

The Role of Music in Second Language Learning

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ABSTRACT

In the First Account of Education of Plato's *Republic, Book III*, the education of the youth consisted mainly of music and gymnastics. It was the immortal philosopher's belief that this educational combination would produce citizens who are intellectually able, morally upright, and physically strong. It is considered that music is the supreme art and science, art because it embodied beauty and science because it followed the rigorous logic of mathematics. In the context of education, music is a required subject in both elementary and secondary education. Thus, music is viewed as an important element of our young people's education. While music has a strong popularity and its influence on society is recognized, research on the role of music in second language learning is still in its embryonic stage (Huy Le, 1999). Pedagogically, music is given importance by teachers and students in teaching, speaking, listening, reading, and writing. This research explored the role of music in second language learning of grade six pupils in San Beda College Alabang. A total of 60 pupils and 10 English teachers participated in the study. Results had shown that music had some influence on students' learning.

Key words: music, education, language, learning

INTRODUCTION

A lot of studies had shown that music influences learning (Anderson, et. al., 2000; Hashemi & Azizineshad, 2011; Huy Le, 1999). In fact, Halpern (1999, p1) as cited in Huy Le, 1999 stated that:

"...of the many factors that influence learning, few are as far-reaching - or little understood - as sound and music". When one thinks of music, the first thing that comes to mind is enjoyment. Its entertaining function is common in our countless activities. The sound of music brings into the world its magic power to activate the mind when it is dormant, to soothe the soul when it is in turmoil, and to heal the body when it is hurt. Its power is the reason why children love to play with songs and rhymes even at an early age in life. Babies, even inside their mothers' womb, show some appreciation to music when exposed to it. The sound of singing among villagers across a rice field in Asian countries turns a hard-working day into a festive one. An image of a mother singing her baby to sleep has a lasting impact on many individuals who have experienced such tender human interaction. It is unthinkable to see people's existence without

music. According to Neuenfeldt (1998), aboriginal musicians in Australia use music in school curricula in a unique way. Over the past decade, they have been introducing aboriginal knowledge and concepts into schools at all levels by performing and teaching with the aboriginal musical instrument 'didjeridu'. The music incorporates an empowering social context in an entertainment format to convey indigenous interpretation of Australian life.

Indeed, music is a big part of our lives. It has the power to transform an ordinary day into a festive one. It can also turn a boring class into one which is full of life. This is because, according to Plato “musical training is a more potent instrument than any other, because rhythm and harmony find their way into the inward places of the soul, on which they mightily fasten...making the soul of him who is rightly educated graceful” (Jowett, p271, cited in Stansell, 2005). Thus, it is not surprising to find numerous researches on its influence in learning as well. In one study, it was found out that music enabled the student to concentrate, relax and revisualize spelling words (Anderson, et al., 2000). A similar study by Harwood (1998) as cited in Huy Le (1999) pointed out that:

... context affects both the musical content children learn (choice of repertoire, stylistic conventions) and how they attempt to learn it (problem solving skills and strategies). Through exposure to multiple contexts where music learning occurs, (formal and informal, school, home, church, playground) children acquire different understandings about what it means to be a music maker and learner. Smith (1998) made a study on trialing the intercultural communication of indigenous Australian music and dance, through a specified series of teaching and learning strategies, to urban west-centric primary school settings. Campbell (1998) researched on children's engagement in music beyond school, including the manner by which the various folkways, technologies, and institutional settings help them to perpetuate and preserve particular musical expressions and experiences. According to Campbell, discussion of music in children's play, the use and function of music in their lives, and the means by which they are musically enculturated will lead to a consideration of music's place in their schooling.

A song is more than words and notes on paper (Lake, 2002). As Lake (2002) stated in his paper, “music is an environment that expresses emotion and conveys a message. Researchers have found that music trains the brain for higher forms of thinking (Stansell, 2005). According to Zatorre (2000) cited in Stansell (2005):

“...phonological processing is accomplished through a network including the left posterior and temporal parietal regions and Broca's area”, all left brain areas. Pitch discrimination seems to emanate from a right-brain network of the right prefrontal cortex, the right temporal gyrus, and the right frontal lobe.

