World Academy of Science, Engineering and Technology International Journal of Computer and Information Engineering Vol:9, No:06, 2015

Item Response Calibration/Estimation: An Approach to Adaptive E-Learning System Development

Authors: Adeniran Adetunji, Babalola M. Florence, Akande Ademola

Abstract : In this paper, we made an overview on the concept of adaptive e-Learning system, enumerates the elements of adaptive learning concepts e.g. A pedagogical framework, multiple learning strategies and pathways, continuous monitoring and feedback on student performance, statistical inference to reach final learning strategy that works for an individual learner by "mass-customization". Briefly highlights the motivation of this new system proposed for effective learning teaching. E-Review literature on the concept of adaptive e-learning system and emphasises on the Item Response Calibration, which is an important approach to developing an adaptive e-Learning system. This paper write-up is concluded on the justification of item response calibration/estimation towards designing a successful and effective adaptive e-Learning system.

Keywords: adaptive e-learning system, pedagogical framework, item response, computer applications **Conference Title:** ICCAT 2015: International Conference on Computer Applications in Technology

Conference Location: London, United Kingdom

Conference Dates: June 28-29, 2015