Preface of the 5th International Conference on Vocational Education Applied Science and Technology (ICVEAST) †

Ari Nurfikri 1*, Triana Karnadipa 2*, Karin Amelia Safitri 3, Debrina Vita Ferezagia 3,* and Widyo Swasto 4

1 Hospital Administration, Universitas Indonesia, Depok 16424, Indonesia
2 Physiotherapy, Universitas Indonesia, Depok 16424, Indonesia
3 Insurance and Actuarical Administration, Universitas Indonesia, Depok 16424, Indonesia
4 Vocational Program, Universitas Indonesia, Depok 16424, Indonesia
* Correspondence: debrinaferezagia@gmail.com
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The International Conference on Vocational Education Applied Science and Technology (ICVEAST), formerly the International Conference on Vocation for Higher Education (ICVHE), is an annual event organized by the Vocational Program, Universitas Indonesia (Figure 1). It aims to encourage innovative applied research in vocational higher education. This year we rebranded the conference, as we wanted to focus on being an international forum where scholars and practitioners share their ideas on vocational education, especially within the context of applied science and technology. The rebranding from ICVHE to ICVEAST marked our fifth conference, with the theme, “Attaining Sustainable Development Goals through Innovative Technological Research in Vocational Higher Education”.

Welcome to The 5th International Conference on Vocational Education Applied Science and Technology.

The COVID-19 pandemic, climate change, and the acceleration of disruption due to digitalization and automation have changed the nature of education and work. These shifts that have taken place over the past few years—and even decades—are pushing universities more than ever to adapt more quickly in preparing qualified human resources that meet current needs. Furthermore, the world of education must prepare its students to adapt to future economic activities, as digital technology is changing the landscape of education and work patterns. In addition, both the pandemic and digitalization have fundamentally changed various economic activity forms, marked by the increasing adoption of technology within conventional economic activity patterns. All of these conditions provide an excellent opportunity for vocational higher education, where integration between universities, business, and industry has been increasingly promoted. In this case, partnerships among the involved actors are vital to avoid a mismatch between work and workers who are...
often found across regions within and between countries. Where there is demand for work, there may not be a supply of qualified workers to fill the gap. Thus, vocational higher education has played an essential role in accommodating the world of education and the world of work to create more entrepreneurs and increase SMEs’ capacity, while improving the education system’s quality.

Integrating digitalization and sustainability into the vocational higher education context is also becoming more crucial to ensure that workers develop the skills necessary to continue sustainable practices. Incorporating sustainability into educational and training programs is multi-dimensional. Various approaches are involved, leading to multiple perspectives within the sustainable development context, having immediate practical relevance. Information and communications technology brings challenges and opportunities from the respective fields, and placing emphasis on the perspective of vocational higher education as a pillar to national development.

Consequently, reskilling becomes crucial for workers to thrive in a high-tech working environment. Sustainability governance in a digitalized environment must be addressed in the context of vocational higher education as a central concern. Therefore, we need a digital global participatory platform for using ICT that can help to promote human well-being and fairness, increase sustainability and resilience, reduce damages, and improve opportunities for economic, political, and social participation.

The 5th ICVEAST 2022 intended to offer insights into how vocational higher education can utilize digital technology to achieve the 17 UN Sustainable Development Goals and support global economic recovery. This intention also aligns with the central issue of G20, particularly regarding the Education Working Group (EdWG) that focuses on preparing adaptive graduates. In addition, researchers and policymakers in vocational higher education must identify the impact of digital transformation on economic, social, and environmental development and explore options for action to ensure that socio-technical transformation processes foster sustainable development and social justice. Though an interdisciplinary approach, the 5th ICVEAST 2022 navigated these issues from technical, economic, social, and environmental science perspectives, actively involving stakeholders from the respective fields, and placing emphasis on the perspective of vocational higher education as a pillar to national development.

This conference was attended by 81 participants from various countries, as seen in Figure 2, and was held both offline and online. The categories or collections of articles that were presented by participants in parallel sessions (and also by keynote and plenary speakers) were Fostering Economic Resilience and Building Future Entrepreneurship through Technological Innovation, Digital Technologies to Increase Competitive Advantage and Quality of Products and Services, Utilization of Big Data, and Application Technology in Integrated Health Services to Improve Community Well-Being.

Six keynote speakers from various countries were invited according to their disciplines:
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1. Padang Wicaksono, S.E., Ph.D. (University of Indonesia)—The Role of Technology in Supporting Sustainability of Education Quality;
2. Benny Tjahjono (Coventry University, United Kingdom)—The Imperatives of Digital Skills in Supply Chain Innovation;
3. Feifei Xu (Southeast University, China) and Prof. Peter Bath (The University of Sheffield, United Kingdom)—Big Data and Implication in Tourism Research;
4. Assistant Professor Roos Gerritsma (Inholland UAS, the Netherlands)—Innovation in Higher Education via Livings Lab—The Urban Leisure and Tourism Lab Amsterdam as a case study;
5. Prof. Peter Bath (The University of Sheffield, UK)—Application of data and text mining methods to predict health outcomes among people with suspected COVID-19;
6. Prof. Dr. Mohamad Sattar bin Rasul (University Kebangsaan Malaysia)—TVET Aligning to STEM.

The proceedings were published by MDPI at https://www.mdpi.com/2504-3900/83/1 (accessed on 29 May 2023), including the selected works presented at the conference and later peer-reviewed by the scientific committee. We would like to thank the sponsors and partners (Figure 3) for supporting this event.

Figure 3. ICVEAST sponsors.

We are pleased to announce that the 6th International Conference on Vocational Education Applied Sciences and Technology (ICVEAST) 2023 will be held in Surakata, Indonesia, on 25–27 July 2023. This year, the sixth conference will be presented with the theme, “VOCATIONAL 5.0: Virtuosity Collaboration for Sustainability Development and Innovative Technologies Goals 5.0” (https://icveast.ui.ac.id/ (accessed on 29 May 2023)).

Conflicts of Interest: The authors declare no conflict of interest.

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