ACCEPTED PAPER FOR **ECEL, 24th European Conference on e-Learning, 22-23rd October 2025, Technical University of Denmark (DTU), Denmark**

**Teaching and Learning via Video Conferencing Platforms: Issues Across Three Asian Countries**

Siew Eng Ling 1, Margaret Kit Yok Chan2, Nikorn Rongbutsri3, Nafees Mansoor4

1Faculty of Computer and Mathematical Sciences, Universiti Teknologi MARA, Sarawak Branch, Kota Samarahan, Sarawak, Malaysia

2Faculty of Plantation and Agrotechnology, Universiti Teknologi MARA, Sarawak Branch, Kota Samarahan, Sarawak, Malaysia

3School of Applied Digital Technology, Mae Fah Luang University, Chiang Rai, Thailand

4Department of Computer Science and Engineering,University of Liberal Arts Bangladesh, Dhaka, Bangladesh

lingse@uitm.edu.my

drmchan@uitm.edu.my

nikorn@mfu.ac.th

nafees.mansoor@ulab.edu.bd

**Abstract:** Video conferencing platforms have become essential tools for facilitating remote teaching and learning, particularly in the aftermath of the COVID-19 pandemic. This global health crisis accelerated the transition from traditional face-to-face instruction to online education, making virtual classrooms widespread and enduring practices in higher education. This study investigates the key issues associated with video conferencing technologies in teaching and learning across three Asian countries: Malaysia, Thailand, and Bangladesh. Utilizing a design thinking approach, qualitative data was collected through interviews and focus group discussions with educators, students, and technical staff. A total of 106 participants were involved in the study. The empathize stage of the design thinking process allowed for a deeper understanding of user experiences, frustrations, and needs in the context of online teaching and learning. The define stage was then employed to categorize the recurring issues into common themes. The analysis revealed seven major themes encompassing a total of seventeen subthemes. These themes include: Infrastructure, with challenges related to internet connectivity and power reliability; Environment, which concerns the suitability of physical spaces for both teaching and learning; Competency, which covers ICT skills, pedagogical adaptability, assessment methods, and course design; Support, including the roles of institutional management, parental or family involvement, and community resources; Tools, which refer to problems encountered with software and hardware devices; Health, addressing the impact on mental and physical well-being; and Self-efficacy, related to users’ confidence and the learning curve in adopting new technologies. The findings shed light on the multifaceted and interconnected nature of the issues and emphasize the need for solutions. The outcomes of this study are valuable not only for video conferencing platform developers aiming to improve functionality and usability but also for higher education administrators seeking to create more inclusive, supportive, and effective digital learning ecosystems.

**Keywords:** Design thinking, Online Teaching and Learning, Virtual classroom, Educators