"Double degree programs and education for sustainable development implementation: Experience of Ukrainian and UK universities cooperation in wartime"

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NUMBER OF REFERENCES

62

NUMBER OF FIGURES

0

NUMBER OF TABLES

3

BUSINESS PERSPECTIVES

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DOUBLE DEGREE PROGRAMS AND EDUCATION FOR SUSTAINABLE DEVELOPMENT IMPLEMENTATION: EXPERIENCE OF UKRAINIAN AND UK UNIVERSITIES COOPERATION IN WARTIME

Abstract

The internationalization of higher education has become a key trend and response to the growth of globalization and online learning. After the start of the Russian war in Ukraine, Ukrainian higher education underwent significant destruction. Ukrainian HEIs have been significantly losing their capacity for development. Loss of human capital, including educational losses, becomes more relevant from the perspective of further sector development.

This paper explores the intersection of DDP implementation and the implementation of Education for Sustainable Development (ESD), focusing on faculty members' experiences within the Twinning Initiative framework. By investigating faculty members' perceptions of quality assurance gaps and examining the impact of DDPs on the integration of SDGs, the study provides insights into how these programs contribute to advancing Sustainable Development Goals (SDGs) in higher education. This study employed semi-structured interviews. Interviewees were selected from the academic staff of five of the six Ukrainian universities involved in DDPs. Nine interviews were conducted in the period from April 2024 to June 2024. All interviewees represent the double-degree staff from different roles.

Despite some differences between the procedures, the principles of internal quality assurance in Ukrainian universities correspond to those of their British partners. The findings show that implementing DDP promotes "learning by doing" for teaching staff, encouraging curriculum innovation and professional development. This study highlights the potential of DDP to stimulate the implementation of ESD principles in higher education and suggests directions for future research, particularly in war-affected regions.

INTRODUCTION

The internationalization of higher education, which became a trend even before the COVID-19 pandemic, raised all prospects to intensify due to online learning development, the massification of higher education, and increased globalization. According to Gaebel et al. (2024), HEIs have considered internationalization and global outreach as an important part of their mission, in addition to research, education, and service to society (high importance for 83% of them). Double degree programs (DDP) or joint degree programs (JDP) as essential in-

ternationalization tools have proved to be effective for establishing and developing partnerships and sharing experiences in teaching and learning practices in the international context.

Despite increasing DDP in the global HE landscapes, some issues still need to be solved. The introduction of sustainability standards by universities in education complicates partnerships: European universities consistently define the implementation of sustainability in their curriculum. At the same time, DDPs create opportunities to disseminate the best practices in implementing education for sustainable development. The quality assurance policies and procedures should be adjusted to make such cooperation happen and meet the partner's requirements. Organizing productive cooperation between universities with significant gaps in quality assurance procedures related to SDGs and ESD is difficult. The question of how the implementation of HEI's international partnerships, particularly in the implementation of double degree programs, contributes to the dissemination of sustainable curriculum and appropriate approaches to quality assurance in higher education remains poorly researched. For Ukrainian universities, this issue is complicated by war conditions. The question arises as to how much universities retain the potential for cooperation and development since implementing double degree programs requires significant efforts in harmonizing approaches to learning, teaching, and assessment and revising internal policies and procedures.

1. LITERATURE REVIEW

The growing demand for international education in developing countries makes international cooperation in higher education more relevant. According to a global survey by Marinoni and Pina Cardona (2024), more than 60% of HEIs at the global level deliver either joint degree programs, or dual/double and multiple degree programs, or both types of programs with international partners. However, HEIs reported essential differences at the regional level. In the context of increased global instability provoked by the war in Ukraine, a differentiation of regional opportunities to implement effective international cooperation in both education and research will expand.

The DDP design and delivery are being explored in various contexts, which can be generalized into four thematic groups, such as

1. DDP in the changing global educational landscape.

2. Students' benefits, their professional identification and experiences.

3. Academic staff experiences in different contexts.

4. Quality assurance and its features for double degree programs.

Double degree programs in the changing global educational landscape, DDP in the context of the internationalization of higher education. Despite the significant differences in the DDP models regarding the organization of education, student enrollment, funding, and academic policy, the DDP JDP become a more popular strategy for the HEI's curriculum internationalization (Rumbley, 2014).

Transnational education (TNE) is considered the most advanced stage of university internationalization, which allows the dissemination of positive practices and contributes to aligning quality assurance. Healey and Bordogna (2014) emphasized that different aspects of the TNE were continuously internationalizing and created more diverse, dynamic educational environments. The academic staff, the student population, the curriculum, and the quality assurance approaches of both partners are impacted by international cooperation.

There are some concerns about the growing DDP and international HEI cooperation, such as "educational imperialism." Pyvis (2011) claimed that the current approach to QA in transnational higher education "promotes" it and postulated that recommendations and practices should be tailored to context-sensitive measures of quality to avoid "suppression of local educational traditions."

However, the risk of academic imperialism is reduced due to multinational regulations in quality assurance by two or more countries and the adoption of policies by both institutions (Healey & Bordogna, 2014).

Intercultural features related to DDP or JDP, such as language and cultural distinctions, are in focus and need to be taken into consideration in program design and delivery (Heffernan et al., 2011; Pineda, 2023). The considerations of the cultural aspects of learning related to decolonizing agenda imply that the educational environment, quality assurance policies, and procedures could weigh a lot and need to be carefully investigated from DDP and JDP perspectives.

Students' benefits, their professional identification, and experiences. The massification of higher education and the changing student profile are the most common prerequisites that have impacted research in this sector for more than 20 years. Given the inherent differences in learning styles and cultural backgrounds, it is important to consider these differences in the design of educational programs (Heffernan et al., 2010). Some studies have shown that double degree programs often do not meet the expectations of students (Pineda, 2023). Otherwise, Culver et al. (2011) analyze faculty attitudes in terms of their understanding of the dual degree programs' benefits for students and, importantly, conclude that "the added value comes directly from experiencing" (Culver et al., 2011, p. 57). This conclusion relates not just to students but to all stakeholders, who emphasized the importance of cross-cultural skills development and personal growth rather than subject-specific skills or professional knowledge. Steagall et al. (2021) found that undergraduate DDPs suggest students with more profound international experiences, in particular about the global business environment.

