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The Effect of Board Games in Class on EFL Children's English
Vocabulary Learning

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Abstract

Various teaching materials, including board games, have been applied to the education field and found to have a great impact on children's learning. The current project explored whether students could gain vocabulary knowledge from board games. Six high-grade students in Guo-Tai Elementary School participated in the weekly one-hour class for two months. Three board games were used in class, such as Dobble, Pictomania, and Dixit. It is expected that through games, students will boost English vocabulary knowledge and become motivated.

Introduction

With children's increasing pressure in school work, games, an alternative teaching strategy, seem to be added into class activities in order to reduce learning stress and to support learning. One of the prevalent games, board games, has been highly recommended recently by elementary school teachers. They claim that elementary-aged children could learn basic words by participating in different board games, such as *Dixit*, *Pictomania*, *Dobble* and feel engaged with learning because the board games provide simple ways to play and the words used during the games are easy to be understood. But what students actually benefit from board games is still unclear. Therefore, more research is needed to explore whether board games could enhance children's English vocabulary performance and learning motivation.

In this study, three different board games were respectively administered throughout the class. Each board game was played by students for three one-hour class period per week, and students followed the rules as well as engaged in the activities well. With the vocabulary tests and learning motivation questionnaires given for students to write, their grades and performance improved gradually. Thus, by playing as well as learning English through board games in class, children gained learning motivation and help improve children's vocabulary competence.

The following questions guide the current paper:

1. How do board games specifically influence and help improve elementary school students' English vocabulary competence?
2. Do the participants gain English vocabulary knowledge after the board games?
3. Do the participants become more motivated in learning English after the board games?

Literature Review

In the following sections, the benefits of board games in students' general learning are presented first. Then, relevant studies about using board games in English learning for elementary-aged learners are described.

Games and Play

Bork (2014) argues that play is multifunctional and is essential in children's experience. Besides, play is consisted of activities that increase children's attention and interest. Therefore, children would learn in a more relaxing way but still can learn something practical, as long as teachers integrate teaching materials and tools into the games for children to play. As Kim (2015) suggests, play can increase users' happiness with fun activities and games and can reduce stress. Hence, these positive changes and influence on children will be great when they play games.

Additionally, the authors mention that all children love to play because it's a workshop for children to explore, learn, and change. Most importantly, games are the key aspect of kids' play. (Bay-Hinrix, 1994). It is no doubt that games do influence children and children's skills or potential could be further explored through playing.

Board Games in English Learning

The use of board games in class is highly promoted by Treher (2011). He pointed out there are several of prevalent myths about learning, and one of them is that hands-on learning works best. However, many students are unable to think independently when working on experiments or tests. Therefore, Treher suggests that understanding, thinking, synthesizing, applying, and independent reasoning are required during students' learning process. The solution is that hands-on and heads-on learning works best. Either alone is not sufficient, but well-designed board games are an effective way to provide this combination, and they are also an important tool to provide hands-on and heads-on skill and knowledge development for people of all ages. Board games create an engaging atmosphere as well as provide a joyful yet competitive learning environment, naturally and gradually leading children to learn without much pressure.

Besides, in "Using digital board games for genuine communication in EFL classrooms" this article, the authors indicate that face-to-face gaming, such as board

games, create an environment which increases children's attention and engagement. Mostly, board game activities include game planning such as roles selection, and performing, such as placing cards. These all require children to continuously think independently and offer brilliant ideas or strategies (Wu, Chen, & Huang, 2014).

Collaborative Learning Fostered by Board Games

Relationships between peers are an important learning opportunity. Through playing board games, children interact with peers and learn social skills. Group work is a crucial part of children's daily life. Not only do children learn to cooperate with peers, but they also build skills which are needed in the future. The benefit of collaborative learning is that children can learn with a group of people, so they can learn from peer's strengths and weaknesses. Additionally, children create friendships, consult each other, work and play together; thus, they can overcome anxieties when having fun together (Marjanen, 2010).

