

Comparison of Dalcroze Eurhythmics Teaching Approach with Conventional Approach to Enhance Kompang Playing Skills among Malaysian Children

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Abstract

Kompang playing is getting more recognition in schools to celebrate official events and as learning activity in classroom. The aim of this research is to compare the efficiency of Dalcroze Eurhythmics teaching approach with conventional approach to enhance kompang playing skills in school. Research sample consisted of 70 Year 3 students aged 9 years old from a primary school in Putrajaya, Malaysia. This research was conducted as quasi-experimental that involves two groups which are control group and experimental group. The experimental group was given the intervention of Dalcroze Eurhythmics approach whereas the control group used conventional approach. Intervention was given once a week until three months for 12 times. Quantitative data was analysed using SPSS version 21. Results from independent T-test shows that null hypothesis is rejected due to significant difference between achievement score of students in experimental group with control group that is $t(68) = 7.03, p = .000, 95\% CI [-15.04, -8.38]$. Paired T-Test found that null hypothesis is rejected for there is significant difference between achievement score of students in experimental group in pre-test and post-test which is $t(34) = -9.92, p = 0.00, 95\% CI [-17.83, -11.77]$. Results show that Dalcroze Eurhythmics approach is more effective compared to conventional approach in enhancing students' kompang playing skills.

Keywords - Dalcroze Eurhythmics, kompang playing, students

I. INTRODUCTION

Music subject is found to be exposed to school students in Malaysia since the country achieved its independence. Curriculum is drafted to ensure syllabus accurately fulfils the educational needs of citizens from various ethnicities and religions. Students were taught to musical activities such as singing, playing musical instruments and movements since 1985. Musical activities were conducted to give focus towards musical concepts which are rhythm,

melody, harmony, tone, ornament and expression (Zaharah, 2003). These days, curriculum is drafted under the name of Primary School Curriculum of Malaysia (*Kurikulum Standard Sekolah Rendah*, KSSR) that prepares students with 21st century's skills to enable them acquire knowledge and skills as according to international standards. Music Education subject is combined with Visual Art Education to form Art Education subject.

A. Problem Statement

Kompang is one of membranophone percussion instruments taught at primary school level. Based on Year 2 Art Education textbook, students are exposed to kompang learning since Year 2 with accentuation given in the aspects of identifying sounds and basic techniques of kompang playing. Other than that, kompang playing activity is getting more recognition in schools to honour respectable guests, accompany singing performances, commemorate retiring teachers, celebrate festivities and compete for kompang formation competition. More than often, students are summoned to play kompang as a performance with limited time for preparations. Therefore, the researcher feels that there should be a more effective approach to enable students acquire kompang playing skills and possess the knowledge in short period of time. Thus, Dalcroze Eurhythmics is chosen as an intervention for this research.

The purpose of this research is to see whether Dalcroze Eurhythmics is more effective in enhancing kompang playing skills among students as compared to conventional approach. Two groups of respondents are formed which are experimental group who employed Dalcroze Eurhythmics approach and control group who employed conventional approach. Thus, the following hypotheses are developed to define research effectiveness.

H₀₁: There is no significant difference in students' achievement score in conventional group and those in Dalcroze Eurhythmics group.

Ho2: There is no significant difference in pre-test and post-test achievement score of students in Dalcroze Eurhythmics group.

Ho3: There is no significant difference between pre and post-test of students in conventional group.

II. LITERATURE REVIEW

Dalcroze Eurhythmics is one of several music teaching approaches used to cascade musical concepts such as rhythm, melody and expression. It is explored by a Swiss composer and music teacher, Emile Jaques Dalcroze. The philosophy of this teaching approach is using body movements to feel the music that enables children to understand musical rhythm more effectively. It is also said to be able to enhance sensitivity in music (Abramson, 1980). There are three main components in Dalcroze Eurhythmics approach which are rhythmic movements, solfege and improvisation (Dalcroze, 2013).

