Effectiveness of English Song Activities on Vocabulary Learning and Retention

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Abstract
The two main objectives of this study were (a) to study the effectiveness of song activities on vocabulary learning and retention and (b) to explore students' opinions towards song activities. The sample of the study was 40 first year students. The teaching and research materials used in the study were song activities, a pretest, two posttests, and a questionnaire that about students' opinions of song activities. The two post-tests were: Posttest I (administered immediately) and Posttest II or Retention test (administered two weeks later).
The data collected were from the pretest and the two posttests. We also collected data from an opinion questionnaire containing a five-item Likert scale. The analyses included mean, standard deviation and significance of difference (paired t-test).
The results showed that there was a significant difference between the pretest and posttest I mean scores of the students' English vocabulary achievement at a level .01. However, there was no significant difference between Posttest I and Posttest 2. Students had positive attitudes toward using song activities to develop their vocabulary learning and retention. It can be concluded that learning English through song activities can encourage students to develop and retain their vocabulary knowledge.

Keywords: song activities, vocabulary learning, vocabulary retention

Introduction

English has become a tool for communication in the new era of globalization and information technology. In Thailand, people use English for tourism, education and international affairs. (Broughton, 1997)

According to Wiriyachitra (2003), the main reason that English learning is not very successful in Thailand is that our students lack the opportunity to learn English in real life interaction in an English environment. Therefore, many teachers try their best to find the strategies and techniques for teaching English to students. Inadequate vocabulary is one of the serious problems in learning English, and it affects language development and learning ability because vocabulary is a basic component of language use which creates the foundation for learners' performance in other skills (Alemi and Tayebi, 2011, as cited in Chulawan, Sirirat and Krdsanaphon, 2012).

In order to help students succeed in learning language they need to learn vocabulary that is used in daily life. One tool that can interest students in learning vocabulary is the use of song, which introduces students to new vocabulary and phrases in a lively way. Many schools have used songs to help students in learning and improving their behavior. Music allows students to learn vocabulary more rapidly. (Salcedo, 2010)

According to Medina (1993 as cited in Alipour, Gorjian, & Zafari, 2012), a popular song can promote a wide variety of useful words. Using the students' favorite songs can help them learn vocabulary over the long term; this is called the song-stuck-in-my –head phenomenon. (Murphey, 1992)

The Purpose of the Study

This present study addressed two research objectives as follows:
1. To study the effectiveness of song activities on vocabulary learning and retention.
2. To study students' opinions toward song activities.

Review of Literature

Vocabulary and Its importance

Vocabulary can be defined as the words of a language involving single items and phrases or chucks of several words which provide a particular meaning. English vocabulary consists of three main aspects which are form, meaning and use. It involves lexical phrases. Learning vocabulary is challenging because of the size of the task; it involves understanding the varied types of vocabulary which include: single word, phrase, idiom, collocation, strategic vocabulary, grammar pattern, and fixed vocabulary. (Alemi and Tayebi, 2011)

Several teachers of English and researchers have tried to find the strategies and techniques for teaching and learning English vocabulary because they are aware of the importance of learning vocabulary which is the basis for learners' performance in other language skills including speaking, listening, writing, and reading. (Alemi and Tayebi, 2011)

If students don't know grammar, they can still communicate however ineffectively but if students don't know vocabulary they cannot communicate at all (Wilkin, 1972). Teaching English vocabulary help Thai students talk with others in English. Inadequate vocabulary is one of the serious problems in learning English. Without learning vocabulary, students are held back in language skill development and general learning ability. (Bualuang.C, Sinprjakphol. S, nd Chanphrom. K, 2012)

Types of Vocabulary

There are four types of vocabulary:
1. Listening vocabulary: The words we hear and understand. Babies are listening during all waking hours and gradually learn new words that time. Most people can remember and understand words nearly 50,000 words.
2. Speaking vocabulary: People have a limited speaking vocabulary. Most adults use between 5,000 and 10,000 words for all their conversations.
3. Reading vocabulary: This type is the second largest vocabulary type. These are the words we understand when we read text. If people are not readers, they cannot improve this type of vocabulary.
4. Writing vocabulary: The words use when we write to explain ourselves. The words we use to write we derive mostly from the words that we can spell. (Montgomery, J., 2007)

