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Interactive ICT Language Games in Encouraging Active Learning among the Suburban ESL Learners

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Abstract

In this present competitive global setting, mastering English language is one of the basic skills for each individual. Despite the fact that English has been taught and learnt as the second language for years in Malaysian schools, most of the ESL (English as a Second Language) learners in Malaysia are passive during English class and incompetent in seeking their own knowledge. Active learning enables the learners to learn ESL more effective as well as to increase the classroom performance. In relation to the 21st century learning, learner centred learning and ICT (information and communication technologies) in education are being emphasized by the Ministry of Education in Malaysia (MOE). Therefore, this study explored the application of interactive ICT language games among the ESL learners in suburban area in enhancing the pupils' active participation during English class. This study found that the application of interactive ICT language games able to gain the learners' attention and later encourage them to become active learners which resulted to better academic performance. Therefore, ESL teachers may use the interactive language ICT games in order to encourage active learning especially among the passive ESL learners.

Keywords: Interactive ICT Language Games, Active Learning, ESL, Suburban ESL Learners

Introduction

The current demand of education is to produce pupils who are highly competent and able to compete globally by first mastering English as the global language. However, learning second language is never easy for these learners as it is a time consuming and demanding duty. Gryzelius (2015) identified that most of the Malaysian pupils are passive and encounter difficulties when it comes to participating and seeking their own knowledge. During the lesson, these learners refused to participate, no active interaction between the learners with their peers as well as with their teacher and merely accepting any knowledge from their teacher. This is probably due to the fact that the lesson is not captivating and lack of motivating factor. As a result, these learners faced difficulties in seeking knowledge in English. Yahyazade et al (2018) stated that in order to learn better, the pupils need to actively participate and contribute more during the lesson. Aji &

Khan (2019) mentioned that active-learning will engage students in the process of learning through activities or discussion in class. The more these learners participating during the lesson, the better their learning experience are which later lead to better achievement.

Moreover, the 21st century classroom demand pupils to have more opportunity in seeking their own knowledge including collaboration, communication, critical thinking, creativity, citizenship, and global awareness (Dillon, 2017). Thus, "Learner-centred" is being more emphasized in the current and improved curriculum in the Malaysian Education Blueprint. Not to forget, in line with the rapid current development of ICT that are available now, ICT should be used and incorporated during the teaching and learning process so that the lessons become more learner centred, effective, and up to date (Anam & Susanto, 2018). Ujbanyi et al (2017) acknowledge that interactive ICT tools in learning may arouse student's interest in a bigger extent and support them in independent learning. The instructiveness characteristic of the ICT tools and applications which are available today beneficial to the teachers as the instructors as well as to cater pupils' need at the same time (Ratheeswari, 2018). The fact that these pupils are from suburban area means that they have the potential to be developed to become active learners as these pupils get exposure to the internet and ICT better than those pupils in rural areas although not as much as those in the cities. Hence, this study is conducted to explore the use of the interactive ICT language games in order to help the pupils in the suburban areas to become active learners during ESL lesson. It also provides a platform for the pupils to actively learn in a fun and interactive setting. This study will also enable the teacher to identify the effective criteria of the interactive ICT games which can promote active learning.

Literature Reviews

In the sphere of Malaysian education system, English is the second language and is a compulsory subject to be taught and learnt at the primary and secondary government aided schools. Cambridge Advanced Learner's Dictionary 4th Edition defined "suburban" as an area on the edge of a large town or city where people often live. Thus, suburban ESL learners refer to all ESL learners who go to any government aided schools somewhere between the city and rural areas. The word "interactive" defined as a computer program or interactive system which was designed to involve the user in the exchange of information (Cambridge Advanced Learner's Dictionary 4th Edition). Astriani, Moniaga & Pradono (2013) mentioned that "interactive" feature of the ICT language games enable the teacher to grab students' attention and students can learn more compared to the usage of the traditional method. The interactive learning also enable teacher to focus on pupils' interest and abilities (Giorgdze & Dgebuadze, 2017). In short, the term interactive ICT means that the usage of technologies be it on-line or off-line that enable the pupils to produce something or get instant respond while learning or for the assessment purposes (Abdul Rahman, Abdul Wahab & Rajab, 2017). In relation to active learning, according to Attaran and Gholami (2014) it promotes an interactive classroom and stimulate critical thinking. In addition, according to Bonwell and Eison (1991) active learning provides opportunity for the learners to engage and fully participated during the lesson. For this study, the term "active learning" occurred when the learners participate, actively respond and show improvement. The

quality of pupils' active participation in the lesson was measured based on the pupils scores for the pre and post test.

