

## **Developing a tool for the evaluation of student's engagement in learning activities**

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Active engagement in learning activity is a critical component in student learning behaviour. However, there is a scarcity of literature on how to evaluate student engagement in learning activities. The purpose of this study was to develop a tool to evaluate student engagement in learning activities.

A preliminary checklist to evaluate student engagement in learning activities was constructed with the help of existing literature and teaching experience. This checklist comprised of 31 items categorized based on: Pre-activity engagement, per-activity engagement and post-activity engagement. Consensus on the items in the checklist was obtained by a Delphi survey of 8 experienced teachers at the Faculty of Medicine, Peradeniya. Internal consistency was measured using Cronbach's alpha. The tool was used on 73 1<sup>st</sup> year medical students in the Faculty of Medicine, Peradeniya and 228 pre-entry students eligible for local medical schools to evaluate student engagement prior to, during, and after an interactive lecture.

Two items of the tool were agreeable to 70%, on initial Delphi survey with one item receiving a 50% and the rest a 100% each. Consensus was defined as agreement by 70% or more participants. Such consensus was achieved on 97% of the questions in the tool. The entire tool obtained an internal consistency value ( $\alpha$ ) of 0.872 and the pre-activity, per-activity and post activity categories got 0.724, 0.427 and 0.802 respectively. The coefficient of correlation ( $r$ ) calculated for student engagement versus test performance, after eliminating the outliers, was 0.103.

The tool has the face validity but concurrent validity and predictive validity need further evaluation. This could be considered as the first step towards developing a valid and reliable tool to evaluate student engagement in educational activities. It should be modified and improved further. However, feasibility with regards to need for resource persons and subjective nature of the observation and variability hinder its usefulness as a research tool.