

## DESIGNING METACOGNITIVE LEARNING STRATEGY FOR IMPROVING VOCABULARY MASTERY THROUGH MUSICAL INTELLIGENCE

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### ABSTRACT

The objective of this research was to describe; (1). The design of learning English strategy by using metacognitive for improving vocabulary mastery through musical intelligence, (2). the system of learning evaluation , and (3). The improvement of students' vocabulary learning achievement. The methodology of this research was qualitative research that involved students of Economic faculty who took English level II at language laboratory of Bandar Lampung University in period 2016/2017. The writer took the class by using random sampling from four classes of Economic students, that was 20 students. This metacognitive learning designed students' activities as listening to the song in audio and doing the task (*cloze procedure*), reading the text of song through audio visual and practising good pronunciations, understanding words and sentences' meanings, producing sentences in a good structure, retelling the content of song in written form and spoken form in a short dialogue. Here, students learnt vocabulary mastery while practising integrated skills (listening, speaking, reading, and writing) and English components (vocabulary, structure and pronunciation). The instruments of research were observation and final test. The research findings indicated that; (1) applying the design of metacognitive learning strategy made an improvement of active students in learning activities about 18 students or 90%, (2). The learning evaluation used *Simpel PAS (Sistem Pengelolaan Program Analisis Soal)*. In the first test, the validity was 0,2 (low), the test reliability was 0,59 (moderate), the level of difficulty was 0,54 (moderate) and the discrimination power was 0,36 (moderate). In the second test, the test validity was 0,41 (moderate), the test reliability was 0,78 (high), the level of difficulty was 0,68 (moderate) and the discrimination power was 0,36 (moderate), (3). the achievement of vocabulary mastery in the first test, students who passed the test was 12 students or 60%. The second test, students who passed the test were 16 students or 80%. So, there was an improvement of students' vocabulary learning achievement. This findings indicated that this learning strategy design can improve students' learning in vocabulary mastery effectively.

*Key words : metacognitive learning strategy, learning achievement, learning evaluation, musical intelligence*

### A. Preliminary

With the rapid development of educational technology and emphasis on English skill in Indonesia. Culture and teaching English are closely related in order to master a second language. Learners have to learn not only vocabulary and grammar but also L2 contexts to make a correct use of the language. In this case, we can make our students learn English culture through the use of pop songs, rhymes and all that entails the use of authentic songs for pedagogical purposes to practice students' integrated skills; those are listening, speaking, reading and writing. The first point to make connection with teaching English that the meaning of words must be taught in context. Students are primarily interested to learn L2 language by a communication vehicle in learning. Moreover,

elderly students should present some words not 'stick' in their minds without extra effort of learning. It is important for second language learners to acquire the language skills as listening, speaking, reading, and writing. Therefore, providing strategy of training integrated skill is one of the most significant ways in which teachers can improve students' integrated skills as the basic communication tool by language learners.

Students of Bandar Lampung University who take General English subject had many problems in learning new vocabularies of their English book and practising their integrated skills because the strategy of learning is in conventional way and often monotonous. Both teachers and students are concerned about how

to train and how to learn English to get good academic result of score. As most English tests in university include vocabulary, grammar, listening, speaking, reading and writing items of test, the students often get a low score because of their weakness in vocabulary field. Although most learners of English still feel that many of the difficulties in both receptive and productive language use.

Vocabulary acquisition is important for second or foreign language (L2) learners since it affects their grammar competence, ability to communicate, and perceptions about the relative importance of vocabulary (Barcroft, 2004). The role of vocabulary acquisition in L2 learners' target language acquisition, the development of approaches to help students to acquire new words Strategies are especially important for L2 learning because they are tools for active and self-directed involvement, which is in line with the argument of constructionist learning in which learners construct mental models to understand the L2 knowledge.

