The Impact of Music Activities on Foreign Language, English Learning for Young Children

Liza Lee and Shu-Chuan Lin
Chaoyang University of Technology, Taichung, Taiwan

Abstract
The purpose of the study was to examine the impact of music activities on foreign language, English learning for children at age four. The methodology of the study used a quantitative analysis to measure validity based on assessment scales used in the observation forms by the observers and a qualitative study using interviews with classroom teachers and parents. A group of children at age four was selected by purposive sampling to participate in the study. The duration was 18 weeks with 45-minute instructional sessions twice per week. The teaching content included a Hello Song, Letter Song, Musical Storytelling, Music Appreciation, Musical Movement and Goodbye Song. The study applied the thematic music elements to the teaching content. The results were the following: 1) Based on the comparison of pre- and post-test and observation forms, the quantitative scores for the participants were clearly enhanced; 2) Based on the observation forms, teacher’s observation and parental reports, the use of the music, musical instruments and supplemental materials for the participants’ foreign language, English learning were developed.

Key words: Music Activities; Foreign Language; English; Young Children

Introduction

Background
With globalization and global competition, it is clear that education is critically important for the future success of young people in Taiwan (Chen, 2014). The Ministry of Education and other experts agree that initiatives such as creating an “all-English environment” are necessary to enable Taiwan to participate in the global economy (Chang, 2014). As anyone who has tried to learn a foreign language will agree, the process can be very difficult and requires that educators find unique ways in which to help their students.

As an educator and researcher in the U.S. and Taiwan, the researcher has found that music – and music education – can play a crucial role in helping children to learn a second language, English. In the United States the researcher created, tested and implemented a music program to help Chinese-American children learn Chinese language and culture (Lee, 2002; 2005). This curriculum, and the dissertation based on it, drew on years of research and work in music education. The key to the program is using music as a means to help children become familiar with a foreign language and culture. The work has been successful as it is based on the leading contemporary research (Hallam, 2010) that shows clearly that music is essential to learning in all other areas, and is a huge benefit to aiding children in language learning.

The purpose of the study
The purpose of the study was to examine the impact of music activities on English learning for children at age four. The specific purposes of the study were:
The Impact of Music Activities on Foreign Language, English Learning for Young Children

1. Evaluating the use of music activities on promoting English ability of understanding and expression for children at age four.
2. Evaluating the effectiveness of a music curriculum on enhancing foreign language development for children at age four.

Research questions
According to the purposes of the study, the research questions were:
1. Will the use of music activities promote English ability of understanding and expression for children at age four?
2. What is an effective music curriculum for enhancing foreign language development?

Literature Review
Music offers its own benefits - similar and complimentary to the benefits of learning a second language. Like language, there is documented research (Lathom-Radocy, 2002) that shows early exposure to music can lead to increased brain density and an increased skill in math and logic. However, the music seems to stimulate a different yet complimentary portion of the brain. It is noted that both are important to a child's development and it is crucial to incorporate music as a means of teaching language.

The linkage between music and language learning
Most infants grow fast from crying to babbling, which enables them to consciously experiment with prosodic elements of speech, such as tone, pauses, timbre, and stress. Loewy (2004) states, “This music of speech is the earliest dimension of language that is used and understood by children” (pp. 61). The babble introduces words with consonant – vowel – consonant constructions and semantic placement in musical phrases. Real spoken words and sentences will follow up soon.

Music contains authentic, informal language that is natural to the ear. Songs offer precious resources that develop students’ abilities in listening, speaking, reading and writing (Saricoban et al., 2000). A research from the University of Edinburgh (Ludke, Ferreira, & Overy, 2013) found that adults who sang words or short phrases from a foreign language while learning were twice as good at speaking it later. It is thought that by listening to words that are sung, and by singing them back, the technique takes advantage of the strong links between music and memory. This study provides the first experimental evidence that a listen-and-repeat singing method can support foreign language learning, and opens the door for future research in this area.

