CHAPTER I
INTRODUCTION

1.1 Background

Language is a means of communication in the delivery of ideas thoughts, opinions and feelings. Language is necessary as a means of communication in society. Hurlock (1997: 176) states that: "The language includes any means of communication to symbolize thoughts and feelings to convey meaning to others".

Learning the language will not be separated from learning vocabulary and vocabulary is the cornerstone of language skills. Language learning objectives will not be achieved without the mastery of vocabulary, as more and more vocabulary owned by someone then more skilled he is also speaking.

Children know different languages through a learning process. In addition to the first language / mother, and the national language (Indonesian) children to know a foreign language well. One foreign language taught in kindergarten is English. Child's ability to learn and master the English language a requirement for advancement of Science and Technology (Science and Technology) is so rapid. Alwasiah (2004) states:

"The role of English as a second language in Indonesia, which serves as a tool to help the competition and cooperation at the global level either through education, trade, use of science and technology as well as other human interaction activities."

English as an international language is a tool to communicate orally and in writing. Early teaching is required to master the English language, for the English language learning has been applied ranging from education kindergarten through
Learning English in kindergarten serves as the introduction of the English language.

The principle of learning in young learner itself is playing while learning. Learning English in young learner should also be presented with a fun, playing, use the selection of interesting media and learning methods must be appropriate. Of the many methods available such as vocabulary learning: methods Story Telling; Role Play; Art and Craft, Games; Show and Tell; and Music and Movement writer interested in conducting research with Music and Movement method because this method can be used as an alternative learning method selection is quite easy to implemented.

Music has an influence on educators and children as an educator can use music to set the mood, change the mental state of the child and support the learning environment. Music also can help children work better and remember more. Music also can stimulate, rejuvenate, and reinforce the learning, both consciously and unconsciously. Lozanov (1979) says: "The rhythm, knock, and harmony of music affects human physiology, especially the brain waves and heart rate in addition to evoke memories and feelings."

From statement of Lozanov can be concluded that music can also help develop the cognitive aspects especially in memory.

Refers to the cognitive development of Piaget (1969) in learning theory based on the motoric development, then one needs to be stimulated is a movement skill. Through the motoric skills of the child to know his world concretely. Abilities of visual, auditory and touch also strengthened through the motion activity. Gallahue
(1998) says abilities such further optimized through stimulation by listening to classical music.

Music successfully stimulate mindset and become a bridge or ideas that are more complex. Supported also by Gardiner(1996) in Goleman(1995) of his research says art and music can make students smarter, music can help the brain to focus on other things studied.

Thus movement and music has efficiency against all aspects of capabilities such as the ability motoric, cognitive and so on. This method can also be an alternative in developing children's English vocabulary skills.

This research was done because the use of learning vocabulary method is conventional, so difficult when children learn and remember every vocabulary.

Based on the explanation above, the researcher did the research with the under title “THE USE OF MUSIC AND MOVEMENT METHOD TO INCREASE STUDENTS’ VOCABULARY MASTERY” (A Quasi Experimental Study at the Fourth Grade of SDN Binaharapan 2 Bandung).”
1.2 Research Questions

In this research, the researcher need understanding of "Music and Movement Method" which will be applied in SDN Binaharapan 02 Bandung. Therefore, the researcher formulate some questions about the research, including:

1. What is student’s vocabulary mastery before using music and movement method?
2. What is student’s vocabulary mastery after using music and movement method?
3. How significant is different between student’s vocabulary mastery before using music and movement method and after using music and movement method?

1.3 Aims of Research

Based on the formulation of the problem, the author have goals for this research in finding answers from the formulation of the problem, including:

1. To know the students' vocabulary mastery before using music and movement method.
2. To know the students' vocabulary mastery after using music and movement method.
3. To know the significant is difference between student’s vocabulary mastery before using music and movement method and after using music and movement method.

1.4 Significances of Research
This research is expected to give some contributions to anyone who reads and relates to this research. This research significance is divided in two points as follows:

1. The result of this research is expected to be able to use as references for anyone who want to teach vocabularies using music and movement method.
2. Give information to teachers that music and movement method can be used to help their students’ mastery vocabularies.
3. Solve the problem by giving the best solution in teaching vocabularies.
4. Give some accurate information for designing materials in teaching vocabularies.
5. Give valuable experience for the researcher to develop English knowledge, especially in teaching vocabularies using music and movement method.