Academic staff experiences in different contexts have been studied extensively alongside the experiences of students. There is much debate about faculty perceptions of quality assurance procedures (Teng et al., 2013; Lucas, 2014; Gallagher, 2014). Some studies suggest that academics perceive some procedures as excessively bureaucratic and contrary to academic values, particularly the principle of academic freedom (Gallagher, 2014;

Henkel, 2000). However, there is almost no research on faculty perceptions of quality assurance procedures in the DDPs, as well as other challenges that arise with teaching in these programs – different student profiles, cultural differences, collaboration with colleagues from partner universities, workload allocation, etc.

Therefore, differences in national legislation, cultural peculiarities, workload intensity, and learning styles between universities demand special program design and delivery procedures.

The theme of quality assurance and its features for double degree programs is in the current research focus because of ESD and SDGs implementation. DDP development means designing two concordant programs to fulfill the different requirements regarding the rules and regulations at the participating HEIs (Hunger et al., 2013). This means that aligning and coordinating partners' procedures and approaches are crucial for the DDP or JDP success. Compatibility is one of the three most influential factors in the QA of DDP or JDP. Compatibility implies two aspects: 1) the consistency of values, goals and norms of the partner HEIs in the QA system of the DDP – "intraorganizational compatibility"; 2) a congruence of values, goals, and norms of the DDP with those of the partner HEIs – "external compatibility" (Zheng et al., 2017). So the quality assurance procedure should be considered as challenging as crucial for successful DDP delivery. Quality assurance becomes a more important means of ensuring that academic standards meet the national and/or institutional requirements, especially while the United Nations 2030 Agenda for Sustainable Development demands sustainability-oriented actors in the sector. The HEIs reported that sustainable development, social inclusion, and equity have become significant priorities for their development (Gaebel et al., 2024). So, any partnership implies aligning the policy and procedures for Sustainable Development Goals and Education for Sustainable Development implementation. Tomas et al. (2023) and Forlicz et al. (2024) investigated how internationalization activities of HEIs interacted with the strategic orientation on sustainability and emphasized that despite some negative consequences of internationalization from sustainability perspectives, such as students and staff

mobility, the positive impact of such activities was essential. According to Manzoor et al. (2021), the implementation of sustainability into university policies and practices, including curriculum, is also essential for improving the university's image and increasing student satisfaction

Fia et al. (2022) pointed out two general trends for modern higher education in ESD and SDG implementation. The first trend concerns the development of a "culture of sustainability" in the sector, which is generally around the current agenda. The second trend characterizes the practice of introducing the SDGs into educational programs, the spread of curriculum design approaches, teaching-learning methods, etc. In the case of DDP, there is a collaboration of higher education institutions from different environments and with different internal approaches to implementing ESD and SDG in academic programs. It is obvious that the program itself embodies certain approaches to ESD and directly translates pedagogical approaches and quality assurance procedures in university partnerships. It can be assumed that such cooperation can influence the development of the quality culture: a kind of "transfer" of the quality culture inherent in the environment.

International collaboration in research and the development of students' international and intercultural competencies are obviously positive outcomes. Tomas et al. (2023) believed that "it would be impossible to achieve the Sustainable Development Goals without internationalization and international cooperation." As Fiselier et al. (2017, p. 405) mentioned: "One important driver of change is the allowance of time for staff to engage with, understand the disciplinary context of ESD and to develop appropriate pedagogic responses". Cooperation in teaching and learning in DDP delivery impacts Education for sustainable development (ESD) advance and promotion. It has been argued that learning processes that enable transformative changes largely depend on academic staff and their capabilities and willingness to support such processes (Barth & Rieckmann, 2012). Leal Filho et al. (2021) emphasize that the contribution of universities to implementing the SDGs and the integration of ESD should include the development of the potential of teachers, including their ability to "better contextualize their teaching

and create a more culturally inclusive learning environment". They justify this understanding, firstly, by the diversity of social, cultural, and institutional contexts, which involves the application of various strategies and methods, and secondly, the need to promote transformative learning methods through interdisciplinarity.

Despite plenty of related publications (Barth & Timm, 2011; Wals, 2013; Advance HE and QAA, 2021; Brownell & Tanner, 2012), some aspects are still under-researched, in particular, the issue of how quality assurance policies and procedures on DDP contribute to the "transfer" of education for sustainable development to a new educational context is still the gap. Given that the Ukrainian higher education sector has been functioning in exceptionally critical conditions, there are some peculiarities and limitations not just for international cooperation but for regular teaching and learning process caused Russian-Ukrainian war.

After the Russian full-scale invasion of Ukraine, the Ukrainian higher education sector has been significantly disrupted (Kozmenko et al., 2023). And it is not only about the destruction of infrastructure: Ukrainian HEIs have been significantly losing their capacity for development. The loss of academic staff due to military service, death, or displacement to other countries (World Bank, 2022). It is currently difficult to assess these losses because the war continues without any concrete prospects for the end, as well as due to the difficulty of assessing the impact of these losses from the perspective of the present. 665,000 students and 25,000 teachers were forced to leave their educational establishments. The danger of constant shelling, including civilian infrastructure, forces educational services to be provided online. This will exacerbate the negative effects of COVID-19 on education (Kołodziej & Kołodziej-Durnaś, 2024). Besides, the World Bank (2022) estimated learning losses in Ukraine that are below the lowest-performing countries in Europe, emphasizing the war impacts all elements of a "student's opportunity to learn: less time spent on learning and lower quality of instruction via remote/online modalities." So, the expected loss of human capital is not only due to non-return refugees but also because of a decline in the quality of education, which objectively occurs in war conditions.