Metacognition is a concept of cognitive psychology that "focuses on the active participation of the individual in his or her thinking process" (Stewart & Landine, 1995, p. 17). Metacognition is popularly known as 'thinking about thinking' or 'cognition about cognition'. It refers to a person's knowledge about their own learning and thinking process (Flavell, 1979). Such knowledge is used to monitor and regulate cognitive processes during learning and thinking activities. In the context of learning, awareness of the processes used in learning and thinking plays an important role in the development of students' research skills. The use of a metacognitive approach is recommended by educational psychologists to provide opportunities for students to learn about their learning process, thereby helping them to acquire the intended knowledge and skills. Furthermore, Wenden, 1998 (retrieved in Chang, 2014) lists eight points about learners' metacognitive ability which encourage and guide students' metacognitive development in EFL learning. He states that learners could (1) be more skilled learners, (2) be faster in the progress as well as the quality of their engagement, thereby resulting in the higher motivation level, (3) be persistent in their abilities to pursue goals, (4) gain help from peers, teachers, or family if required, (5) understand how to be successful learners, (6) be active thinkers about obstacles, inaccuracies or failures that occur during the learning process, (7) manage their learning to match it with learning tactics and adjust themselves to reflect

changing circumstances, and (8) remind themselves that they are continual learners who can successfully adapt to new situations or rules.

Intelligence is a general concept for a group of processes which are inferred from people's explicit behaviors and responses. For example, we can observe the problem solving strategies and measure the result of using such strategies precisely, but intelligence which is supposed to create such techniques is not observable (Moafian, 2008). Intelligence has been defined more broadly (Crowl et al., 1997; Kauchak & Eggen, 1998; Kirby & Kuykendall, 1991). Intelligence is no longer limited to the idea of a single ability or global capacity to learn, adapt, and think rationally; inclusive in its general and specific abilities to embrace general knowledge, comprehension, thinking, and problem solving; multidimensional in mental processes involving convergent and divergent thinking; and multilevel, including linguistic-verbal, logical-mathematical, spatial, musical, bodily-kinesthetic, interpersonal, and intrapersonal abilities that influence one's approaches to problem solving and thinking.

Gardner (1983) who proposed Multiple Intelligence Theory and challenged the too narrowly defined intelligence with his proposal of basic human intelligence types (linguistic, mathematical, musical, spatial, bodily-kinesthetic interpersonal and intrapersonal). At the beginning, there were seven types of intelligences and by his further research, he proposed the eighth intelligence, which has been added to the list and now there is the possibility of the ninth intelligence (Armstrong, 2008). Imagine there are two boys who want to progress their musical intelligence. The first person goes to the music store and buys several of his favorite cassettes. He takes them home, listens to them, and then tries to play what he hears. The second person goes to the music store and buys sheet music. He takes the selections home, studies and reads the music, and then sits down to play. Both of these individuals are working to develop their musical intelligence, but they do it in different ways. The preferred learning style for music for the first person is auditory; the preferred learning style for music for the second person is visual.

Language learning depends on the nature of interaction that can share features such as simplified vocabulary, change in voice, formulaic expressions, and the frequency of repetition, and modification of international patterns. Rhythm and melody of speech have a great impact on communication and they can help language learning (Zybert&Stepien, 2009). The role of

music in learning can be specified in terms of enhancement of social harmony and motivation in working in group. Utility of learning and teaching social harmony is necessary in classroom. Children often sing together and realize the feeling of togetherness. Music in the class is applied to calm the mind, to relax muscles and enables learners to be free from pressure and stress (Mashayekh 2011). Music is purposely used to teach language and culture. Using music in the classroom can create a soothing atmosphere for learners and helps them not to feel threatened. It also can strengthen the relationship between teacher and students. Furthermore, Jolly (1975) stated that the use of songs in lessons can improve four skills of language: listening, speaking, reading and writing. Songs activate both parts of the brain. The pronunciation of words, understanding, rhythm and musical execution correspond to the left hemisphere, whereas, melodic expression, emotions, and tone correspond to the right hemisphere. Kraus (2010) stated that musical training develops auditory skills as well as verbal memory.