1.5 Rationale

According to Kamtini and cape in his book (2005:9), “Playing Trough Music and Movement in Kindergarten. Music is a part of life and development of the human soul. Since the child was born, she had to have a certain aspect of music that becomes a natural part of the life experience”. The starting time for any learning (Wikipedia Indonesia, 2006).

In the opinion of Suharto. M in the book “Dictionary of Music” (1992:86) definition of music is through the idea of disclosure through the sounds, the element is basically a melody, rhythm, and harmony with supporting elements in the form
of ideas, the nature of sound and color. But in its presentation, often with other elements, such as language, motion, or song.

Music is the container of all types of childhood education. It comes naturally into a child needs. According allegory of music by Lippi, music is sound that is received by the individual and vary based on history, location, culture and tastes of a person. True definition of music is also diverse. According to Aristotle (Wikipedia Indonesia, 2006), music that has the ability to reconcile the troubled heart, the soul of patriotism. Listening to music can help alleviate a bit of the burden of thinking through singing can devote feeling in your heart.

According Umar, motion is a change in the position or position to a certain reference point.

Learning music and movement is singing and body movement exercises are very closely linked, because the rhythm of the song can influence and control nerve center. So that a good way for children to learn is through song and movement. By learning through movement, then the children can learn about themselves and their world. (Piaget, 1976:168) in the book *Phyiology of Early Childhood Play* by Diana Mutiah. According opinion of Frost and Piaget (1969:169) translated by Diana Mutiah say that children can express themselves through movement, and thinking through movement and body.

According to Kridalaksana in Tarigan (1994:446), vocabulary is: (1) a language component, which contains information about the meaning and usage of words in the language; (2) that said property owned by a speaker writer or language;
and (3) a list of words that are arranged like a dictionary, but with a brief explanation and practical.

Meanwhile, according to Soedjito in Tarigan (1994:447): Vocabulary is: (1) all the words contained in a language, (2) that said property is owned by a speaker; (3) the word used in the field of science; and (4) a list of words that are arranged like a dictionary with brief explanations and practical.

The neuroscientists sure that song, movement and music in the game with a child is one of the neurological activity that is good for introducing speech patterns, sensory-motor skills and capabilities vital motion. Children are very interested if the music using song, movement, emotions and game (Carol Cress 2010:2).

The result of the study Herrera (1996), Siegel (1999), which is based on the theory of neurons (conductor cells in the nervous system), explains that the neurons would be circuit if there is music stimuli, stimuli such as movement, caress, a separate sound lead neurons mesh and integrate themselves in brain circuitry. The more simulation the music will be given the increasingly complex tangle of neurons. That’s really the basis of mathematical ability, logic, language, music, and emotion in children.

Dr. Coulter (1995) neuroscience educator and author of Early Childhood Connections: The Journal of Music and Movement –based learning, classify songs, movement exercises and games for children as a brilliant brain, which introduce children to the speech patterns, skills-the motor sensory skills, and an important movement strategy. Not only the development of children’s language and increase vocabulary through games that contain music, but also the logic and rhythm skills.
To make easier, the research can be figured out in the following scheme.

**Figure 1**

**Frame of Research**

- Experimental Study
- Pre-Test
- Using Music and Movement Method
- Post-Test

Quoted from Michael McCarthy in Vocabulary in use upper intermediate (2000), there are some indicators of Vocabulary Mastery: countable nouns, uncountable nouns, Collective nouns, abstract nouns, suffixes, roots, synonyms, context clues, and punctuations. In this case, a countable noun can be used with a or an with singular form, and ending in s/es for plural constructions. Meanwhile, an uncountable noun is not normally used with a or an, but it is used with articles some and any.
1.6 Hypothesis

Based on Sugiyono (2008:96), hypothesis is tentative answer or assumption toward either research question or research problem identification. It means that answers given to hypothesis are just based on relevant theory. Furthermore, hypothesis is not based on empirical data yet through collecting data.