Zatorre's research seemed to suggest that the two aspects of language, pitch and phonemes, are handled separately, yet in harmony by a musical-linguistic collaboration (Stansell, 2005). He further explained that:

Children pay close attention to subtle variations in tone and timing, which enables them to learn their language accent flawlessly and which alerts them when an individual regardless of advanced training, is not a native speaker. Likewise, musical people have increased aptitude in foreign language learning due to an advanced ability in perceiving, processing, and closely reproducing accent (Stansell, 2005).

If one observes children closely, one would notice that children learn to sing before they speak. Infants communicate with their mothers or caregivers through coos which signal hunger, fatigue, alarm or pleasure (Lake, 2002). Mothers or caregivers can discern their infant's needs based on pitch (Lake, 2002). Hence, this poses a question; can music enhance the acquisition of a second language? Does music play a role in second language learning? To guide the researcher in this study, Krashen's Hypothesis was used to provide the framework for this paper. There are several features of Krashen's Hypothesis relevant to music and language. Three of the most accepted components are: the affective filter, the monitor model, and natural input (Lake, 2002).

According to the affective filter hypothesis, optimum learning occurs in an environment of high stimulation and low anxiety (Krashen, 1985). This theory implies that the emotional state of the learner acts as a filter. Krashen sees the learner's emotional state or attitudes as an adjustable filter that may pass or impede input needed for acquisition (Krashen, 1985; Richards & Rogers, p.133, cited in Lake, 2002). Therefore, if a student has high levels of anxiety chances are he/she will not be able to reach his/her optimum learning level. Many ESL students come to class in a state of uncertainty. They often feel cut off from their native cultures and struggle to adapt, causing a disturbance in their affective filters (Brown, 1994).

Another aspect of Krashen's theory is the monitor model. In describing this model, he claimed that adult second language learners have two means for internalizing the target language (Brown, 1994; Lake 2002). The first is acquisition, an intuitive process of constructing the system of language (Brown, 1994). The second is a conscious process in which students pay close attention to form, rules and are clearly aware of the learning process (Brown, 1994; Krashen, 1985).

During acquisition, the input language students receive should be just beyond their level of understanding (Lake, 2002). This is called the "I-plus-one" formula (Lake, 2002). In other words, language learners are exposed to their own level of competency "plus one," or just a bit more of the next level (Krashen, 1985; Lake, 2002). Song lyrics often work this way because students will pick up the chorus much sooner than the verses of a song (Lake, 2002). The chorus is a hook to the plus-one feature of many parts of the verses. Students learn the chorus, and then use it to learn the rest of the lyrics (Lake, 2002).

A third aspect of Krashen's theory is defined as natural input. Given that each side of the brain represents different styles of learning, natural input is achieved differently by each individual learner. There are a few general conclusions about the functions of left and right brain learning that can be used to help relate to music (Krashen, 1985).

The left brain dominant individual is defined as being more verbally oriented and objective (Stansell, 2005). They rely on language in thinking and tend to be analytical in their reading. The right brain dominant individuals, on the other hand, tend to be more emotional and "look at life through the filters of their passions" (Tracer, 2007). Music, according to Stansell (2005), "is so complex that it defies being put in either hemisphere". He further explained that "when the brain processes music, this function extends over both hemispheric regions and blurs traditionally accepted divisions between them".

Author James Asher states, "My hypothesis is that no genuine learning can happen until there is a brain-switch from the left to the right brain. 'Genuine' means that the learning happens on the first exposure with zero stress and long-term retention." (Asher, 1993). In other words, logic and emotions are needed in learning. Students easily learn a lesson when they put their 'heart' into it. Thus, when music is used in the classroom it could stimulate learners' desire. When coupled with a visual image, music can become a very powerful learning tool (David, 1994). Perhaps that may be the reason why television programs that dramatize contemporary songs have been successful as a medium in reaching the young people. Whether it is a positive or negative message, the input sticks.

In fact, the world of advertising uses music to make viewers retain information about a product or even to feel, "At Home Ako Dito," as in the case with Jollibee Foods. The jingle plays on the emotion and the memories. The key factor to storing material in a person's long-term memory is rehearsal. Adding rhythm and melody to chunks of language invites rehearsal and transfers words into the long-term memory. As what Stansell (2005) had pointed out in his paper, music and language are like supportive sisters, "...separate, though complimentary systems of structured communication...language is primarily responsible for content and music for evoking emotion" (Jourdain, cited in Stansell, 2005).

