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.