Song and Language Learning

Music plays an important role for every step of human life. It reflects the culture, history, folklore, and current idiom of countries. Singing is an important tool for building students' confidence. It gives students a degree of fluency before they have succeeded in speaking. Words usually occur in context in lyrics; the sound of new words is easily remembered through the melody of the song. While listening to the song, students will hear several new vocabularies many times.   Music affects language accent, grammar, memory, mood, enjoyment, and motivation. Composing words and rhythm appropriately can help to hold the song together and increase the mind's ability to recall it. Pairing music and language can help the process of learning vocabulary and phrases. When using songs to teach vocabulary, it begins with listening and finishes with communication. For some students who are not used to the culture of the target language and have some difficulties in expressing, they can learn the language better by using the music which provides them a relaxed atmosphere. Songs are the authentic materials for teaching a second language. The song lyrics provide a target vocabulary, grammar, and patterns for students to study. By listening to English songs, students can listen to the native pronunciation and also develop their listening ability. Melodies and rhymes help students to use good pronunciation like a native speaker. (Stansell,as cited in Šišková, 2008)

Songs can be used as effective materials for teaching vocabulary such as using the words of a song, dictating a song, using a song for gap-fill, cloze or for correction, integrating songs into project work, practicing pronunciation, stress, and intonation. By singing songs, students are taught lessons with a fun atmosphere which can create very positive effect in language learning. (Murphey, 1992)

Prescott (2005) points out that music is an important thing for education. It not only help students learn and gain the knowledge but also helps students increase their scores. There are many studies showing that music has a positive effect in the classroom.

If students do not understand the definition of all the words in the song, students can get the meaning from the lyric. There are many popular songs together with their music videos that help students understand the content of the lyrics. The music videos also provide the song's story which helps the students understand the words in context. Students also hear the words via the songs over and over again and figure out their meaning through the video's content. (Šišková, 2008) All of this can help students learn new vocabulary. They learn the language naturally while singing and hearing the songs. When students listen to their favorite songs they remain interested and motivated in learning vocabulary. Music video keep students motivated; the video are one tool for keeping students aware of what is happening around them. (Murphey, 1992)

Retention and Memory

Retention is ability to recall or recognize what has been studied or experienced. Retention can be known as memory. Memory is the persistence of learning over time. The model of human memory is the process of information that involves encodes, stores, and retrieves information. Some types of information can be encoded automatically whereas other types need information including meaning, imagery, organization, and require effort. Much of what we sense we can fail to notice or process without the process of effort. Memory can be improved by using strategies such as: spaced practice, active rehearsal, encoding of well-organized, meaningful associations, mnemonic devices, self-testing and rehearsal, and minimizing interference.

Types of Memory
Each type of memory has different particular modes of operation which cooperate in the process of memorization and can be divided into three types.
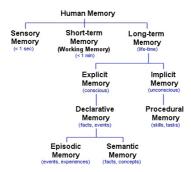

Figure 1: Types of Human Memory (Luke Mastin, 2010)

Sensory memory: It is the shortest-term type of memory. It retains sensory information after receiving stimuli through five senses which are sight, hearing, smell, taste, and touch. The retention is quite correct but very short. An example of sensory memory is when you are looking at something for very short time and remember its feature. As information is

perceived, it stored in sensory memory automatically without forcing. The sensory memory cannot be prolonged by rehearsal. It decays very quickly for 1/5-1/2 second after the perception of a thing.

Short-Term Memory: This information will disappear quickly, forever if we don't make a conscious effort to remember it. The information from short-term memory can be transferred to long-term memory by repetition of the information, or by giving it a meaning and associating it with other previous knowledge.

Long-Term Memory: It is used for storage of information for a long period. Short term memory can transfer to long-term memory through rehearsal and meaningful association. Long-term memory encodes information based on meaning and association. In order to establish long-term memory, a process is need called long-term potentiating which involves physical changes in the structure of neurons in human brain. (Mastin, 2010)

Measure of Retention

There are both direct and indirect methods of measuring memory.