This research paper aims to discover the following:

- Is music, as a method in teaching free verse poetry, effective in second language learning?
- How should music be used to enhance English in the teaching-learning process?

METHODOLOGY

This paper reports findings of an exploratory study on the role of music on learning which was done for completion of a course requirement in the graduate

school. The data was gathered in School Year 2005-2006 at San Beda College Alabang. This study was approved and accepted by the professor handling the course in Linguistics as well as the principal, guidance counselors, and advisers of San Beda College Alabang – Integrated Basic Education (SBCA-IBED).

Sample

A total of 60 grade six pupils enrolled in School Year 2005-2006 at the Integrated Basic Education (IBED) of San Beda College Alabang participated in the study. These pupils belonged to two different classes. Each class comprised of 30 pupils. The average age of participants was 12 years old. In terms of class standing, each group was heterogeneous. In other words, they were relatively equal in intelligence level.

Procedure

Before the start of the data gathering, the researcher asked permission from the principal, guidance counselor as well as the class advisers to include the two grade six classes in the study. There was no problem encountered in seeking for said permission because the researcher had worked in the IBED as vice-principal before. So everybody knew and trusted her.

The researcher explained the nature of the study not just to the school authorities concerned but also to the pupils. To ensure that the two classes were not different from one another in terms of the intellect, the researcher conducted a short pre-test consisting of three questions. The pre-test asked the following questions: (1) What kind of poetry was used in the Bible? (2) What are the six elements of free verse? (3) Give at least two characteristics of free verse. The result of the pretest showed that although there were differences in the number of errors committed per class (Table 1-3), chi-square analysis showed that these differences were not significant at alpha 0.05.

Table 1
Frequency distribution of errors for the question: What kind of poetry is used in the Bible?

Data Set	Frequency of Errors	Percentage
Class 1	18	60%
Class 2	16	53%
($\chi^2 = 0.14, df = 1, p > .05$)		

Table 2
Frequency distribution of errors for the item: Give at least two characteristics of free verse.

Data Set	Frequency of Errors	Percentage
Class 1	20	67%
Class 2	22	73%
($\chi^2 = 0.32, df = 1, p > .05$)		

Table 3
Frequency distribution of errors for the question: What are the six elements of free verse?

Data Set	Frequency of Errors	Percentage
Class 1	23	77%
Class 2	25	83%
($\chi^2 = 0.42, df = 1, p > .05$)		

After the pre-test, lectures were conducted in both classes. However, different teaching techniques were employed. In class 1, music and lecture were used while in class 2, pure lecture was employed. After three days, a post-test was conducted to assess the effectiveness of music as a teaching technique.

English teachers in IBED were also interviewed. These teachers helped in validating and clarifying the outcome of the study.

Research Instrument

The research questions used in the study was developed by the researcher herself. The items were based on the elements of free verse which grade six pupils were exposed to. These include imagery, onomatopoeia, alliteration, assonance, parallel structure, and cadence. The American Heritage Dictionary (2012) defines the above mentioned elements as:

- (1) **Imagery**- refers to the use of vivid or figurative language to represent objects, actions, or ideas. In poetry, it pertains to the images or pictures which the poet would want his/her readers to ‘see’.
- (2) **Onomatopoeia** is the formation or use of words such as *buzz* or *murmur* that imitate the sounds associated with the objects or actions they refer to.
- (3) **Alliteration** is the repetition of the same sounds or of the same kinds of sounds at the beginning of words or in stressed syllables, as in "*on scrolls of silver snowy sentences*" (*Hart Crane*). Modern alliteration is

predominantly consonantal; certain literary traditions, such as Old English verse, also alliterate using vowel sounds.).

- (4) **Assonance** is the resemblance of sound, especially of the vowel sounds in words, as in: "*that dolphin-torn, that gong-tormented sea*" (*William Butler Yeats*).
- (5) **Cadence** – refers to balanced, rhythmic flow, as of poetry or oratory.
- (6) **Parallel Structure**, on the other hand, as defined by Driscoll (2012) - means using the same pattern of words to show that two or more ideas have the same level of importance. This can happen at the word, phrase, or clause level. The usual way to join parallel structures is with the use of coordinating conjunctions such as "and" or "or."

