

Implementation of Reading Fixed ‘Do’ and Moving ‘Do’ Notations on Improving Music Practical Achievement

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How to cite: Murbiyantoro, H., Dharmawanputra, B., Anggoro, R. R. M. K. M., Karyawanto, Y. & Mahendra, M. P. (2024). Implementation of Reading Fixed ‘Do’ and Moving ‘Do’ Notations on Improving Music Practical Achievement. *Gondang: Jurnal Seni dan Budaya*, 8 (1): 172-179. <http://dx.doi.org/10.24114/gondang.v8i1.54860>

Article History : Received: Dec 19, 2023. Revised: Jul 01, 2024. Accepted: Jul 09, 2024

ABSTRACT

Music education is a realm of study concerned with the teaching and learning of music. This music education will develop affective, motor skills in students who play instruments and expand cognitive development through reasoning and interpretation of musical notation. However, many people still underestimate music education. In the education and teaching system of music arts, especially in the last years of the 20th century, new methods emerged. One of the methods that will be discussed is the Tonika-Do Method. This article is a type of literature study and uses the exposition method in presenting the concepts contained in previous studies. The sources used contain the results of discussions about art education, music, and music education. The application of fixed "do" is not carried out as it should be from the meaning of fixed "do" itself. The reading system used in this lesson is not an fixed "do", but a system taken from the basic idea of an fixed "do" system, where 'Do' is not understood as a C, D, E note or something else, but is more understood as a number 1, which is the tone of writing in numerical notation. This fixed "do" reading system is carried out with the aim of avoiding moving 1 ('do') which is generally found in how to read numerical notation, which of course tends to make it difficult for students in a notation recognition. The learning process can include practicing the C scale, followed by the chromatic scale, etude, then entering the song.

KEYWORDS

Music
Symbol
Notation
Numerical

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INTRODUCTION

Education is a place of activity that can be seen as a printer of high quality human resources. Education today is one of the most essential needs for human life (Izzah, Pradoko, and Syukur, 2020). Education is not something static or fixed, but something dynamic that demands continuous change or improvement due to the development of increasingly advanced science. The core activity in the entire educational process in schools is the teaching and learning process, through the teaching and learning process it is hoped that it can increase the level of education and change in behaviour in students. One of these subjects is music. Music exists as a language that can be used to communicate that brings satisfaction and certain feelings towards cultural values. Music can also be an expression of feelings or the language of the soul expressed through sound, in which there are elements of rhythm, melody, and harmony (Samosir, Ginting, and Wiflihani, 2019). Pica in Augustine (2015) explained that music is a nonverbal form of communication and is a channel to link the cultural division between people of diverse backgrounds. Music served as a tool to elevate moral senses and values of the society, which brought along the concept of music education (Page,

Suttachitt, in Thuntaweche and Trakarnrung, 2017). The development of music life and the world of music education in Indonesia has recently shown very rapid progress and is very interesting to follow. Music education has now become something important for humans and is now starting to attract the attention of many parties. Through various studies from various disciplines, music is known to provide important benefits for the human soul, starting from those related to intelligence, to brain function. Music education is a realm of study concerned with the teaching and learning of music. This music education will develop affective, motor skills in students who play instruments and expand cognitive development through reasoning and interpretation of musical notation.

Music education also plays a part in developing an individual's self-esteem and patriotism through student awareness of and participation in different musical cultures and genres in a country (Ministry of Education in Yie and Ying, 2017). However, many people still underestimate music education. Teachers are the guiders for learning (Cheng, 2016). There are nine factors that can influence the creativity of teachers in teaching, namely thinking style, family factors, teaching beliefs, education and career experience, personal effort, motivation, teacher knowledge, environmental factors, and the personal qualities of the teachers themselves which are interrelated with each other (Hong in Rizkita and Sukmayadi, 2022). Learning strategies and methods are the main factors in improving the learning process, learning strategies that are not well arranged allow for results that are not achieved according to the target (Fatimah in Budiawan and Aulia, 2022). One of the developments in education is marked by the emergence of new findings and innovations in it (Karyawanto, Anggoro, and Mahendra, 2020). One of them is teaching materials. Material or learning source is one of the various components in learning. Learning material is one of the requirements to make the learning activities run effectively and efficiently (Suwami in Gregorian and Milyartini, 2019). The concept of teaching materials used to assist teachers in carrying out teaching and learning activities. The material in question can be either written material or unwritten material. Through teaching material, it enables students to learn competencies in a coherent and systematic manner so that they are able to master all competencies in an integrated and integrated manner (Winarko, Suwahyono, and Anggoro, 2020). In the education and teaching system of music arts, especially in the last years of the 20th century, new methods emerged. One of the methods that will be discussed is the Tonika-Do Method.

