

Designing Game-based Learning To Foster The Cross-cultural Cognition

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Abstract

Boredom would be the biggest challenge in realizing a successful learning - effective and joyful learning. Boredom could happen in any learning when the students learn what they do not need or and they do not enjoy the conventional way of learning. In this case study, the writer would design game-based learning to foster the cross-cultural cognition in Business Cross-cultural materials. By designing and playing games for learning BCC materials, the writer tried to create the effective and joyful learning. In this research, the writer would use five phases of the research in designing the game-based learning. Moreover, the writer would investigate their joy and effectiveness of learning by using two different groups of totally 40 participants of Business English students that learn BCC - the experiment group that would use the game-based learning and the controlling group that had learnt without it. And the research results are there was insignificant difference in cognitive learning but the game-based learning could enhance the joy and motivation of learning.

Key words: boredom, BCC, game-based learning, effectiveness, joy.

Introduction

Cognitive learning needs a way that makes the learning process of obtaining and retrieving the knowledge be successfully done. Obtaining and retrieving the cross-cultural knowledge, including recognizing and memorizing some new words across-cultures tend to be routine activities. And routine activities are often considered as a monotonous process of learning. So, memorizing new words or knowledge across-cultures is often considered a boring activity. And learning motivation is one crucial factor of successful learning that cultivates the learners' interest in learning. Therefore, there

are at least two factors that teachers have to consider in teaching new knowledge across-cultures. First, it is important for teachers to think about the learning materials whether students really need to learn. Second, it is also important to know how students want to learn or what kind of learning method they expect to do. In this paper, the writer also expects to meet the students needs and interests in learning subject like Business Cross-culture by designing game-based learning so that there is an effective and joyful way to enrich and strengthen the students' knowledge. In this case of learning

Business Cross-culture, the students feel bored to learn it in a conventional way. The effect of such conventional learning for students is the learning boredom. It is also shown that the result of the learning report conducted by the quality assurance team of Ubaya mentioned that one of the learning process problems at Business English study program of Politeknik Ubaya was the student learning boredom. Boredom would be the biggest challenge in realizing a successful learning: effective and joyful learning. Boredom could happen in any learning when the students learn what they do not need and they also do not enjoy the dull way of learning. By designing and playing games for learning Business Cross-culture materials, the writer expects that the game-based learning atmosphere would create the joyful/conducive learning. Therefore, the writer would like to investigate the students by assessing their needs and interests in learning Business Cross-cultural materials and find out the appropriate game-based learning to foster/strengthen the cross-cultural cognitive learning materials.

Further, based on this real case study in the classrooms of Business Cross-culture subject, the writer would like to investigate on it by having three main problematic questions

- 1) How could the writer design game-based learning that is effective to enhance the cross-culture recognition in learning Business Cross-culture materials

- 2) How could the writer design game-based learning that could create joy and could uplift the interest to learn Business Cross-culture materials ?
- 3) How could the writer find out between the experiment and the control groups in learning Business Cross-Culture materials by using different ways of learning: game-based learning and non-game-based learning?

Therefore, the purposes of this research would be as follows: first, the writer would like to know the effectiveness of game-based learning in learning Business Cross-culture materials, second, he would like to know whether the respondents (the students) would really enjoy learning Business Cross-culture materials by using game-based learning and why they would like it, and third, he would like to compare two different ways of learning: game-based learning and non-game-based learning. And the benefits of this study would be: first, helping the students foster the cross-cultural cognitive learning in order to encourage/keep their learning passionately, second, producing effective and joyful game-based learning to enhance/strengthen the cross-cultural cognitive materials, third, facilitating international students/tourists'/businessmen's learning in order to enhance the joy and effectiveness of their business trip/ study.

Review of Related Literature

The game-based learning is an alternative way to solve boredom in cognitive learning. And the use of game-based learning in educational contexts is also growing popular (Alaswad & Nadolny, 2015). The game-based

learning in educational contexts could enhance the participants' learning motivation , improve the knowledge, and make them have positive attitudes toward the use of the educational games for learning. (Zhi & Po,

