategy, the European Commission's Digital Education Action Plan (2021–2027), and UNESCO's Sustainable Development Goal 4 on Quality Education [5; 10; 11].

Thus, the article seeks not merely to describe this project as an isolated case, but to analyze it as a scalable prototype of international academic resilience – an adaptive system in which digital innovation supports transnational cooperation even in times of disruption.

The global higher education landscape is undergoing an unprecedented transformation, driven by digitalization, crisis adaptation, and the evolution of international cooperation. The COVID-19 pandemic accelerated the digital turn across universities worldwide, while the subsequent geopolitical disruptions – the ongoing war in Ukraine – forced academia to rethink resilience, mobility, and sustainability in international partnerships (DAAD Annual Report 2024) [2]. As the UNESCO Global Education Monitoring Report 2023 highlights, "technology has become both a lifeline and a litmus test for equity and inclusion in education" [11, p. 14]. However, digitalization alone does not guarantee resilience; it requires systemic change, strategic partnerships, and sustained investment in human capacity.

The case of Ukraine is particularly illustrative. The country's higher education system has faced the dual challenge of wartime displacement and the urgent need to preserve research, teaching, and international collaboration. According to the *DAAD Annual Report 2023*, more than 150 Ukrainian universities have maintained cooperation with German universities despite wartime disruptions, primarily through digital means [3]. These partnerships have not only ensured academic continuity but have also become testbeds for digital transformation and international solidarity.

The cooperation in international projects of the Anhalt University of Applied Sciences (HSA) with Ukrainian universities serves as complementary model of how digital transformation can support and even expand cooperation in higher education in times of crisis. The strategic question at the heart of these projects concerns how international academic cooperation can evolve from mobility-based exchange to a resilient, digitally integrated, and future-oriented model. This problem is not unique to Ukraine; it mirrors global challenges described by UNESCO, which warns that "the digital divide between and within countries risks becoming the new face of inequality in higher education" [11, p. 38].

The purpose of this study is to examine how digitally integrated international partnerships, exemplified by the German-Ukrainian projects of the Anhalt University of Applied Sciences, can serve as a sustainable framework for supporting academic cooperation, increasing institutional adaptability, and improving the quality of education in times of crisis. The study aims to identify the mechanisms through which digital transformation contributes to the sustainable development of higher education and to align these processes with global sustainable development goals for education, such as Sustainable Development Goal 4 and the European Commission's Digital Education Action Plan 2021–2027 [5].

The relevance of this research is determined by the urgent need to modernize and reconfigure international higher education cooperation frameworks under conditions of geopolitical instability, technological acceleration and sustainability. Newer policies and partnerships further reinforce the urgency and opportunities of this research. For instance, the German-Ukrainian University Network (DUHN) programme, launched by DAAD with BMBF support, is investing €24 million through 2029 to deepen cooperation across teaching, research, and administrative internationalization through virtual and hybrid formats [6].

The process of internationalization in higher education has been widely discussed in contemporary academic discourse. Foundational definitions by J. Knight [8] describe internationalization as the "process of integrating international, intercultural, and global dimensions into the purpose, functions, and delivery of post-secondary education". Subsequent works by Altbach and Teichler [1], De Wit [14], and Brandenburg [13] have extended this concept, emphasizing sustainability, digital transformation, and equity in global education.

The areas of HSA's projects help to respond effectively and create new initiatives. Currently, HSA cooperates with 11 Ukrainian universities (Table 1). The first partnership was established more than 25 years ago, and some

of these university partnerships have been in place for more than 10 years (Eastern Partner since 2015, Erasmus KA 171 since 2017). Through the successful implementation of various DAAD projects, Anhalt University of Applied Sciences has made a significant contribution to the further development of German-Ukrainian university cooperation. Major projects include: *DigIn.Net 1, 2* (Support program for the internationalization of Ukrainian universities), *DGS Computer Systems and Networks/IoT* (Program for German-language study programs) and *IDEA-East-Hub* (Program for HAW.International). Since the beginning of the war, HSA has been providing comprehensive support to universities in Ukraine through projects such as *DigiJED 1, 2, 3* (Digital Ukraine: Ensuring Academic Success in Times of Crisis) and *Fit4Ukraine* (Future Ukraine Program). These initiatives have not only helped strengthen Ukrainian universities, but have also created numerous new contacts and opportunities for cooperation. Given the profound crisis facing Ukraine's scientific and academic system due to the partial or complete destruction of infrastructure, close cooperation is more important than ever.

