Juergen Bleicher, Emil Velinov

The Role of Blended Learning International Cooperation in Increasing Students' Employability

DOI: https://doi.org/10.34135/mlar-24-02-05

ABSTRACT

The swift evolution of education, catalyzed by the global pandemic, has driven the infusion of advanced technologies into higher education. As student expectations evolve amid global trends and digital transformation, a paradigm shift in pedagogical strategies is underway. This paper explores the realm of international business education and investigates the influence of Blended Learning in International Contexts (BLIC) on increasing students' employability. This study analyzes the motivating factors propelling student participation in virtual collaborations across international management, strategic management, and cross-cultural management disciplines, spanning diverse countries and business schools. Additionally, it assesses the role of institutional support and digital literacy in enhancing the effectiveness of BLIC. This paper further examines how BLIC enhances critical thinking, problem-solving, and intercultural communication skills, ultimately preparing students to thrive in an increasingly interconnected and dynamic global workforce. By fostering international collaboration, BLIC empowers students to navigate complex global business challenges and equips them with the competencies essential for success in today's digital economy.

KEY WORDS

Blended Learning. Business Education. Global Virtual Teams. Student Employability.

1 Introduction

The dynamic transformation of education, accelerated by the global pandemic, has compelled the integration of cutting-edge technologies into higher education (Mathew et al., 2021). This paper probes the transformative impact of Blended Learning in International Contexts (BLIC) on student employability within international business and management courses. The emergence of global virtual teams (GVTs) within experiential learning models has become a vital catalyst, fostering cross-border collaboration. This study sheds light on the drivers prompting students across diverse business schools to participate actively in virtual cooperation, particularly within the international management domain and their perception on future employability.

The rapid evolution of education, catalysed by the unprecedented challenges posed by the global pandemic, has ushered in an era of innovation, where the infusion of state-of-the-art technologies into higher education has become a necessity rather than an option (Rahimi & Oh, 2024). During these transformations, this paper takes a deep dive into the profound influence of BLIC on student employability, a cornerstone of modern pedagogical strategies, within the realm of international business and management courses. As educational landscapes evolve and student expectations adapt to shifting global trends, there is a compelling need to explore the ways in which technology, specifically BLIC, is reshaping the employability dynamics of students within the context of global virtual teams (GVTs).

The BLIC (Blended Learning International Collaboration) initiative significantly enhances students' employability by equipping them with the critical skills demanded by global employers. Through active participation in BLIC projects, students develop key competencies such as cross-cultural communication, virtual teamwork, and digital literacy. These projects simulate real-world business environments, providing students with hands-on experience in managing international projects, utilizing digital collaboration tools, and navigating cross-border professional dynamics (Velinov & Bleicher, 2023).

1.1 Literature Review

The infusion of digital platforms into education is a response to the evolving educational landscape, fuelled by the pandemic (Tomei et al., 2024). The pandemic's influence has led to shifts in higher education, with technology playing a crucial role in ensuring uninterrupted learning (Reale et al., 2022). Experiential learning, a cornerstone of business education, has gained prominence, with global virtual teams serving as a vehicle for immersive learning experiences (Jagatheesaperumal et al., 2024). These teams facilitate collaboration across geographical barriers, fostering strategic thinking and cross-cultural understanding (Jagatheesaperumal et al., 2024).

Digital platforms have significantly reshaped pedagogical approaches, particularly within the realm of international business education, by facilitating flexible and accessible learning opportunities (Alam et al., 2022). The integration of online and blended learning environments has revolutionized the delivery of education, fostering a technology-enhanced learning ecosystem (Adamson & Sloan, 2023). Notably, the adoption of computer-supported collaborative learning (CSCL) has demonstrated substantial benefits, including improved knowledge acquisition and skill development (Tedla & Chen, 2024). The onset of the COVID-19 pandemic accelerated the adoption of technology-assisted learning, further emphasizing the critical importance of integrating technological tools into educational frameworks (Paudyal, 2022). Blended learning, which combines online and face-to-face instructional methods, has gained considerable momentum, offering both flexibility and a unified learning experience (Tonbuloğlu & Tonbuloğlu, 2023). Furthermore, virtual learning environments and learning management systems have enhanced communication within virtual teams, thereby improving collaboration and interaction (Swart et al., 2022). The pandemic has underscored the pivotal role of digital platforms in sustaining connectivity and engagement amidst educational disruptions (Li et al., 2023).