From the strategic perspective, the Ukrainian HE sector can face the irreversibility of negative changes. The reforms and enhancement that should have been realized during the war, but did not occur due to the war will lead to a loss of the development capacity which many universities had before the full-scale invasion. This primarily concerns international cooperation, reducing the number of foreign students, and implementing the Sustainable Development Goals. According to Pereira et al. (2022), the negative impact on the education sector in Ukraine, which includes learning loss, infrastructure destruction, and children and teenager conflict traumatic disorders, will continue to grow and, in particular, will be substantial in Ukraine and will be challenging for Ukraine to achieve SDGTs 4.1, 4.2, 4.3, 4.4, 4.5, 4.6, 4.7, and 4.a.

Many universities were forced to reconsider their strategic goals, particularly regarding internationalization, sustainability, and innovations. In such conditions, any initiatives aimed at supporting Ukrainian HEIs are not just an act of solidarity but also a means for compensating for lost potential. This study is contextualized within the Twinning initiative (American Council on Education, 2014), which has provided support for Ukrainian universities in different ways in partnership with British universities. This initiative became crucial for developing different types of successful partnerships. Dlouhá et al. (2018) and Palermo et al. (2018) emphasized the importance of networking for double degree program development. One of the areas of cooperation between Ukrainian and British universities is double degree programs (DDP); starting September 1, 2023, British and Ukrainian partners have been implementing six programs.

This study explores how quality assurance policies and procedures for delivering DDPs impact the implementation of ESD in wartime from the perspective of teaching staff. This is part of the more general goal of contributing to the ongoing discourse on the internationalization of the higher education sector and the implementation of Education for Sustainable Development and Sustainable Development Goals by HEIs.

The research questions reveal academic staff attitudes to quality assurance, particularly how they perceive approaches to implementing ESD in DDPs, considering the circumstances in which Ukrainian universities operate.

2. METHODS

This study employed semi-structured interviews as a qualitative data collection method. Interviewees were selected from the academic staff of five from six Ukrainian universities involved in DDPs, which have been delivered under the Twinning initiative. One HEI Twinning DDP participant reported in the survey, which had been conducted before the interviews, had not implemented ESD and SDGs into their program.

Nine interviews were conducted in the period from April 2024 to June 2024. All interviewees represent the double degree from different roles: lecturers, program leaders, and partnership coordinators. Given that only one semester of the programs had been delivered and there are no other cases to be included in the study, there are no more partnerships between Ukrainian and UK universities that have been established during the war, the number of interviewees can be considered sufficient for answering research questions. Besides, all interviewees had appropriate expertise in teaching, research, and international collaboration. Some of them play significant roles in HEI management and administration. Five double degree programs delivered by Ukrainian and British higher education institutions under the Twinning initiative were covered, and interviewees distribution is represented in Table 1.

The interview was designed open-ended to understand the interviewees' perceptions of the DDP QA practices based on their reflections on Doody and Noonan (2013), Bryman and Cassell (2006), and Diefenbach (2009). The research methodology was narrative analysis, according to the approach for qualitative analysis (Bohnsack, 2014). The interviews were conducted in Ukrainian.

The interview was designed to understand two aspects: 1) lecturers' perceptions of the conditions and requirements of program implementation (their understanding of QA on the DDP, advantages, and challenges) and 2) their vision of how

Table 1. Double degree programs delivered by Ukrainian and British higher education institutions under the Twinning initiative

DDP Title	Partner universities	Numbers of interviewees from Ukrainian HEIs
Business administration in Organizational Transformation	Abertay University and Simon Kuznets Kharkiv National University of Economics	2
Informational Technologies for Sustainable Energy Engineering	London South Bank University and Ivano-Frankivsk National Technical University of Oil and Gas	2
Marine Engineering River and Sea Transport	Plymouth University and Kherson Maritime Academy	1
Psychological Wellbeing and Mental Health	Nottingham Trent University and National University 'Lviv Polytechnic'	1
Sustainable Agriculture and Food Security	Royal Agricultural University and Sumy National Agrarian University	3

far the implementation of the DDP contributes to the implementation of ESD and SDGs. The second aspect is structured to find out the peculiarities of the national context in the implementation of SDG and ESD, whether there is such experience that teachers consider appropriate to implement ESD and DSGs in their HEIs (Flinders, 1997; Griffee, 2005).

3. RESULTS

The overview of the participants' answers allows identifying two points of view from which it is reasonable to analyze and interpret the outcomes and make the conclusions: 1) the pedagogical point of view and 2) the quality assurance point of view. The pedagogical point of view means applying teaching, learning, and assessment strategies from learning outcome achievement and student experiences and their success perspectives. The QA point of view means focusing on regulative and organizational procedures per se. Some cases are about complying with criteria differently, while others mean the use of some restrictions or procedures that are absent in the Ukrainian context, for example, the procedure of academic moderation or external examination.

3.1. General perception

An important result of this study is the unequivocal recognition by all respondents of the importance of implementing double degree programs for the development of their universities, despite the difficulties associated with both internal institutional issues and war circumstances.

This partnership creates an opportunity to explore crisis management cases in the context of global conflicts.

All participants responded that they were familiar with QA procedures, and all agreed that QA was essential for SDG and ESD successful implementation.

To understand the teachers' general perception of the norms and procedures provided for in the DPP, three questions were asked: 1) What are the challenges and difficulties you have faced while working at DPP? 2) Is there a difference in the approaches to quality assurance at the DPP compared to regular procedures you have at your HEI, what exactly? 3) What CPD needs can you identify in terms of DDP?

All participants responded that there was no significant difference in the approaches to QA at the DDP. However, there were some nuances needed to be agreed upon (Table 2).