METHODS

This article is a type of literature study and uses the exposition method in presenting the concepts contained in previous studies. The sources used contain the results of discussions about art education, music, and music education. In addition, the discussion is enriched by cross-disciplinary studies and the formulation of research methods in the current era of learning. The concepts in the literature are discussed and reviewed again, so as to gain new knowledge about the scope of music research. Reference sources include textbooks, journals, presentation papers in seminars, websites, and YouTube video recordings. The literature study approach uses five key elements: search, assessment, synthesis, analysis, and presentation (Montagu, 2017). All key elements are combined in the discussion process to obtain a complete set of narratives. At this stage, the author describes the results of the analysis in a coherent manner so that it is easy to understand and then conclude (Suprayitno and Prasetyo, 2021).

RESULTS AND DISCUSSION

Music must first be defined and distinguished from speech, and from animal and bird cries (Khoerunnisa, 2019). Music is a species-specific communication system that develops under a complex set of genetic constraints and environmental input (Siswanto, 2018). Effective musical communication requires the conveyance of the intended message in a manner perceptible to the receiver (Whipple, Gfeller, Driscoll, Oleson, & McGregor in Lee and Ho, 2018). Music is an art of expression that emphasizes freedom of expression, but there are also provisions that must be followed to obtain the beauty and harmony of tones in music (Sihombing, 2020). Many ideas,

issues and studies concerning creativity have been discussed over time and there is an increased interest in music because of its application to education, innovation, business, arts and science and society as a whole (Runco in Chew, Chang, and Piaw, 2012).

A significant role for practical teaching is played in higher normal college music education. It's a crucial platform for students to link theory to practice, develop their skills, and enhance the quality of their instruction. How to improve the practical teaching of music education, develop students' practical ability, and create a very unique training program for developing higher normal college students' specialized practice capacity in music education is the issue that has to be considered and resolved (Jiang, 2019). Beam notation reading practical skill has been obtained at various levels of education, starting from junior high school and senior high school in arts and culture subjects, as well as at the university level which has a special music study program. However, in reality the ability to read musical notation at every level of education, experiencing problems in terms of the accuracy of reading notation values, even though the subject of rhythm has been explained with regard to the form and value of notation (Rahayu, 2021). Music notation is an important aspect that needs to be understood in learning music. Waruwu in Sihombing (Muttaqin, 2008) argues that notation can be interpreted as a way or system of writing, musical notation is a system or way of writing music. In line with this idea, Banoe in Rahayu (Banoe, 2003) suggests that notation is a symbol or writing of music; numerical notation is a system for arranging symbols or writing in the form of numbers. Aside from being a medium for studying a piece of music, music notation can be used to document a piece of music. The global world has created a form of notation that is used to document musical works. For example, in Indonesia, the *pelog* and *slendro* scales are known in Java, then the notation system (*genta*) *da, mi, na, ti, la*, in Sundanese gamelan and others. The notation system is used for the needs of certain regional music. Western nations created a notation system which was then used in almost all corners of the world, because it is more universal. These systems are known as number notation and musical symbol notation.

Musical notation is the writing of musical symbols in which some are pitched and some are not. Tones symbolized in various forms of notes can determine the high or low, as well as the long or short of these notes, if they are located on staves with certain key signs and time signatures (Hartayo, 1994). In the presentation of musical notation, two forms of notes are often used, namely (1) numerical notes and (2) musical notes.

1. Numerical Notation

Numerical notation (or also known as relative note) is a sign expressed by a number to explain the high and low sound. The numbers used include 1, 2, 3, 4, 5, 6, 7 and 0. These numbers represent the names of the notes in the diatonic scale, namely *do, re, mi, fa, sol, la, and ti*. As for the long or short intensity of the tone in the number notation system, it can be classified into several types, namely:

a. Numerical Notation of Standalone Numbers

An independent numerical notation is a numerical notation that has no other signs above or beside it

5 | 3 3 3 4 | 5 . 0 5 | i 5 4 3 | 2 . 0

Figure 1 Standalone Numerical Notation

b. Numerical Notation with One Line Above it

A numerical notation with a line above it, indicating that the note is worth 1/2 (half) of a beat.