As one of the main sources of authentic language learning materials, English videos such as song videos are widely used in EFL classrooms. Although the effects of audio and visual aids on language learning are very complex and researchers as well as language teachers cannot agree with each other on the specific processes and details of how visual aids can facilitate language learning (Baltova, 1994; Canning-Wilson, C., 2000), there is a unanimous agreement that authentic English videos as audio and visual aids have positive effects on the enhancement of EFL learners' integrated skills. However, as an independent course, teaching English through videos does not have well-established methodology and recognized patterns. As a result, teachers do not have clear goals in mind in their classroom activities and their attentions are often not focused. Classroom activities and teaching methods are often monotonous, random and improvised, which frequently gives rise to the inefficiency in the use of video materials in EFL classrooms

Audio-visual aids used to aid in the communication of our everyday ideas mainly those related to pedagogy which normally takes place in classrooms. They can be used as good means for helping learners, especially those children who suffer from mental impairments or language disorders. They can also be effectively used not only to attract learners, but also to maintain their attraction as much as possible. Moreover, audio-visual aids can be successfully

used to clarify senses of words and meanings of utterances. Music is also crucial for human beings out of school; it is always present in learners' daily life. Music includes a wide scope of fields: "sociocultural, musical, psychological and spiritual dimensions" (McCarthy, 2009: 30). By means of music, learners can feel real-life experiences thanks to songs, nursery rhymes, chants and anthems. Moreover, scholars claim that music is crucial in the physiological development of human beings. An example of this is how an unborn child can recognize melodies and his/her mother's voice from the outside of the womb, something vital for the development of cerebral functions. As Storr (1992: 1) already pointed out, language and music have been present since our ancestors painted people dancing in the caverns. In fact, linguistic and musical issues are key disciplines in all cultures. Supporting this connection, there is a strong link between humanity and music. Music is, therefore, traditionally linked with human ways of expression and language. Music favours social relationships while it enriches cognitive processes in language learning (Failoni, 1993).

The purpose of research was to describe how far the students were active in applying the designing metacognitive learning strategy for improving vocabulary mastery through musical intelligence, the improvement of students' vocabulary learning achievement, and its items learning evaluation.

### Research Methodology

This research was qualitative research. A qualitative researcher holds that understanding of a phenomenon or situation or event comes from exploring the totality of the situation, often with access to large amounts of "hard data". It may begin as a grounded theory approach with the researcher having no previous understanding of the phenomenon; or the study may commence with propositions and proceed in a scientific and empirical way throughout the research process (Bogdan & Taylor, 1987). This research involved students of Economic faculty who took English level II at language laboratory of Bandar Lampung University in period 2016/2017. The writer took the class by using random sampling from four classes of Economic students. Each class consisted of 20 students, then the writer took five students from each class randomly, that was 20 students totally. The Indicators of study were the followings as;

1. The teaching learning process would be success if there was an improvement of students' activity which had reached 75% actively.
2. Learning evaluation would be given in final test. The test items analysis were given through 1) test validity, 2) test realibility, 3) level of difficulty, and 4) discrimination power by using SIMPEL PAS (*Sistem Pengelolaan Program Analisa Soal*) program.
3. The increasing of students' learning achievement was observed by the result of test. If 70% students had passed the standard score 61, with the score criteria as; A (100-81), B (80-71), C (70- 61), D (60-51) and E (50-0). (source: *BAAK*), so the students' learning achievement was success.

## Results

In applying the design of metacognitive learning strategy in this research, the process of teaching learning can be explained for the followings;

### 1. Planning

- 1) Making lesson plan/SAP.
- 2) Preparing the instrument of students' observation and lecturer's observation.
- 3) Preparing the media and teaching aids such as songs in an audio form, computer, slide, LCD, and *room speaker*.

### 2. Acting

She explained the learning objective and steps of learning in *pre-activity*, *while- activity*, and *post-Activity*. In *pre-activity*, Lecturer gave motivation to students in lead-in activity to the topic.