According to Bay-Hinitz, Peterson, and Quilitch's study (1994), in contrast to competitive games, collaborative games are particularly suited for boosting collaboration. Collaboration as a team differs from cooperation among individuals, because cooperative players may have different goals whereas collaborative players have only one goal and share the rewards or penalties. (Zagal, Rich, & Hsi, 2006). Hence, collaborative learning gives children an opportunity to engage in discussion and take responsibility for their own learning (Gokhale, 1995). Consequently, children not only come up with learning strategies but also gain knowledge in collaborative learning.

Learning Motivation and English Learning

First and foremost, Wimolmas (2013) reported the many different definitions of motivation, especially in language learning. For instance, Harmer (1991) explains that "internal drive" is the motivation which pushes somebody to do something. If we are appealed by goals that are worth doing, then we would try to achieve that goal. Furthermore, Harmer views motivation as the continuous process based on one's desire.

Two types of motivation in second language learning are also brought up by Harmer (1991), including short-term goal and long-term goal. Short-term goal motivation refers to objectives students desire to achieve in the near future, such as

getting good grades or passing the exam, while long-term motivation means students' purpose of learning language is to communicate with people by using the language they learn or to get a better job.

Motivation provides L2 learners with ways to sustain a good attitude during the learning process. In other words, learning motivation is a key element for sustainability learning. Without sufficient motivation, one still can't accomplish long-term goals even if he or she has remarkable competence. On the other hand, high learning motivation is essential when it comes to learning deficiencies in one's language aptitude and learning conditions (Dornyei, 1998).

Method

This research purpose was explore whether students gained vocabulary knowledge and learning motivation through the use of board games in class. Students were given vocabulary tests and learning motivation survey in the project. The results were examined by comparing the outcome of students' vocabulary pretest and delayed posttest, pre-learning motivation survey and post-learning motivation survey.

Participants and Research Context

The experiment was conducted in English Club in Guo-Tai Elementary School in the northern part of Taiwan. Six participants were recruited in the project and they were in 4th, 5th and 6th grades respectively. The course duration lasted for ten weeks, and each weekly session was one hour long.

Instruction Procedure Design

The design of this research was measure students' vocabulary knowledge and learning motivation before and after the use of board games. Students played the board game *Dobble* in the first three weeks, *Pictomania* in the following three weeks, and *Dixit* in the last two weeks. Before each board game was played, the instructor taught vocabulary through the use of flashcards. In the first *Dobble* board game, students learned fruits and body parts. They simply looked at the flashcards and repeated the words. The main reason for doing this was to let students link the pictures and words as they saw the flashcards. After the practice of repetition of every word, students started to play *Dobble*. The second board game, *Pictomania*, tested

students' hand-eye coordination skill. They learned animals and emotional adjectives vocabulary first. Then the instructor spread flashcards on the table evenly and had students carefully listen to her. When the instructor said one word, each student needed to pat on the picture of that word on the flashcard as quick as they could. They sufficiently practiced English listening. As the board game *Pictomania* started and they began to draw the pictures, they also had to guess what other players were drawing. The more precise and faster one had done with the drawing and guessing, the more points one got. For the last one, *Dixit*, students reviewed all the vocabulary they had learned in the previous lessons, including fruits, body parts, animals, and emotional adjectives.

Teaching Instruments

The activities being carried out in the program were from the following board games: *Dixit*, *Dobble*, and *Pictomania*. The three board games helped increase students' learning motivation and engagement in class. The activities were conducted mainly in English. Only when students didn't understand the game rules or words could the activities conduct in Chinese with a view to letting students better understand how to play the board games and the vocabulary they learned. What follows briefly introduces the three board games.

Dobble (See Figure 1). Each student received the same number of cards with multiple graphics of objects like fruits and body parts before the game started, but there were more than one graphics on each card and the cards were not allowed to be shown to other players. Then players took turns flipping over a card in hands on the table. As long as players saw the same graphic on other player's card, the players had to point to the graphic and say the word corresponding to the graphic out loud in order to win points. This game was applied for three class sessions. Students simply said the words and became familiar with the vocabulary. They learned to recognize each graphic and its meaning and tried to match the words with the graphics at the same time.



Figure 1. Dobble.