Generalizing the answers about the differences in the QA approach, the pieces can be identified which could be interpreted as an essential gap:

- More thorough attitudes to the QA procedures.

- The procedures of quality assurance are "more detailed".

- More "control points" of teaching staff.

- Meetings with students and open discussion, not just surveys, after studying the modules.

Table 2. Challenges and teaching staff and continuous professional development needs

Challenges for academic staff	CPD needs from the DDP perspective
Regulative (requirements of the Ukrainian Ministry academic standards, size of credit and student's workload planning, academic calendar: semester vs trimester)	Design of learning materials, including approaches to ESD assessment
Assessment: QA view (assessment validation, Terminology)	Cooperation with organizations experienced in SD
Interdisciplinarity (cooperation between teachers of different faculties)	Learning technologies (presentations, video materials, etc.)
Some modules delivered just online	Student-centered practices
Development of the learning materials in English ("not challenging but time-consuming")	Micro-credential with a focus on soft skills, digital skills, and leadership development ("it is so useful for Lifelong Learning perspective")
	Approach to online education
	Terminology
	Approaches to interdisciplinarity ("We have a «pure agronomist" and here (DDP – auth.) an agronomist with a global vision is taught).

- Assessment: validation, fewer summative tasks, academic moderation, use of the assessment scale and criteria, discussion and approval of the assessment, mapping assessment to the program as a whole.

- Program validation (internal).

The results correspond to the findings obtained by the American Council on Education (2014, 2021). Academic issues, i.e., related to teaching and learning, represent notably greater challenges for DDPs and JDPs. According to the survey (American Council on Education, 2014), over two-thirds of respondents reported that their programs faced challenges regarding course equivalencies and language and cultural differences.

According to the content of the answers about the differences in quality assurance approaches, the main gaps are assumed to relate mainly to the procedures of the QA, rather than the pedagogical strategies. All HEIs seem to have "intra-organizational compatibility" – the consistency of values, goals, and norms of partner HEIs in the QA system of the DDP, according to Zheng et al. (2017). But these aspects need to be investigated deeper.

Some questions in the interview related to the advantages and potential benefits for students, teachers, and institutions were asked to find out teachers' perceptions of the DDP since it is important to understand if the academic staff see the advantages for students or HEIs, and for themselves. Respondents noted some advantages compared to

what they considered important for implementation in their HEIs (Table 3).

The awareness of DDP advantages is in line with Buerkle et al.'s (2023, p. 13) conclusions that international partnerships of HEIs "ultimately provide a small but non-neglectable contribution to peace and prosperity as part of sustainability."

As an important result, it also can be considered that 7 out of 9 interviewees perceive work on this program as their own development. Despite the difficulties and challenges, all teachers noted that they considered the program as useful experience for themselves, which provides an understanding of the international context, and the opportunity to communicate with colleagues from the partner university. One participant even pointed out that despite the difficulties for teachers to implement an interdisciplinary approach, possible replacements of teachers were discussed. However, none of them have expressed a desire to leave teaching in the program, as they "get real experience of working in an international environment" and "better understand the requirements".

It is important to note how participants view professional development for improving ESD-oriented teaching strategies. They mentioned "Student-centered practices" and "design of learning materials". These views correspond with Leal Filho et al. (2021) who consider ESD should include the development of the potential of academic staff, including their ability to "better contextualize their teaching and create a more culturally inclusive learning environment. One interviewee

Table 3. Advantages of double degree programs and ways for their further implementation

Advantages of DDPs	It is helpful to implement at their HEIs (generalized)
Assessment: pedagogical view (4[1]) - wide use of formative assessment, rubrics in summative assessment, focus on coursework instead of exams, fewer summative assignments	Assessment: QA view: academic moderation, external examination, assessment validation, assessment mapping
Assessment: QA view (5) - academic moderation, external examination, assessment validation, assessment mapping	Assessment: pedagogical view: wide use of formative assessment, rubrics in summative assessment, focus on coursework, fewer summative assignments
Interdisciplinarity (3)	Students' feedback ("Regular meetings - a dialogue between students and staff")
Structured learning (certificate, diploma, and degree) (1)	Online delivery mode for some modules
Employability (7)	Direct communication between the teachers before DDP started
Understanding the international context (3)	Approaches to student-centered learning
the prestige of the UK HEI's degree opportunities for research cooperation (9)	
HEI's image (9)	
Network development and professional cooperation ("an opportunity to see your subject in a different way"; "going beyond your approach") (6)	
DDP as a continuous professional development for staff	

Note: [1] - The number of the answers contains a specific advantage.

pointed out the cultural differences in the perception of SD: "We focus more on economic development rather than on complex problem or inclusive education".

3.2. Assessment

A significant overlap between how teachers see the program's benefits and what they would like to implement in their universities has been exposed. This is a piece of evidence that the benefits interviewees mentioned are perceived as real, even though some of the interviewees also described them as challenges. It seems to be important that among these "points of overlapping" the vast majority relate to assessment. Assessment is key for implementing ESD strategies.

Assessment is crucial for ESD and SDGs implementation (Advance HE and QAA, 2021; Kioupi & Voulvoulis, 2020; Scherak & Rieckmann, 2022; Vargas-Merino et al., 2024; Southall & Wason, 2016). Along with consensus of assessment importance, it was also mentioned as a challenge, as an advantage, and as a component that teachers consider helpful to implement in their HEIs. Based on the teachers' answers regarding the assessment, it can be emphasized that two perspectives mentioned above took place: the pedagogical view (wide use of formative assessment, rubrics in summative assessment, focus on coursework,

etc.) and the QA view (academic moderation, external examination, assessment mapping, etc.). Importantly, the interviewees evaluated the advantages of assessment practices pedagogically as well as QA procedures that framed the student assessment. Each participant defined a certain assessment-related instrument as one they would like to implement in their HEI.