2013). Moreover, language learners only succeed of learning in a positive, relaxed, and enjoyable experience, that's why teachers have to facilitate their learning so that they could gain the joy themselves from the materials they are using, and the learning materials should engage the emotions of the students because their emotions, such as joy, excitement, laughter, sad, and anger could also promote learning. In this research, the writer would like to produce/ design game-based learning to meet the needs of the Business Cross-culture subject and the learners. It is previously explained that the game-based learning is an alternative way to solve boredom in cognitive learning. Based on the cognitive learning theory, this theory focuses on the conceptualization of the learning processes of learners and how knowledge is obtained, organized, stored, and reused/ retrieved by the mind-the memory system (Ertmer & Newby in Bakan & Bakan, 2018). Furthermore, cognitive theorists promote that the mind has an important role in learning. And the cognitive processes of the mind, such as motivation, and imagination are the critical elements of learning that bridge environment stimuli and students' responses (Picciano, 2017). Bandura in Harinie et al (2017) also emphasizes the importance of behavioral factors, environmental and individual (cognitive) in the learning process. The games which would deal with the cognitive processes of the mind are considered as serious games. And serious games were found to be more effective in terms of learning but the game-based learning was not more motivating than conventional instruction methods (Wonters et al, 2013). Moreover, Khenissi & Fathi (2015)

found out that serious games also succeeded in improving student motivation, increasing students' desire to learn, making learning more enjoyable. Another finding that the use of fun activity, such as game-based learning, is more effective in teaching vocabularies (cognitive words) technique than the conventional way (Bavi, 2018). However, games are not the only useful way. It means that other ways of learning should not be ignored (Ayesha, 2016)

Further, the teachers usually use games as a warm-up activity or a fun break from the routine of language classes to maintain the students' learning efforts for learning their best.

In learning new words or new languages, teaching language games are beneficial for EFL students because language games could help them enhance language knowledge (cognition) and also build a good relationship or a collaborative learning (Ibrahim, 2017). On the other hand, effective language games could also eradicate the boredom of the classroom on two things, first by movement (the game activity) and, second by game design itself (Ayesha et al, 2016). Therefore, it is important to design this game-based learning based on the learning objectives from the curriculum and the appropriateness of the students' (the players') level, interest, and context (Bakhsh, 2016). Therefore, as a part of edutainment, the game-based learning should be designed by using educational technology in learning EFL/ ESL (Ahmadi, 2018). And the teachers who would use the game should convince of the effectiveness of technology in improving their students' learning (Pourhossein, 2017).

Previous Studies

Previous studies revealed that games are useful in vocabulary learning because they enhance learners' abilities to memorize words, encourage their interaction, improve their communication skills, and enhance their motivation to learn (Derakhshan and Khatir, 2015). Therefore, the learners that learn with the use of game-based learning, gain positive attitudes and can be more motivated while learning. In another study of Rohani and Pourgharib (2013), there was no significant difference between the group of students that was taught by using textbooks and the group that was taught by games.

Another research result with the edutainment model that has various components, such as the teacher, the game-based learning materials, the latest technology, and others, Pasawano (2015) also found out that the learners had the positive

First of all, the writer would like to make the game for learning Business Cross-culture materials by using the following steps: First, the writer would like to map the participants' needs and interests in learning the cross-cultural cognitive learning materials. Second, the writer would design the game-based learning, such as a board-card game for having a trip around the world to enhance/strengthen the cross-cultural cognition. In this board game, there would be cards with questions on the cross-cultural cognitive learning materials. If the player could answer it correctly, the player's pawn could have, for instant, one step forward, but if it was wrong, the pawn couldn't step forward. There would be some other cards that were the bonuses and traps in order to make the game more exciting. He also made

attitude, wanted to study, and finally increased their learning achievement. The use of games as a technique for language learning was also mostly positive. Most participants of this research thought that students felt happy to learn English through games. (Korkmaz, 2013)

Moreover, the positive effects of language games are lowering the learners' anxiety and providing meaningful use of a language in class. In their research, Zhi and Po (2013) also found out that learning motivation could be enhanced via educational games. Moreover, Alaswad and Nadolny (2015) also found out that game-based learning could increase the learners' achievement and motivation. It is also evident that using games promote learning motivation and vocabulary acquisition (Beyza, 2017). As a matter of fact, the use of games in educational contexts is growing in popularity.

Method

the game rules and instructions for the board-card game for learning Business Cross-culture with its game given name: Cross-cultural Trip Around the World. Third, it was the implementation of the word-card games to improve the cross-cultural cognitive learning. The players/ students would play the game with the game rules and instructions given. The players would also play it in maximum 10 seconds' time that was considered the most appropriate and possible challenging time for each player to think the answer. The time speed given would encourage the players to think fast. Fourth, it was the reflection of the effectiveness and the joy of the games-based learning.