Pictomania (See Figure 2). Each student was given one board and a pen to draw. Various questions were provided but each round only one question was given. The questions included names of different similar words or words in the same category to make the games challenging and the players confused, and each student was assigned with one word in a round. Then students started drawing the assigned word on their own board without saying anything but needed to guess what other players' were drawing at the same time. Each correct guess deserved one point. This game was applied for three class sessions. Students learning motivation increased and drawing helped lessen anxiety; thus, students could learn vocabulary without much pressure.



Figure 2. Pictomania.

Dixit (See Figure 3). Using a deck of cards illustrated with dreamlike images, players selected cards which matched a title suggested by the “storyteller”, and guess which card the “storyteller” had selected. Players took turns being the storyteller. This game was applied for two class sessions. Students had the opportunity to use their imagination to give description during the game, so they were not limited to say certain words.

In addition to the vocabulary tests and learning motivation survey, instructor's observation on students' class participation and performance is also one of the references. During the two month teaching, students gradually became active in answering instructor's questions. Moreover, instructor observed that by playing board games, one of the students, who actually was in the lowest level, could sometimes win the first prize. That student began willing to raise her hand to answer questions.

Results

Initial data analysis consisted of examining the data from the 6 participants who took the vocabulary tests. These descriptive statistics are presented in Table 1. The mean of vocabulary pretest, treatment, and posttest are 71.67, 73.35, and 86.67, respectively. And the standard deviation are 25.63, 27.17, and 15.06, respectively. In Table 2, it provides the test statistic (χ^2) value ("Chi-square"), degrees of freedom ("df") and the significance level ("Asymp. Sig."). The finding of the significance is .07, which shows no significance in students' vocabulary knowledge improvement.

Table 1

Descriptive Statistics of Vocabulary Test

	N	Mean	Std. Deviation	Minimum	Maximum	Percentiles	
						25th	50th (Median)
pretest	6	71.67	25.63	40.00	100.00	40.0000	80.0000
treatment	6	73.35	27.17	43.30	100.00	45.8500	76.7000
posttest	6	86.67	15.06	70.00	100.00	70.0000	90.0000

Table 2

Test Statistics of Vocabulary Test

N	6
Chi-Square	5.200
df	2
Asymp. Sig.	.074

Baesda on Wilcoxon Signed-Rank Test using SPSS Statistics, the results of learning motivation survey are presented in Table 3. Only question 16 "*I'm confident with my English ability*" shows significance as its significance level is .046.

Table 3

Comparison of English Learning Motivation Before and After the Treatment

Test Statistics ^a				
	postQ1 - preQ1	postQ2 - preQ2	postQ3 - preQ3	postQ4 - preQ4
Z	-1.000 ^b	-1.000 ^b	-1.000 ^b	-.577 ^c
Asymp. Sig. (2-tailed)	.317	.317	.317	.564

Test Statistics ^a				
	postQ5 - preQ5	postQ6 - preQ6	postQ7 - preQ7	postQ8 - preQ8
Z	.000 ^b	.000 ^b	.000 ^b	-.378 ^c
Asymp. Sig. (2-tailed)	1.000	1.000	1.000	.705

Test Statistics ^a				
	postQ9 - preQ9	postQ10 - preQ10	postQ11 - preQ11	postQ12 - preQ12
Z	.000 ^b	.000 ^b	-1.000 ^b	.000 ^c
Asymp. Sig. (2-tailed)	1.000	1.000	.317	1.000

Test Statistics ^a				
	postQ13 - preQ13	postQ14 - preQ14	postQ15 - preQ15	postQ16 - preQ16
Z	-1.633 ^b	.000 ^b	-.577 ^b	-2.000 ^c
Asymp. Sig. (2-tailed)	.102	1.000	.564	.046

Test Statistics ^a				
	postQ17 - preQ17	postQ18 - preQ18	postQ19 - preQ19	postQ20 - preQ20
Z	-1.000 ^b	-.447 ^b	-1.342 ^b	-.816 ^c
Asymp. Sig. (2-tailed)	.317	.655	.180	.414

It showed that through the use of board games in class, students obtained vocabulary knowledge as well as increased learning motivation by comparing the results of vocabulary pretest and delayed posttest and learning motivation questionnaires. This outcome is positive, since most students not only improved on their vocabulary tests but gained more interests in learning English.