$\overline{5}$ $\overline{3}$ $\overline{3}$ $\overline{1}$

Figure 2 One Line Above Numerical Notation

c. Numerical Notation with Two Lines Above it

A numerical notation with two dashes above it, indicating the note is worth 1/4 (one quarter) beat.

$\overline{\overline{1}}$ $\overline{\overline{3}}$ $\overline{\overline{5}}$ $\overline{\overline{1}}$

Figure 3 Two Lines Above Numerical Notation

d. Dotted Numerical Notation

In some musical works, it is common to find notes that have dots to the right of the numerical notes. Each dot to the right of the number note is counted as 1 (one) beat.

3	.	3	2		
5	.	.	1		
1	.	.	.		
3	.	$\overline{2}$	1	3	
$\overline{\overline{3.3}}$	$\overline{\overline{3.3}}$	$\overline{\overline{2.3}}$	1		

Figure 4 Dotted Numerical Notation

e. Silence in Numerical Notation

Rest marks in numerical notation are symbolized by the number zero (0). If a 0 (zero) mark is found on a part of the song, it means it is silent, or does not make any sound, as long as the value of the stop sign is. Zero (0) has its own value.



Figure 5 Silence Sign in Numerical Notation

2. Musical Symbol Notation

Musical symbol notation (or also known as absolute notation) is a way of writing musical works that uses symbols or pictures of notes written on staves. Another opinion suggests that beam notation is a symbol or sign that is placed on a space or line in a staff which produces a series of musical tones.

Both numerical notation and musical symbol notation have their own way of application in the learning process, using certain methods as well. One of the learning methods that applies a numerical notation reading system is the Tonika-Do method. This method is a method originating from Germany, where this method is a continuation of the Tonic Sol-fa method which is actually rooted in the numerical method (Kivijärvi, 2019). This method was born to solve an important problem, namely: the tone problem for music education and teaching. This method was propagated by a great philosopher, writer, and composer during the Age of Enlightenment, namely JJ Rousseau, and created by Agnes Hundoegger. This method is also often referred to as the Galin-Paris-Cheve method, but in Indonesia it is better known as the Cheve method.

a. *Pierre Galin*

Pierre Galin (1786-1822) was a French educator. Galin studied mathematics and commerce and has been a mathematics teacher at a school for speech and hearing children in Bordeaux. He taught himself music, but had difficulty understanding his notebooks until he discovered the principles of Solfeggio.

b. *Aimé Paris*

Aimé Paris (1798-1866) was a French scholar. Paris is the man who invented the Stenography Method and he is the originator of the Galin-Paris-Cheve Method for musical notation. He also studied Mathematics and Law and became a Judge. His memory abilities have been recognized, at one point he was Professeur de Mnémonique at the Athenee in Paris.

c. *Émile-Joseph-Maurice Chevé*

Émile-Joseph-Maurice Chevé (1804-1864) was a doctor from Paris known in the music world for his success in introducing and implementing a system of musical notation that uses the numbers: 1, 2, 3, 4, 5, 6, 7, and is the creation of Pierre Galin for singing lessons at school, this system is also called the Cheve method or the complete Galin-Paris-Cheve Method. This method does show satisfactory results, because this method makes it easier and faster for children to master a song. The high or low of a tone is indicated by dots above and below the tone.

The Galin-Paris-Cheve method has the following principles: (1) Bar notation gives an idea of the absolute pitch of the note. For instrumental music it is fine, but for choral songs, school songs and folk songs it is too difficult; (2) For the singers' needs, it is enough to apply a system of relative pitch of numerical notation, which is about the comparison of one note in relation to another; (3) Tonic-dominant intervals can be written in several keys, types and pitches of musical notes. In writing the number notation, there is only a number notation that can be adjusted according to the barrel; (4) Regarding understanding rhythm becomes simpler. The use of meter marks $3/2$, $3/4$, or $3/8$ makes no difference in the system for reading the numerical notation, so that meter $3/4$ is written the same as meter sign $3/8$.