Table 1

Timeline of HSA-Ukrainian Cooperation Projects and Partner Universities [7]

Project	Program	Years	Partners
Study Internship Communication and Embedded Systems	Study internships for groups of international students in Germany	2015–2022	– **State University of Intellectual Technologies and Communications (SUITT)** – **National Technical University of Ukraine "Igor Sikorsky Kyiv Polytechnic Institute" (KPI)** – **Odesa Polytechnic National University (OPNU)**
Eastern Partner			**All Partners**
Erasmus +	**KA171 Student– and Staff Mobility**	2017–2026	– **National University of Life and Environmental Sciences of Ukraine (NUBIP)** – **Tavria State Agrotechnological University** – **SUITT** – **KPI** – **OPNU** – **Ternopil Volodymyr Hnatiuk National Pedagogical University (TNPU)**
DigIn.Net: German-Ukrainian network for digital innovations	Shaping the digital future together – German-Ukrainian university cooperation	2019–2021	– **KPI** – **SUITT** – **OPNU**
DigIn.Net 2: German-Ukrainian network for digital innovations	Shaping the digital future together – German-Ukrainian university cooperation	2021–2023	– **KPI** – **SUITT** – **OPNU** – **TNPU**
DigiJED 1-3: Digital Education with Joined Efforts	Ukraine digital: Ensuring academic success in times of crisis	2022–2024	– **KPI** – **SUITT** – **OPNU** – **Oles Honchar Dnipro National University (DNU)** – **Kharkiv National University of Radio Electronics (NURE)**
IDEA-East-Hub: International Innovation Hub for Data Science and renewable Energ	HAW.International	2022–2025	– **KPI** – **OPNU** – **TNPU** – **Ukrainian State University of Railway Transport (UkrSURT)** – Odesa State Agrarian University (OSAU) – Odessa State Academy of Civil Engineering and Architecture (OSACEA)
Integra– und Welcome	Integra– und Welcome participating Universities/ Studienkollegs	2022–2023	**All Partners**
Fit4Ukraine: Future Innovation Talents 4 Ukraine	Future Ukraine – Scholarship programme for refugees from Ukraine at German universities	2022–2025	**All Partners**
DSG: Ukrainian-German study program Computer Systems and Networks/ IoT	German-language degree programs (DSG)	2023–2026	– **OPNU** – **TNPU**
EDUBA: Expanding the successful German-Ukrainian education network	German-Ukrainian University Network (*DUHN*)	2025–2029	– **KPI** – **OPNU** – **DNU** – **NURE** – **TNPU** – OSAU – OSACEA

DigIn.Net Project (2019–2024) implemented a comprehensive mixed-method strategy integrating innovation competitions, digital pedagogy training, and institutional capacity building. Over 2,900 educators from 123 universities completed transformation International Internship under the Digital Transformation: The Power of Blended Learning program. These courses provided practical training in digital communication and collaboration platforms (Vevox, Pigeonhole Live, Wooclap, FigJam, Lucidspark, Miro), tools for creating digital educational content and infographics (Infogram, Datawrapper), AI-based services for text generation, translation, visualization, and multimedia content creation (ChatGPT, Gemini, Microsoft Copilot, Writesonic, Topic, Deepl, Wordtune, Gamma, Beautiful.AI, SlidesGo), as well as digital tools for research and academic publishing (LaTeX, data analysis, machine learning applications), fostering a new generation of educators proficient in contemporary digital and AI technologies for higher education. The project's innovation competitions yielded 242 proposals and 58 funded projects, ranging from e-health and smart homes to AI-based accessibility systems [4].

