UDC: 378.147:005.96:004.738.5

## Olena CHERNIAVSKA, Prof., Dr. Sc.,

Head of the Board

The Institute of Social and Economic Initiatives,

Poltava, Ukraine

President

DiTELC Switzerland - Swiss Centre of Excellence in Digital Transformation and Ecosystem

Leadership

Zurich, Switzerland

# Mwangi KARANJA, Dr.

JHUB Africa,

Jomo Kenyatta University of Agriculture and Technology (JKUAT) in Kenya, Nairobi, Kenya

## Oleksandra CHERNIAVSKA,

PhD candidate, Kyiv National University of Technologies and Design, Kyiv, Ukraine

#### Paul RURO.

Researcher St. Paul's University,
Limuru, Kenya

# VIRTUAL EXCHANGE AS A VECTOR OF SYSTEMIC TRANSFORMATION IN BUSINESS EDUCATION: THEORETICAL-METHODOLOGICAL EXPLICATION AND INSTITUTIONAL ANALYSIS OF THE ERASMUS+ VEHUB4YOU PROJECT

Contemporary educational landscapes are undergoing profound transformations, shaped both by global digital transitions and by the pressing necessity to embed the principles of sustainable development into educational practices. Within this evolving context, the concept of virtual exchange — defined as the use of digital technologies to facilitate transnational and intercultural interaction between students, educators, and professional communities — has acquired increasing scholarly and practical relevance (O'Dowd, 2021). Virtual exchange is no longer a mere technological add-on; it becomes a strategic tool for rethinking the very meaning of accessibility and quality in business education in a globalized world. The VEHUB4YOU project, implemented within the framework of the ERASMUS+ programme, exemplifies how virtual exchange can be institutionalized and integrated into models of international business education. The project aims to establish a sustainable network of virtual business hubs in Ukraine and Azerbaijan, providing access to cutting-edge educational resources grounded in EU best practices for youth from socially and geographically marginalized communities.

The project is theoretically anchored in several complementary paradigms, including social constructivism (Vygotsky, 1978), connectivism (Siemens, 2005), distributed cognition (Hutchins, 1996), and dialogic education (Wegerif, 2007). These approaches provide a multilayered

methodological framework that positions virtual exchange not as an extrinsic pedagogical practice, but as an ontologically embedded component of contemporary educational processes. Social constructivism, which emphasizes the role of collaborative activity and socio-cultural context in knowledge formation, finds concrete application in VEHUB4YOU's structure — where learning unfolds through collective project design, problem-solving, and real-world case analysis. Knowledge here is not a transcendent entity transferred from teacher to student, but a product of co-constructed meaning-making embedded in both local and global contexts. Connectivism adds to this perspective by conceptualizing knowledge as a dynamic network of connections among people, digital artifacts, and information flows (Siemens, 2005). Project fosters precisely such a network: its participants, coming from diverse cultural and resource backgrounds, co-create new educational content through collective interpretation. The hubs are not merely transmission channels but nodes of networked intelligence, enabling cognitive co-evolution.

Distributed cognition, as proposed by Hutchins (1996), permits viewing virtual exchange as a sociotechnical system wherein cognitive functions are distributed across individuals, technologies, organizational structures, and cultural codes. In this sense, virtual exchange becomes a mechanism of distributed knowledge governance, rather than merely a digital conduit. Dialogic education (Wegerif, 2007) offers an interpretive lens to understand how it stimulates critical thinking, creative engagement, and entrepreneurial competence development. Dialogue, not merely as a form but as a methodology, empowers participants to transcend conventional educational paradigms, opening space for novel interpretations and solutions.

The initiative can be interpreted as an institutional experiment that tests the scalability of virtual exchange across educational systems in the Eastern Partnership countries. The establishment of a network of 60 virtual business hubs involves not only technological infrastructure but also the development of a resilient local-global educational ecosystem. These hubs function as localized nodes of a global knowledge network, granting students access to educational content, mentorship, and international partnerships. The project's distinctive feature lies in its dual aim: beyond knowledge transfer, it fosters the co-creation of new educational and entrepreneurial practices rooted in cooperation, mutual respect, and adaptive capacity. It presents a hands-on model of hybrid education that integrates elements of remote learning, project-based collaboration, and experiential learning (Kolb, 1984). The emerging hybrid ecosystem supports the development of digital competencies outlined in the DigComp 2.2 framework (Vuorikari et al., 2022), including information literacy, digital communication, content creation, safety, and problem-solving in digital environments. Thus, the project facilitates not only knowledge acquisition but also the formation of meta-competencies essential for social integration and professional success in the digital economy.