Recent studies from 2022 to 2024 have continued to explore the impact of blended learning on student employability. For example, Kumar & Goyal (2023) emphasize that blended learning environments prepare students for the digital and collaborative nature of modern workplaces. Additionally, research by Taylor (2023) found that students participating in blended learning programs reported higher levels of job readiness and employability skills compared to those in traditional learning environments. These studies highlight the ongoing relevance and importance of blended learning in higher education.

2 Methodology

This study engaged 114 students across diverse business schools, spanning various countries, and enrolled in business and management programs. Data collection employed an online questionnaire, utilizing the Likert scale, distributed through Google Forms. The research aimed to uncover the impact of Blended Learning in International Contexts (BLIC) and innovative teaching approaches on student employability within global virtual teams. A comparative analysis of student perceptions before and during the pandemic (2017 and 2022) was also conducted.

The methodology of this study encompassed a comprehensive examination of student employability within global virtual teams, with a specific focus on the transformative role of BLIC and innovative pedagogical approaches. To effectively explore this phenomenon, the research engaged a cohort of 114 students, hailing from a diverse array of business schools (Duale Hochschule Baden-Wurttemberg, Keele University, Reykjavik University, Technologico de Monterrey, Skoda Auto University and the Estonian Business School) from six respective countries – Germany, United Kingdom, Iceland, Mexico, Czechia and Estonia. These students were enrolled in business and management programs, making them ideal participants to provide insights into the impact of BLIC on student employability within the context of global virtual teams.

Data collection was executed using a carefully crafted online questionnaire that harnessed the Likert scale, a proven tool for assessing attitudes and perceptions. The questionnaire was strategically designed to delve into the nuances of student employability within the realm of international business and management education, particularly when operating within the dynamic landscape of global virtual teams. The Likert scale, known for its versatility and ability to capture nuanced responses, enabled participants to provide granular insights into their experiences, opinions, and perceptions.

The distribution of the online questionnaire was facilitated through Google Forms, a widely accessible and user-friendly platform that ensured a seamless and convenient process for participants. Leveraging digital technology for data collection was not only aligned with the study's focus on technology-driven engagement but also enhanced the efficiency and reach of the research.

The overarching goal of the research was twofold: first, to unravel the multifaceted impact of BLIC and innovative teaching approaches on student employability within global virtual teams, and second, to conduct a comparative analysis of student perceptions over a defined timeframe. Specifically, the study aimed to understand how student employability had evolved before and during the pandemic, marked by the years 2017 and 2022, respectively.

By employing a mixed-methods approach that combines quantitative data obtained through the Likert scale with qualitative insights garnered from open-ended responses, the methodology ensured a comprehensive exploration of the phenomenon. This hybrid approach empowered the research to capture both the quantitative trends and the qualitative nuances of student employability, providing a richer understanding of the interplay between BLIC, teaching innovation, and virtual teamwork.

The methodology aligns with recent studies such as those by Muhria, Supriatna, & Nurfirdaus (2023), who explored the impact of blended learning on employability skills, and by Crew & Martins (2023), who analysed the effectiveness of blended learning in developing real-world skills through virtual teamwork. This comprehensive approach ensures a robust analysis of how BLIC influences student readiness for the global job market.

3 Results

The study revealed a positive student perception of employability enhancement within experiential learning projects such as BLIC and X-Culture in business and management education across the globe. Amid pandemic-induced lockdowns, digital platforms and online learning emerged as pivotal tools, maintaining connectivity and facilitating assignment completion. Students expressed satisfaction with team performance, educator support, and peer interaction through digital platforms. Communication tools like Google and Bing garnered significant appreciation.

N	Min	Max	Means	Std.Dev.
Utilization intensity of technologies and tools: 1. Online libraries from the university		1.000	7.000	3.149
Utilization intensity of technologies and tools: 2. Internet search engines (e.g., Google, Bing)	114	2.000	7.000	6.289
Utilization intensity of technologies and tools: 3. Social media portals (e.g., Facebook)	114	1.000	7.000	3.096
Utilization intensity of technologies and tools: 4. Video channels (e.g., YouTube videos from experts)	114	1.000	7.000	3.763
Utilization intensity of technologies and tools: 5. Community/ Conference technologies (e.g., Zoom, MS Teams, Skype, WebEx, etc.)		1.000	7.000	5.035
Utilization intensity of technologies and tools: 6. Cloud-based services (e.g., Google Drive, DropBox, OneDrive)	114	1.000	7.000	4.026
Utilization intensity of technologies and tools: 7. WeChat, WhatsApp, Viber App, etc.		1.000	7.000	5.272
Utilization intensity of technologies and tools: 8. Learning portals from the university (e.g., Moodle, Canvas, Blackboard)		1.000	7.000	3.430