The use of music in English as a Foreign Language (EFL) classroom
Lynch (2006) indicated that music can improve listening comprehension skills in EFL learners by exposing them to new vocabulary, expressions, idioms, and accents. Researcher (Mora, 2000) asserts that music and language should both be used in the EFL classroom. She asserts that verbal practice associated to musical information seems to be more memorable, using melody with new phrases lowers the student's anxiety, and foreign sounds paired with music will be stored in long-term musical memory and accessible for mental rehearsal and memorization. In Mora’s study (2000), she states that repetition is one of the basic ways the brain remembers material. She describes why using a melodic approach works: “The musicality of speech has an effect not only on the pronunciation skills of EFL students but also on their entire language
acquisition process” (Mora, 2000, pp. 148). Music and the musicality of language teaching provide a rich environment of sound and cuts out other auditory distractions. The musical method enhances the EFL learner's awareness of sounds, rhythms, pauses, and intonations and encourages them develops linguistic fluency through imitation and subvocal rehearsal (Mora, 2000, pp. 152).

**The benefits of music for young children’s language learning**

Research studies (Daniels, 2003; Hatasa, 2002) have long and consistently proven that early, positive, age appropriate experiences with music have a remarkable impact on children's second language learning, such as pronunciation, vocabulary, comprehension and expression.

Most people learn song lyrics faster than words and melodies tend to store easier in the memory even though the meaning of the words might not be clear. “Through the use of songs, rhymes and music, children are able to retain much larger amounts of information” (Ortis, 2008, pp. 207).

Researcher proposes that language should be considered not in a cognitive context, but in a musical one, which she calls the Musical Stages of Speech (Loewy, 2004). Music contains a variety of vocabulary that can easily be adjusted to the appropriate age or level of learning. It is full of phrases and expressions that will prepare children for using genuine language. It teaches grammar and many songs can be used as grammar exercises (Saricoban & Metin, 2010).

Researcher asserts that a child can imitate the rhythm and musical contours of the language long before he can say the words, and caretakers of young children will agree. She says that musical aspects of language, tone, pauses, stress, and timbre are sonorous units into which phonemes, the consonant and vowel sounds of language, are later placed (Mora, 2000).

**Methodology**

The methodology of the study used a quantitative analysis to measure validity based on assessment scales used with a “1-5” scale structured observation forms by three trained observers and qualitative data using interviews with parents, classroom teachers and anecdotal unstructured observation reports from three trained observers.

**The participant and setting**

From the previous studies (Lee, 2007; 2009), the results showed the effectiveness of using music activities for children at age 3 to 4; therefore, the study was attempted to expand the numbers and ages of the participants. Originally there were twenty-three participants, nine boys and fourteen girls, aged four. At the end, one male participant dropped out due to the family reasons. All of the participants had no foreign language experience in order to receive more objective results. They were enrolled in a private kindergarten in Taichung, central Taiwan and selected by purposive sampling to take part in the study.

**Duration**

This was an 18-week study, with 45-minute sessions twice per week of specific, study-focused music activities.
The curriculum design
The curriculum framework has been tested by the hands-on teaching for 12 years. The curriculum contents included a Hello Song, Letter Song, Musical Storytelling, Music Appreciation, Musical Movement and Goodbye Song.

Table 1: The curriculum included two thematic topics containing different objects

<table>
<thead>
<tr>
<th>Themes (Storybooks)</th>
<th>Musical Elements</th>
<th>Language Goals</th>
<th>Target Objectives</th>
<th>Description &amp; Definition</th>
</tr>
</thead>
</table>
| Colors (The Black Witch & White Witch) | 1. Stop & Go  
2. Short & Long  
|                      |                  |                | 2. Follow the instructor's direction | Following the instructor’s directions to do the proper movements. |
| Body Parts (Where are my Facial features) | 1. Stop & Go  
2. High & Low  
3. Loud & Soft |                         | 3. Imitation of speaking, chanting or singing | Imitating instructor’s speaking, chanting or singing contents either segment or whole content. |
|                      |                  |                | 4. Expressing the musical meaning by playing instruments | Expressing the meaning of the music or songs by playing instruments, changing or singing spontaneously. |
|                      |                  |                | 5. Simple answer | Answering the instructor’s questions spontaneously |

Assessment
The assessment instruments included pre-test and post-test forms administered by the researcher, semi-structured observation forms to gather data on English abilities of understanding and expression.

