Application of Game Based Evaluation and Learning (GABEL) as a Pedagogical Tool for Active Class Room Teaching

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In the present era of modern technology, the information is available on just a click of a button. To engage the students in a class is a challenging task, specially while teaching large classes. Large classes are less effective as compared to small classes for achieving retention of material, developing critical thinking and changing student attitudes. The teachers mainly use lecture method as an instructional strategy but students' retention power decreases by simply sitting in class just listening to the one-way lectures, memorizing contents and repeating answers. Retention levels of the students can be enhanced when active learning methods are used (McKeachie, 1999; Silberman, 1996). Active learning produces: higher achievement, more positive relationships among students, and healthier psychological adjustment. (Johnson, D. W., R. T. Johnson, and K. Smith, 1991)

The main aim of active learning is to increase the motivation of the learners to deal with specific subjects by gamification of a course (Deterding, Dixon, Khaled, & Nacke, 2011). Active learning in terms of game based leaning has been experimented in the course "Applied Thermodynamics". This paper develops a game-based learning system that would increase student interaction with course material to improve self-efficacy for students' learning. Teachers can create innovative and interesting games to engage the learners. Here the teacher customizes some popular games such as - housie, playing with share markets which increases the interest in the classes and provides a different perspective of looking at things. When teachers start doing such things, the creativity in learner enhanced. The games increase student interaction with course material and provide students many different ways of demonstrating their learning in the course.

References:

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