3.3. Interdisciplinarity

Despite significant difficulties and the fact that Ukrainian universities are operating on the verge of maintaining a normal operational regime of teaching and research due to the ongoing war, the introduction of interdisciplinarity in Ukrainian higher education creates opportunities for transformation. The strategic advantages of a particular HEI will be determined by its ability to take advantage of such opportunities.

Three interviewees pointed out interdisciplinarity as an advantage and two wanted to implement some practices in their HEIs. This can be explained that 2 of 5 DDP are interdisciplinary. So, this outcome of the study displays a separate direction for further research because interdisciplinarity is the most important for ESD and is in the focus of the pedagogical research (Di Giulio & Defila, 2017; Herweg et al., 2021; Hammer & Lewis, 2023). All participants noted that teaching in such programs

is an experience that enriches their approaches to implementing interdisciplinarity, assessment practices, etc. They specified practices of the partner universities they would like to implement in their universities and identified specific approaches and practices in implementing education for sustainable development and the Sustainable Development Goals. This emphasizes the potential of the DDP to stimulate the implementation of the SDG principles in higher education in Ukraine. As Dlouhá et al. (2018) found, the documents were perceived only as creating an enabling environment for the development of institutional strategies and specific measures. And practical cooperation catalyzes their implementation. This experience can be considered as "learning by doing" for teaching staff. Therefore, DDP implementation encourages innovation and allows academics to better understand the international context and determine what they need for their professional development, development, to match this context.

Language challenges have been stressed among the difficulties associated with the interdisciplinarity introduction. There are some answers about terminology and difficulties for students with criteria understanding.

The features representing the national context of ESD and SDG implementation, except the war, are school education, financial opportunities of Ukrainian HEIs, and cultural differences in the perception of sustainable development: "We focus more on economic development rather than on complex problems, including inclusive education". All participants in their answers mentioned the impact of the war as a factor of limitation for the DDP delivery ("forced online format of learning", "our HEI is in the occupied territory", "limited opportunities conducting extracurricular activities with students", "limited field study") or as a factor that creates additional demand for graduates ("psychological support of the veterans", "destroyed energy infrastructure", "contaminated lands").

4. DISCUSSION

The general conclusions obtained in this study are consistent with the findings of Healey and Bordogna (2014). The findings indicate there were no manifestations of "educational imperialism".

On the contrary, the approaches of both partner universities persist, despite the significant role of the UK university.

The study has some limitations, particularly related to representativeness – only Twinning project participant universities are covered by the research. However, the case of Twinning is quite illustrative because different fields of study and HEIs with different backgrounds and specializations are included. This case is interesting in comparing the Ukrainian and UK academic environments and approaches to academic quality.

The issues associated with the current conditions in which Ukrainian universities function, the psychological aspects caused by the war, and their impact on teaching staff have been revealed. All participants in their answers mentioned the impact of the war as a limiting factor for the DDP delivery ("forced online format of learning", "our HEI is in the occupied territory", "limited opportunities conducting extracurricular activities with students", "limited field study") or as a factor that creates additional demand for graduates ("psychological support of the veterans", "destroyed energy infrastructure", "contaminated lands"). One of the questions that should have been taken into consideration in the stage of research planning is how we can investigate the development if now we are talking about the survival of universities, preserving their potential as much as possible. Indeed, the strategy of development and the strategy of survival are two different strategies from the managerial point of view (Kettunen, 2010; Kotler & Murphy, 1981). This aspect reasonably should be included in further research.

The DDP-related research task arises from the war circumstances, namely ways of the Ukrainian higher education development in the conditions of war (UNESCO, 2024; Nikolaiev et al., 2023; Ganguli & Waldinger, 2023; OECD, 2022; Tröndle et al., 2024; Datsko, 2024). Besides the academic alignment inherent in different national regulatory environments, cultures, and practices, the problem of DDP delivery in the war-affected educational environment appears to be the essential factor for HEIs' capacity development and the translation of the pedagogy strategies. Two questions should be researched further: 1) To what ex-

tent such higher education institutions can implement international partnerships, complying with the requirements of the partner university and maintaining their internal quality standard? 2) What is the impact of DDP on war-affected HEIs that operate in an objectively more difficult situation (sometimes even critical) than their partner?

The problem of the HE development on territories with conflicts (Milton & Barakat, 2016; Habib, 2022; Inaba, 2020) and its role in the recovery of post-war societies can become a new direction of pedagogical research on the application of education for social development. It can be a new way of ESD development per se.

CONCLUSIONS

It was found that despite some differences between the procedures, the principles on which internal quality assurance is based in Ukrainian universities correspond to those of their British partners. The main differences concern the assessment procedure – the involvement of an external examiner, and academic moderation – which is important from the respondents' point of view and appropriate for implementation in their universities. Structured learning and employability are considered the main advantages.

The results display a sufficient perception of DDP QA by teaching staff. To some extent, the DDP implementation is "learning by doing" for teachers because it allows faculty to directly engage in curriculum development and refurbish their teaching and learning strategies. This finding is in line with Chan's (2021) results – transnational education supports internationalization of teaching and learning practices and widens staff development opportunities. Also, no "educational imperialism" of any kind was revealed.

The main characteristic associated with the Sustainable Development Goals and education for sustainable development is interdisciplinarity. At the same time, interdisciplinarity is identified as one of the challenges that need to be taken into account in academic design.

An important result of the study was the analysis of how participants assess the needs for continuous professional development associated with the successful implementation of double degree programs. Assessment for ESD and implementation of student-centered approaches are defined as such needs.

The key point is that interviewees considered "program as a continuous professional development" for staff and the institution generally.

These conclusions must be addressed considering some limitations of the study, including: 1. Theoretical limitations. There is no common theoretical framework for justifying the role of DDP in promoting ESD and the SDGs. 2. Limited data on the assessment of DDPs impact the implementation of ESD because only 9 members of the teaching staff were involved in the interview. The opinion of other stakeholders, primarily students, is important for assessing such an impact. 3. Data generalization is difficult due to different DPP structures, as well as the fact that some programs have a clear focus on sustainable development, while others may only contain "embedded" ESD promotion tools. A structured interview does not fully reveal these features.

