



2nd International Conference on Computer Science and Computational Intelligence 2017,
ICCSCI 2017, 13-14 October 2017, Bali, Indonesia

Design and Development Game Chinese Language Learning with Gamification and Using Mnemonic Method

Dicky Rawendy^a, Yi Ying^b, Yulyani Arifin^{c*}, Kelly Rosalin^d

^a *Game Application Technology Department, School of Computer Science, Bina Nusantara University, Jl. K.H. Syahdan No. 9, Palmerah, Jakarta 11480, Indonesia*

^{b,d} *Chinese Department, Faculty of Humanities, Bina Nusantara University, Jl. Kemanggisian Ilir III No.45, Palmerah, Jakarta 11480, Indonesia*

^c *Computer Science Department, School of Computer Science, Bina Nusantara University, Jl. K.H. Syahdan No. 9, Palmerah, Jakarta 11480, Indonesia*

Abstract

In globalization era, many people interested to learn Chinese language. It caused by potential of China's economic growth in the world. Chinese language has introduced to children in early age in Indonesia. But sometimes learn Chinese language was difficult to them, which will make them feel boring. This paper has purpose to help children learn Chinese language using gamification and mnemonic method into game content. Briefly, gamification is process that adopt game elements to apply into non-game context and mnemonic is strategy to increase memory with various ways. Both in gamification and mnemonic method have applied in previous paper which the conclusion showed positive result in learning environment. This game refers to primary school, which students in 6-12 years old. The conclusion in this paper show that the developed game by authors can interest children to learn Chinese language based by pre-test and post-test result.

© 2017 The Authors. Published by Elsevier B.V.

Peer-review under responsibility of the scientific committee of the 2nd International Conference on Computer Science and Computational Intelligence 2017.

Keywords: Chinese Language; Game; Gamification; Mobile Learning; Mnemonic

* Corresponding author. Tel.: +62-021-5345830;

E-mail address: yarifin@binus.edu

1. Introduction

Currently, many people interested to learn Chinese language. Learn Chinese language can become a great opportunity to apply for a job in the era of globalization, which some companies need Chinese language speaker as requirement. As same as English, Chinese language become important because potential of China's economic growth increases every year (See Fig.1)¹.

In Indonesia, Chinese language has introduced to children in primary school even playground. Introducing Chinese language to children in early age from 6-12 years old, which is more productive than adults because their memory still strong than adults to remind new knowledge². As beginner, sometimes the learners felt difficult, especially Chinese character, which can decrease children's motivation to learn. To solve the problem, learning Chinese language must creative to preserve children's motivation³.

In modern age, learn Chinese language becomes easy via media. Form of learning media can be a text, picture, sound, video, animation until video game. Beside as entertaining, video game has been widely used as an educational tool for people called or game education⁴.

Based on previous studies, the authors propose the idea to develop and design game education of Chinese language, which still rarely found in the study than English. The authors want to find the result with testing a game. The content of the game will apply gamification and mnemonic method, the strategy memory to remind information and object. Gamification able to provide a new experience in learning environment that can motivate people⁵. Then mnemonic method will be increased user's behaviour of thinking⁶.

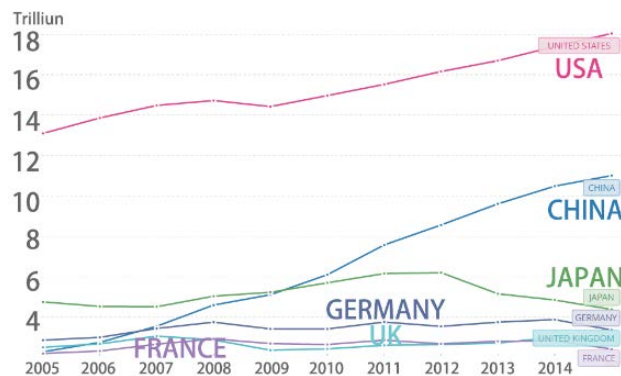


Fig. 1. GDP (current US\$) in 2005-2014
(source: worldbank.org)

2. Literature Review

2.1 Gamification

Gamification is process and application which game elements applying into non-game context⁷. Gamification become growing trending in business environment, marketing, and management company⁸. Bohyun Kim said that gamification has amuse in business and education⁹. Gamification becomes testing tools to indicate user's skill for particular field¹⁰. Based study result by Sailer et al., gamification able to motivate with different context¹¹. In education field, gamification techniques had adopted to support learning rapidly⁵. In Garland's study result, gamification can give advantage in learning language¹². Gamification also made learning environment more active and participative¹³.

2.2 Game Based Learning

Marina conclude that Game based learning capable to increase curricular and student's motivation in academic school¹⁴. Game based learning focused on learning via game that support the structural process¹⁵. Learning experience with game is influenced by the game design¹⁶. It must be build learning environment to achieve learning

Download English Version:

<https://daneshyari.com/en/article/4960427>

Download Persian Version:

<https://daneshyari.com/article/4960427>

[Daneshyari.com](https://daneshyari.com)