The first component, rhythmic movement, is the main component and closest to human (Dalcroze, 1921). Therefore, Dalcroze has introduced this component by relating elements of time, space and energy to form perfect rhythmic movements. All three of the elements are closely related and heavily influence each other. Wang's research (2008) has found that students demonstrated positive achievement in learning rhythmic titles using Dalcroze approach cascaded as per scheduled. Manifold (2008) in his research explained that Dalcroze Eurhythmics is the basis to all musical elements learning including singing and playing instruments. This approach is said to be highly relevant and suitable to be implemented on children to enhance their musical skills.

The philosophy of Dalcroze Eurhythmics accentuates body as an instrument through actions for singing skills, rhythmic movements and body percussion. Thus, this philosophy gives space for individuals to use body as musical instruments, giving kinaesthetic experience, responses towards musical stimulus, and in-depth hearing that trigger sense of thoughts towards musical actions. In this approach, coordination between aural, psychomotor, intellect and movement aspects according to rhythms forms something called Eurhythmics (Daley, 2013). Dalcroze Eurhythmics activities not only make individuals understand musical concept better but also enhance coordination between body parts. Good coordination is able to control movements in performing desired skills. Kinaesthetic skills are also involved in the process of learning how to play musical instruments whereby kinaesthetic is generated from the use of physical body parts (Thomsen, 2007). Boyarsky (2009) then explained that Dalcroze Eurhythmics activity enables a

musician to listen to the musical stimulus and consequently, respond quickly.

Rhythmic movement activity in Dalcroze Eurhythmics approach is made as main activity to assist students in focusing and reinforcing musical skills (Miller, 2008). Through this activity, the relationship between brain and body function can be fully utilized. Dalcroze believes brain functions as main tool that is used to process stimulus and therefore gives signals to body parts to act. However, the strength of relationship between brain and body parts depends on the person's nervous system. Research shows that a child is more comfortable repeating same movements after they have done it once. For example, they move four steps forwards and jump with one leg. They will frequently repeat the same step without changing any parts of the steps. From here, teachers play their role to include musical element in the steps so that children understand and identify the presence of rhythm in their movements (Findlay, 1995).

In Malaysian primary schools, students are exposed to traditional music education in line with modern music that is not solely Western oriented. Students are taught to play kompang as one of traditional Malay ethnic percussion instruments (Abdullah, 2004). Kompang playing allows students to interact in positive environment and educate them to appreciate national art heritage. This is because by playing kompang, a student can nurture religious, aesthetical, customary and moral values within himself. It is very valuable to give an individual exposure of music learning traditionally which then will develop society who possesses cultural strength (Syahroni, 2011).

III. METHODOLOGY

This research was conducted quantitatively through quasi-experimental design in a primary school in Putrajaya. Research was conducted once permission was obtained from the school. Research sample involving 70 students among Year 3 students aged nine years old who only learn music in schools during Music Education class. The students consist of 38 male and 31 female students involving in this research. There are two groups of respondents consisting 35 students in experimental group and other 35 in control group. They do not attend intensive music classes outside school hours. The number of research sample here is determined by considering Roscoe's statement (1975) – the suitable number of samples for experimental research should be at least 30 students or more.

A. Research Procedure

Students involved as respondents are given learning exposure to play kompang using Dalcroze Eurhythmics for 12 weeks. The researcher went to the school and taught the students for about 30

minutes every week for 12 sessions. Pre-test was held on the first week of the research. The students were advised not to learn from those who are skilled in music field especially in kompong playing or attend intensive music classes during the course of the research. This is to avoid influence of interruptive variables in the research. During the proses of teaching and learning, the song 'Maju dan Sejahtera' and the teaching aids used are laptop player, speaker and kompong. During the 12th week, researcher performed a Post Test on the respondents. Post-test were conducted individually on the students in a special room. Skills demonstrated by the students were also recorded. Teaching activities were planned by combining principles of space, time and energy that are included in Dalcroze Eurhythmics rhythmic movement category. Other than that, this activity was also planned by involving Dalcroze pedagogical components which are reaction, memory, inhibition- incitation and senses. The activities held during the research weeks (sessions) using Dalcroze Eurhythmics approach are as following:

Week 1 (Pre Test)

- Students listened to the song 'Maju dan Sejahtera'.
- Students strummed kompong accompanying to the song.