This study revealed additional questions that should be included in further research, particularly the investigation of the specifics of the implementation of DDP in the war-affected territories. It is important to consider the psychological aspects of such research and engage the researchers with relevant backgrounds for analysis and discussion.

The outcomes gained from the research study can have wider implications for policy and practice in higher education, particularly for Ukrainian HEIs oriented on internationalization and DDP or JDF

development. Further research could be directed towards examining the influence of specific circumstances on quality assurance policies and procedures, as well as on ESD, examining the long-term sustainability of DDP. Additionally, comparative studies across different educational systems and cultural contexts could provide deeper insights into the global applicability of findings.

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ACKNOWLEDGMENT

REFERENCES

1. American Council on Education. (2014). *Mapping international joint and dual degrees; U.S. program profiles and perspectives.* Retrieved from https://www.acenet.edu/Documents/MappingInternational-Joint-and-Dual-Degrees.pdf

2. American Council on Education. (2021). *Comprehensive internationalization framework.* Retrieved from https://www.acenet.edu/Research-Insights/Pages/Internationalization/CIGE-Model-forComprehensive-Internationalization.aspx

3. Advance HE and QAA. (2021). *Education for Sustainable Development Guidance.* Retrieved from www.qaa.ac.uk/quality-code/education-for-sustainable-development

4. Akgün B., & Alpaydın, Y. (Eds.). (2022). Education Policies in the 21st Century Comparative Perspectives. In *Maarif Global Education Series* (p. 292). Singapore, Palgrave Macmillan.

5. Barth, M., & Timm, J. (2011). Higher education for sustainable development: Students' perspectives on an innovative approach to educational change. *Journal of Social Science, 7*(1), 13-23. http://dx.doi.org/10.3844/jssp.2011.16.26

6. Barth, M., & Rieckmann, M. (2012). Academic staff development as a catalyst for curriculum change towards education for sustainable development: An output perspective. *Journal of Cleaner Production, 26,* 28-36. https://doi.org/10.1016/j.jclepro.2011.12.011

7. Bohnsack, R., Pfaff, N., & Weller W. (Eds.). (2010). *Qualitative Analysis and Documentary Method in International Education Research* (371 p.). Barbara Budrich Publishers Opladen & Farmington Hills, MI.

8. Brownell, S. E., & Tanner, K. D. (2012). Barriers to faculty pedagogical change: Lack of training, time, incentives, and … tensions with professional identity? *CBE – Life Sciences Education, 11(4),* 339-346. Retrieved from https://pmc.ncbi.nlm.nih.gov/articles/PMC3516788/

9. Bryman, A., & Cassell, C. (2006). The researcher interview: a reflective perspective. Qualitative *Research in Organizations and Management: An International Journal, 1.1,* 41-55. http://dx.doi.org/10.1108/17465640610666633

10. Buerkle, A., O'Dell, A., Matharu, H., Buerkle, L., & Ferreira, P. (2023). Recommendations to align higher education teaching with the UN sustainability goals – A scoping survey. *International Journal of Educational Research Open, 5,* 100280. https://doi.org/10.1016/j.ijedro.2023.100280

11. Chan, R. Y. (2021). Understanding International Joint and Dual Degree Programs: Opportunities and Challenges during and after the COVID-19 Pandemic. *Journal of Comparative & International Higher Education, 13(5),* 86-107. https://doi.org/10.32674/jcihe.v13i5.3690

12. Culver, S. M., Puri, I. K., Spinelli, G., DePauw, K. P. K., & Dooley, J. E. (2011). Collaborative Dual-Degree Programs and Value Added for Students: Lessons Learned Through the Evaluate-E Project. *Journal of Studies in International Education, 20*(10), 1-22. https://doi.org/10.1177/1028315311403934

13. Datsko, O., Zakharchenko, E., Butenko, Y., Melnyk, O., Kovalenko I., Onychko, V., Ilchenko, V., & Solokha, M. (2024). Ecological Assessment of Heavy Metal Content in Ukrainian Soils. *Journal of Ecological Engineering, 25(11),* 100-108. https://doi.org/10.12911/22998993/192669

14. Di Giulio, A., & Defila, R. (2017). Enabling university educators to equip students with inter- and transdisciplinary competencies. *International Journal of Sustainability in Higher Education, 18*(5), 630-647. https://doi.org/10.1108/IJSHE-02-2016-0030

15. Diefenbach, T. (2009). Are case studies more than sophisticated storytelling? Methodological problems of qualitative empirical research mainly based on semistructured interviews. *Qualitative Quantitative, 43,* 875-894. https://doi.org/10.1007/s11135-008-9164-0

16. Dlouhá, J., Henderson, L., Kapitulčinová, D., & Mader, C. (2018). Sustainability-oriented higher education networks: Characteristics and achievements in the context of the UN DESD. *Journal of Cleaner Production, 172,* 4263-4276. https://doi.org/10.1016/j.jclepro.2017.07.239

17. Doody, O., & Noonan, M. (2013). Preparing and conducting interviews to collect data. *Nurse Researcher, 20,* 28-32. https://doi.org/10.7748/nr2013.05.20.5.28.e327

18. Fiselier, E. S., Longhurst, J., & Gough, G. (2017). Exploring the current position of ESD in UK higher education institutions. *International Journal of Sustainability in Higher Education, 19*, 393-412. https://eric.ed.gov/?id=EJ1166597

19. Flinders, D. J. (1997). Review of the book InterViews: An introduction to qualitative research interviewing. *Evaluation and Program Planning, 20*(3), 287-288. https://doi.org/10.1016/S0149-7189(97)89858-8