The latest project EDUBA – Expanding the successful German-Ukrainian education network, in turn, represents the next phase of this ecosystem – transforming short-term digital collaboration into a structural model of internationalization. Anchored at HSA, EDUBA consolidates over a decade of DAAD-supported projects (Table 1) into a unified hybrid network. Its core mission is to expand Double Degree Programs (DDPs) and establish a Center for Coordination of Double Degrees (ZeKoD) to systematize international curricula and ensure quality assurance. Current programs include the Master's in Communication and Embedded Systems (with NURE and DNU), the Master's in Data Science (with OPNU and TNPU), and the Bachelor's in Computer Systems and Networks/IoT (with KPI and NURE). New programs under development include the Bachelor's in International Business (with OSACEA) and the Master's in Food and Agribusiness (with OSAU). As DAAD (2024) notes, such projects are "essential to maintaining academic sovereignty and resilience in partner countries under stress" [2]. The study highlights this project as a flagship example demonstrating how digitalization can sustain and expand international cooperation during crises. In collaboration with Ukrainian partners, HSA offers a suite of online courses in advanced topics such as Deep Learning, Machine Learning, ICT Security, and Mobile Development. These courses are designed for both students, teachers and administrative staff members, and are complemented by modules on intercultural competence, leadership, and inclusive education. By 2029, the project aims to reach over 440 students and 85 faculty members through these digital learning formats. The project also includes hybrid German language courses, semester mobility programs, and study visits to Germany and Ukraine. These activities are designed to enhance linguistic skills, intercultural awareness, and professional networking. In addition, the project supports the creation of an alumni network for Ukrainian graduates of HSA, with a target of 100 members by 2029. This network will serve as a platform for career development, academic exchange, and outreach to prospective students in Ukraine.

Drawing from empirical surveys involving over 2,000 participants across German and Ukrainian institutions, the study applied factor and comparative analysis to evaluate digital competence, innovation adoption, and institutional resilience [12]. The results revealed a strong positive correlation between digital tool adoption and perceived institutional sustainability – suggesting that digital transformation directly enhances not only teaching efficiency but also organizational adaptability.

The novelty of this project lies in its systemic perspective. While earlier studies on higher education cooperation emphasized student mobility and credit recognition, EDUBA integrates structural, technological, and pedagogical dimensions into a holistic model of digital internationalization. This is further evidenced by the continuity of outcomes: DigIn.Net 2's digital infrastructure (notably the DUDIZ platform and e-learning repository) continues to operate post-funding, supporting ongoing academic exchange and training [4]. The project extends this sustainability by embedding digital practices into institutional governance – a shift from temporary adaptation to long-term transformation.

Importantly, these initiatives resonate with broader global priorities. DAAD's Ukraine Digital – Ensuring academic success in times of crisis program has enabled over 15,000 Ukrainian students and faculty to participate in digital courses and labs since [2]. Such figures demonstrate that international digital cooperation is not only viable but also scalable.

Empirical research, particularly the DigIn.Net 2 study [9; 12], provides valuable insights into the digital evolution of internationalization. Their factor analysis identified five core determinants of success:

1. Global cooperation and networking;
2. Competence and standard globalization;
3. Digital evolution and innovation;

4. Funding and policy dynamics;

5. International research initiatives.

The EDUBA project builds upon these determinants by institutionalizing them through long-term Double Degree Programs, cross-disciplinary research clusters, and digital professional development courses for academic staff.

In recent years, DAAD and BMFTR evaluation reports have underlined that projects integrating digital infrastructure, sustainable partnership management, and capacity development show 40–60% higher efficiency in outcomes and continuity post-funding [3]. This aligns with the methodological framework adopted by HSA, positioning its internationalization model as a benchmark for blended education partnerships.

The methodological framework of this study integrates quantitative and qualitative approaches to comprehensively assess the effectiveness, sustainability, and innovation potential of Ukrainian–German higher education cooperation under crisis conditions. The research design follows a mixed-method model, combining *exploratory factor analysis (EFA), comparative ranking, and qualitative institutional assessments*.

Empirical data were drawn from four large-scale surveys conducted between May 2022 and April 2025, encompassing 2000 respondents from more than 150 higher education institutions in Ukraine and Europe. Participants included academic staff, administrative representatives, and students involved in DAAD-supported projects such as DigIn.Net 1-2, DigiJED 1-3, IDEA-East Hub, FIT4Ukraine, and EDUBA.