There are various related studies and findings to the areas of the study. However, there are not much study which explored the usage of interactive ICT language games among the suburban ESL learners. Thus, this research will be among the first to discuss such issue which may serve as guidance for teachers in making decision to use interactive ICT language games in the future. Rahamat et all (2012) stated that ICT can help make the teaching and learning process become more engaging and active as well as tools to expand access to education, raise the quality and strengthen the relevance of education. Costley (2014) in another study highlighted that applying interactive technology into the teaching and learning improve learning. Technology in school makes learning fun and helps them learn more as children love to learn by interacting, doing and discovering (Baytak, Tarman & Ayas, 2011). Costley (2014) stated that technology improve pupils' motivation and interactions, enhanced learning and engagement, increased technology skills and allows for learning at all levels. According to Zakaria et all (2018) games-based learning has many powerful capabilities. Interactive ICT language games also provide platform for collaboration, immediate feedback, and interactive. Houghton et al (2013) added that educational games as a support tool for teamwork, following rules, problem solving, interaction, and good sportsmanship. Klimova (2015) in another study categorised the types of educational games such are the competitive type or for problem solving together as a group or as a class where winning or losing is not important. For this study, interactive ICT language games serve as the transformational tools which are used to encourage a learner-centred environment. However, despite of all the benefits of using ICT in the classroom, Ujbanyi et all (2017) acknowledge that ICT does not guarantee its efficiency in learning new knowledges and skills as teachers need to have the required background working with ICT tools in order for it to be able to enhance the education's level and efficiency.

This study is adapting the Technology Acceptance Model (TAM) in which it discovered the teacher and pupils' readiness in order to form an end-user's beliefs on a technology and therefore predict their attitude toward the technology (Liu & Ma, 2005). The term The Technology Acceptance Model (TAM) was introduced by Davis (1986) used to explain user acceptance behavior (Lai, 2017). Parasuraman and Colby (2001) stated Technology readiness (TR) refers to people's tendency to embrace and use the new technologies in home and at work (Lai, 2017). Shafeek (2011) evaluated the acceptance of e-Learning systems by teachers by using TAM. The latest version of TAM is called TAM 2 as proposed by Venkatesh and Davis (2000). In relation to this study, it served as the guidance to the teachers in identifying the pupils' readiness to use and apply the technology for the educational purposes in today's classroom which are depending on the type of interactive game used and who they are competing with as Chau and Hu (2002) combined the factor of peer Influence with TAM.

Methodology

This research utilised experimental research type. The data analysed by using qualitative method. The data were collected through the pre and post test as well as the interviews. The instruments had the function of investigating the effectiveness of using interactive ICT game to encourage

active learning among the ESL suburban learners. The interview enabled the participants to add further thoughts and comments about their learning experience. This will also determine the criteria of the games which may affect to the result of the study. The interview sessions administered to the participant on a one-to-one basis. For the test, both groups were given the same multiple choice questions as the pre test and post test. However, for the pre test, the control group was given the quiz in a non-interactive ICT game form with the exact same question sequence while the experimental group was given the interactive ICT game in which the sequence of questions are different. For the post test, both group are tested by using a typical multiple choice quiz type in which the questions and sequence of the questions are completely identical. For the purpose of the research, the pupils are divided into two groups with each group consisted of 10 pupils. Among these 10 pupils, 3 of them are the lowest achievers, 4 of them are the medium achievers meanwhile another 3 are the top achievers which is divided equally to both of the control and experimental group. The pupils were selected based on their first semester school examination test result as well as through their participation during the classroom teaching and learning sessions. These learners consisted of the passive and active learners based on the daily classroom interactions.

Findings and Result

Table 1 below shows the result of the pre and post test of the study.

CONTROL GROUP			EXPERIMENTAL GROUP		
SCORE	QUIZ	POST TEST	SCORE	QUIZ	POST TEST
TOTAL SCORE	43	63	TOTAL SCORE	51	75
MEAN SCORE	4.3	6.3	MEAN SCORE	5.1	7.5
TOTAL PERCENTAGE (%)	43	63	TOTAL PERCENTAGE (%)	51	75

Table : Pre and Post Test Result

Based on the mean score obtained from the pre test, the experimental group scored more with the mean difference of 0.8 compared to the control group. Both of the control and experimental group shows increment in the post test. However, for the post test, the control group increased by 2.0 mean score while the experimental group had increase by 2.4 mean score. This means that the experimental group obtained 4% increment more than the control group for the post test result. The total percentage difference for the post test between the experimental group and the control group is 12%. This also means that the experimental group scored more that the control group for the post test. Thus, the higher increment obtained by experimental group proves that the experimental group pupils perform better than the control group.

Table 2 below is the summaries of the conducted interviews.