Week 2

- Students walked while strumming kompong according to the song tempo that was played by teacher.
- Students walked while strumming kompong according to the song tempo that was played without teacher's accompaniment.
- Students sang while strumming kompong.
- Students sang while strumming kompong in a group.

Week 3

- Students moved and play kompong while teacher play the rhythm of . ♩ ♪ ♪ ♪ ♪
- Students varied their movements by walking and jumping according to rhythmic patterns that they have learned.
- Students sang while playing the same rhythmic patterns using kompong with accompanying music.
- Students sang while playing the same rhythmic patterns using kompong in a group.

Week 4

- Students played body percussion while listening to teacher's rhythm patterns of and . ♩ ♪ ♪ ♪ ♪ ♩ ♪ ♪ ♪
- In pairs, students copied their partners' movements of playing body percussion based on

rhythmic patterns learned according to the music played.

- Students sang while strumming kompong.
- Students sang while strumming kompong in a group.

Week 5

- Students did movements according to the song played.
- Students acted like animals such as cow and rat according to the music played.
- Students sang while clapping two rhythmic patterns that they learned with accompanying music.
- Student sang while clapping two rhythmic patterns that they learned using kompong with accompanying music.

Week 6

- Students sang while clapping two rhythmic patterns that they learned with accompanying music.
- Students moved according to two rhythmic patterns that they learned with accompanying music.
- Students sang while moving according to two rhythmic patterns that they learned with accompanying music.
- Students sang while clapping to two rhythmic patterns that they learned using kompong with accompanying music.

Week 7

- Students formed a circle formation.
- One student clapped to two rhythmic patterns that they learned using body percussion. Other students copied the action with accompanying music.
- Other students sang and performed step b. The students took turns to lead the group.
- Students sang while clapping to two rhythmic patterns that they learned using kompong with accompanying music.

Week 8

- Students sang in loud and soft dynamics while moving according to high and low level. Low level represents soft dynamic whereas high level represents strong dynamic.
- Students sang the song while moving according to levels on set phrase. The first phrase is soft dynamic, second phrase strong dynamic, third phrase soft dynamic and fourth phrase strong dynamic.
- Students sang while playing kompong according to dynamic.
- Students did group activities.

Week 9

- a. Students were divided into several groups with every group consisting not more than five students.
- b. Students considered and did suitable movements according to rhythmic patterns that they learned.
- c. Students did the movements whether by locomotors or not when music is played.
- d. Students played kompang when music is played.

Week 10

- a. Students sang the song according to loud and soft dynamic with teacher's guidance.
- b. Students were divided into several groups with each group consisting not more than five students.
- c. Students chose rhythmic patterns and did suitable movements to represent loud and soft dynamic.
- d. Students played kompang while accompanying the song according to the determined song dynamic.

Week 11

- a. Students were divided into several groups with each group consisting not more than five students.
- b. Students did movements based on two rhythmic patterns that they learned.
- c. Students played kompang based on two rhythmic patterns that they learned.
- d. Students practiced playing kompang while listening to the song.
- e. Students presented practice result in front of the whole class.

Week 12 (Post Test)

- a. Students listened to the songs played.
- b. Students strummed kompang accompanying the song.

B. Data Collection

Data was collected by conducting music practical test on the respondents. This test was evaluated by three panels that are knowledgeable music field. Therefore, a marking scheme was prepared to evaluate the skills performed by the students. This scheme was developed by the researcher based on the content and format in scoring criteria from *The Associated Board of The Royal School of Music (ABRSM)* and Standard Performance Document used by Malaysian Ministry of Education including grade system used all over Malaysian schools. According to the grade system that is currently implemented for primary school, Grade A is excellent with score range between 80 to 100, Grade B is good with score range between 65 to 79, Grade C is satisfactory with score range between 50 to 64, Grade D reaches the minimum level with score range

between 40 to 49 and Grade E has yet to reach minimum level with score range between 0 to 39. The instrument built was reviewed and verified by three music experts.