During all class sessions, students gradually became more willing to repeat the words and speak English. Besides, they would point to the flashcards quickly and correctly as they heard of the words said by the instructor. Owing to the continuous practices, students developed the habit of answering questions actively. What's more, board games are the key elements which helped students gained vocabulary competence and learning interest. They played the board games without pressure.

Discussion

The purpose of this research was to explore the effect of board games on EFL children's English vocabulary learning and their learning motivation. The hypothesis questions included the positive improvement on students' vocabulary knowledge and positive outcome of their English learning motivation. One possible limitation was the limited number of students affected the result. However, as expected, the findings showed that most students changed their attitude toward learning English. More importantly, the results suggested their improvement on vocabulary learning. Board games are efficiently used in class, since students did gain interest in learning English vocabulary and show their enthusiasm when playing. Hence, the use of board games in class can really improve EFL children's English vocabulary learning and gain learning motivation.

The educational system can be influenced by the learning environment, number of students, perception of teaching and learning, and so forth. Various kinds of teaching tools are also flourishing. Board games are one of the teaching tools that have positive impact on children's learning. Although it takes time to assess whether board games do help children improve skills, it is better for teachers to try and apply this teaching method in class.



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國立屏東師範學院國民教育研究所碩士論文。

Appendix 1: English Learning Motivation Survey

附錄 1 國泰國小英語社團學生英文學習動機評量表

親愛的小朋友你們好!很高興英語社團有你們的加入與參與，此份學習動機測量表是老師想要更了解你們的學習狀況。每個題目包含四個選項，從非常符合至非常不符合，請耐心並用心回答。此份測量表絕對嚴謹保密，也不會影響課堂成績。

基本資料：我是： <input type="checkbox"/> 男生 <input type="checkbox"/> 女生 班級： 我的名字是：				
	非常符合	符合	不符合	非常不符合
1.學好英文能肯定我的能力				
2.我相信只要努力，我就會得到好的英語成績				
3.把英文學好，對我將來的學習不會有幫助				
4.將英語學好是我的責任				
5.我認為英語是一門沒有用的科目				
6.老師上英語課時所使用的教具，常能幫助我了解英文				
7.我覺得學英語很困難				
8.學了英語後我能夠做更多的事				
9.我上英語課常會打瞌睡、不專心				
10.我的英語表現不能受到別人的肯定				
11.我常與同學討論有關英語的知識				
12.當遇到不懂的英語問題時，我會去問別人				
13.英語課程內容太無趣，我很難集中注意力				
14.對於不懂的英語問題，我會想了解它				
15.與英語有關的知識對我具有吸引力				
16.我對自己的英語能力有信心				
17.我很少努力學習英語				
18.我很少對自己的英語成績感到滿意				
19.上英語課時，我會專心、注意聽老師的講解				
20.我能從英語學習中獲得樂趣				

非常謝謝你們的合作!

Appendix 2: English Vocabulary Pretest & Delayed Posttest

附錄 2 英文字彙能力測驗²

請由下方題目中選出一個最適合且正確的答案。此份英文字彙能力測驗並不會影響課堂成績，請務必誠實作答！

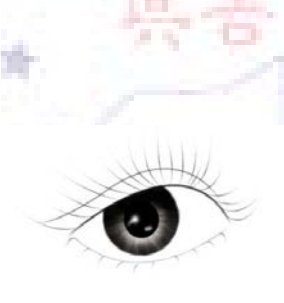
請選出與圖片相對應的英文單字

a	rabbit	b	eye	c	bored	d	deer	e	apple
f	ruler	g	scissors	h	ear	i	lemon	j	mad

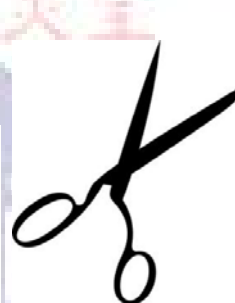
1. ()



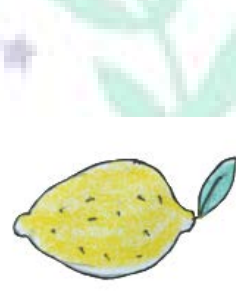
2. ()



