

GAME-BASED LEARNING SYSTEM: AN EXCEPTIONAL LEARNERS MOTIVATION FOR BETTER PERFORMANCE

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Abstract

Special education is a specialized area of education which uses unique instructional methods, materials, learning aids, and equipment to meet the educational needs of students with learning disabilities. Exceptional learner is an inclusive term that refers to students with learning and behavior problems, students with physical disabilities or sensory impairments, and students who are intellectually gifted or have a special talent. Computer games are increasingly part of the daily activities of students of all ages, and have been shown to support student motivation and learning however can be challenging to implement in the classroom. Gamification involves incorporating elements of computer games such as points, leaderboards, and badges into non-game contexts in order to take advantage of the motivation provided by a game environment. Based from literature analysis points, badges and achievements, leaderboards and levels are the most commonly implemented form of gamification. The study aims to determine to what extent gamification supports student achievement and motivation among exceptional learners. Incorporating gamification elements into exceptional learners' environments can motivate students and support their achievement. Increased class attendance and participation, which is positively correlated with improved student performance, was seen as a result of gamification. The user acceptability test was used to determine the proficiency of the system to help the teachers in teaching exceptional learners in the approach of their learning. To test the acceptability of the developed system, the researchers floated an acceptability questionnaire to stakeholders where the target user enjoys exploring the content of the system. Based on their rating, the researchers motivated to enhance the functionality of the system. The target user strongly agrees with a ratio of 4.5 which mean that the system has the functionality needed in their school process.

Keywords: exceptional learners; gamification; learning system; education; motivation; performance