The VEHUB4YOU project must also be interpreted in relation to the United Nations Sustainable Development Goals (SDGs). Its structure and objectives particularly resonate with SDG 4 (Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all) and SDG 8 (Promote sustained, inclusive, and sustainable economic growth, full and productive employment, and decent work for all) (Guth, 2016). This offers young people the opportunity not only to acquire theoretical knowledge, but also to engage in practical entrepreneurial experiences adapted to the specificities of local economies.

These developments align with the findings of Cherniavska et al. (2023), which highlight that virtual exchange and collaborative leadership facilitate the fundamental transformation of higher education, particularly in the context of global digital transitions. This initiative exemplifies

this trend by showing how networked interaction can improve educational quality while also stimulating regional economic development. VEHUB4YOU may be regarded as a pilot model for the systemic transformation of business education, grounded in principles of networked learning, dialogic engagement, and practice orientation. The project's implementation of virtual exchange operates not merely as an educational instrument but as a social mechanism fostering youth integration into global knowledge production and exchange processes. The scholarly significance of the project lies in its capacity to demonstrate how conceptual paradigms — from social constructivism to connectivism — can be operationalized within institutional frameworks responsive to demands for sustainability, inclusivity, and innovation. Project provides a foundation for further inquiry into digital pedagogy, sustainable entrepreneurship, and international educational collaboration, opening new avenues for theory and practice in virtual exchange.

#### References

- 1. Cherniavska, O., Gryshchenko, I., Hanushchak-Yefimenko, L., Olshanska, O., & Cherniavska, O. (2023). Transformative Innovations, Virtual Exchange, and Collaborative Leadership: Reshaping Higher Education for the Global Digital World Web 4.0. Management Journal, 1(37), 106–107. <a href="https://jrnl.knutd.edu.ua/index.php/mng/article/view/1404">https://jrnl.knutd.edu.ua/index.php/mng/article/view/1404</a>
- 2. De Wit, H., & Hunter, F. (2015). Internationalisation of Higher Education. <a href="https://www.europarl.europa.eu/RegData/etudes/STUD/2015/540370/IPOL\_STU(2015)540370\_EN.pdf">https://www.europarl.europa.eu/RegData/etudes/STUD/2015/540370/IPOL\_STU(2015)540370\_EN.pdf</a>
- 3. Jager, S., Peng, H., Albá Duran, J., Oggel, G.A. (2021). Virtual Exchange as Innovative Practice across Europe: Awareness and Use in Higher Education. http://hdl.handle.net/11370/80666684-9024-466a-9968-d13b335cfb6a
- 4. Helm, F. (2015). The practices and challenges of telecollaboration in higher education in Europe. Language Learning & Technology, 19(2), 197–217. http://dx.doi.org/10125/44424
  - 5. Hutchins, E. (1996). Cognition in the Wild. MIT Press.
- 6. Jandrić, P., Knox, J., Besley, T., Ryberg, T., Suoranta, J., & Hayes, S. (2018). Postdigital science and education. Educational Philosophy and Theory, 50(10), 893–899. https://doi.org/10.1080/00131857.2018.1454000
- 7. Kolb, D. A. (1984). Experiential Learning: Experience as the Source of Learning and Development. Englewood Cliffs, NJ: Prentice Hall. <a href="http://academic.regis.edu/ed205/Kolb.pdf">http://academic.regis.edu/ed205/Kolb.pdf</a>
- 8. O'Dowd, R. (2021). What do students learn in virtual exchange? A qualitative content analysis of learning outcomes across multiple exchanges. International Journal of Educational Research, 109, 101804. <a href="https://doi.org/10.1016/j.ijer.2021.101804">https://doi.org/10.1016/j.ijer.2021.101804</a>
- 9. Siemens, G. (2005). Connectivism: A Learning Theory for the Digital Age. International Journal of Instructional Technology and Distance Learning. <a href="http://www.itdl.org/Journal/Jan\_05/article01.htm">http://www.itdl.org/Journal/Jan\_05/article01.htm</a>
- 10. Vuorikari, R., Kluzer, S. and Punie, Y., DigComp 2.2: The Digital Competence Framework for Citizens With new examples of knowledge, skills and attitudes, EUR 31006 EN, Publications Office of the European Union, Luxembourg, 2022, ISBN 978-92-76-48882-8, doi:10.2760/115376, JRC128415
- 11. Vygotsky, L. S. (1978). Mind in Society: The Development of Higher Psychological Processes. Harvard University Press.
- 12. Wegerif, R. (2007). Dialogic education and technology: Expanding the space of learning. Springer. <a href="https://doi.org/10.1007/978-0-387-71142-3">https://doi.org/10.1007/978-0-387-71142-3</a>