

# Effects of University Teacher ' s Technological Pedagogical Content Knowledge on Student ' s Satisfaction toward E - learni

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## ABSTRACT

E-learning has become an indispensable learning approach for university students. Majority of higher education institutes in Taiwan have set up e-learning platforms as teaching and learning channels. Since blended-learning in widespread use how to enhance professor ' s teaching competencies to promote student ' s satisfaction toward e-learning has emerged as an important issue. One of the prerequisites on students continued to use e-learning identified by the previous researches was their satisfaction with the e-learning process. However, the relationship between professor ' s e-pedagogy and students ' self-directed learning, motivation to learn, and perception of learning environment within the e-learning settings is still unknown. The purpose of this study was to empirically examine the relationships between professor ' s technological pedagogical content knowledge (TPCK) and student ' s e-learning satisfaction, mediated by self-directed e-learning, digital learning motivation, and perception of e-learning environment. Based on the prior research findings, a research model consisting of seven hypotheses was purposed. A questionnaire was administrated to 8 universities that adopted a same commercial e-learning product and a total of 483 valid samples were collected. A structural equation modeling (SEM) approach was employed to test the research model ' s goodness of fit and hypotheses. Results showed that university students ' perceived professor ' s TPCK had a significant impact on their e-learning satisfaction, through self-directed e-learning, e-learning motivation, and perception of learning environment. Further, the self-directed e-learning was the antecedent of e-learning motivation and perception of learning environment respectively. Overall, all factors accounted for 67% of the variance in e-learning satisfaction. While the self-directed e-learning variable was excluded from the research model, the explained variance of e-learning motivation was increased dramatically yet it was slightly reduced in perception of learning environment and e-learning satisfaction in the competitive model. It confirmed the mediated effect of self-directed e-learning between TPCK and e-learning motivation.

Keywords : technological pedagogical content knowledge, TPCK、 self-directed e-learning、 perception of learning environment 、 motivation to learn、 e-learning satisfaction

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