



The influence of the value clarification technique learning model on improving elementary school students' music creativity learning outcomes

Alifah Puspita Gayatri ^{a,1}, Sularso Sularso ^{a,2,*} , Dash Enkhtungalag ^{b,3}

^a Elementary Teacher Education, Universitas Ahmad Dahlan Yogyakarta, Indonesia

^b Mongolian State Conservatory, Mongolia

¹ alifah2000005347@webmail.uad.ac.id; ² sularso@pgsd.uad.ac.id; ³ enkhtungalag4@gmail.com

* corresponding author

ARTICLE INFO

Received 2024-09-25

Revised 2024-10-23

Accepted 2024-12-05

Published 2024-12-31

Keywords

Musical Creativity

Value Clarification Technique (VCT)

Learning Model

Music Arts Learning

Educational Experiment

ABSTRACT

In learning activities, creativity is an important aspect, where students can improve and develop their creative talents and abilities in thinking creatively. In grade III students of Muhammadiyah Al-Mujahidin Elementary School, Wonosari, there are still some students who are less interested in music art subjects. This study aims to determine the effect of the Value Clarification Technique (VCT) learning model on the musical creativity of grade III students, the efforts made by class teachers to improve musical creativity. This study is a descriptive quantitative study using an experimental method. The research design used is Pre-Experimental Design in the form of a One-Group Pretest-Posttest Design with a sample of 24 students. Data collection techniques use test and non-test techniques, such as observation, interviews, and documentation. Data is processed using instrument validation and instrument reliability. The results of this study can be seen through the results of the hypothesis test with the Paired Sample t-test technique processed using the IBM SPSS for Windows version 30.0 program, the Sig value (2 Tailed) was obtained at 0.000, which means the Sig value <0.05, which means H₀ is rejected and H₁ is accepted. So it can be concluded that the Value Clarification Technique (VCT) learning model has an effect on the student's outcome's ability to play music creativity of grade III students in Muhammadiyah Al-Mujahidin Elementary School, Wonosari.



This is an open access article under the [CC-BY-SA](https://creativecommons.org/licenses/by-sa/4.0/) license.



1. Introduction

In learning activities, creativity is an important aspect, where students can improve and develop their creative talents and abilities in thinking creatively. In grade III students of Muhammadiyah Al-Mujahidin Elementary School, Wonosari, there are still some students who are less interested in music arts subjects where it affects students' creativity in learning music arts. This can be seen when music arts learning takes place, there are several male and female students who seem unenthusiastic in learning music arts, such as when practicing using a pianica musical instrument by playing one of the regional songs, there are students who do not want to play the musical instrument at all, even when the student brings a musical instrument, such as a pianica from home, the student concerned is not interested in taking it out to play and is more interested in doing other activities. In addition, there are students who do not want to make their voices heard when singing. The characteristics of students vary where the class is a heterogeneous class with students having different interests in learning from each other. There are students who like sports, music arts, study oriented, and story telling. There are also students who have a high interest in music arts, such as singing and playing musical instruments. The solution that can be done to solve the problem at Muhammadiyah Al-Mujahidin Elementary

School, Wonosari is to increase students' creative and innovative values so that learning becomes more interesting and beneficial for students' music art learning outcomes by using a value-based learning model or Value Clarification Technique (VCT). This study aims to determine the effect of the Value Clarification Technique (VCT) learning model on the musical creativity of grade III students, the efforts made by class teachers to improve musical creativity in music art subjects in grade III, and the effectiveness of implementing the Value Clarification Technique (VCT) learning model to improve musical creativity in grade III in the classroom learning process at Muhammadiyah Al-Mujahidin Elementary School, Wonosari.