For the assessment standard of understanding of English, a score of “1” indicated all the participants had no proficiency across 6 activities, such as the ability to use facial expressions, gestures, and body language to respond to the instructor; imitate the instructor’s speaking or chanting contents either in segments or the whole content. A score of “2” showed the participants had 1%~25% understanding of English by following the instructor’s directions or body language. A score of “3” showed the participants had 26%~50% understanding of English. A score of “4” showed the participants had 51%~90% understanding of English. A score of “5” showed the participant had full, 100% proficiency.

For the assessment standard of English expression, a score of a score of “1” indicated all the participants had no proficiency across 6 categories, such as the ability to use verbal language to respond to the instructor. A score of “2” indicated the participants used verbal language to answer 1%~25% questions. A score of “3” indicated the participants used verbal language to answer 26%~50% questions. A score of “4” indicated the participants used verbal language to answer 51%~90% questions. A score of “5” showed all the participants had full ability of English expression and responded to the instructor by verbal language spontaneously.
**Social Validity**

In order to support objective results, a feedback form was completed by six parents, two kindergarten teachers. All respondents gave positive support for the study, and scored various aspects on a 1-5 scale. A score of “1” for questions in the “goals” section indicate that the respondent strongly disagreed with whether a goal of the study had been met; a score of “5” showed that they strongly agreed that a goal had been met. There was 28 score of “5” recorded, 12 scores of “4” for progress, and no scores indicating the parent and teachers felt participants had made fair progress, or had regressed (no “1” to “3” scores).

For the second session, respondents gave a score of “1” if they felt the participant had shown a low level of progress in English ability of understanding and expression or other areas of development; they gave “5” scores if they observed that the participants had made a high level of progress. There was 6 score of “5” recorded, 14 scores of “4” for progress, 4 scores of “3” for no changes, and no scores indicating the parent and teachers felt the participant had made regressed, or had regressed a lot (no “1” to “2” scores).

Table 2: Social validity

<table>
<thead>
<tr>
<th>Items</th>
<th>Feedback Questions</th>
<th>Strongly Disagreed (1)</th>
<th>Disagreed (2)</th>
<th>No comments (3)</th>
<th>Agreed (4)</th>
<th>Strongly Agreed (5)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Part I Goals</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. The research teaching has a crucial meaning for the children under six.</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>4</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>2. The research goals fit the needs of young children’s English learning.</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>2</td>
<td>6</td>
<td></td>
</tr>
<tr>
<td>3. Music activities have positive effects on the young children’s English learning.</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>2</td>
<td>6</td>
<td></td>
</tr>
<tr>
<td>4. Music activities provide a safe, not dangerous learning method and good for young children's English learning.</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>3</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>5. You accept the use of Music activities to teach young children English</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>7</td>
<td></td>
</tr>
<tr>
<td>Total of the percentage</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
<td>30%</td>
<td>70%</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Items</th>
<th>Feedback Questions</th>
<th>Regressed a lot (1)</th>
<th>Regressed (2)</th>
<th>No changes (3)</th>
<th>Regressed (4)</th>
<th>Progressed a lot (5)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Part II Learning Changes</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. After taking the music class, the participants’ ability of English understanding is</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>3</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>Total of the percentage</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
<td>37.5%</td>
<td>62.5%</td>
<td></td>
</tr>
<tr>
<td>2. After taking the research class, the participants’ ability of English expression is</td>
<td>0</td>
<td>0</td>
<td>2</td>
<td>6</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>Total of the percentage</td>
<td>0%</td>
<td>0%</td>
<td>25%</td>
<td>75%</td>
<td>0%</td>
<td></td>
</tr>
<tr>
<td>3. After taking the research class, the participants’ other developments, such as: music, cognition, social interaction, physical movement etc. are</td>
<td>0</td>
<td>0</td>
<td>2</td>
<td>5</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Total of the percentage</td>
<td>0%</td>
<td>0%</td>
<td>25%</td>
<td>62.5%</td>
<td>12.5%</td>
<td></td>
</tr>
</tbody>
</table>

If you have other thoughts or opinions other than the description above, please write down here:
Results
The results were based on the observation forms, interview reports and teaching logs. The comparison of pre-test and post-test is made by the researcher and shown in figure 1. The participants were scored on a “1-5” scale on a range of aspects related to learning changes of English understanding in the activities by the researcher.

Figure 1: Pre-test & Post-test of the participants’ English ability

Figure 1 indicates the comparison of the participants’ English ability between the beginning and the end. The score shows the participants’ progress from the beginning of 1 to the end of 4.