The direct methods are as follows.
Recall: It is the method used for testing memory or measuring retention. It includes verbal reproduction or repetition of previous materials that had been learnt. Students can recall the information easier when the material that they learned is meaningful, short and interesting. The material comprises of lists of words, stores, or visual stimuli. Recall can be classified into two types which are free recall and serial recall. Free Recall allows people not to bring back pieces of information in order. Pieces of learned material can be recalled freely and then don't need to follow any particular order. The material is remembered in any order at all. Serial Recall is different from the free recall because the pieces of information need to be recalled in order. The material learned can only be recalled in the right order. The subject may be asked to report the material in the exact order.
Recognition: a measure of retention involving identifying the correct information from among other choices. It counts on cues being in front of the person so it is the least sensitive measure of retention. An example of a recognition task is choosing a correct answer from among incorrect ones, or a multiple-choice test.
Relearning: A measure of retention that is based on learning information again that has been learned before and stored in long term memory. It is the most sensitive measure of retention since it illustrates that there is some information in memory. (Krishna,n.d.)

Methodology

Population and Sample

The population of this study was the first year English for international communication students from faculty of Liberal Arts, Rajamangala University of Technology Srivijaya. The sample in the study was 40 students from the English for International Communication program. The participants were selected by Cluster Random Sampling.

Variables

The independent variable was song activities, and the dependent variable were students' vocabulary learning and retention

Research Instrument

The research instrument and materials in this study were song activities and the tests including the pretest, immediate posttest (Posttest I), a two week delay posttest or a retention test (Posttest II) which all were the same test.

Validity and Reliability

1. Three specialists checked the validity and the content of the test.
2. The test items with a value of level of difficulty between 0.20 to 0.80 and the discrimination index higher than 0.20 were chosen.
3. Three specialists checked the congruence between the questionnaire items. The items with value of Index of Congruence (IOC) between 0.6-1.0 were chosen.

Data Analysis

The data obtained were analyzed as follows:
1. The students' scores from the pretest and Posttest I were analyzed by using paired t-test.
2. The students' scores from Posttest I and Posttest II were analyzed by using paired t-test.
3. The students' opinion towards song activities were calculated into mean and s.d.

Students' self-rating score from the five-item Likert scale questionnaire was analyzed and calculated for the mean and standard deviation and interpreted into five levels as follows.
4.21-5.00 = very high
3.41- 4.20= high
2.61-3.40 = fair
1.81-2.60 = low
1.00-1.80= very low

Findings

Table 1: The comparison between the overall mean scores of the pretest and posttest I

N	Pretest		Posttest I			Sig. (2-tailed)
	$\bar{x}$	S.D.	$\bar{x}$	S.D.	t	
40	6.34	1.79	8.74	0.87	12.102	.000

According to the table 1, the number of students was 40 students. The overall mean scores of the pretest and Posttest I were 6.34 and 8.74 respectively. The overall standard deviation of

pretest and Posttest I were 1.79 and 0.87 respectively. The results showed that there was a significant difference between the overall mean scores of pretest and Posttest I at a level .01.

Table 2: The comparison of the overall mean scores of the pretest and Posttest I in all activities

Activities	N	Pretest		Posttest I			Sig. (2-tailed)
		$\bar{x}$	S.D.	$\bar{x}$	S.D.	t	
song 1	40	6.65	2.15	9.06	1.22	8.826	.000
song 2	40	7.65	2.47	8.83	1.19	3.718	.001
song 3	40	5.33	2.35	8.78	1.41	9.888	.000
song 4	40	5.73	1.79	8.28	0.87	10.622	.000

According to the table 2, for song 1, the mean scores of the pretest and Posttest I were 6.65 and 9.06 respectively. The standard deviation of the pretest and Posttest I were 2.15 and 1.22 respectively. There was a significant difference between the mean scores of the pretest and Posttest I at a level. 01. For song 2, the mean scores of the pretest and Posttest I were 7.65 and 8.83 respectively. The standard deviation of the pretest and posttest were 2.47 and 1.19 respectively. There was a significant difference between the mean scores of the pretest and Posttest I at a level. 01. For song 3, the mean scores of the pretest and Posttest I were 5.33 and 8.78 respectively. The standard deviation of the pretest and Posttest I were 2.35 and 1.41 respectively. There was a significant difference between the mean scores of the pretest and Posttest I at a level. 01. For song 4, the mean scores of the pretest and Posttest I were 5.73 and 8.28 respectively. The standard deviation of the pretest and Posttest I were 1.79 and 0.87 respectively. There was a significant difference between the mean scores of the pretest and Posttest I at a level. 01.

