e-ISSN: 2785-9479

CoTech Learning Model: A Peer-Assisted Collaborative Framework for Inclusive Digital Marketing Education with Visually Impaired Learners

Ng Boon Ding[1]*, Tang Si King[1], Safinah binti Nawawi[1], Surafah binti Mos[1], Azhar bin Abd Hamid[1], Kedung Fletcher[1]

[1 2,3,4,5,6] *Department of Information Technology and Communication, Politeknik Kuching Sarawak, Kuching, Sarawak, Malaysia*

[1]*E-mail: bdng@poliku.edu.my*

[2]*E-mail: king@poliku.edu.my*

[3]*E-mail: safinah_nawawi@poliku.edu.my*

[4]*E-mail: surafah@poliku.edu.my*

[5]*E-mail: azhar.hamid@poliku.edu.my*

[6]*E-mail: kedung@poliku.edu.my*

Abstract

This paper presents the implementation of CoTech Learning Model, a peer-assisted collaborative teaching and learning framework to promote inclusive digital marketing education for the visually impaired individuals. This initiative is carried out as a result of funding from the Society of the Blind Malaysia, Sarawak Branch together with the collaboration of the researchers from Department of Information Technology and Communication in Politeknik Kuching Sarawak. This framework, includes TVET students as the learning partners as the participants in this initiative. As a whole, this model emphasizes equal participation, empathy and mutual skill development in the peer assists model integrating students with visually impaired throughout a series of hands on workshops. Overall, there are three workshops conducted to build core technopreneur skills among the participants: (1) poster design using Canva, (2) video marketing automation using AI-supported tools like CapCut, and (3) IoT-enabled hydroponic farming for sustainable business applications. Participants exhibited varying degrees of visual capability, which informed the design of flexible, accessible training methods that emphasized audio support, guided navigation, and real-time collaboration. The methodology emphasized empathy-driven pairing, multisensory instructional design, and real-world entrepreneurship. Effectiveness was assessed via Likert-scale surveys and participant reflections, with results showing exceptionally high satisfaction scores (96–99%) across content clarity, facilitation, and skill acquisition. This learning model not only closing the gaps of the learning abilities of the visually impaired personnel, also inculcates technopreneurial competencies, social integrations and digital empowerment among the participants. The results of this learning model indicated positives outcomes and this learning model is found scalable for future educational initiatives in integrating undeserved communities into the digital economy.

Keywords **:** *Inclusive education, CoTech Learning Model, Digital Marketing, Technopreneurship, peer-assisted learning*