Kirschenbaum explained that VCT has advantages for effective learning in the sense [1]: (1) able to foster and instill values and morals in students in real life; (2) able to provide learning experiences from various lives; (3) able to ward off, eliminate, and combine various moral values in the value and moral systems that exist in each individual; and (4) provide an overview of acceptable moral values and guide and motivate to live decently and with high morals. In a study conducted by Destari, *et al.*, showed that the Value Clarification Technique learning model or value-based learning model can improve students' academic achievement through the application of the Value Clarification Technique (VCT) learning model, improve students' understanding of relevant values in the learning context, and encourage active involvement of students in the learning process to achieve better results. From the results of the analysis of the study, it is known that the better the teacher's ability to apply the VCT learning model, the better the students' understanding of the learning material. This means that the better the teacher's ability to apply the learning model, the better the students' learning achievement and the increase occurs significantly [2]. The Value Clarification Technique (VCT) learning model is a learning model that can instill character values through the material taught, in addition, the VCT model can lead students to have the skills and abilities to determine values that are in accordance with their life goals. In addition, this study explains that the VCT model is useful for teachers in designing and implementing active, creative, and moral learning [3]. One way to apply the value-based learning model or VCT in translating values into real forms is to invite each student to creatively play musical instruments in music arts subjects [4]. In addition, VCT aims to clarify and actualize the values that students believe in, as well as train them in assessing, accepting, and making decisions about an issue. VCT also focuses on developing an attitude of tolerance and appreciation for differences in values in society [5].

Creativity learning is often considered a skill based on talent, where only those who are talented can be creative, but this assumption is not entirely true [6]. In research according to E. Nurdin, Wahyudin, it is explained that creativity and problem-solving skills are the abilities required by this data, by forming individual creativity, increasing self-confidence, analytical thinking, creative thinking, and mastering skills [7]. Ananda Khairana Sukandar and Iwayan Astika, creativity-based learning can explore the potential of children's talents, improve children's abilities in the field of music and the observation process with stages of action can run effectively [8]. In a study by Mario Anibal, *et al.*, explained that creativity is used in art learning can be seen from the creative efforts of students in the learning process with teachers being able to foster creativity from each student by developing deeper musical development, encouraging interdisciplinary learning, and improving problem-solving skills [9]. Likewise, according to Ulger K creative thinking is a very important skill that students use in art subjects to produce works of art, with skills and creative thinking students can solve problems with new learning models [10]. The application of creative, critical, constructive, and collaborative thinking can develop thinking skills, especially critical and creative thinking skills which can be seen from how students become more active during the learning process, practicing inquiry skills by presenting explanations, so it can be concluded that skills in creative thinking can improve student learning outcomes [11]. Music art learning is a subject that greatly involves the relationship between teachers and students where there is collaboration, communication, a sense of belonging, creativity, and interaction with each other with teachers and other students [12]. Collaborative activities like this can encourage music art learning to share ideas and knowledge of art together in student learning groups that aim to train each student in the learning process and in everyday life [13]. The results of this study are expected to contribute to explaining the increase in teacher activity, student activity, affective learning outcomes (values of respect), and increased student responses to the Value Clarification Technique (VCT) learning model in Music Art subjects. In addition, this study will help increase the sensitivity and awareness of students' creative values and enable them to appreciate and develop their talents. Students will be able to understand the true meaning of the artistic talent that exists in them, not just liking or enjoying doing it but will be able to provide information and develop. When classroom teachers design learning, they can use the value clarification learning model to clarify

students' creative values, thereby increasing the success and creativity of teachers in teaching music art subjects.