Table 3: The comparison of the overall mean scores of Posttest I and Posttest II

N	Posttest I		Posttest II			Sig.(2-tailed)
	$\bar{x}$	S.D.	$\bar{x}$	S.D.	t	
40	8.74	0.87	8.70	0.90	0.328	.745

According to the table 3, the number of students was 40 students. The overall mean score of Posttest I and Posttest II were 8.74 and 8.70 respectively. The standard deviation of Posttest I and Posttest II were 0.87 and 0.90 respectively. The overall mean score of Posttest I was not significantly different from the overall mean score of Posttest II.

Table 4: The comparison of the mean scores of Posttest I and Posttest II in all activities

Activities	N	Posttest I		Posttest II			Sig. (2-tailed)
		$\overline{x}$	S.D.	$\overline{x}$	S.D.	t	
song 1	40	9.08	0.94	8.65	1.27	1.834	.074
song 2	40	8.83	1.22	8.85	1.31	0.113	.911
song 3	40	8.78	1.19	8.45	1.80	1.198	.238
song 4	40	8.28	1.41	8.85	0.86	0.118	.015

According to the table 4, for song 1, the mean scores of Posttest I and Posttest II were 9.08 and 8.65 respectively. The standard deviation of Posttest I and Posttest II were 0.94 and 1.27 respectively. The mean score of Posttest I was not significantly different from the mean score of Posttest II. For song 2, the mean scores of Posttest I and Posttest II were 8.83 and 8.85 respectively. The standard deviation of Posttest I and Posttest II were 1.22 and 1.31 respectively. The mean score of Posttest I was not significantly different from the mean score of Posttest II. For song 3, the mean scores of Posttest I and Posttest II were 8.78 and 8.45 respectively. The standard deviation of Posttest I and Posttest II were 1.19 and 1.80 respectively. The mean score of Posttest I was not significantly different from the mean score of Posttest II. For song 4, the mean scores of Posttest I and Posttest II were 8.28 and 8.85 respectively. The standard deviation of Posttest I and Posttest II were 1.41 and 0.86 respectively. The mean score of Posttest I was not significantly different from the mean score of Posttest II.

Table 5: Students' opinion toward learning through song activities

While learning through song activities,	$\overline{x}$	S.D.	Level
1. Students like to learn vocabulary.	4.65	0.65	very high
2. Students can remember more words.	4.23	0.66	Very high
3. Students relax while learning vocabulary.	4.83	0.38	very high
4. Students can focus on the vocabulary lesson longer.	4.68	0.53	very high
5. Students enjoy learning vocabulary and the class is fun.	4.68	0.53	very high
6. Students can pronounce words correctly.	4.23	0.62	Very high
7. Students can spell words correctly.	4.10	0.71	high
8. Students can remember the meaning of the words longer.	4.35	0.62	Very high
9. Students would like to learn vocabulary through song activities continuously.	4.68	0.57	very high
10. Students can apply the vocabulary learned in the class to use in daily life.	4.55	0.55	very high
Total	4.49	0.58	very high

From the table 5, the overall mean score of students' opinion toward learning through song activities was 4.49 and standard deviation was 0.58 at a very high level. It showed that students think they relax while learning vocabulary through song activities at a highest level ($\overline{x}$= 4.83, S.D. =0.38), followed by focusing on the vocabulary longer, enjoying learning the vocabulary ,and viewing that the class is fun , as well as preferring to learn the vocabulary through song activities continuously at a very high level ($\overline{x}$ = 4.68, S.D.= 0.53). Besides, they saw that they can apply the vocabulary learned in the class to use in daily life at a very high level ($\overline{x}$ =4.55, S.D =0.55). The students rated that they can remember the meaning of

the words, more words, and can pronounce the words correctly at a very high level ($\bar{x}$ = 4.35, 4.23, 4.23, S.D.= 0.62, 0.66, 0.62) respectively. Lastly, they saw that they can spell words correctly at a high level ($\bar{x}$ =4.10, S.D. = 0.71).

According to the open-ended question, students still would like to learn the vocabulary through song activities. They thought they felt relaxed and happy while learning in the class.