In *while-activity*, the lecturer showed the text by LCD and played the song in audio. She paused the lyric per paragraph and the students did repetition drills. There were few words that few students still made error of pronunciation like as the words *knew*, *freeze*, *touch*, *without a single word*, *piece*, so the lecturer helped them to revise the good pronunciation or review the melody by singer/native speaker. For the second song, the problem of pronunciation was in the words *about*, *younger*, *wild*, *road*, *lying*, *turn*, *arrive*, *through* . After the lecturer helped them in good pronunciation, student can pronounce all the words of song well. Then, lecturer and students discussed the material together. She let students to find content words in the text of song. Students discussed the words meaning in the text. Finally, the song was replayed and students followed the song to practice their pronunciation and word memorization. The

activities above can be repeated for another song to improve students' vocabulary mastery.

In *Post-activity*, lecturer and students made conclusion of learning in stimulus and response activity.

### 3. Observing

The active students in the first meeting were 12 students or 60%, and the second meeting were 14 students or 70%. This meant that the process of teaching learning had not reached the indicator of this research for 75% of active students yet.

### 4. Reflecting

After the second meeting, a teacher gave test in multiple choices. The data indicated that students who passed the test had 12 students or 60%. It means that the students' learning achievement had not reached indicator 70 %.

After knowing the result of test, the students' score would be entered in SiMPEL PAS program. The result of evaluation was:

- 1) The result of item validity *r* table was 0,312, valid items were 31 items and unvalid items were 19 items. The score of test validity was 0,2 (low).
- 2) The result of test realibility was 0,59 (according to KR-20) with the moderate category.
- 3) The result of level of difficulty was 0,54 (moderate).
- 4) The result of discrimination power was 0,36 (moderate)

From the data above, the researcher would revise all data for triangulation by doing the next research in the same place and the same population by preparing song as media through *audio visual* which can be got from <http://www.youtube.com/> or be made by Sony Vegas 7 program, meanwhile the lecturer used windows media player and the like to play the songs.

After getting the data before that the result of research had not reached the indicator yet, so the researcher did the next observation by applying the design of metacognitive learning strategy in rather different strategy by developing the media in audio visual way. The process of teaching learning can be explained for the followings;

### 1. Planning

The plannings of research were as;

- 1) Making lesson plan/SAP.
- 2) Preparing the instrument of students' observation and lecturer's observation.
- 3) Preparin pop western songs in audio visual from <http://www.youtube.com/> or making

by Sony Vegas 7 program, computer, slide, LCD, and room speaker

## 2. Acting

In *pre-activity*, lecturer gave motivation to students in brain storming activity to the topic. In *while-activity*, the lecturer played the song in audio visual and paused the lyric per paragraph, then the students did repetition drills. Students can pronounce the words well. Then, lecturer and students discussed the material together, like as the function of nouns can be as subject in the sentence, eg; "your eyes see everything", as object, e.g; "I would like to stop the clock" and after auxiliary verb, eg; "I am an English student". She let students to find content words in the text of song. Students then discussed the words meaning in the text. For improving their English vocabulary, students retold the content of song by their own words both written and spoken form. Finally, the song was replayed and students followed the song to practice their pronunciation and word memorization. The activities above can be repeated for another song to improve students' vocabulary mastery. In *Post-activity*, lecturer and students made conclusion of learning in stimulus and response activity.

## 3. Observing

The data was got from active students in learning that first meeting had 14 students or 70% and the second meeting had 18 students or 90%. This meant that the T-L process had reached the indicator of 75% active students.

## 4. Reflecting

The data indicated that students who passed the test had 16 students or 80%. This means that the increasing of students learning achievement had reached indicator 70% from each classes.