IV. RESULTS

The marks obtained from music practical test conducted were analysed using statistical method. Data was analysed using *Statistical Package for the Social Sciences (SPSS) Version 21* to find the min and standard deviation as well as to prove hypotheses. Control group refers to the group of children who learned using conventional approach whereas experimental group refers to the children who learned using Dalcroze Eurhythmics approach.

Ho1: There is no significant difference in students' achievement score in conventional group and those in Dalcroze Eurhythmics group.

A T-test was performed to compare the performance scores of kompang playing between experimental group and control group. Based on Table 1, it is found that students in experimental group (M = 72.97, SP = 6.87) have shown higher performance compared to those in control group

(M = 61.26, SD = 7.08). The result obtained from Independent T-Test with the value $t(68) = 7.03$, $p = .000$, 95% CI [-15.04, -8.38], showed less significant value than alpha ($p < 0.05$), which allows hypothesis Ho1 to be rejected. Thus, intervention given to the respondent in experimental group has more significant impact than in control group.

Table 1: Independent T-test between Groups

T-test		N	M	SD	t	df	Sig.
Pair 1	Control Group	35	61.26	7.08	-7.03	34	0.000
	Exp. Group	35	72.97	6.87			

Ho2: There is no significant difference in pre-test and post-test achievement score of students in Dalcroze Eurhythmics group.

A Paired T-test was performed to compare the performance scores of pre-test and post-test in experimental group. Based on Table 2, it is found that students in experimental group showed impressive achievements at post-test level (M = 72.97, SP = 6.87) compared to pre-test achievement (M = 58.17, SP = 8.07). Result from Paired T-test, the value $t(34) = -9.92$, $p = 0.00$ 95% CI [-17.83, -11.77] showed less significant value than alpha ($p < 0.05$), which allows hypothesis Ho2 to be rejected. Thus, intervention given to the respondent in experimental group has impacted significantly on kompang playing skills.

Table 2: Experimental Group Paired Sample T-Test

DV		N	M	SD	t	df	Sig.
Pair 1	Pre-test	35	58.17	8.07	-9.92	34	0.000
	Post-test	35	72.97	6.87			

Ho3: There is no significant difference between pre and post-test of students in conventional group.

Paired T-test was performed to compare pre-test achievement score with post-test in control group. Based on Table 3, it was found that students in control group showed less impressive performance at post-test level (M = 61.26, SP = 7.08) with scores almost similar to pre-test achievement (M = 60.46, SP = 8.28). Result from Paired T-test, the $t(34) = -0.49$, $p = 0.626$ 95% CI [-4.10, 2.50] showed bigger significant value than alpha ($p < 0.05$), which means hypothesis Ho3 failed to be rejected. Thus, conventional approach does not have significant impact towards kompang playing skills.

V. DISCUSSION

In this research, it was found that both results from T-test showed that Dalcroze Eurhythmics approach is more effective compared to conventional approach used in school. On average, students in experimental group received Grade B which is good compared to control group who received Grade C that is satisfactory after the research is completed. The result also showed students achievement in experimental group exceptionally increased from Grade C with average score of 58% to Grade B with average score of 73%. However, students' achievement in control group remains at Grade C which average score is less than 65%.

This also proves that through Dalcroze Eurhythmics approach conducted 12 times in the span of three months is able to enhance students' kompang playing performance in schools by at least one grade increment. This is in line with Manifold's (2008) statement who said that Dalcroze Eurhythmics approach is considerably suitable to be applied on children to gain skills in playing musical instruments. The researcher also found that students seemed eager and attracted towards this given approach because they are given the chance to play with friends and move within the space which makes learning activity to be active and fun. At the same time, students learn to acquire techniques taught by teachers.