A Forum Group Discussion was conducted with all the participants/ players/ students to gain feedbacks on the

implementation of the game. He would also get the participants' feedbacks from the questionnaires and the post test. From the post-test and the previous pre-test, the writer would like to see the difference/ gain of the effectiveness of the game. And he would also like to know the students' opinions of the game including their joy/ preference. He would also use some interviews to triangulate the data collected if necessary. After that, he also did the Forum Group Discussion (FGD) to triangulate some survey results to know whether they enjoyed the game and whether the game was effective. Interview and discussion (Forum Group Discussion) would also be conducted as a tool of triangulation. In this reflection phase, the writer would try to get the weakness/ shortcomings/ lacks of the game in order to improve it to be its best. Fifth, it was the editing of the design of the game-based learning to improve the cross-cultural cognitive learning. After obtaining all the feedbacks/ inputs/ data from the participants, the writer would like to make necessary changes based on the data. He also thought the finishing touch of the printed game design to beautify its appearance of the game board, the game cards, the game box, and the game pawns as well as the spelling accuracy, its color and images/ pictures. Therefore, the writer would like to revise the design of the game based on all the feedbacks. Finally, the writer would also like to improve

the game rules and the game instructions based on the feedbacks/ inputs to make the best design of game-based learning to strengthen the cross-culture cognition.

Moreover, this research used a case study approach. The total participants of the research consisted of forty students of Business English study program of Politeknik Ubaya Surabaya in the 2018/2019 academic year. In this case study, the writer would like to choose twenty first-year students that used game-based learning for learning Business Cross-culture materials as the experimental group and also have the other twenty second-year students that had studied Business Cross-culture materials by using the conventional or non-game-based learning as the control group. In addition to the experimental group, the writer asked the students to do the pretest, played the game-based learning, and asked them to do the posttest. The pretest and posttest as well as the game materials covered the same Business Cross-culture materials. In addition to the control group, the writer taught the same Business Cross-culture materials by using conventional methods in the classroom, such as lecturing, summarizing, and conducting the project-based learning. In the project, the students were assigned to study certain topics and to make their presentation and group reports. The participants of the control group also did the same pretest and posttest.

Findings and Discussion

In this part, the writer would like to reveal the results of this case study relating to the effectiveness of the game-based learning designed to enhance the cross-culture

cognition in learning Business Cross-culture materials (See Table 1).

The result of the pretest average score that was assessed before the game-based learning was 26,6 %. And the result of the

posttest average score that was assessed after playing the game in one round was 49,35 %. So, the gain or the difference between the pretest average score and the posttest average score was 22,75 %. It meant that the game-based learning way/ method was effective for the experimental participants to enhance the cross-culture cognition in learning Business Cross-culture materials though the game was played in one round. If the participants played

the game some more rounds, the gain would significantly become higher than the gain of the first round. It also meant that the game succeeded to enhance the cross-culture cognition in learning Business Cross-culture materials. So, this board-card game designed for learning Business Cross-culture, namely, Cross-cultural Trip Around The World was positive/ effective to foster the players gain new words across-cultures.

Table 1
The Gain/Difference between Pre- and Post Test of the Experimental Group (N=20)

1	140418001	33%	64%	31%
2	140418002	23%	41%	18%
3	140418003	16%	38%	22%
4	140418004	16%	27%	11%
5	140418005	44%	65%	21%
6	140418006	24%	47%	23%
7	140418012	24%	42%	18%
8	140418013	34%	65%	31%
9	140418014	43%	69%	26%
10	140418015	25%	49%	24%
11	140418017	17%	32%	15%
12	140418019	37%	51%	14%
13	140418020	30%	68%	38%
14	140418021	19%	38%	19%
15	140418022	28%	53%	25%
16	140418024	25%	44%	19%
17	140418025	15%	43%	28%
18	140418026	25%	51%	26%
19	140418027	21%	41%	20%
20	140418028	33%	59%	26%
The Sum (Total) score		532%	987%	455%
The Averages score		26,6 %	49,35 %	22,75 %
The Lowest Score		15%	27%	12%
The Highest score		44%	69%	25%

Further, the writer would also like to explain the results of his survey via questionnaires relating to the joy/ fun of the game-based learning designed to be able to

uplift the players'/ participants' interest to learn Business Cross-culture materials (See Fig. 1)