*1=Not at all or very low utilization intensity, 7=Very high utilization intensity

 TABLE 1:
 Usage of digital media and AI technologies by the students within BLIC and X-Culture programs

 Source: own processing, 2024
 Source: Note: Source: Source:

The provided tables present a comprehensive overview of the utilization intensity of various technologies and tools within the context of the study. These technologies play a crucial role in facilitating student employability within global virtual teams, shedding light on their preferences and behaviours in utilizing digital resources. The table presents key statistical measures, including the number of participants (N), the minimum and maximum values, the mean (average), and the standard deviation (Std.Dev.) for each technology/tool category.

Year	Perception Category	N	Mean	Std. Dev.	t-value	p-value
2017	Overall satisfaction with team performance	114	4.32	1.29		
2022	Overall satisfaction with team performance	114	5.16	1.12	5.32	<0.001
2017	Perceived educator support	114	3.85	1.34		
2022	Perceived educator support	114	4.89	1.21	6.01	<0.001
2017	Interaction with peers through digital platforms	114	4.11	1.35		
2022	Interaction with peers through digital platforms	114	5.05	1.25	4.89	<0.001

TABLE 2:Comparative analysis of student perceptions on student performance in 2017 and 2022Source: own processing through STATA software, 2024

This table presents a comparative analysis of student perceptions in 2017 and 2022, focusing on key perception categories such as overall satisfaction with team performance, perceived educator support, and interaction with peers through digital platforms. The analysis includes key statistical measures such as the number of participants (N), the mean (average), the standard deviation (Std. Dev.), the t-value, and the p-value for each perception category.

The table provides valuable insights into the shifts in student perceptions over the specified timeframe, revealing statistically significant differences and trends in their experiences within global virtual teams. The significant p-values (p<0.001) indicate meaningful changes in student perceptions between 2017 and 2022. The paper results depict that the overall student performance has grown over the period 2017-2022 within the selected business school and that learner and teacher interaction has increased as well (see Table 3).

- 1. Students reported higher satisfaction with team performance in 2022 compared to 2017.
- 2. Perceived educator support increased significantly in 2022.
- 3. Interaction with peers through digital platforms showed notable improvement in 2022.
- 4. Students who engage in BLIC demonstrate a higher degree of readiness for the global job market, possessing practical skills and a versatile mindset that are highly valued by employers in today's interconnected world.

 TABLE 3:
 Study findings in nutshell

 Source: own processing, 2024

4 Discussion

The results indicate a substantial positive shift in student perceptions of employability within the context of BLIC and GVTs. This shift can be attributed to several key factors:

Enhanced Digital Connectivity: The proliferation of digital tools and platforms has facilitated seamless communication and collaboration among students, transcending geographical barriers. Tools such as Google, Bing, and video conferencing platforms like Zoom and MS Teams have been instrumental in maintaining connectivity and fostering a collaborative environment. The study by Velinov & Bleicher (2023), underscores the importance of virtual learning environments in enhancing student engagement and interaction.

Educator Support and Pedagogical Innovation: The role of educators in supporting and guiding students through digital platforms has been pivotal. Educators' ability to adapt to new technologies and innovative teaching methods has significantly contributed to students' positive experiences. This aligns with findings from Heilporn, Lakhal & Bélisle (2021), who emphasized the importance of educator support in blended learning environments.

Increased Student Engagement: The integration of experiential learning projects like BLIC and X-Culture has provided students with real-world, practical experiences that enhance their employability. These projects enable students to work in diverse, cross-cultural teams, fostering skills such as strategic thinking, cross-cultural communication, and adaptability. This is consistent with the research by Goulart, Liboni & Cezarino (2022), which highlights the role of experiential learning in preparing students for the job market.

Flexibility and Accessibility: Blended learning offers the flexibility to combine online and face-to-face interactions, accommodating diverse learning preferences and schedules. This flexibility has been particularly valuable during the pandemic, ensuring continuity in education and maintaining student engagement. The study by Aithal and Mishra (2024) supports this, noting that blended learning environments enhance student satisfaction and learning outcomes.

The discussion is interlinked with the methodology by highlighting how the data collection process, specifically the use of online questionnaires and the Likert scale, enabled the capture of detailed insights into these factors. The comprehensive methodology allowed for an in-depth analysis of student perceptions, providing a robust foundation for understanding the impact of BLIC on employability.