Entering the discussion regarding absolute notation (fixed "do"), fixed "do" is understood as 'do' = 1 (the number 1 is understood as the note C). This is contrary to the definition of fixed "do" itself. According to Komiyama (2012) fixed "do" is one of the ways in the solfeggio system to name notes by giving absolute names to each note, namely 'do' for C notes, 're' for D notes, 'mi' for E notes, 'fa' for the tone F, 'sol' for the tone G, 'la' for the tone A, and 'ti' for the tone B. In addition, through his book, Hartayo [10], confirms that the meaning of the word 'do' is basically not a tone or notation, but only the designation for the C note, then 're' for D, 'mi' for E and so on. In the "do" reading system, there are seven distinct tones known, namely do, re, mi, fa, sol, la, and ti. where the syllables are used, both to designate natural tones, as well as chromatic tones that have received additional accidental signs. Meanwhile, in several music learning systems in schools, there is a mention of a separate tone for chromatic tones. For example, if a partiture bears the accidental sign "sharp" or "flat", then the designation and writing of the chromatic tone used is as follows: (1) Di for writing notes on the note C \sharp which is in harmony with the tone D \flat ; (2) Ri for writing a D \sharp tone that is in harmony with the E \flat tone; (3) Fi for writing the note F \sharp which is enharmonic with the tone G \flat ; or (4) Sa for writing the tone B \flat which is enharmonic with the tone A \sharp .

This change or adjustment is made because the fixed "do" that is applied is not to read notation as in sight singing, but is applied to indicate the tone or position of the fingers on a musical instrument, so that between natural tones and chromatic tones are still distinguished by pronunciation and writing. The application of the "do" modification is absolutely only made for writing melodic musical instruments that use number notation, such as recorders and pianika instruments, but this is not the case with violins, because violins are still written using beam notation; whereas for harmonic musical instruments such as keyboards and guitars, writing sheet music uses chord symbols, capital letters with the addition of a large "M" behind the chord to indicate a major chord such as CM, and uppercase letters with an added lowercase "m" at the end of chords to represent minor chords such as Dm.

There is much discussion in popular music education about teaching and learning with notation. Likewise, the application of "do" absolutely has advantages and disadvantages which are always taken into consideration by teachers when implementing this notation reading system for their students, including the following:

d. Song material is more quickly mastered by students

With an fixed "do" reading system, students do not need to re-memorize the positions 1 (do), 2 (re), 3 (mi), 4 (fa), 5 (sol), 6 (la), 7 (ti) (as happens in the mobile 'do' system). Students only know that 1 ('do') is in the note C. This advantage makes students understand song material more quickly. The song is played even though it is not in the C major scale, but the way to read the notes is the same as the C scale, so that students' knowledge of how to read the notations that have been obtained in the previous song will be very helpful in reading material for the next song.

e. Learning becomes more effective and enjoyable

By applying the absolute "do" modification, students will become more independent in reading sheet music, so they don't have to always depend on the presence of the teacher. Time is not wasted in repeating the theory required in reading notation, such as memorizing the location of notes in new scales. Reading "do" absolutely makes learning fun because playing a musical instrument becomes easier to understand. Students do not need to be complicated anymore to have to understand other scales.

f. Increase knowledge about chromatic tones

This reading system also benefits students in terms of knowledge of chromatic tones. The note sequence that is usually encountered when applying a moving 'do' is 1 (*do*), 2 (*re*), 3 (*mi*), 4 (*fa*), 5 (*sol*), 6 (*la*), 7 (*ti*), whereas by applying the fixed "do" modification, students will encounter chromatic tones as follows: 1 (*do*), (*di*), 2 (*re*), (*ri*), 3 (*mi*), 4 (*fa*), (*fi*), 5 (*sol*), (*sel*), 6 (*la*), (*sa*), 7 (*ti*).

g. Students do not know other scales besides the C scale

Of course a good method is not free from weaknesses, as well as fixed "do" modifications. This reading system makes students not familiar with the changes in the scales that exist in the scores of songs. Students don't know what scale they are playing in. However, theoretical knowledge has been conveyed in learning, such as scales and musical symbol notation.

CONCLUSION

The application of fixed "do" is not carried out as it should be from the meaning of fixed "do" itself. The reading system used in this lesson is not an fixed "do", but a system taken from the basic idea of an fixed "do" system, where 'Do' is not understood as a C, D, E note or something else, but is more understood as a number 1, which is the tone of writing in numerical notation. This fixed "do" reading system is carried out with the aim of avoiding moving 1 ('do') which is generally found in how to read numerical notation, which of course tends to make it difficult for students in a notation recognition. Its application only occurs in recorders, or pianos. The learning process can include practicing the C scale, followed by the chromatic scale, etude, then entering the song.

ACKNOWLEDGMENTS

The Directorate of Center for Excellence in Arts and Culture and the Universitas Negeri Surabaya Research Grant provide full support for this study.

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