2. Method

The type of research used in this study is descriptive quantitative research which uses experimental methods. Quantitative research aims to collect and analyze numbers to test hypotheses and generalize results from samples to populations with planning, data collection, analysis, and drawing conclusions. The techniques used in data collection are using test and non-test data. Data collection is a strategic method or step used in research, Heap, *et al.*, explain that data collection techniques are methods used to collect information from participants in research, some common methods include surveys, observations, interviews, and secondary data collection and where the selection of the right technique depends on the characteristics of the sample and the variables being investigated [14]. Testing is an important aspect of the research process, which allows researchers to validate their hypotheses and draw meaningful conclusions, data testing involves collecting and analyzing data to assess the accuracy and reliability of research findings. In addition, data testing helps ensure that conclusions drawn from research are based on strong and valid evidence [15]. Non-test refers to data collection methods that do not involve formal measurement, such as interviews, observations, and case studies, these methods are often used to obtain more in-depth qualitative information about individual behavior or views [16]. For non-test data collection in research using observation, according to Mirhosseini, observation is the main aspect of research, which allows researchers to collect data and information about research subjects in this technique involves observing, listening, and recording details carefully to collect accurate and reliable data, through observation, researchers can gain insight into behavior, patterns, and phenomena, which can then be analyzed and interpreted to contribute to research findings [17]. In this study, the design used is the Pre-Experimental Design in the form of a One Group Pre-Test-Post Design. This study uses a One Group Pre-Test-Post Design flow which begins with giving Pre-Test questions to students first and then giving Post-Test questions. This study was conducted on grade III students of Semester I of the 2024/2025 Academic Year with a focus on learning materials, namely playing music in the music arts course. This research was conducted at Muhammadiyah Al-Mujahidin Elementary School, Wonosari which is located in Dusun Gadungsari, Wonosari Village, Gunungkidul Regency, Special Region of Yogyakarta. This earch research was conducted from January to November in the first semester of the 2024/2025 academic year. The population in this study were all students of grade III of Muhammadiyah Al-Mujahidin Elementary School, Wonosari in the 2024/2025 Academic Year totaling 26 students. The sample in this study was one of the grade III classes totaling 24 students in this study at Muhammadiyah Al-Mujahidin Elementary School, Wonosari.

In this study, data collection used test and non-test techniques, such as observation and documentation. The data collection instrument to measure the value of learning outcomes with creative thinking used the vale clarification technique (VCT) learning model by practicing playing the pianica in the subject of music arts. The influence of the value clarification technique (VCT) learning model in learning music arts increases the creativity value and independence value for students and the ability of students when playing the pianica musical instrument which is measured using an observation sheet. The instrument used is a test of understanding the material about recognizing rhythmic and melodic musical instruments by practicing playing the pianica musical instrument which is one example of a melodic musical instrument. This written test sheet is in the form of a pretest and posttest. There are grids for the Pre-test and Post-test test instruments for understanding the material in the form of fill-in or descriptive questions totaling ten in accordance with the indicators of understanding and operational indicators. The values from the results of the Pre-test and Post-test are categorized by test score categories. There is also a learning observation sheet used as a measuring tool for the instrument in this study which covers all planned learning activities, from preliminary activities to core activities in accordance with the steps of the Value Clarification Technique (VCT) learning model, to closing activities. All activities on this observation sheet amount to 27 learning activities from the beginning to the end of the learning process.

Validity in this quantitative research is specifically related to the concept of empiricism which emphasizes evidence, truth, objectivity, reason, facts, deduction, and the use of numerical data [18]. Valid and usable instruments are instruments that have undergone improvements through consultation with expert opinion [19]. The instrument used is a test in the form of a pre-test and post-test. In this case, the test instrument is arranged in such a way that it can be used as the right instrument to obtain,

find, and describe students' creativity related to musical creativity in working on a problem. So that this instrument can be stated as an appropriate and good instrument to use and apply. After the validity test, the normality test is a statistical method used to determine whether the data comes from a normally distributed population that has symmetrical characteristics, where the mean and median are in the middle the instrument is tested for its reliability level [20]. The importance of conducting an instrument reliability test lies in the instrument's ability to provide sufficient confidence [21]. This can help in assessing how consistent the instrument is in providing reliable results. Therefore, an instrument is considered to have a good level of reliability when the instrument provides stable and consistent results in measuring the measured variables. The instrument in this study will be used several times to measure a phenomenon and the same respondents but at different times. Thus, reliability in this study was carried out using the SPSS 30.0 for Windows software program. Instrument reliability testing was carried out to ensure that the data obtained was in accordance with the stated measurement objectives. Therefore, the reliability test used Alpha Cronbach with a maximum value of 1. If the Alpha Cronbach scale is grouped into five classes with a similar range, then the level of consistency as a benchmark can be described as follows; (1) $0.80 < r < 1.00$ = very high reliability; (2) $0.60 < r < 0.80$ = high reliability; (3) $0.40 < r < 0.60$ = moderate reliability; (4) $0.20 < r < 0.40$ = low reliability; (5) $-1.00 < r < 0.20$ = very low reliability. Based on the results of the reliability test calculation (see Table 1) of 0.603 and the instrument is declared highly reliable because it is between $0.60 < r < 0.80$. In this study, the statistical data analysis technique uses a quantitative descriptive approach. The data analyzed, such as observations of the understanding of the concept of the value of student creativity in playing musical instruments when the subject of music art and the results of understanding obtained through the Pretest and Posttest.