Interview Questions	Control group			Experimental group		
	1) Do you enjoy today's lesson? Rate how much you enjoy it from scale 1 - 5.	0-2 10 %	3-4 40%	5 50%	0-2 0%	3-4 30%
2) Why do you like/dislike(s) the strategy?	Like (s)		Dislike (s)	Like		Dislikes
	Reasons: Fun, Challenging		Reasons: Time given is too fast No live score No fast feedback	Reasons: Very fun, can compete with friends and can memorise the answers		Reasons: Time given is too fast
3) Towards what extend do you find the strategy is helpful to learn the comparisons of adjectives? Give your reason. (not helpful/ very helpful)	Not very helpful	Helpful	Very helpful	Not very helpful	Helpful	Very helpful
	10 %	50%	40 %	0%	30%	70%
4)Do you want to learn by using this strategy in the future? Why?(Yes, a lot/Yes, sometimes/No)	No	Yes	Always	No	Yes	Always
	0 %	50%	50%	0%	20%	80%

Table 2: Interview results

Through the interviews result, the pupils from both control and experimental group were thrilled and excited to go through the pre test as they were excited to play the ICT language games. Therefore, most of them believe that ICT language games are more fun and intriguing. Based on their responses, it is also found that the interactive ICT language game is more engaging and motivating as they can memorise the answers, compete with their peers and see their live scores and the displayed answers when compared to the non interactive ICT language game. As the researcher, it was intended to set the short time time frame in order to see how the pupils able to answer the questions and participate within the time frame given. Based on interviews, only 40% of the control group thought that ICT language games as very helpful compared to 70% of the experimental group who thought that interactive ICT games as very helpful. It is found that

only the pupils from the experimental group were thrilled to frequently play by using the interactive ICT language games in class. Meanwhile, half of the control group, would love to use ICT language games always in class while another half like to use it more frequently. This interview result proved that the interactiveness criteria of the ICT games attracted them and later help them to actively learn. Their eagerness to play interactive ICT language games in the future is a positive sign that this can be a helpful tool for the teacher in helping the pupils to become active learners.

Discussion

Criteria of interactive ICT language games

The findings of the study shows that the progress tracker, immediate feedbacks, interactivity and time are the main criteria which could affect to the effectiveness of the chosen games. For example, the experimental group's interview feedbacks proved that they are more focused and motivated as they are provided with immediate answers feedback and their progress were also displayed throughout the session. They can also refer to their own progress as well as their peers' progress during the game. Some of the pupils admitted that they memorized some of the answers which were displayed after each question was answered. This is as well supported by the great difference in score of the control and experimental groups' post test result. Prensky (2001) in Agard (2016), acknowledged on various structural elements of games such as rules and goals, outcomes and feedback, competition or challenge and interaction. In addition, Flores (2015) also listed some elements in game such as the points, performance graphs, levels, and rewards. It proved that as they are actively learned and participated during the session, they will able to retain the knowledge that they just learn longer and better. Thus, this contributed to better academic achievement.

Implications on Malaysian ESL Classroom

The increment of the mean score proved that as the quality of the lesson increase, so do their participation and understanding. Thirusanku & Yunus (2018) acknowledge how the ESL teachers frequently looking for ways to improve the teaching and learning to keep the pupils interested and motivated to learn English. The self-directed learning in interactive ICT language games enable some learners to possess a higher autonomy over learning while other would require a higher level of guidance from instructors (Nordin et al, 2018). The study proved that the usage of appropriate games may affect to the extend of the active learning. Gozcu & Caganaga added that (2016) games create a successful and positive classroom vibe in which learners and their learning are central. If teachers or policy makers were to take this study seriously, they might need to consider few factors in games such as its rules, competition and learning in particular. Meanwhile, for each games, teacher needs to set the rules clearly and explicitly explained. All of these aspect should be taken into consideration when planning the lesson so that it beneficial to the learners in learning the language. Teachers have to be very selective about which games are beneficial, should be used, when to use, and how to connect them with the syllabus or text book. Integrating games in Malaysian ESL classroom is like opening a new door to greater learning experience.

Recommendation & Conclusion

As a conclusion it is proven that the interactive ICT language games are effective in enhancing pupils' active participation in the class. The pupils also more motivated and performed better in the class as proved by the experimental group. For teachers, conducting language games makes the job powerful and provides a limelight for all the educators to utilize interactive ICT language games into their teaching practices. For the suburban learners, it support and assist them in learning the target language. It is a bonus point for these learners too as they may able to use the interactive ICT language games independently be it at school or at home. Over these years, the ESL learners faced multiple issues while learning English which lead to passive, demotivating and ineffective learning. Thus, the application of interactive ICT games in the ESL classroom is effective in engaging and promoting active learning as the learning process is between the pupils themselves and the computer, it creates a non-threatening environment which makes these pupils to feel comfortable and positive to accept any mistakes or errors (Yunus, Hashim & et all, 2010). Teachers should be able to identify the nature and importance of this motivational process in language learning (Anam & Susanto, 2017); Zirawaga et all (2017) acknowledge that educational technology need to be in line with the curriculum to be effective to the students' achievement. As a recommendation, teachers need to consider the criteria of the most suitable ICT language games in which Ibrahim (2017) acknowledged the need of designing the game based on the curriculum and topics to suit the learners' level and applicable at different levels. Norman et all (2018) added that results presented in this study are useful for future researcher to further investigate the aspects of games that could enhance students' motivation and later further improve the teachers' teaching.

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