Figure 2: The weekly changes of the participants’ ability of English learning

Participants’ narrative
Figure 2 shows the average of weekly changes of the participants’ English understanding by the observers. The participants’ narrative is based on the observation forms from three observers and interviews with teachers and parents.
Baseline
According to interviews with the kindergarten teachers and parents, this was a brand new learning experience for the children to participate in the study. Especially it was their first school experience. There were only five children, 3 girls and 2 boys attended private music lesson after school. All of the children had no foreign language experience. One parent is an English teacher at a local junior high school, but never speaks English to her child at home.

Theme I: Colors — “The Black Witch and White Witch”
At week one, the participants were silent most of the time since they could not understand a word during the entire music session. After the instructor sang goodbye to the children, one girl seemed to relieve from her tension by signing out loud and said: “Whew, time’s up finally.” (OA02182011, OB02182011, OC02182011)

At week two, when the instructor first time introduced the musical story, The Black Witch and White Witch, to the class, the class became more energetic by giggling and started talking to each other. When one youngest boy saw the witches, he started crying. Some older children told him not to be afraid of those fake puppets.

“Don’t cry! They are fake.” (OA02252011, OB02252011)
“Come on, it’s not real.” (OA02252011, OB02252011)
“I am not afraid of Witches.” (OA02252011, OC02252011)

From week three to week five, the children were more used to the learning style. Therefore, there were more children followed the instructions by showing their body responses and playing on an instruments, such as when they heard the music playing, they would be banging on the drums; when they heard the music stopped, few would say “shh” to remind those who were still banging.

“Sh, don’t play!” (OA03042011, OB03112011, OC03182011)
“Be quiet!” (OB03042011, OA03112011, OC03182011)

From week six to week eight, over 4 out of 5 children showed their learning motivation by actively attending each activity. Some children were able to answer simple words in English, such as: yes, no, ok etc. Some children would sing the story songs during the school day.

“2/3 children were able to answer the instructor’s questions by saying yes in English.” (OB03252011, OC03252011)
“Child E sang Put-Away Song before going home.” (TB03172011)

By the end of the theme I, due to the familiarity of the teaching content, all the children were able to respond to the instructor by body language. Although there were some children’s responses made by imitating either from the instructor or peers, it did not affect the result of English learning.

In sum, through the theme I, from week one to nine, all the children became more and more attentive to the class, so the average score went up gradually and stably.

Theme II: Body parts — “Where are my facial features?”
During the second phase, the instructor used a new theme to introduce the body parts. Due to the unfamiliarity, the average score went down at week ten. Most children had no responses to the new vocabulary and activities. There were only few children able to answer yes or no even they did not really understand.
The Impact of Music Activities on Foreign Language, English Learning for Young Children

When the instructor asked “Could you show me your eyes?” Children D & F answered “Yes”. But they didn’t follow up to show their eyes. (OA04292011, OB04292011, OC04292011)

Because of the previous learning experience, most children at theme II learned more smoothly and faster than the first stage. The average score at week ten was down to 2.33 due to the new vocabulary and content.

All the children love to play in the class. Some children would play the role in the story during their free time. (TA05022011)

From week 11 to week 15, the average score went up gradually. It indicated the effectiveness of the study. At week 16 the reason made the score went down a bit was due to the graduation rehearsal on the same day. All the children became excited and distracted from the event.

All the children were so excited about putting on their costumes and getting on the stage. (TA06102011, TB06102011)

By the end of the study, from week 17 to week 18, all the children showed their stability on their performance of learning English.

Most of the children were able to follow the instructor’s directions even they couldn’t respond in English. (OA06242011, OB06242011, OC06242011)

The combination of singing, movement, games and art make the classes dynamic and fun, and hold the child’s interest. (TA06242011, TB06242011)

Curriculum Analysis

The curriculum analysis was based on the results:

1. Singing activities: Hello Song, Attendant Song, Goodbye Song

Among the teaching activities, songs are found to be the most effective ones to be used for children in the study. Using songs to signal changes helps children understand what is going on and also helps save the instructor’s voice. Moreover songs contain words and expressions of high frequency and offer repetition for young children’s language learning.

