Chapter 7

Gamifying Children’s Linguistic Intelligence With the Duolingo App: A Case Study From Indonesia

Muhibuddin Fadhli
Universitas Muhammadiyah Ponorogo, Indonesia

Saida Ulfa
Educational Technology Department, State University of Malang, Indonesia

Sukirman Sukirman
Institut Agama Islam Negeri Palopo, Indonesia

Happy Susanto
Universitas Muhammadiyah Ponorogo, Indonesia

Aldo Redho Syam
State University of Malang, Indonesia

ABSTRACT

This chapter discusses the use of Duolingo App to enhance children’s linguistic intelligence. Linguistic intelligence is expertise in applying vocabularies effectively and efficiently. Duolingo is an application based on the Android platform which helps children mastering other languages that they can practice speaking, reading, listening, and writing through a play. Children in early childhood are in the period of ‘playing’ spontaneously. They will do activities of playing without any instruction from others. The activity of playing naturally will stimulate the aspects of linguistic and symbolic that this development is closely related to learning to speak by involving the ability to vocalize. The use of this application will implement toward gamification method. Gamification uses game-based mechanics, aesthetics, and game thinking to engage people, motivate action, promote learning, and solve problems. This chapter provides an illustration that gamification can be used specifically in stimulating linguistic intelligence based on a case study in Indonesia.

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INTRODUCTION

The term gamification started to exist around 2010 as part of a long process. In the beginning, the term was applied when office workers were getting bored with their routines and needed activities to refresh their bodies and souls. Academic researchers have held that “gamification is a term originated in the digital media industry”. The first documented uses date back to 2008, but gamification entered widespread adoption only in the second half of 2010, when several industry players and conferences popularised it (Deterding, Khaled, Nacke, & Dixon, 2011). The use of gamification spread through the education field, until Kapp employed the term in a learning context in his book explaining how gamification can motivate learners. He defines gamification as “using game-based mechanics, aesthetics, and game-thinking to engage people, motivate action, promote learning, and solve problems” (Kapp, 2014). In gamification, while elements of games such as points, badges, freedom to fail, and challenge are used, the intent is not to create a self-contained unit—not to create a game. The intent is to use elements from games to encourage the learners to engage with the content and to progress toward a goal. The argument is supported by Nicholson’s observation that gamification is like a reward. Scoot states: “Rewards have been used for centuries to change behaviour; children and pets are trained through rewards and punishments, soldiers are rewarded for achievements through ranks and badges, and schools use grades to entice students to do schoolwork” (Neeli, Reiners, & Wood, 2015). The rewards referred to in this article are used to change behaviour, so that children previously uninterested in something will become interested, and will want to join in certain activities. Reward is one of elements in game which can be used to attract attention. This article provides an illustration in which gamification is used specifically to stimulate intelligence, in the sense stated by Gardner, who identifies eight intelligences in his book Frames of Mind: the Theory of Multiple Intelligences (Gardner, 2011). In this writing, the authors emphasise linguistic intelligence. Linguistic intelligence is the ability to understand and use spoken and written language. This can include expressing yourself effectively through speech or the written word as well as showing a facility for learning foreign tongues. Writers, poets, lawyers, and speakers are among those that Gardner sees as having high linguistic intelligence (Gardner, 2011). The example of famous people with high linguistic intelligence are William Shakspeare and J.K Rowling.

The use of smartphones in Indonesia has recently increased sharply, due to ease of access and affordability (BPS, 2017). In 2019, the number of smartphone users in Indonesia increased to 92 million (Katadata, 2019). The use of these devices affects the pattern of educating children. In the past, parents taught children how to read by giving them notebooks or letting them scribble on the wall. This shift in the pattern of education is a necessity that must be faced. If parents forbid children to use smartphones, they will become a generation closed to the outside world. Yet, allowing their children to interact with smartphones without clear objectives and boundaries will create unruly characters, highly dependent on their gadgets. Wise use of smartphones creates a generation of children who are independent and have broad knowledge. ‘Wise’ means obeying time restraints, obeying the rules, and being balanced. One of the wise things that can be done is to provide the right application for the child’s age. Planting characters through smartphones is also a wise solution to their use. The phenomenon of education using smartphones also occurs in Indonesia, with parents installing applications to teach children to read, write, and understand vocabularies. One such application that is often used and installed is Duolingo. Irmayanti in her research argued the roles of the parents in assisting the use of gadget in pre-school children is extremily important, the factors which are supporting to guide children use the smarthphone are the knowledge of the technology and the impacts of using smarthphone to teach children (Irmaryanti, 2018). One of