
International Journal of Computer Applications
Foundation of Computer Science (FCS), NY, USA

Volume 131

Number 7

Year of Publication: 2015

Authors:

Muhamad Risqi Utama Saputra

10.5120/ijca2015907416

Abstract

As a specific learning disability, dyslexia is not curable, yet manageable. Dyslexia management is usually conducted as extra learning program using multisensory method which is called remediation. However, some studies indicate that students with dyslexia have lower motivation in learning than students without dyslexia. This research design a learning model for dyslexic children, termed LexiPal, using gamification approach as motivational affordances. The proposed model incorporates 7 game elements: story/theme, clear goals, levels, points, rewards, feedback, and achievements/badges, to improve desired psychological outcomes, namely engagement, enjoyment, and motivation. The developed application, based on Windows Presentation Foundation (WPF) technology, was evaluated to dyslexic children (n = 40) through 2 steps, qualitative and quantitative step. Qualitative step using observation was intended to observe the engagement of dyslexic children when using the application. Quantitative step using simple Q&A adopted from questionnaire was purposed to confirm whether dyslexic children feel enjoyment and motivated when and after using the application.
References


Index Terms

Computer Science

Information Sciences

Keywords
Gamification, learning application, dyslexia, psychological outcomes, engagement, enjoyment, motivation.