Another instrument used was music. This was especially chosen by the researcher to fit the purpose of the study.

RESULTS AND DISCUSSION

Participants of the study were taught different elements of free verse, namely: imagery, onomatopoeia, alliteration, assonance, parallel structure, and cadence. One class used music and lecture as teaching methodologies while the other class used lecture alone. Instructions in the post test state that pupils should identify the element used in the given free verse. A few lines culled from a free verse were given to the respondents then they were asked to identify those lines: whether they were imagery, onomatopoeia, alliteration, assonance, parallel structure, and cadence.

When the post test was conducted three days after the lesson was taught, it was found out that those pupils in the class which used both lecture and music performed better than the class with pure lecture and no music in the free verse element called *imagery* (Chi-Square = 5.42, df = 1, $p < .05$). As shown in Table 4, the frequency of errors for Class 1 was only 33% while in Class 2, it was 63%. The chi-square test result indicated that this difference was significant at alpha 0.05. Table 4 shows that Class 1 committed fewer errors as compared to Class 2.

Table 4
Frequency distribution of errors committed for item #1: Imagery

Data Set	Frequency of Errors	Percentage
Class 1 (with music)	10	33%
Class 2 (w/out music)	19	63%
$(\chi^2 = 5.42, df = 1, p < .05)$		

A similar result was found in the free verse element - *onomatopoeia* (Chi-square = 7.92, df = 1, $p < .05$). As indicated in Table 2, everybody in Class 1 was

able to correctly identify the lines presented to them as onomatopoeia while for the class with no music 23% committed a mistake. The chi-square analysis showed that this difference was significant at alpha 0.05.

Table 5 Frequency distribution of errors committed for item #2: Onomatopoeia

Data Set	Frequency of Errors	Percentage
Class 1 (with music)	0	0%
Class 2 (w/out music)	7	23%
($\chi^2 = 7.92, df = 1, p < .05$)		

One of the reasons why the class with music was a lot better in imagery and onomatopoeia was the nature of the elements themselves. Imagery and onomatopoeia stir the imagination. Presence of music could've enhanced such imagination, hence pupils in a class with music performed better in those elements than those in another class without music. This result is consistent with a study conducted by Anderson, et al. (2000), Hashemi & Azizinezhad (2011), and Huy Le (1999) which showed great promise of music in enhancing learning of a second language. These studies had also shown how music helped learners in acquiring needed information.

In other elements such as alliteration, assonance, parallel structure, and cadence there was no significant difference between the two classes in terms of their performance. Although, it could be noted from Tables 6-9 that the class with music consistently performed better than the class without music in the above mentioned elements of free verse, it could not be concluded that the class with music indeed performed better because the chi-square analysis showed no significant difference (Table 6, 7, 8, & 9). But still it could not be denied that there is great potential for music to enhance students' learning in these elements as well.

More exercises on the elements (alliteration, assonance, parallel structure, and cadence) with the use of music may improve the pupils' performance. As stated in the Introduction section, adding rhythm and melody to chunks of language invites rehearsal and transfers words into the long-term memory. Though music is not really a "requirement" for learning the elements of free verse, music may facilitate in reinforcing and enriching them. Hence, music may be helpful in learning the skill.

Table 6 Frequency distribution of errors committed for item #3: Alliteration

Data Set	Frequency of Errors	Percentage
Class 1 (with music)	5	17%
Class 2 (w/out music)	6	20%
($\chi^2 = 0.42, df = 1, p > .05$)		

Table 7
Frequency distribution of errors committed for item #4: Assonance

Data Set	Frequency of Errors	Percentage
Class 1 (with music)	9	30%
Class 2 (w/out music)	14	47%
$(\chi^2 = 1.76, df = 1, p > .05)$		

Table 8
Frequency distribution of errors committed for item #5: Parallel Structure

Data Set	Frequency of Errors	Percentage
Class 1 (with music)	8	27%
Class 2 (w/out music)	13	43%
$(\chi^2 = 1.84, df = 1, p > .05)$		

Table 9
Frequency distribution of errors committed for item #6: Cadence

Data Set	Frequency of Errors	Percentage
Class 1	7	23%
Class 2	12	40%
$(\chi^2 = 1.92, df = 1, p > .05)$		

According to Krashen's input hypothesis (Krashen, 1985), humans acquire language in only one way -- by understanding messages, or receiving 'comprehensible input'. So teaching activities should be designed in such a way as to supply the child with enjoyable and easy to understand input. As what Asher (1993) had pointed out 'genuine' learning happens on the "first exposure with zero stress and long-term retention." Songs, rhymes, and games are wonderful materials in that respect.