3. ()



4. ()



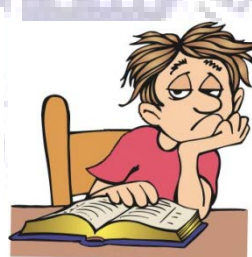
5. ()



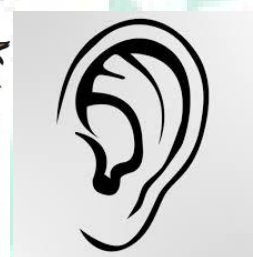
6. ()



7. ()



8. ()



9. ()



10. ()



Appendix 3: English Vocabulary Immediate Posttest (1)

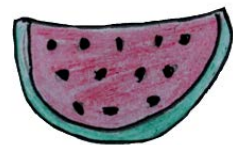
附錄 3 英文字彙能力測驗 (1)³

請由下方題目中選出一個最適合且正確的答案。此份英文字彙能力測驗並不會影響課堂成績，請務必誠實作答！

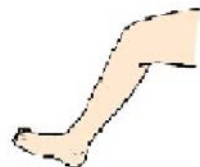
請選出與圖片相對應的英文單字

a	guava	b	watermelon	c	strawberry	d	grapes	e	kiwi	f	ear	g	orange
h	peach	i	apple	j	papaya	k	leg	l	tomato	m	arm		

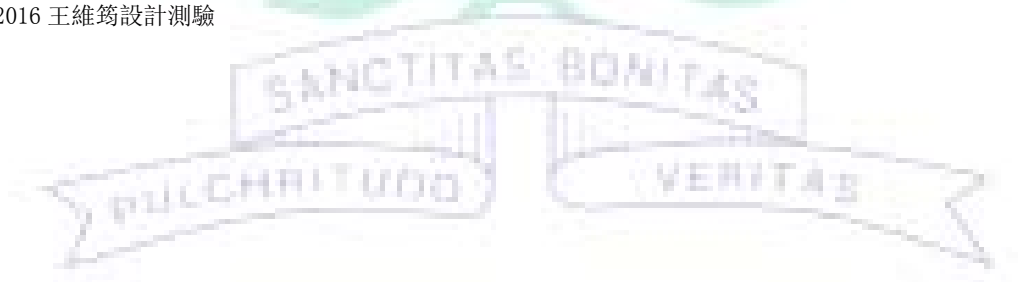
1. () 2. () 3. () 4. () 5. ()



6. () 7. () 8. () 9. () 10. ()



³ 2016 王維筠設計測驗



Appendix 4 English Vocabulary Immediate Posttest (2)

附錄 4 英文字彙能力測驗 (2)⁴

請由下方題目中選出一個最適合且正確的答案。此份英文字彙能力測驗並不會影響課堂成績，請務必誠實作答！

請選出與圖片相對應的英文單字

a	horse	b	bored	c	sleepy	d	hippo	e	rabbit	f	sad
i	glad	j	deer	k	mad	l	sheep	m	panda	n	nervous

1. ()



2. ()



3. ()



4. ()



5. ()



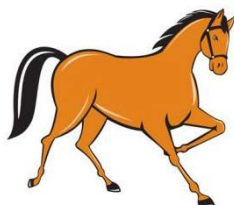
6. ()



7. ()



8. ()



9. ()



10. ()



Appendix 5 English Vocabulary Immediate Posttest (3)

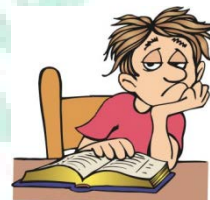
附錄 5 英文字彙能力測驗 (3) ⁵

請由下方題目中選出一個最適合且正確的答案。此份英文字彙能力測驗並不會影響課堂成績，請務必誠實作答！

請選出與圖片相對應的英文單字

a	bored	b	tiger	c	lucky	d	monkey	e	hand	f	banana
i	mouth	j	bear	k	lemon	l	pineapple	m	mad	n	brave

1. () 2. () 3. () 4. () 5. ()



6. () 7. () 8. () 9. () 10. ()



⁵ 2016 王維筠設計測驗

