E-Learning for introductory Computer Science concept on recursion applying two types of feedback methods in the learning assessment

Mondigo, L & Lao, D.M (2017) "E-learning for introductory computer science concept on recursion applying two types of feedback methods in the learning assessment," *Asian Association of Open Universities Journal, 12(2), pp. 218-229*.

In this article, Mondigo and Lao (2017) imeplemented a test driven development (TDD) approach in developing a web-based interactive learning object (ILO) of an introductory Computer Science (CS) concept on recursion. The authors adapted Multimedia Educational Resource for Learning and Online Teaching (MERLOT) to evaluate the ILO's effectiveness as a learning tool. Freshmen Math and CS undergraduate majors were then utilized as respondents to compare delayed and immediate feedback methods. Their conclusion is that the web-based ILO is an effective teaching tool for introductory recursion, an feedback mechanism is crucial to the learning process especially when implemented along with an ILO.

However, the author uses only 32 respondents within the university, which heavily restricts the scope of the study. Furthermore, the study does not account for the possibility that CS students may have already encountered the concept of recursion, since the author simply assumes that the students have no prior knowledge.

While this article does not relate to my research topic, Mondigo and Lao's work reveals the importance of feedback mechanism and interactivity to the learning process. This gives a clear picture on how technology can be applied to further improve teaching methods and knowledge retention.