Institutional datasets were supplemented by DAAD Annual Reports (2021–2024), Erasmus+ Statistics (2022–2024), and internal EDUBA project documentation (2025–2029), which provided detailed performance metrics, mobility indicators, and partnership evaluations.

To ensure transparency and ethical integrity, all data collection and processing procedures were conducted in accordance with the General Data Protection Regulation (GDPR) of the European Union and DAAD ethical research standards, ensuring voluntary participation, informed consent, and anonymization of personal data.

The factor analysis employed the Principal Component Analysis (PCA) extraction method with Varimax rotation and Kaiser normalization, following the methodological model developed under the DigIn.Net 2 project [12]. Five latent factors were extracted from 42 observed variables representing institutional, pedagogical, and digitalization parameters. These factors were subsequently used to construct an integrated Digital Internationalization Index (DII) – a composite indicator measuring the degree of digital transformation and institutional resilience.

For the comparative assessment of DAAD– and Erasmus+-funded projects, a multi-criteria evaluation model was applied. Each project was scored using five weighted indicators:

Table 2

Ranking indicators

Indicator	Description	Weight (%)
Digital Integration Index (DII)	Level of digitalization in project implementation and management	25
Partnership Sustainability (PSI)	Duration and continuity of cooperation beyond funding phase	20
Participant Engagement Rate (PER)	Number and diversity of active participants	20
Institutional Innovation Impact (III)	Creation of new curricula, research clusters, or mobility schemes	20
Funding Efficiency (FEI)	Ratio of achieved outcomes to received budget	15

Each project received normalized scores on a 0–100 scale, with cumulative rankings derived through weighted aggregation. This approach ensured comparability between projects of varying scale and funding structures, while allowing for longitudinal trend analysis.

Survey instruments were administered online via Google Forms, Mentimeter, and Slido, ensuring broad accessibility for respondents across Ukrainian and German universities. Each participant was informed about the voluntary and anonymous nature of the study, and data security was maintained in compliance with GDPR standards.

Qualitative data – including institutional reports, participant feedback, and project evaluations – were coded and analysed using NVivo 14 software. This enabled triangulation between quantitative indicators and narrative insights, providing a richer understanding of institutional practices and perceived project impact.

The comparative ranking analysis was supplemented by correlation analysis to identify key relationships between project variables (e.g., digitalization, hybrid mobility, and innovation output) and success indicators (e.g., continuity, participant satisfaction, and publication rates).

The analytical study of the EDUBA project was conducted using a comprehensive empirical methodology combining factor, correlation, and comparative analyses. Data from over 300 participants – including lecturers, students, and administrators – were analyzed to evaluate the program's institutional and pedagogical outcomes.

The working hypothesis posited a strong positive correlation ($r > 0.7$) between three core variables – long-term partnership management, implementation of hybrid mobility, and integration of innovative learning formats – and two dependent variables: academic success rates (course completion, digital competence improvement) and participant satisfaction.

Results confirmed that sustained partnerships and systematic digital infrastructure are the strongest predictors of project success and post-funding resilience. The EDUBA project (01.07.2025-30.06.2029), coordinated by Anhalt University of Applied Sciences (HSA) in collaboration with seven Ukrainian universities, exemplifies this model by combining continuity, inclusivity, and technological innovation.

Key empirical outcomes include:

− The establishment of the Center for Coordination of DDPs (ZeKoD), which standardizes digital modules, coordinates DDPs, and ensures quality assurance within the European Higher Education Area (EHEA).

− A significant increase in inclusivity, particularly among students from conflict-affected regions, achieved through the expansion of hybrid and online learning formats.

− Efficiency in blended mobility schemes, with digital exchange formats demonstrating engagement and learning outcomes comparable to physical mobility but at 40–50% lower cost.

− A measurable increase in institutional innovation, with new curricula and AI-enhanced teaching tools introduced in partnership universities.

Exploratory factor analysis identified five main dimensions, which explain 72% of the total variation in internationalization success (the methodology is described in the article [9; 12], the results are presented in Table 3).