20. Forlicz, M., Tomaszewski, J., & Skýpalová, R. (2024). Measuring quality and effectiveness of HEI internationalisation - results from Poland, Czechia, Ukraine and the United Kingdom. *Economics and Sociology, 17*(1), 196-214. https://doi.org/10.14254/2071-789X.2024/17-1/13

21. FREE Network. (2022). Higher Education and Research in times of War and Peace: Key Insights from the 2022. *FREE Network Conference. Policy Brief.* Retrieved from https://freepolicybriefs.org/2022/09/26/education-war-peace/

22. Gaebel M., Zhang T., & Stoeber H. (2024). *Trends 2024: European higher education institutions in times of transition.* EUA: European University Association. Retrieved from https://www.eua.eu/images/publications/Publication_PDFs/Trends_2024.pdf

23. Gallagher, P. (2014). The classroom is my castle: academics responding to quality assurance. *Procedia – Social and Behavioral Sciences, 116,* 4748-4757. https://doi.org/10.1016/j.sbspro.2014.01.1020

24. Ganguli, I., & Waldinger, F. (2023). *The impact of the war in Ukraine on science and universities.* CEPR. Retrieved from https://cepr.org/voxeu/columns/impact-war-ukraine-science-and-universities

25. Griffee, D. T. (2005). Research tips: interview data collection. *Journal of Developmental Education, 28*(3), 36-37. Retrieved from https://www.researchgate.net/publication/234757803_Research_Tips_Interview_Data_Collection

26. Habib, M. (2022). Digital transformation strategy for developing higher education in conflict-affected societies. *Social Sciences & Humanities Open, 8*(1), 100627. https://doi.org/10.1016/j.ssaho.2023.100627

27. Hammer, T., & Lewis, A. L. (2023). Which competencies should be fostered in education for sustainable development at higher education institutions? Findings from the evaluation of the study programs at the University of Bern, Switzerland. *Discover Sustainability, 4*(19). https://doi.org/10.1007/s43621-023-00134-w

28. Healey, N. M., & Bordogna, C. (2014). From Transnational to Multinational Education: Emerging Trends in International Higher Education. *Internationalisation of Higher Education, 3,* 33-53. Retrieved from https://eprints.hud.ac.uk/id/eprint/32451/

29. Heffernan, T., Morrison, M., Basu, P., & Sweeney, A. (2010). Cultural

differences, learning styles and transnational education. *Journal of Higher Education Policy and Management, 32*(1), 27-39. https://doi.org/10.1080/13600800903440535

30. Hegarty, K. (2008). Shaping the self to sustain the other: Mapping impacts of academic identity in education for sustainability. *Environmental Education Research, 14,* 681-692. https://doi.org/10.1080/13504620802464858

31. Henkel, M. (2000). *Academic Identities and Policy Change in Higher Education*. London: Jessica Kingsley.

32. Herweg, K., Tribelhorn, T., Lewis, A. L., Providoli, I., Trechsel, L. J., & Steinböck C. (2021). *Transdisciplinary Learning for Sustainable Development – Sharing Experience in Course and Curriculum Design*. Bern, Switzerland: Centre for Development and Environment (CDE), University of Bern, with Bern Open Publishing (BOP).

33. Hunger, A., Werner, S., & Eka-diyanto, F. A. (2013). Towards an Automated tool for Assisting the Design of Double Degree Programs. *Procedia – Social and Behavioral Sciences, 102*, 228-235. https://doi.org/10.1016/j.sbspro.2013.10.737

34. Inaba, Y. (2020). Higher education in a depopulating society: Survival strategies of Japanese universities. *Research in Comparative and International Education.* https://doi.org/10.1177/1745499920910581

35. Kettunen, J. (2010). Strategy Process in Higher Education. *Journal of Institutional Research, 15*(1), 16-27. Retrieved from http://pandora.nla.gov.au/pan/122841/20161127-0002/www.aair.org.au/articles/volume-15-no-1/15-1-strategy-process-in-higher-education.html

36. Kioupi, V., & Voulvoulis, N. (2020) Sustainable development goals (SDGs): assessing the contribution of higher education programmes. *Sustainability, 12*(17), 6701. https://doi.org/10.3390/su12176701

37. Kołodziej, A., & Kołodziej-Durnaś, A. (2024). What about my future career after the pandemic? SARS-CoV-2 and distance learning in

the evaluation of future professional opportunities. *Economics and Sociology, 17*(1), 49-68. https://doi.org/10.14254/2071-789X.2024/17-1/4

38. Kotler, P., & Murphy, P. E. (1981). Strategic Planning for Higher Education. *The Journal of Higher Education, 52*(5), 470-489. https://doi.org/10.2307/1981836

39. Kozmenko, S., Danko, Y., & Kozlovskyi, S. (2023). Academic management in war conditions: Chronicles of aggression and resistance experience of Ukrainian universities. *Problems and Perspectives in Management, 21*(2-si), 1-3. https://doi.org/10.21511/ppm.21(2-si).2023.01

40. Leal Filho, W., Frankenberger, F., Salvia, A. L., Azeiteiro, U., Alves, F., Castro, P., Will, M., Platje, J., Lovren, V. O., Brandli, L., Price, E., Doni, F., Mifsud, M., & Ávila, L. V. (2021). A framework for the implementation of the Sustainable Development Goals in university programmes. *Journal of Cleaner Production, 299,* 126915. https://doi.org/10.1016/j.jclepro.2021.126915

41. Lucas, L. (2014). Academic resistance to quality assurance processes in higher education in the UK. *Policy and Society, 33*(3), 215-224. https://doi.org/10.1016/j.polsoc.2014.09.006

42. Manzoor, S. R., Ho, J. S. Y., & Mahmud, A. Al. (2021). Revisiting the 'university image model' for higher education institutions' sustainability. *Journal of Marketing for Higher Education, 31*(2), 220-239. https://doi.org/10.1080/08841241.2020.1781736