Songs are a great way for children to learn English. (TA06242011, PF06242011)

Some children come to class bouncing off the walls, while others are quite reserved. Starting class with an active song allows the higher energy children to move out their energies and the lower energy children to pep up a little. (TA06242011, TB06242011)

While gathering the children, I sang “Come & Follow me”. It’s the most effective way to gather children between every activity. (RL06242011)

2. Musical movement

Most young children love to move. It is a natural way for them to learn. They can make shapes with their fingers, arms, or whole bodies. They can create movements for verbs, or act out nouns or adjectives. Movement can be varied by moving in one place, with a partner, taking turns with a group, or even moving around the classroom.

The combination of music, singing, movement and games make the classes dynamic and fun, and hold the child’s interest. (TA06242011, TB06242011)

My child liked to hold my hands to do the movements she learned in Liza’s class at home. Most of the time, she would pretend she was the teacher. I find out that her physical movement is doing better than before. The music class did help my child a lot. I hope Liza will keep the music class for next semester. Not only my child’s wish, also the parents. (PL06272011)

3. Music Appreciation

Using contrastive music pieces is a good way for teaching young children to understand music concepts and verbal language. Music with contrastive elements could motivate young children do movement spontaneously and learn spoken language simultaneously. For example: For “Stop and Go” game, when the music starts, children
do the movement the instructor select (such as “jump”) in one place until the music stops and the instructor calls out “stop!” Praise those children who set a good example by stopping after the movement and remaining still.

The CDs Liza provided are fun, so the children tend to listen to them during the school time. (TA06242011, TB06242011)

My child loves Liza’s CDs so much, K would ask for listening to ABC song in the car again and again when we go out. (PK06292011)

4. Musical storytelling
Musical storytelling is an ideal tool for enhancing young children’s language ability and attention span. When a storyteller tends to use more repetition, sounds, music, and gestures than a person merely reading a story, children will be more attentive to the activity. Using instruments to represent each character in the story is also a fun way to get children’s attention.

Child T is very shy and quiet all the time. After attending Liza’s music class, he would repeat the song and chanting in the story all the time. He couldn’t go to sleep without telling the story to us at night. (PK06292011)

The most miracle thing for the children in the class is Liza’s Musical Storytelling Time. We reviewed some part of the story activities during the school time. Children became more energetic and enthusiastic by saying “I know it, I know it” “Ooh yeh, I am right!” (TA06242011, TB06242011)

In summary, music is an effective tool for teaching English, especially to young children as long as it is fun and interesting. Music and songs are useful venue and bounce around in children's head long after the lesson is over. Young children pick up vocabulary, sentence structures, and the rhythm of the language simply by doing what they already love to do.

Conclusions, recommendations and limitations

The results of the study provide support for the effectiveness of music activities in enhancing young children’s English ability. It is clear to researchers, educators and parents that music is a crucial tool for enabling the language learning process and will give children a boost in language development. Other than language benefits music is:

1. Music is a non-threatening way to make learning English more fun. In this way, children’s learning motivation will be enhanced.
2. Music offers shy or introverted children more frequent and varied ways to participate.
3. Music and playing instruments can be used to reinforce children’s attention span.
4. Music, action songs and playing instruments help children develop gross and fine motor skills that are associated with learning to read.

In summary, children are natural music lovers. There is no need to convince them that it will help them learn.

Recommendations
Music is a very effective tool that should play a larger role in the foreign language classroom because it offers a great variety that appeal to children. Most children enjoy music and therefore it should increase their interest in learning a new language in a very entertaining way. Educators need to be willing to incorporate music in their lessons in order to better enhance their students’ learning.

Music can be used to remove language barriers. More music in every language
classroom will inspire more children to become creative and independent. Music will allow educators and their students to understand each other and connect in a new way. Music is a valuable teaching tool. It makes complex concepts more accessible and enjoyable. It facilitates language learning.

Limitations
With the trends towards economic globalization, English has become the most widely ubiquitous and crucial international language in Taiwan. The most common way for teaching English at school is still using traditional method which is teacher-centered. However, as educators all notice that learning needs to be fun to be effective for children (Gladwell, 2000), especially young ones. Due to the limitations, such as: project budge and time etc., there are some discussions for the future study:
1. Will the use of traditional teaching and music base technique receive different results?
2. Will the use of comparison method receive more objective results?
3. Will it be doable to implement a large group of participants?

References