Table 3

Exploratory Factor Analysis

Factor	Eigenvalue	Explained Variance (%)	Key Components
F1 – Global Cooperation and Networking	5.42	22.6	Partnerships, DDP, research consortia
F2 – Digital Evolution and Innovation	3.81	15.9	E-learning platforms, hybrid mobility, digital content
F3 – Competence and Standard Globalization	2.75	12.8	Curriculum alignment, accreditation, language skills
F4 – Funding and Policy Dynamics	2.34	11.2	DAAD/BMBF support, project efficiency
F5 – International Research Initiatives	1.95	9.5	Joint publications, conferences, innovation labs

Interpretation:

− Factors F1 and F2 emerged as the most influential, confirming that networking and digital innovation jointly determine project sustainability.

− The cumulative variance (72%) validates the robustness of the model for predictive analysis.

These findings are consistent with prior studies [12], confirming that success in internationalization is determined by both strategic institutional frameworks and operational digital capacity.

The results of this research confirm that the success of international cooperation in higher education depends on the synergy between institutional strategies, technological readiness, and policy-driven funding. The EDUBA initiative represents a paradigmatic shift from project-based to ecosystem-based collaboration, integrating digital transformation with transnational education governance.

The evaluation model [2] emphasizes four interrelated criteria: innovation, sustainability, inclusiveness, and transferability. EDUBA demonstrates strong compliance with all four. Its innovation stems from the integration of Double Degree Programs with virtual and blended mobility. Its sustainability lies in the structural establishment of ZeKoD within HSA, ensuring post-funding continuity. Its inclusiveness is visible in cross-disciplinary and cross-regional participation of Ukrainian institutions, and its transferability provides a template for replication across other EU partnerships.

Additionally, the study identifies an important structural pattern in German–Ukrainian cooperation:

− Digitalization as the foundation – providing virtual learning platforms, shared research labs, and online administrative tools;

− Hybrid mobility as the accelerator – enabling both virtual and physical academic exchanges;

− Institutional coordination as the stabilizer – ensuring continuity beyond funding cycles.

This triad underpins a new model of international education resilience – "blended global academia" – hat sustains research, teaching, and innovation even during crises such as pandemics or wars.

Furthermore, the factor analysis revealed that global networking and digital innovation are statistically the most influential variables, accounting for over 38% of the total variance in successful project outcomes. This aligns with UNESCO's 2023 Global Education Monitoring Report, which stresses that "internationalization is no longer a luxury but a resilience mechanism for higher education systems under stress".

The article also highlights that HSA ranks among the top German universities in implementing DAAD-funded digital partnerships. In contrast, many short-term cooperation frameworks without digital infrastructure failed to sustain measurable outcomes post-funding. This underscores the necessity of institutional anchoring mechanisms – a defining feature of EDUBA's success.

Conclusions

The EDUBA project exemplifies an advanced, multi-layered framework of international cooperation between Germany and Ukraine, combining digital education, intercultural exchange, and institutional development. The results demonstrate that digital platforms, shared learning environments, and virtual research hubs significantly enhance both efficiency and inclusion in international education. EDUBA aligns with SDG 4 (Quality Education) and the Bologna Process, making it a model for post-crisis educational resilience. Factor analysis and comparative rankings confirm that long-term partnership management, blended mobility, and innovative teaching formats are the key drivers of successful cooperation. By establishing best practices for the implementation of joint activities and double degrees, the partners can adapt their approach to any challenges or crises and further develop international academic cooperation. Beyond academia, EDUBA contributes to rebuilding human capital, supporting displaced Ukrainian scholars, and preparing a digitally competent workforce for Ukraine's post-war recovery. The creation of ZeKoD ensures long-term continuity, while the digital modules of EDUBA can be replicated across other partner universities in Eastern Europe and beyond.

The continuation of EDUBA beyond 2029 will focus on expanding partnerships to include Baltic and Central European universities, strengthening interdisciplinary research clusters, and enhancing bilingual education modules. Future stages will integrate AI-driven adaptive learning systems, joint PhD supervision models, and cloud-based academic infrastructure.

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