World Academy of Science, Engineering and Technology
International Journal of Educational and Pedagogical Sciences
Vol:15, No:05, 2021

Measuring Self-Regulation and Self-Direction in Flipped Classroom Learning

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Abstract : The diverse necessities of instruction could be addressed effectively with the support of new dimensions of ICT integrated learning such as blended learning –which is a combination of face-to-face and online instruction which ensures greater flexibility in student learning and congruity of course delivery. As blended learning has been the 'new normality' in education, many experimental and quasi-experimental research studies provide ample of evidence on its successful implementation in many fields of studies, but it is hard to justify whether blended learning could work similarly in the delivery of technology-teacher development programmes (TTDPs). The present study is bound with the particular research uncertainty, and having considered existing research approaches, the study methodology was set to decide the efficient instructional strategies for flipped classroom learning in TTDPs. In a quasi-experimental pre-test and post-test design with a mix-method research approach, the major study objective was tested with two heterogeneous samples (N=135) identified in a virtual learning environment in a Sri Lankan university. Non-randomized informal 'before-and-after without control group' design was employed, and two data collection methods, identical pre-test and post-test and Likert-scale questionnaires were used in the study. Selected two instructional strategies, self-directed learning (SDL) and self-regulated learning (SRL), were tested in an appropriate instructional framework with two heterogeneous samples (pre-service and in-service teachers). Data were statistically analyzed, and an efficient instructional strategy was decided via t-test, ANOVA, ANCOVA. The effectiveness of the two instructional strategy implementation models was decided via multiple linear regression analysis. ANOVA ($p < 0.05$) shows that age, prior-educational qualifications, gender, and work-experiences do not impact on learning achievements of the two diverse groups of learners through the instructional strategy is changed. ANCOVA ($p < 0.05$) analysis shows that SDL is efficient for two diverse groups of technology-teachers than SRL. Multiple linear regression ($p < 0.05$) analysis shows that the staged self-directed learning (SSDL) model and four-phased model of motivated self-regulated learning (COPES Model) are efficient in the delivery of course content in flipped classroom learning.

Keywords : COPES model, flipped classroom learning, self-directed learning, self-regulated learning, SSDL model
Conference Title : ICBL 2021 : International Conference on Blended Learning
Conference Location : Sydney, Australia
Conference Dates : May 17-18, 2021