Sudjana (1986:213) said that hypothesis is base of assumption about something that cleared the problem and guide to the next research. Hypothesis has two possibilities, it may be right or wrong. So, it should prove by hypothesis testing. The explanation above can be formulated a hypothesis of using pictorial stories in English teaching learning process and its influence on students speaking ability. It relevant with transfer of learning theory that will influence on their speaking skill through using pictorial stories.

According to Arikunto (2006:71), hypothesis is a tentative assumption of research has two variables there are intensity to using music and movement method variable X and learn English vocabulary as variable Y. In connection with problem is about the students’ intensity to using music and movement method related improving of learning vocabulary.

The hypothesis in this research is:

1. \( H_0 \) (null vies) accepted, if \( t \ count < t \ table \). There is no influence of the use of music and movement method on students increasing vocabulary.

2. \( H_a \) accepted if \( t \ count > t \ table \): There is an influence of the use of music and movement method on students increasing vocabulary.
The hypothesis was proposed test the validity with statistic by the collected data.

1.7 Procedure of Research

1.7.1 Method of Research

The researcher uses a quasi experiment method to get the data would be analyzed in this research. A quasi experiment method included assignment, but not random assignment of to group (Creswell 2008:313). This is because the experimenter cannot artificially create group for the experiment. By using quasi experiment method, the researcher attempts to investigate whether there is any influence of using music and movement method on students’ vocabulary mastery and how high this influence is.

1.7.2 Location of Research

This research will be conducted in class IV SDN Binaharapan 02 is located at Jl. Golf Selatan I No. 26 Bandung. The determination is based on the school strategic location, easily accessible making it easier for researcher to collect data.

1.7.3 Research Subject

a. Population

The word population (population / universe) in statistics refers to a collection of individuals with distinctive characteristics of concern in a study (observation). The population statistics are not limited to a group of people, but
also animals or anything that concerns us. For example, the population of private banks in Indonesia, plants, houses, office equipment, and type of work.

According Margono (2010:118), "The population is all the data that concern us in the scope and the time that we set". Meanwhile, according Sukmadinata (2011:250) suggests that the population is "large groups and regions into the scope of our research. "Similarly, Arikunto (2002:108) suggests that the population is "the whole subject of research".

Population investigated in this research is the fourth grade of SDN Binaharapan 2 Bandung. The population of this research are 40 students.

b. Sample

According to Arikunto (2010:172), suggested that if the population is less than 100, for the sampling it is better to take all of them. Because the population is 40 and less than 100, so according to Arikunto (2010:172), the sample taken by as much population amount that is 40 students.

1.7.4 Type of Data

The type of data was used in this research is quantitative data of students’ achievement on ability vocabulary because the data were taken by using quantitative method and statistic to get result of the student intensity to using music and movement method related to their English vocabulary mastery.
1.7.5 Techniques of Collecting Data

The techniques are used in this research for collecting the data are through:

a. Test

According to Suharsimi (2006:150) test is a series of questions or exercise, other tools used to measure the skills, knowledge, intelligence, ability, or talent possessed by individuals or groups.

1) Pre-test

It is intended to know the ability of student vocabulary before use music and movement method.

2) Post-Test

It is purposed to know the ability of student vocabulary after use music and movement method.

b. Observation

Observation is defined as the systematic observation and recording of the symptoms seen in the research object (Zuriah, 2003). Observations and records prepared to place objects or under way events occur. There are two observations made by researchers in the research of this action, including: (1) Direct observation, observation is carried out where the observer is located along the investigated object. This means that researchers participated directly when the event occurs. (2) in direct observation, is the observation made where the observer was not with the object investigated. However, researchers use a checklist in add or collect data when using this technique.
Observation aim to collect the school data like school profile, number of the class, teacher and student, and also school situation.