Discussion

The effectiveness of song activities on students' vocabulary learning and students' opinions toward using song activities

According to the results, there was a statistical difference between the students' scores of their vocabulary test before and after learning through song activities. The result was relevant to the results of Kasuwan (2013). The results showed that after learning through song activities, the students' score were significantly higher than before learning at a .01 level. According to Krashen (1981, as cited in Priester, 2011), unknown vocabulary can be learned best when people have a low affective filter, which can help people to be free from stress. When students relaxed, they learned the new vocabulary more easily. The results show the students learned better in a relaxed atmosphere; the students said that in this relaxed atmosphere they were happy and enjoyed the class (Murphey, 1992)

When students feel comfortable they have easier time accessing new information. Students were also motivated to learn the new vocabulary through song activities. When students are motivated they have a longer retention span to absorb new vocabulary. Using music is an important motivator in attracting and retaining students' attention. (Šišková, 2008) Motivation is an important factor for students' success. (Šišková, 2008) According to Martin,C. (2013) , listening to song is a very enjoyable activity. Song selection is important for students because if they like the songs, they will try to understand the meaning.

Thus, they will feel motivated to understand and learn the target language themselves. The selected songs should be the ones that are popular among the students. If a selected song is one of a favorite singer, the students will try to memorize this song, and, in this way, feel a sense of closeness with the singer. During the experiment, students sung the song together; this creates the good relationship among them, they laughed and sang along which helped them to work as a team and learn in this way. Music has always brought young people together. They love to share their music with others.

In addition, students can more easily learn through songs because the brain can be stimulated by using music and song. While classroom teaching is processed by the brain's left hemisphere, music is processed through brain's right hemisphere. Therefore, learning through music stimulates the students' right hemisphere which allows communication between the right and left hemispheres. Therefore, music is a very effective learning tool (Priester, 2011).

As shown in the results, students saw that their pronunciation also improved. While listening to music, students can hear the pronunciation of the native speakers. Students also improve their ability to hear the language .Music's natural rhythm in words and phrases helps students develop good pronunciation (Šišková, 2008)

The effectiveness of the songs in language learning helps student relax, create the friendly atmosphere, good relationship among students and teachers, improve students' pronunciation. Students saw that they really enjoyed the song activities and preferred to learn the new vocabulary continuously through song activities.

The effectiveness of song activities on students' vocabulary retention

Although, from the result, there was no statistically significant difference between Posttest I and the retention test (Posttest II), it showed that students can still retain the vocabulary effectively. From the questionnaire, students stated that they can remember more words and their meaning at the high level.

In lyrics, words always appear in context, and so it is easy to remember them along with the melody of the song. While students listened to the song, they are exposed to the new vocabulary several times. Combining words with the rhythm hold songs together in a way that improves the mind's ability to recall the words which helps in learning vocabulary and phrases.(Stansell, as cited in Siskova, 2008) .Walllace (1944 as cited in Martin, 2013) mentioned that the melody is an important factor in the retention of information. The combination of melody and words are retained in the brain easily. When words are in a musical context, they are better retained. This is relevant to the results of Martin's study (2013). It revealed that the use of song may improve the memory and the retention of vocabulary. It stated that the songs can be an effective way to stimulate language retention and a good way to motivate students to like the foreign language. Music is a good tool to help students memorize many aspects of the language because of its repetitive nature.

Learning through song activities, vocabulary can be acquired via popular songs. When the teachers used students' favorite songs, it helped them store information in their long term memory. Music can help students to deal with their difficulties of retaining vocabulary because it has the quality of sticking in people's head, which can be called the song-stuck –in –my-head-phenomenon. (Medina, 1993 as cited in Alipour,Gorjian and Zafari, 2012). When a song sticks in one's head, it is difficult to get rid of it. The song consists of two verses, a bridge and a chorus. The chorus usually repeats many times which can help students remember the new vocabulary from this part first. Thus, the song is a source of repetition which is also a factor that can help students to remember words better. (Šišková, 2008)

In conclusion, song activities had the impact on students' vocabulary learning and retention.

Suggestion for further study

1. A researcher should use investigate the use of English song to promote students' grammar achievement.
2. A researcher should study the use of English song to teach students' pronunciation.

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