After that, the data was evaluated by SIMPEL PAS program. The result was ;

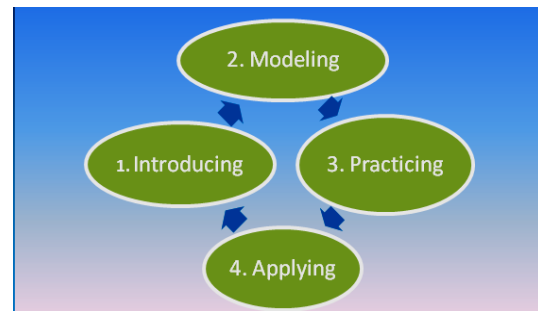
- 1) The result of item validity *r* table was 0,312, valid items were 40 items and unvalid items were 10 items. The score of test validity was 0,41 (moderate).
- 2) The result of test reliability was 0,78 (according to KR-20) with the high category.
- 3) The result of level of difficulty was 0,68 (moderate).
- 4) The result of discrimination power was 0,36 (moderate)

## Findings

In etymology, language can be *bhasa* (Sanskrit), *bahasa* (Indonesia), *lughah* (Arabic), *langue* (French), *taal* (Dutch), *sprach* (Deutsch) dan *kokugo* (Japan), and the like. English was learnt in integrated skills such as listening,

speaking, reading and writing.. The learning objective was in order to students be able to communicate both spoken and written form. Integrated has superiority for the followings: (1) to enrich and develop learning; (2) to motivate students in learning; (3) to build an efficiency and effective learning ; And the lack of integrated was; (1) teacher must master with the concept of skills; (2) difficult to apply all at once; (3) variety of learning source

Suyanto (2010;47-49) stated about vocabulary learning in integrated consists of four steps were as;



Picture 2.1 Vocabulary Learning Process

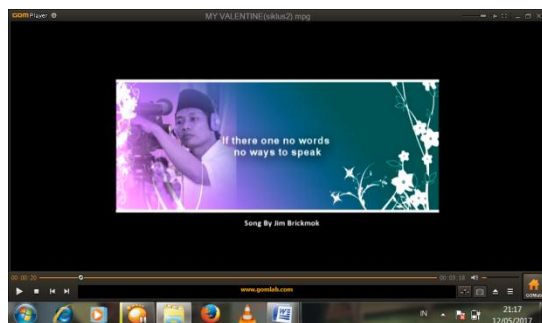
1. Introducing → Lecturer introduces new words in good pronunciation by native speaker
2. Modeling → Lecturer can give a model to help students' problem in learning
3. Practicing → Lecturer practiced students to pronounce and memorize words well
4. Applying → Students applied the usage of words in sentences

Vocabulary is the base of language in communication, in other words, students should get some vocabularies as the introduction of a language. vocabulary is to build a language, it is a prominent element in communication. We can see that learning vocabulary plays an important role in understanding the language whether in written or spoken form. Furthermore Rivers (1970) stated that it is impossible to learn a language without words, without vocabulary. Referring to the statement, we can deduce that vocabulary is the essential thing of language learning. By knowing vocabulary, we understand someone's opinion, be able to communicate to others, and be successful in learning English. It can be inferred that students who learn a language, should learn vocabulary. Basically, the teacher should teach the form and the meaning of words in vocabulary in order to use those vocabularies in communicative purpose. In the *Vocabulary Building I*, the material prepared word classes including functional



words/grammatical words and content words/lexical words.

This is an example of song as media;



Based on the content of song above, students can learn about the function of 'verb' and other words. Students can learn its utterance by listening, its meaning, pronunciation, structure, function words and the like both in spoken and written form. The advantages of learning activity are; English learning is the learning of language acquisition for sound, words and structure; *drilling* for teaching strategy; involving native speaker by the singer; learning Integrated skills; learning language is habitual, so it must be repetition; building *intrinsic* and having motivation through the songs;

## Conclusion

Based on the analysis of findings, It can be concluded as follows:

1. The students were active in T-L process were 18 students or 90%. And this had reached the indicator of 75% active students
2. The data of students' learning evaluation indicated that the test validity was 0,41 (moderate), the test reliability was 0,78 (according to KR-20) with high category, the level of difficulty was 0,68 (moderate) and discrimination power was 0,36 (moderate).
3. The increasing of students' learning achievement indicated that there were 16 students or 80% who passed the test. And this result had reached the indicator of 70% students who passed the test.

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