Recent studies from 2022 to 2024 have further supported these findings. For instance, research by Hughes (2024) emphasized the effectiveness of blended learning in developing realworld skills through virtual teamwork and highlighted the positive impact of blended learning on employability skills. These studies reinforce the importance of innovative teaching approaches and digital connectivity in enhancing student employability within the context of global virtual teams.

5 Conclusion

In conclusion, experiential learning within global virtual teams, propelled by BLIC, augments student motivation and engagement, thereby increasing employability. Projects like BLIC and X-Culture underscore the value of immersive learning experiences and international exposure within business education. The study advocates for the continued advancement of global virtual teams, enhancing international business courses and nurturing student participation. As technology advances, future research could explore how BLIC and virtual reality further amplify experiential learning within global virtual teams. Additionally, investigating the role of mentorship and guidance in fostering cross-cultural collaboration could refine pedagogical practices in international business education, ensuring students are well-equipped for the complex global business landscape.

However, the implementation of BLIC also presents several challenges and limitations that need to be addressed for its successful integration. Issues such as the digital divide could hinder equitable access to these learning tools, as not all students may have the necessary technological resources or infrastructure. The readiness and quality of technological infrastructure, particularly in underdeveloped regions, may also limit the reach and effectiveness of these virtual learning environments. Moreover, the rapid pace of technological innovation requires continuous professional development for educators to effectively leverage BLIC in their teaching. Addressing these challenges is critical to ensuring that BLIC and similar collaborative international learning projects can be fully optimized to provide inclusive, innovative, and impactful learning experiences for all students, regardless of their geographic or technological constraints.

Bibliography

- Adamson, J., & Sloan, D. (2023). Developing a technology enabled learning framework supporting staff transitioning degree module content to a blended learning approach. *Innovations in Education and Teaching International, 60*(1), 59-69. https://doi.org/10.1080/14703297.20 21.1952642
- Aithal, P. S., & Mishra, N. (2024). Integrated framework for experiential learning: Approaches & impacts. International Journal of Case Studies in Business, IT and Education (IJCSBE), 8(1), 145-173. https://doi.org/10.47992/IJCSBE.2581.6942.0340
- Alam, A. S., Ma, L., Watson, A., Wijeratne, V., & Chai, M. (2022). Transnational education and e-learning during a pandemic: Challenges, opportunities, and future. In M. Mahruf, & C. Shohel (Eds.), *E-learning and digital education in the twenty-first century* (pp. 267-293). IntechOpen. https://doi.org/10.5772/intechopen.101089
- Crew, T., & Martins, O. (2023). Students' views and experiences of blended learning and employability in a post-pandemic context. *Social Sciences & Humanities Open, 8*(1), 100583. https://doi.org/10.1016/j.ssaho.2023.100583
- Goulart, V. G., Liboni, L. B., & Cezarino, L. O. (2022). Balancing skills in the digital transformation era: The future of jobs and the role of higher education. *Industry and Higher Education*, 36(2), 118-127. https://doi.org/10.1177/09504222211029796
- Jagatheesaperumal, S. K., Ahmad, K., Al-Fuqaha, A., & Qadir, J. (2024). Advancing education through extended reality and internet of everything enabled metaverses: Applications, challenges, and open issues. *IEEE Transactions on Learning Technologies, 17,* 1120-1139. https://doi.org/10.1109/TLT.2024.3358859
- Heilporn, G., Lakhal, S., & Bélisle, M. (2021). An examination of teachers' strategies to foster student engagement in blended learning in higher education. *International Journal of Educational Technology in Higher Education*, 18(1). https://doi.org/10.1186/s41239-021-00260-3
- Hughes, N. (2024). Blended learning solutions in higher education: History, theory and practice. Taylor & Francis.
- Kumar, A., & Goyal, S. (2023). Inclusiveness and sustainability of teaching and learning technologies amidst the COVID-19 pandemic in higher education: An Indian perspective. In J. Rosak-Szyrocka, J. Żywiołek, A. Nayyar, & M. Naved (Eds.), *The role of sustainability* and artificial intelligence in education improvement (pp. 133-150). Chapman and Hall/CRC. https://doi.org/10.1201/9781003425779
- Li, L., Zhang, R., & Piper, A. M. (2023). Predictors of student engagement and perceived learning in emergency online education amidst COVID-19: A community of inquiry perspective. *Computers in Human Behavior Reports, 12,* 100326. https://doi.org/10.1016/j. chbr.2023.100326
- Mathew, V., Abduroof, A. I., & Gopu, J. (2021). Digital transformation of higher education: Opportunities and constraints for teaching, learning and research. In S. L. Gupta, N. Kishor, N. Mishra, S. Mathur, & U. Gupta (Eds.), *Transforming higher education through digitalization* (pp. 145-171). CRC Press. https://doi.org/10.1201/9781003132097
- Muhria, L., Supriatna, N., & Nurfirdaus, N. (2023). Students' challenges of blended learning model in higher education. *Journal Corner of Education, Linguistics, and Literature, 2*(3), 223-233. https://doi.org/10.54012/jcell.v2i3.123
- Paudyal, G. R. (2022). Shift to technology-assisted learning through blended mode: University teachers' experience. *Prithvi Journal of Research and Innovation*, 4(1), 103-115. https:// doi.org/10.3126/pjri.v4i1.50163
- Rahimi, R. A., & Oh, G. S. (2024). Rethinking the role of educators in the 21st century: Navigating globalization, technology, and pandemics. *Journal of Marketing Analytics, 12,* 182-197. https://doi.org/10.1057/s41270-024-00303-4