Data from Teacher Respondents

The data from the scheduled interviews with the ten (10) English teachers in IBED revealed the following insights in relation to the research question, *How should music be used to enhance English in the teaching-learning process?*

According to the teachers, "songs, rhymes, and chants are wonderful means of teaching stress intonation patterns of English." In fact, they have noticed that when music is employed in their teaching strategies, it stirs students' interests and therefore made them more motivated to learn. In addition, music and rhythm make it much easier to imitate and remember language than plain words which are just 'spoken'. In fact, they said that "if you teach children a song, they somehow remember it with ease." Moreover, "games, including musical ones, constitute a

context for language use for children. They become themselves when they play or sing.” This is because the learning atmosphere is light and stress-free.

The English teachers recommended using songs or chants to teach children the sounds and rhythms of English as well as to reinforce structures and vocabulary. For these educators, “a song is a very strong tool in stirring emotions that contribute to socialization as well as in helping to develop an aesthetic taste for learners. Songs also appeal to the ear and evokes pleasure.” The reason why music can enhance learning is that “songs contain words and expressions of high frequency which are repeated countless times”. Therefore, according to the teachers, singing can facilitate memorization. This is because “singing helps one acquire a sense of rhythm.”

The above-mentioned responses of English teachers support previous studies (Anderson, 2000; Li & Brand, 2009; Huy Le, 1999; Stansell, 2005) that showed that music has the power to enhance students’ learning.

Given this, what then should be the role of music in language learning? Based on observations while teaching the lesson in the class which employed music as a teaching method and based on qualitative feedback from the teachers during the interviews, the appeal of music may unlock interest in even the shyest and most reserved students by engaging them in real listening activities. The children were observed to be motivated by the music, the variety of rhythms, the instrumentation, the voice involved and the theme.

It could be noted in Tables 4 to 9 of the post-test that Class 1 got fewer incorrect answers as compared to Class 2. It seems that music may have played a role in understanding the lesson better compared to pure lecture method employed in Class 2.

CONCLUSION

This study has delved into the role of music in second language learning. The result seemed to suggest that indeed, music has the potential to enhance learning of a second language. Using music in teaching had somehow proven that indeed, it has the power to improve students’ performance. Although only two elements of free verse, namely: imagery and onomatopoeia showed a significant difference between the performance of class with music and class without music, with the former doing better than the latter, it could not be denied that for the other verses the trend is similar. This implies that there is really great potential for music as the motivator for students’ learning. This result is consistent with previous studies (Anderson, 2000; Li & Brand, 2009; Huy Le, 1999; Stansell, 2005).

RECOMMENDATIONS

Using the above conclusions as bases, the researcher recommends the use of music in teaching especially in the basic education level where attention span is short. SBCA English teachers should undergo trainings and seminars related to the use of music in the classroom so that they will know how to incorporate it in their lessons. Future researchers interested in the topic should try exploring other topics aside from free verse and include younger and/or older respondents to see whether it is true across the different age groups.

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Appendix 1: Post Test

Give the element of free verse that is being described in the following.

1. I took a walk around the world to
Ease my troubled mind
I left my body laying somewhere
In the sands of time
I watched the world float to the dark
Side of the moon
I feel there is nothing I can do
2. The moan of doves in the elms,
And murmuring of innumerable bees.
And in the stream the flowers weep,
And from the ledge the poppy hangs in sleep
3. In Tracy's drawer were thirty green pairs of trousers.
4. The bows glided down, and the coast
Blackened with birds took a last look
4. Born here of parents, born here from parents the same, and their parents the same
6. Tiger Christ unsheathed his sword,
Threw it down, became a lamb.
Swift spat upon the species, but
Took two women to his heart.
Samson who was strong as death
Paid his strength to kiss a slut.
Othello that stiff warrior
Was broken by a woman's...
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