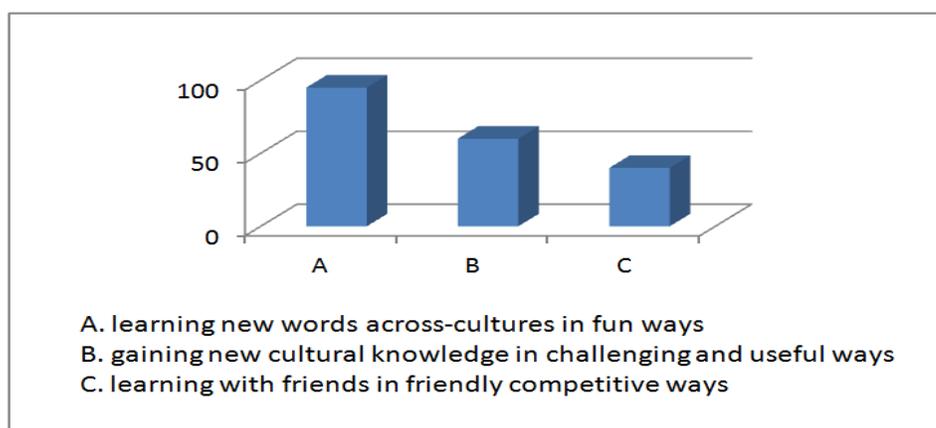


Fig. 1 The reasons of enjoying the game for learning Business Cross-culture materials

When asked

whether the participants enjoyed the game for learning Business Cross-culture materials, all the participants enjoyed it. And when asked why they enjoyed the game for learning Business Cross-culture materials, the participants replied that almost all of them could learn new words across-cultures in fun ways, more than half of them could gain new cultural knowledge in challenging and useful ways, and many others could learn with friends in friendly competitive ways. Moreover, these findings were also in line with the same other questionnaire. such as when asked whether the participants felt satisfied or happy to learn Business Cross-culture by playing this game, the participants replied that all of them felt satisfied or happy to learn Business Cross-culture by playing this game. And when asked why they felt satisfied or happy to learn Business Cross-culture by playing this game, the participants replied that almost all of them could learn to know new words from different languages/ cultures, and majority of them could learn and play with friends together. From their opinions, the writer could highlight some

important findings that the participants this game could facilitate their joyful learning because the way/ method of learning was fun, challenging, and friendly competitive.

Furthermore, the writer would also like to explain the results between the experimental group and the control group in learning Business Cross-culture materials by using different ways of learning: game-based learning and non-game-based learning. There were twenty participants from the experimental group that did not learn Business Cross-culture materials yet. They merely learned Business Cross-culture materials by using this game-based of learning method done in the classroom. On the other hand, there were other twenty participants from the control group that had taken/ learned Business Cross-culture materials in the previous year in conventional ways/ methods of learning. It meant that they did not learn Business Cross-culture materials by using the game-based of learning; they learned Business Cross-culture materials through the teacher lecturing, summarizing the materials, conducting the Business Cross-culture project assigned and presenting in

front of the classroom. And the results of both participants from the experimental group and the control group could be compared (See Fig.1). From the table 2 above, the participants in the experimental group were taught the BCC learning materials by using the game-based learning, while the participants in the control group underwent the conventional learning. And the results showed that the total average gain score of the experimental group (22,75%) was, in fact, slightly higher than that of the control group (21,25%). The difference between them was merely 1,5 % which could be considered as insignificant difference. On the other word, the comparison of the effectiveness of the game-based learning method and the

conventional learning method (non-game-based learning method) revealed that the total average gain scores might be more or less the same or the total average gain score of the participants that learned Business Cross-culture materials via the game-based learning could be slightly/ insignificantly higher than that of those that learned Business Cross-culture materials via the conventional learning. From the comparative results of both learning methods seen at the table 2 above, there had only a little difference or insignificantly difference between the total average gain score of the experimental group and that of the control group on learning Business Cross-culture materials.

Table 2

The gain of the experimental group and the control group (N=40)

