PREFACE

There is a timeless question in education: how can we improve education and make teaching more engaging and effective? Regardless of societal development, this question persists, and I believe it will continue to do so because we all strive for excellence in education, where the best can become even better.

As we are aware, education is always situated within a context, and the educational context needs to adapt to the current circumstances. Throughout the history of education, learning may have begun with stones and leaves, then progressed to the use of chalk, boards, notebooks and paper-based textbooks. However, in the age of technology, classrooms have undergone significant changes through the integration of technology. Every classroom, to some extent, incorporates different levels of technological engagement.

The development of educational technology provides educators with a wider range of options to enhance their teaching activities. However, it is important to discuss to what extent and how technology should be used effectively and judiciously. Our mission is to bring technology closer to education and introduce innovative approaches with careful consideration. To fulfill this mission, the Vietnam National Institute of Education Science has organized international conferences on technology in education, aiming to bridge the gap between technological initiatives and teachers, educators, and policymakers. The conference was held in the midst of the COVID-19 pandemic in 2022 in Vietnam, necessitating an online format. Despite being conducted virtually, the conference witnessed active engagement and interaction from all participants. It successfully drew the interest of numerous national and international scholars and educators, who shared their valuable insights and presented innovative technological applications in education. They come from diverse backgrounds, spanning educational theory, educational practice, early childhood education, higher education, formal and informal education, and various subjects. Each author brings their perspectives to the conference, but all share the common goal of promoting quality, creative, and equitable education through the use of technology. The conference holds significance not only in terms of scientific knowledge but also in showcasing practical and creative practices in technology integration.

A wide range of educational technology-related topics have been presented, illustrating the significant demand for educational technology in all aspects of educational activities and highlighting its significance and feasibility in

implementation. Each paper submitted to the conference proceedings offers unique perspectives, exploring different aspects of educational technology from multidimensional viewpoints. Based on the points of convergence within the topics, we have organized them into four main sections: Technology Integration in The Classroom, Technology in Online Education, Technology in Inclusive Education, and Enhancing Competencies for Educational Institutions and Teachers in The Digital Transformation Era. Each section represents a substantial research area with discoveries contributed by various authors.

The first section, Technology Integration in Education, includes six papers that reflect the rich discoveries and explorations of technology application in the classroom. Technology integration in the classroom is a topic of growing interest in education, and several papers shed light on its application and impact. Dang et al. explore how Vietnamese teachers and students utilize Google products to transform their teaching and learning practices, emphasizing the positive attitudes and valuable effects of Chromebooks and Google Workspace. Le et al. investigate the effects and influencing factors of digital and augmented reality games in mathematics education for primary school students. Nguyen and Ngo focus on digital games in teaching mathematics, providing guidelines for constructing and implementing such games in primary schools. Vuong et al. address the implementation of virtual reality headsets in Vietnamese secondary schools, aiming to bridge the gap between theory and practical application. Nguyen-Nam and Ngo-Thanh present the development of AI chatbot scenarios for teaching chemistry, enhancing students' self-study and discovery capacity. Finally, Kaushal and Sehmbi explore the integration of technology, such as virtual shows and touch and feel books, into early childhood education, highlighting innovative pedagogical interventions during the COVID-19 pandemic. These papers collectively contribute to our understanding of technology integration in the classroom and provide insights into its benefits and practical implementation across various educational levels worldwide.

Moving on to the second section, Technology in Online Education, consists of five papers that provide both an overview and detailed insights into online education, especially in the context of COVID-19. Spataro explores the use of digital games and tools in the remote EFL classroom, demonstrating the positive impact of gamification and interactive tools on student engagement and learning outcomes. Factors affecting high school students' remote online exam results during the COVID-19 pandemic in Vietnam are analyzed by Nguyen et al., identifying the main factors influencing remote online exams. Vu-Thao et al. examine the situational motivation of high school students in continuing education online learning programs in Vietnam and identify differences based on gender, school grades, learning time, and program. Peer-support in online training courses and its experiences are examined by Nguyen-Cuc and Ngo-Thuy, revealing the forms and factors influencing peer support in online learning contexts. The paper by Vu-Tuan et al. explores the effectiveness of blended learning in developing both digital literacy and subject domain-specific competence among high school learners in the context of digital transformation in Vietnam. These papers collectively contribute to our understanding of technology

integration in online education and provide insights into its benefits and practical implementation in various educational contexts in Vietnam.

The third section, Technology in Inclusive Education, includes three articles. These articles focus on exploring the use of technology to increase access to technology for individuals with disabilities and enhance the quality of inclusive education. The paper by Lesmez et al. presents an inclusive educational strategy utilizing virtual reality and multi-touch screen technology to improve learning in health and safety at work for individuals with disabilities. Another paper by Mai et al. reviews studies on the application of virtual reality in education for children with autism spectrum disorders, highlighting positive results and the need for further research. Additionally, another paper by Mai et al. presents a case study on using VRapeutic software for children with ADHD, emphasizing the need for longer experimental periods and combining virtual reality with educational therapies for comprehensive assessment. These papers collectively demonstrate the potential of technology in enhancing the education of children with disabilities.

The fourth section, Enhancing Competencies for Educational Institutions and Teachers in the Digital Transformation Era, consists of three articles. These articles focus on seeking strategies to support educational institutions and teachers in enhancing their application of technology. The paper by Hoang and Phan explores the similarities between business process management and digital transformation in higher education, presenting practical lessons from the application of the BPM model. Another paper by Truong discusses the characteristics and requirements of teaching technology and technical majors based on the multi-intelligence theory, emphasizing the need to develop digital capacity for teaching staff in these fields. Additionally, the paper by Nguyen examines the flexibility and readiness of teachers in various countries, including Vietnam, to incorporate technology into university-level teaching contexts, aiming to evaluate their abilities in integrating technology into the classroom through literature. These papers collectively address the development of digital capacity and the integration of technology in the education sector during the digital transformation era.

I hope that this proceedings volume will serve as a valuable resource for educators, researchers, policymakers, and anyone interested in the field of educational technology. The diverse range of topics and perspectives presented in this collection highlight the dynamic and ever-evolving nature of educational technology and its potential to transform teaching and learning. As we navigate the digital age, it is crucial that we continue to explore innovative ways to harness the power of technology in education. By sharing knowledge, experiences, and best practices through conferences and publications like these proceedings, we can collectively shape the future of education and ensure that technology is effectively integrated into educational practices.

I extend my gratitude to all the authors who generously shared their valuable research and insights for this proceedings volume. My sincere thanks also go to the organizers, reviewers, and all those who played a role in ensuring the success

of the International Conference on Educational Technology. I would like to give special recognition to UNICEF Vietnam for their partnership with The Vietnam National Institute of Educational Sciences in the joint mission of fostering digital skills in Vietnam's education system. Your dedication and contributions are highly appreciated.

Finally, I invite readers to delve into the diverse papers presented in these proceedings and explore the possibilities that educational technology offers. May this volume inspire new ideas, foster collaboration, and ultimately contribute to the advancement of education in the digital era.

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