Table 1. .Reliability Test Results

Reability Statistics		
<i>Cronbach's Alpha</i>	<i>Cronbach's Alpha Based On Standardized Items</i>	<i>N of Items</i>
.603	.528	10

The following are data analysis techniques that can be applied using normality tests and hypothesis tests. The normality test in this study used SPSS version 30. To determine the normality of data, namely the significance level > 0.05 , it is stated to be normally distributed and vice versa if the significance level < 0.05 , it is stated to be abnormal. Furthermore, for the hypothesis test, the decision-making guidelines in the Paired Sample t-test are based on the significance value. This study uses the Paired Sample t-test as a hypothesis test. Paired sample t-test is used to compare related or paired data from two groups, for example before and after treatment on the same subject [22]. The results of the SPSS output, the criteria for testing the hypothesis results are if the significance value > 0.05 then H_a is rejected and vice versa if the significance value < 0.05 then H_a is accepted. The criteria for the results of the paired sample t-test based on the comparison between the calculated t value and the t table are H_0 is accepted if $-t \text{ table} \leq t \text{ count} \leq t \text{ table}$. And H_0 is rejected if $-t \text{ count} < -t \text{ table}$ or $t \text{ count} > t \text{ table}$. This means that the learning model applied is effective in increasing the creativity of playing music in the music arts subjects of students. The next step is to consider the effect size calculation to determine the magnitude of the influence of the application of the Value Clarification Technique learning model or value-based learning model to improve understanding of the material in the middle of recognizing rhythmic and melodic musical instruments by practicing playing the pianica for grade III students at Muhammadiyah Al-Mujahidin Elementary School, Wonosari. The effect size test uses the Cohen's d formula [23].

$$ES = \frac{\bar{d}}{SD} \quad (1)$$

The description of data analysis in this study includes several statistical indicators, namely Effect Size (ES), the average (\bar{d}) obtained from the difference between the pre-test and post-test values, and the Standard Deviation (SD) used to measure the distribution of data from these values. The value clarity technique (VCT) learning model is a learning method that aims to help students in the learning process by understanding moral values, analyzing moral values, and classifying moral values. The strategy for implementing the value clarity technique (VCT) learning model is through problem solving, discussion, and achievement. The steps that must be taken in implementing the VCT learning model are divided into 3 levels, namely freedom of choice, appreciation, and action. The application of the value clarity technique (VCT) learning model is carried out to improve the learning outcomes of students' musical creativity which can be seen from 3 things, namely improvisation skills, use of

musical instruments, and evaluation and assessment. After applying the Value Clarification Technique (VCT) learning model to see how the learning model affects students' music playing practices, it can be seen in Fig. 1.

