Development of Scaffolded Mastery Learning (Ml) in Cell Division Module and its Impact in Teaching and Learning Process

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ABSTRACT

Purpose – The purpose of the study is to develop a Scaffolded Mastery Learning (ML) module in cell division topic for both teachers and students and study its impacts in teaching and learning process.

Method – The study employed Sidek Module Development model in developing the modules. Three expert teachers and ten Form 4 students were involved in pilot study to obtain validity and reliability using the validity index and Cronbach alpha value, respectively. The module was implemented among Form 4 Biology class students. Observation and interview sessions were conducted for teachers and students to obtain the impact of the modules in teaching and learning process.

Findings - The module obtained high validity score (0.96) and high reliability value (α: 0.90). The module can be used as teaching aids to assist the teachers in teaching and learning process of cell division topic in Biology. The module also showed positive impact among Form 4 students as they utilized it in learning the topic.

Significance - The module is suitable for use by the Biology teachers in teaching and learning process of cell division topic while the students can utilize the module in improving their understanding regarding to the topic.

Keywords: Scaffolded Mastery Learning, Cell division, Module development, Biology, Teaching aid