The experimental group					The control group				
No	The participants'	Pretest	Posttest	The gain/difference between Post-test and-Pre-test	No	Participants' number	Pretest	Posttest	The gain/difference between Post-test and Pre-test
1	140418001	33 %	64 %	31 %	1	140416001	12 %	25 %	13 %
2	140418002	23 %	41 %	18 %	2	140416004	21 %	41 %	20 %
3	140418003	16 %	38 %	22 %	3	140416005	36 %	60 %	24 %
4	140418004	16 %	27 %	11 %	4	140416010	34 %	60 %	26 %
5	140418005	44 %	65 %	21 %	5	140416011	21 %	36 %	15 %
6	140418006	24 %	47 %	23 %	6	140416012	16 %	28 %	12 %
7	140418012	24 %	42 %	18 %	7	140416014	45 %	67 %	22 %
8	140418013	34 %	65 %	31 %	8	140416015	28 %	42 %	14 %
9	140418014	43 %	69 %	26 %	9	140416016	22 %	50 %	28 %
10	140418015	25 %	49 %	24 %	10	140416018	38 %	52 %	14 %
11	140418017	17 %	32 %	15 %	11	140416020	15 %	21 %	6 %
12	140418019	37 %	51 %	14 %	12	140416023	18 %	32 %	14 %
13	140418020	30 %	68 %	38 %	13	140417001	34 %	50 %	16 %
14	140418021	19 %	38 %	19 %	14	140417002	25 %	63 %	38 %
15	140418022	28 %	53 %	25 %	15	140417003	22 %	45 %	23 %
16	140418024	25 %	44 %	19 %	16	140417006	14 %	26 %	12 %
17	140418025	15 %	43 %	28 %	17	140417007	30 %	60 %	30 %
18	140418026	25 %	51 %	26 %	18	140417009	27 %	61 %	34 %
19	140418027	21 %	41 %	20 %	19	140417010	24 %	52 %	28 %
20	140418028	33 %	59 %	26 %	20	140417011	12 %	48 %	36 %
The sum (total scores)		532 %	987 %	455 %	The sum (total scores)		494 %	919 %	425 %
The average score		26,6 %	49,35 %	22,75 %	The average score		24,7 %	45,95 %	21,25 %
The lowest score		15 %	27 %	12 %	The lowest score		12 %	21 %	9 %
The highest score		44 %	69 %	25 %	The highest score		45 %	67 %	22 %

Moreover, when asked whether the participants from the control group enjoyed learning Business Cross-culture materials by using the conventional learning method, such as lecturing from the teacher, making the summaries of the materials, conducting and presenting the project, most of the participants enjoyed learning them. They enjoyed learning them because they could get some introduction and inputs of Business Cross-culture materials from the teacher first, also think to summarize one chapter into only one page, doing their project themselves from mostly online resources and presenting it in front of the class. They actually liked this conventional learning method because they could learn from the guidance of the teacher, any online resources, individual and collaborative learning. Though most

participants of the control group enjoyed learning them in this conventional method or in this non-game-based learning, they might feel bored when doing some routine class activities in one semester. There were 14 meetings of learning this subject in one semester. The writer as their teacher would like to minimize their learning boredom because learning boredom might affect the students' motivation / interest to learn the subject joyfully/ passionately. Therefore, the writer would like to collect data from the other group of participants that learned the same subject/ Business Cross-culture materials merely by using the game-based learning. And the other results of the survey (questionnaires, FGD, and observation on the board-card game for learning BCC materials; see Fig.2).

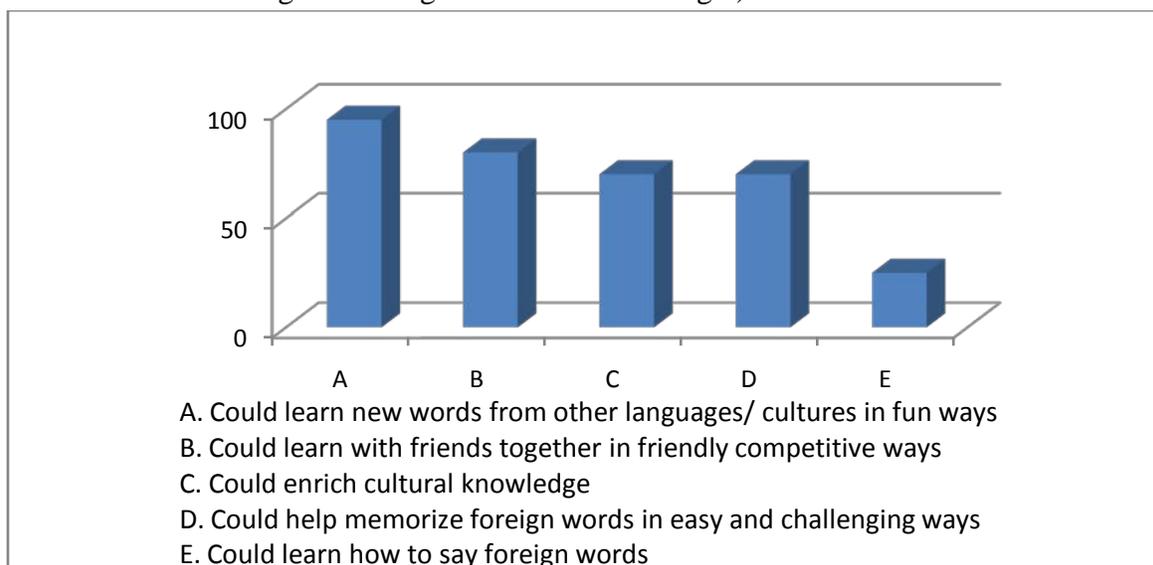


Fig. 2 The benefits of playing the board-card game

When asked about the benefits of playing the board-card game, the participants from the experimental group replied that almost all of them could learn new words from other languages/ cultures in fun ways, most of them could learn with friends together in friendly

competitive ways, more than half of them could enrich cultural knowledge and also could help memorize foreign words in easy and challenging ways, and some others could learn how to say foreign words.