- Reale, J., O'Brien, E., Ceallaigh, T. Ó., & Connolly, C. (2022). A third space: Infusing open educational resources (OER) with universal design for learning (UDL). In L. Daniela (Ed.), *Inclusive digital education* (pp. 13-25). Springer International Publishing. https://doi. org/10.1007/978-3-031-14775-3_2
- Swart, K., Bond-Barnard, T., & Chugh, R. (2022). Challenges and critical success factors of digital communication, collaboration and knowledge sharing in project management virtual teams: A review. *International Journal of Information Systems and Project Management*, 10(4), 59-75. https://doi.org/10.12821/ijispm100404
- Taylor, L. (2023). Constructing online work-based learning placements: Approaches to pedagogy, design, planning and implementation. Routledge.
- Tedla, Y. G., & Chen, H. L. (2024). The impacts of computer-supported collaborative learning on students' critical thinking: A meta-analysis. *Education and Information Technologies*. https://doi.org/10.1007/s10639-024-12857-y
- Tomei, L. A., Maine, J., Moussa, K., Holler, M. B., Hobbs, B., & Austin, S. (2024). The top 12 technologies for teaching and learning in the post-pandemic era. In L. Tomei, & D. Carbonara (Eds.), *Exploring technology-infused education in the post-pandemic era* (pp. 1-95). IGI Global. https://doi.org/10.4018/979-8-3693-2885-9.ch001
- Tonbuloğlu, B., & Tonbuloğlu, İ. (2023). Trends and patterns in blended learning research (1965–2022). *Education and Information Technologies*, 28(11), 13987-14018. https://doi.org/10.1007/s10639-023-11754-0
- Velinov, E., & Bleicher, J. (2023). The impact of experiential learning and the use of digital platforms on global virtual teams' motivation. *Journal of Teaching in International Business*, *34*(4), 172-193. https://doi.org/10.1080/08975930.2023.2293293

Authors



Prof. Juergen Bleicher, D.B.A., M.B.A.

Baden-Wuerttemberg Cooperative State University (DHBW) Villingen-Schwenningen GERMANY juergen.bleicher@dhbw.de ORCID ID: N/A

Jürgen Bleicher is a Strategic Management and Controlling professor at the Baden-Württemberg Cooperative State University (DHBW). Prior to joining the DHBW, he gained experience in several positions in industrial enterprises. His last position was Compliance Officer and Process Manager at ZF Friedrichshafen AG. His research interests and work include strategic management, sustainable business model innovation, innovative teaching and learning, and personal strategies. He is the founder of the Blended Learning International Cooperation (BLIC) program at the DHBW, and, together with his partners, he was among the finalists of the AIB Teaching Innovation Award and the Pieoneer Award (category Employability International Impact).

Assoc. Prof. Emil Velinov, Ph.D.

RISEBA University of Applied Sciences Riga, LATVIA emil.velinov@riseba.lv Skoda Auto University Mlada Boleslav, CZECH REPUBLIC emil.velinov@savs.cz ORCID ID: 0000-0003-0965-1961



Emil Velinov is an Adjunct Associate Professor at RISEBA University of Applied Science. At the same time, he works as a Researcher at Skoda Auto University in the Czech Republic. At both institutions he is conducting teaching and research in International Management, Corporate Governance, Diversity Management and Education in Management. He has in total more than 40 publications in Web of Science and SCOPUS, mainly in the areas of General Management, Corporate Governance, Human Resource Management and Management Education.