1.8 Data Analysis

The research uses data analysis of test and variable X and Y separated using following step:

1. Determining normality

Making the distribution table of frequency, with procedure:

a. Determining the range (R)

\[ R = X_t - X_r \]  \hspace{1cm} (Subana, 2000: 38)

NOTE:

\( X_t = \) the higher score

\( X_r = \) the lower score

b. Determining interval class (K)

\[ K = 1 + 3.3 \log n \]  \hspace{1cm} (Subana, 2000: 39)

NOTE:

\( n = \) frequency

3.3= constant number

c. Determining the length of interval class (P)
\[ P = \frac{R}{K} \]  
(Subana, 2000: 40)

NOTE:

R = range

K = class interval

d. Making distribution table of frequency

Table 1.1

The Distribution Table of Frequency

<table>
<thead>
<tr>
<th>Score</th>
<th>( f_i )</th>
<th>( x_i )</th>
<th>( f_i \times x_i )</th>
<th>( x_i - \bar{x} )</th>
<th>( (x_i - \bar{x})^2 )</th>
<th>( f_i(x_i - \bar{x})^2 )</th>
</tr>
</thead>
<tbody>
<tr>
<td>( \Sigma )</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

(Subana, 2000: 100)

e. Determining mean (\( \bar{x} \))

\[ \bar{x} = \frac{\Sigma f_i \times x_i}{f_i} \]  
(Subana, 2000: 87)

f. Determining the standard deviation

\[ S^2 = \frac{\sum f_i (x_i - \bar{x})^2}{n-1} \]

g. Arranging the distribution of observation and expectation frequency

Table 1.2

Distribution of Observation and Expectation Frequency
<table>
<thead>
<tr>
<th>Class Interval</th>
<th>Class Limit</th>
<th>Z count</th>
<th>Z table</th>
<th>Li</th>
<th>Oi</th>
<th>Ei</th>
<th>$(O_i - E_i)^2$</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
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<td></td>
<td>$\sum$</td>
</tr>
</tbody>
</table>

(Subana, 2000: 125)

h. Determining chi square count ($x^2 count$)

$$X^2 = \sum \frac{(O_i - E_i)^2}{E_i}$$  
(Subana, 2000: 170)

NOTE:

$X_i$ = observation frequency

$E_i$ = expectation frequency

i. Determining degrees of freedom (DF)

$$df = K - 3$$

NOTE:

$K$ = interval class

$3$ = constant nominal

j. Determining chi square table

$X^2$ Table with significance 1%

k. Determining normality distribution
• Data is normal if $X^2$ count table smaller than $X^2$ table
• Data is abnormal if $X^2$ count is higher than $X^2$ table

2. Testing homogeneities of two variants
   a. Determining score $F$ ($F_{\text{score}}$)

   
   $F = \frac{S_1^2}{S_2^2}$

   (Subana, 2000:171)

   b. Determining degree of freedom (df) of data

   $Df_1 = n_1 - 1$
   $Df_2 = n_2 - 1$

   c. Determining table $F$ ($F_{\text{table}}$) with the significance level 1%

   $F_{\text{table}} = F(a)(\frac{df_1}{df_2})$

   d. Determining homogeneities of data

   It is called homogeneous if $F_{\text{table}} > F_{\text{count}}$
3. Testing correlation analysis by using t-test formula

a. Looking for grouping standard deviation ($dsg$)

\[
DSG = \sqrt{\frac{(n_1-1)V_1 + (n_2-1)V_2}{n_1+n_2-2}}
\]

NOTE:

$N_1$ = totally data of group one

$N_2$ = totally data of group two

$V_1$ = data variant of group one ($sd_1)^2$

$V_2$ = data variant of group two ($sd_2)^2$

b. Determining $t$ count ($t_{\text{count}}$)

\[
t = \frac{X_1 - X_2}{dsg\sqrt{\frac{1}{n_1} + \frac{1}{n_2}}}
\]

c. Determining degree of validity ($db$)

\[
db = n_1 + n_2 - 2
\]

(Commentary: Subana, 2000:172)

d. Determining $t$ table ($t_{\text{table}}$)

\[
t_{\text{table}} = t(1-a)(db)
\]

(Commentary: Subana, 2000:172)

e. Testing Hypothesis

Ho accepted, if $t_{\text{count}} < t_{\text{table}}$

(Commentary: Subana, 2000:146)

Ha accepted, if $t_{\text{count}} > t_{\text{table}}$