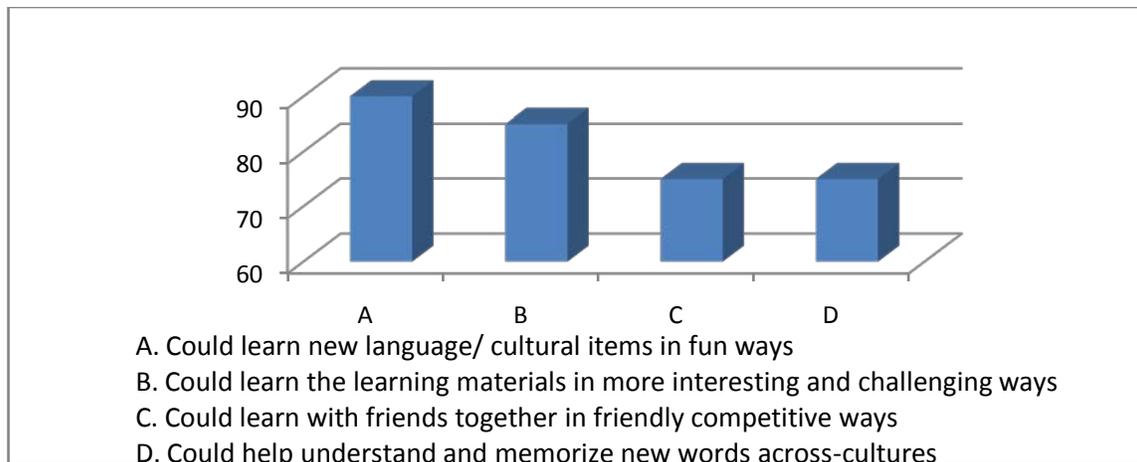


Fig. 3 What makes this game-based learning be different from the non-game-based learning

When asked about what made this game-based learning be different from the non-game-based learning, the participants from the experimental group replied that majority of them could learn new language/ cultural items in fun ways, most of them could also

learn the learning materials in more interesting and challenging ways, and more than half of them could learn with friends together in friendly competitive ways and help understand and memorize new words across-cultures.

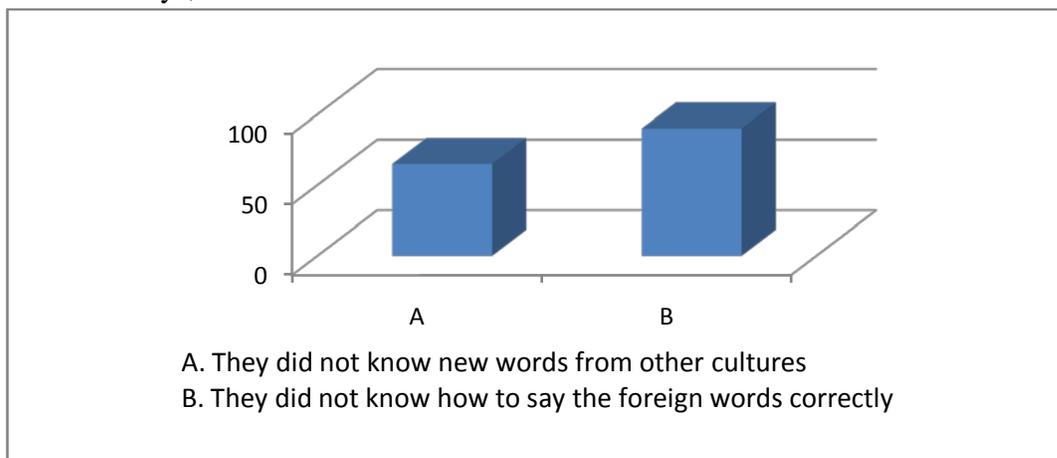


Fig. 4 Difficulties in playing this board-card game.

When asked about the difficulties in playing this board-card game, the participants from the experimental group replied that more than half of them did not know new words

from other cultures and most of them (90%) also did not know how to say the foreign words correctly.