43. Marinoni, G., & Pina Cardona, S. B. (2024). *Internationalization of Higher Education: Current Trends and Future Scenarios* (6th IAU global survey report). IAU: International Association of Universities. Retrieved from https://www.iau-aiu.net/IMG/pdf/2024_internationalization_survey_report_digital.pdf

44. Milton, S., & Barakat, S. (2016). Higher education as the catalyst of recovery in conflict-affected

societies. *Globalisation Societies and Education, 14*(3), 403-421. https://doi.org/10.1080/14767724.2015.1127749

45. Nikolaiev, Ye., Riy, G., & Shem-elynets, I. (2023). *War in Ukraine: Reshaping the higher education sector. Analytical report* (74 p.). Kyiv: Borys Grinchenko Kyiv University. Retrieved from https://elibrary.kubg.edu.ua/id/eprint/46251/1/H_Rii_Y_Nikolaiev_I_shemelynets_Monograph_2023_ATs.pdf

46. OECD. (2022). *Environmental consequences of the war in Ukraine and prospects for green reconstruction.* (In Ukrainian). Retrieved from https://www.oecd-ilibrary.org/docserver/a7bd20e4-uk.pdf?expires=1686570688&id=id&accname=guest&checksum=FE4D7DABFAD9102300665E6804DD2D75

47. Palermo, O. A., Bisignano, A. P., & Mercado, S. (2018). The Design of International Dual Degree Programmes as Effective Transnational Education Experiences. In V. Tsiligiris & W. Lawton (Eds.), *Exporting Transnational Education*. Cham: Palgrave Macmillan. https://doi.org/10.1007/978-3-319-74739-2_4

48. Pereira, P., Zhao, W., Symochko, L., Inacio, M., Bogunovic, I., & Barce-lo, D. (2022). The Russian-Ukrainian armed conflict will push back the sustainable development goals. *Geography and Sustainability, 3*(3), 277-287. https://doi.org/10.1016/j.geosus.2022.09.003

49. Pineda, P. (2023). Double the degree, double the identity? Identification and experiences of students studying two simultaneous degrees. *International Journal of Educational Research, 125,* 102346. https://doi.org/10.1016/j.ijer.2024.102346

50. Pyvis, D. (2011). The need for context sensitive measures of educational quality in transnational higher education. *Teaching in Higher Education, 16(6),*733-744. http://dx.doi.org/10.1080/13562517.2011.570436

51. Rumbley, L. E., Helms, R. M., Peterson, P. M., & Altbach, P. G. (Eds.). (2014). *Global Opportuni-*

ties and Challenges for Higher Education Leaders. Global Perspectives on Higher Education. Rotterdam: SensePublishers. https://doi.org/10.1007/978-94-6209-863-3_13

52. Scherak, L., & Rieckmann, M. (2022). Development and assessment of ESD competences: staff training at the University of Vechta. In P. Vare, N. Lausselet, & M. Rieckmann (Eds.), *Competences in Education for Sustainable Development. Critical Perspectives* (pp. 121-128). Cham: Springer International Publishing. Retrieved from https://link.springer.com/chapter/10.1007/978-3-030-91055-6_15

53. Southall, J., & Wason, H. (2016). Evaluating the use of synoptic assessment to engage and develop lower level Higher Education students within a Further Education setting. *Practitioner Research in Higher Education Journal, 10*(1), 192-202. Retrieved from https://ojs.cumbria.ac.uk/index.php/prhe/article/view/319

54. Steagall, J. W., Falk, P., Gallo, A., & Porter, T. W. (2021). International double degree programs as accelerators for internationalization: Lessons from the Trans-Atlantic Business School Alliance. *Journal of Teaching in International Business, 32*(1), 7-35. https://doi.org/10.1080/08975930.2021.1906378

55. Teng, C., Horng, J., & Baum, T. (2013). Academic perceptions of quality and quality assurance in undergraduate hospitality, tourism and leisure programmes: A comparison of UK and Taiwanese programmes. *Journal of Hospitality, Leisure, Sport & Tourism Education, 13,* 233-243. https://doi.org/10.1016/j.jhlste.2012.06.002

56. Toman I., Marinoni G., & Harris M. (2023). A new kind of internationalisation to help achieve SDGs. *University World News, 04*(November). https://www.universityworldnews.com/post.php?story=20231031125854458

57. Tröndle, T., Melnyk, O., Tutova, O., Porieva, V., Neumann, F., Staffell, I., & Patt, A. (2024). Rebuilding Ukraine's energy supply in a secure, economic, and decarbonised way. *Environmental Research: Infrastructure and Sustainability, 4*(3). https://doi.org/10.1088/2634-4505/ad6738

58. UNESCO. (2024). *Analysis of war damage to the Ukrainian science sector and its consequences*, United Nations Educational, Scientific and Cultural Organization https://unesdoc.unesco.org/ark:/48223/pf0000388803

59. Vargas-Merino, J. A., Rios-Lama, C. A., & Panez-Bendezú, M. H. (2024). Critical implications of education for sustainable development in HEIs - A systematic review through the lens of the business science literature. *International Journal of Management Education, 22*(1), Article 100904. https://doi.org/10.1016/j.ijme.2023.100904

60. Wals, A. E. (2013). Sustainability in higher education in the context of the UN DESD: A review of learning and institutionalization processes. *Journal of Cleaner Production, 62,* 8-15. https://doi.org/10.1016/j.jclepro.2013.06.007

61. World Bank. (2022). *Education: Impact of the War in Ukraine.* Retrieved from https://documents1.worldbank.org/curated/en/099945306202211104/pdf/P1775870809f1d04d0844c0e-7042abf0eb5.pdf

62. Zheng, G., Cai, Y., & Ma, S. (2017). Towards an analytical framework for understanding the development of a quality assurance system in an international joint programme. *European Journal of Higher Education, 7*(3), 243-260. Retrieved from https://www.twinningukraine.com/