Result has shown that conventional approach does not give significant impact towards students' achievement in kompang playing skills. The researcher thinks conventional approach causes students to require more time with continuous practice to acquire kompang playing skills. It is found that teaching and learning activities were more

teacher-centred with emphasis on disciplinary aspect. Students are given little chance to explore the skills and interact with friends. Class environment were found to be silent with mostly students playing kompang solely based on teachers' instruction.

VI. CONCLUSION

As a conclusion, Dalcroze Eurhythmics approach is still relevant to be currently applied in music education classes specifically. The researcher proposes that a study of Dalcroze Eurhythmics approach on other coordination of music skills to be carried out. For example, coordination skills of singing while playing piano and coordination skills of singing while dancing using Dalcroze Eurhythmics approach. This is not only able to enhance someone's musicality but also expand the functionality of Dalcroze approach in other fields. At the level of curriculum developer, Dalcroze Eurhythmics approach can be used as guidance for music learning activities especially involving kompang. Courses can be held for music teachers to further understand Dalcroze Eurhythmics pedagogy. It is hoped that students are able to understand better about more music concepts and skills with the application of Dalcroze Eurhythmics approach in learning activities that can be used throughout curriculum.

Table 3: Control Group Paired Sample T-Test

DV		N	M	SD	t	df	Sig.
Pair 1	Pre-test	35	60.46	8.28	-0.49	34	0.63
	Post-test	35	61.26	7.08			

REFERENCES

- [1] Abdullah, M. H. (2004). Multicultural and Idiosyncratic Aspects of Malaysian Music: How Does it Survive in the Public School Curriculum?. International Society for music education Conference.
- [2] Abramson, R. M. (1980). Dalcroze-based improvisation. *Music Educators Journal*, 66(5), 62-68.
- [3] Boyarsky, T. (2009). Dalcroze Eurhythmics and the Quick Reaction Exercises. *The Orff Echo*, 41(2), 15-19.
- [4] Dalcroze, E. J. (2013). *Rhythm, Music and Education*. Read Books Ltd.
- [5] Dalcroze, E. J. (1921). *Rhythm, music and education*. GP Putnam's Sons.
- [6] Daley, C. (2013). *Moved to Learn: Dalcroze Applications to Choral Pedagogy and Practice* (Doctoral dissertation, University of Toronto).
- [7] Findlay, E. (1995). *Rhythm and movement: applications of Dalcroze Eurhythmics*. Alfred Music.
- [8] Manifold, H. L. (2008). *Applying Jaques-Dalcroze's Method to Teaching Musical Instruments And its Effect on the Learning Process*.
- [9] Miller, P. A. (2008). *Music theory pedagogy: Melding Dalcroze Eurhythmics with Brain Gym RTM*. MM, University of Missouri-Kansas City). ProQuest Dissertations and Theses, 304518495
- [10] Roscoe, J.T.(1975). *Fundamental research statistics for the behavioral sciences*. 2nd edition. New York: Holt Rinehart & Winston.
- [11] Syahroni. (2011). Nilai estetika dan moral dalam kesenian tradisional kompang; Kajian Terhadap Kesenian

- Daerah Bantan Tengah, Kecamatan Bantan. (Thesis, Universitas Islam Negeri Sultan Syarif Kasim Riau).
- [12] Thomsen, K. (2007). Interview with Silvia Del Bianco. *American Dalcroze Journal*, 34(1), 12-15.
- [13] Wang, D. P. C. (2008). The Quantifying Analysis of Effectiveness of Music Learning Through the Dalcroze Musical Method. *Online Submission*, 5(9), 32-41.
- [14] Zaharah M. A. (2003). *Dalcroze Eurhythmics Dalam Pengajaran Dan Pembelajaran Pendidikan Muzik Tahap Satu Sekolah Rendah* (Doctoral dissertation, USM) eprints@usm.