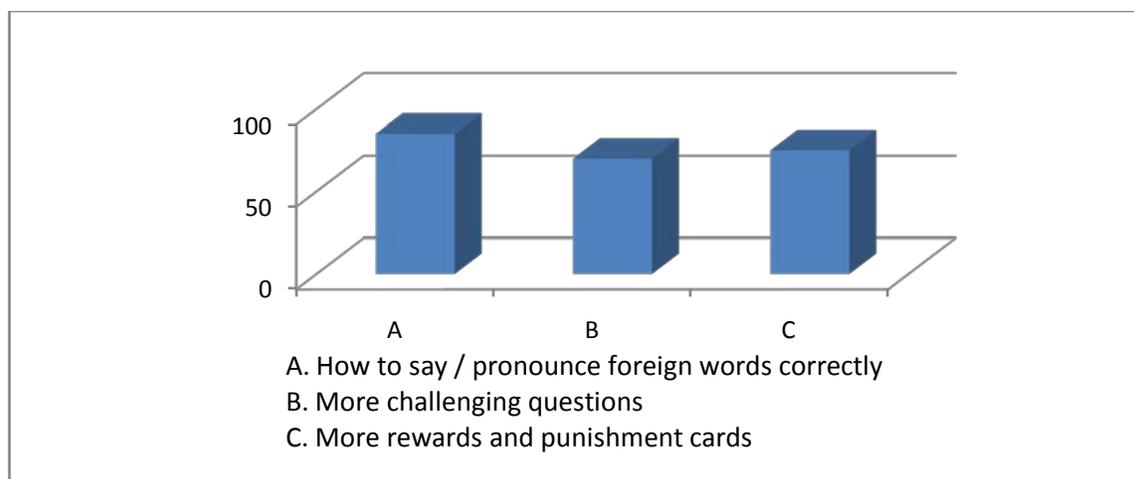


Fig. 5 Suggestions for the board-card game

When asked about suggestions on the board-card game for learning Business Cross-culture materials, the participants from the experimental group replied that most of them suggested to learn how to say / pronounce

foreign words correctly, more than half of them suggested to add more challenging questions, and nearly half of them also suggested to add more rewards and punishment cards.

Conclusion

In this case study, the writer would like to investigate whether game-based learning could foster the cross-cultural cognition in Business Cross-cultural materials and minimize the learning boredom. So, the students that learned Business Cross-cultural materials could learn effectively and joyfully by playing the board-card game that was scientifically designed for learning Business Cross-cultural materials. Further, based on the real case study in the classrooms of Business Cross-culture subject, the writer would like to investigate on BCC subject by having three main questions: how could the writer design game-based learning which would be effective to enhance the cross-culture cognition in learning BBC, how could the writer design game-based learning which could create joy and could uplift their interest to learn BBC, and how could the writer find

out between the experiment group and the control group in learning BBC materials by using different ways of learning: game-based learning and non-game-based learning.

First, the writer found out that the game-based learning method was effective to enhance the cross-culture cognition in learning BBC. In one round of playing this board-card game, namely Cross-culture Trip Around the World, the participants from the experimental group could gain 22,75 % which was the difference between the total pretest average score that was 26,6 % and the total posttest average score that was 49,35 %. It meant that the game-based learning method was, anyhow, effective for the experimental participants to enhance the cross-culture cognition in learning BBC.

Second, he also found out that the game-based learning method was joyful/ fun. The

joyful/ fun learning would enhance their motivation/ interest to learn BCC materials. This board -card game for learning BCC could minimize the learning boredom when the students had to learn routine activities in conventional ways. The results of the survey also revealed that all the participants enjoyed it or felt happy to play the game for learning Business Cross-culture materials for some reasons, such as almost all of them could learn new words across-cultures in fun ways, more than half of them could gain new cultural knowledge in challenging and useful ways, and many others could learn with friends in friendly competitive ways.

Third, he also found out that the total average gain score of the experimental group (22,75%) was , in fact, slightly higher than that of the control group (21,25%). The difference between them was merely 1,5 % which could be considered as relatively insignificant difference/ gain in cognitive learning. It meant that the gain of learning Business Cross-culture materials via the game-based learning could be slightly/ insignificantly higher than that of learning Business Cross-culture materials via the conventional learning. The participants

thought that this game-based learning was different from the non-game-based learning/ conventional one for some reasons, such as the students could learn new language/ cultural items in fun ways, could learn the learning materials in more interesting and challenging ways, could learn with friends together in friendly competitive ways, and could help understand and memorize new words across-cultures.

