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# Strengthening Teaching Innovation through Digital Preparedness: Evidence from Malaysian Polytechnics and Community Colleges

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## ***Abstract***

Digital innovation has become increasingly important in higher education, particularly within Technical and Vocational Education and Training (TVET) institutions where lecturers are expected to integrate digital tools into more flexible and innovative teaching practices. However, the extent to which lecturers' digital preparedness contributes to pedagogical innovation remains insufficiently understood in the Malaysian TVET context. This study examines the role of digital preparedness in strengthening teaching innovation among lecturers in Malaysian polytechnics and community colleges. A quantitative cross-sectional survey was conducted involving 200 lecturers selected through purposive sampling, and the data were analysed using descriptive statistics, Pearson correlation, and simple linear regression with IBM SPSS Version 26. The findings show that lecturers demonstrate a moderate-to-high level of digital preparedness ( $M = 3.65$ ,  $SD = 0.50$ ), while pedagogical innovation remains at a moderate level ( $M = 3.45$ ,  $SD = 0.52$ ). The results further indicate a significant positive relationship between digital preparedness and pedagogical innovation ( $r = 0.377$ ,  $p < 0.01$ ), with digital preparedness explaining 14.2% of the variance in innovative teaching practices ( $R^2 = 0.142$ ). These findings suggest that digital preparedness is an important enabler of teaching innovation, but sustained pedagogical change also requires institutional support, continuous professional development, and structured capacity-building initiatives in Malaysian TVET institutions.

**Keywords:** *Digital preparedness; Innovative teaching practices; Pedagogical innovation; TVET institutions; Polytechnic and community colleges*

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