Comparing these two learning methods, the writer concluded that both the non-game-based learning/ conventional learning in varied ways/ methods, such as project-based learning, summarizing one chapter into one page of learning, teacher lectures and the game-based learning method might be relatively effective for cognitive learning, such as the total average gain score of the experimental group (22,75%) was , in fact, slightly higher than that of the control group (21,25%). As a matter of fact that the fun/ joy of the game-based learning method might exceed than the non-game-based learning methods in cognitive learning for this game could also help facilitate their joyful learning because the way/ method of learning was fun, challenging, and friendle competitive.

Suggestions

To foster the cross-cultural cognition, such as learning BCC subject, the teacher could facilitate the effectiveness and the joy/ fun of their learning by using both methods - the game -based learning and the non-game-based learning in varied methods appropriately in the classrooms to minimize the learning boredom as well. It meant that one single learning method either the conventional learning method/ non-game-based learning method or the game-based

learning method could also be boring if the students did the same monotonous classroom activities for a long period of time, such as one semester. The game-based learning and the non-game-based learning methods could complement each other so that the students could experience the successful learning experience in the classrooms by facilitating their effective and joyful learning appropriately.

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Reference

- Ahmadi, Mohammad Reza. 2018. The Use of Technology in English Language Learning: A Literature Review. *International Journal of research in English Education*. (IJREE) 3:2.
- Alaswad, Z. and Nadolny, L. 2015. Designing For Game-Based Learning: The Effective Integration of Technology to Support Learning. *Journal of Educational Technology Systems*. Retrieved from <http://doi.org/10.1177/0047239515588164>.
- Bakan, U and Bakan, U. 2018. Game-Based Learning Studies in Education Journals: A Systematic Review of Recent Trends. *Actualidades Pedagógicas* (72), 119-145. Doi: <https://doi.org/10.19052/ap.5245>
- Bavi, Farideh. 2018. The Effect of Using Fun Activities On Learning Vocabulary At The Elementary Level. *Journal of Language Teaching And Research*, vol 9, no 3, 629 -639.
- Derakhshan, A. and Khatir, E.D. 2015. The Effects of Using Games on English Vocabulary Learning. *Journal of Applied Linguistics and Language Research*. Vol 2, issue 3, 2015:39-47. Available at www.jallr.ir.
- Gilakjani, Abbas. 2017. A Review of The Literature on The Integration of Technology Into The Learning And Teaching of English Language Skills. *International Journal of English Linguistics*, 7 (%), 95 - 106. Retrieved from <https://doi.org/10.5539/ijel.v7n5p95>.
- Ibrahim, Abdelrazig. 2017. Advantages of Using Language Games In Teaching English As a Foreign Language In Sudan Basic Schools. *American Scientific Research Journal for Engineering, Technology, and Sciences*. (ASRJETS). Vol 37, No 1, 140 - 150.
- Khenissi, Mohamed Ali and Fathi Essalmi, Mohamed Jemni. 2015. Comparison Between Serious Games And Learning Version of Existing Games. *Procedia - Social and Behavioural Sciences* 191, 487 - 494.
- Pasawano, T. 2015. Results of Enhanced Learning With the Edutainment Format. *Procedia - Social Behavioral Sciences*. 176 (2015) 946-951. Doi: 10.1016/j.sbspro.2015.01.563.
- Perveen, Ayesha, Asif, Muhammad, and Mehmood, Sidra. 2016. Effectiveness of Language Games In SEcond Language Vocabulary Acquisition. *Sci. Int. (Lahore)*, 28 (1), 633 -637.
- Picciano, A.G. 2017. Theories and Frameworks for Online Education: Seeking an Integrated Model. *Online Learning*, 21 (3), 166-190. Doi: 10.24059/olj.v21i3.1225.
- Rohani, M. and Pourgharib, B. 2013. The Effect of Games on Learning Vocabulary. *International Research Journal of Applied and Basic Sciences*. Vol 4 (11): 3540-3543. 'Available online at www.irjabs.com.
- Silsupur, Beyza. 2017. Does Using Language Games Affect Vocabulary Learning in EFL Classes? *Journal of Foreign Language Education And Technology*, 2 (1). Retrieved from <http://jfllet.com/jfllet>.

- Wonters, P., Van Vimwegen, C., Van Oostendorp, H., and Van der Spek, E.D. 2013. A Meta-Analysis of The Cognitive And Motivational Effects of Serious Games. *Journal of Educational Psychology*, 105 (2), 249-265. Retrieved from <http://dx.doi.org/10.1037/a0031311>.
- Zhi, F.L. and Po, K.C. 2013. The Effect of Game-Based Learning on Students' Learning Performance in Science Learning - A Case of Conveyance Go. *Procedia* vol 103, 1044-1051.