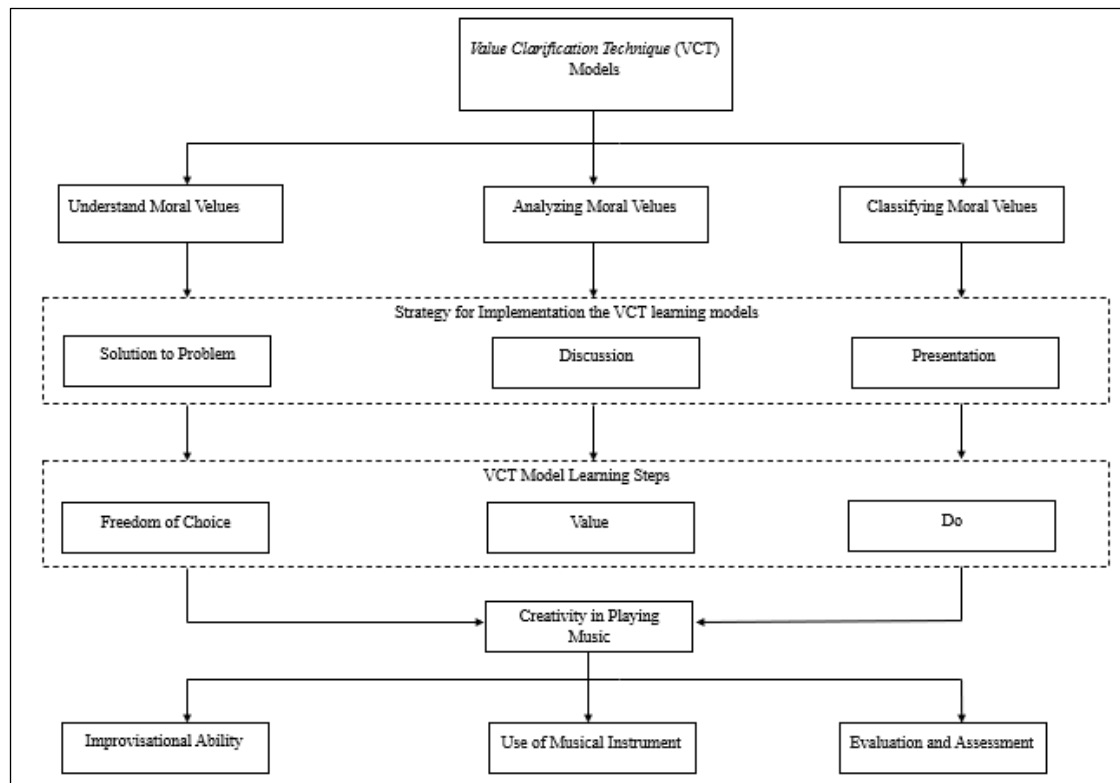


Fig. 1. The Value Clarification Technique (VCT) learning model

2.1. Strategy for Implementing the Value Clarification Technique Learning Model

The value-based learning model or Value Clarification Technique (VCT) has the advantage of ensuring that affective learning can run well [24]. According to Agnes Tesalonika, *et al.*, (2023), the steps of the Value Clarification Technique (VCT) learning model include: (1) value identification, where students are invited to identify the values they have and that are relevant to the situation at hand; (2) discussion and analysis, through group discussions, students analyze these values, considering their validity, morality, and relevance; (3) decision making, students are encouraged to choose the values that will be adopted and applied in everyday life; and (4) practice and reflection, where students practice the chosen values and reflect on their experiences to strengthen their understanding and commitment to these values [2].

2.2. Steps for Implementing the Value Clarification Technique Model

In the implementation of the VCT learning model, there is a syntax or steps that must be met to achieve the previously determined learning objectives which are divided into seven stages which are divided into three level tingkatan [25], namely as follows:

- Freedom of choice, at this level consists of three stages, namely; (1) Choosing freely, where students are given the freedom and opportunity to determine a problem or incident that the teacher gives or from the learning book; (2) Choosing from several alternative solutions, choosing freely which they think is the best; (3) Choosing after first conducting an analysis to find out the consequences of their choices.
- Appreciating, at this level consists of two stages of learning, namely; (1) There is a feeling of joy, pride, and happiness with the value of his choice so that the value becomes part of him; (2) Ensuring the values that have become part of him.
- Doing, at this level consists of two stages, namely; (1) Ability and willingness to try to do it; (2) Re-implementing behavior that is in accordance with the values of one's choice, which means that these values must be reflected in one's daily life [25].

2.3. Influence of Music Creativity

Learning music art is an important learning where music is one form that can be used to develop a person's creative abilities and can affect a child's psychomotor abilities. When someone listens to or plays a musical instrument alone, various nerves, neurons, and cells in the brain become balanced and can trigger thinking movements in the child's brain. Music learning at this time has not reached all the skills that are in accordance with the nature of art learning: art learning as a means, media of expression, communication, play, talent development, and creativity [26]. Sandra Rimkute explains that the development of musical creativity in students can be seen in 3 things, namely: (1) Improvisation ability, where students' ability to create, create, and express their musical ideas spontaneously; (2) Use of musical instruments, the development of musical creativity can also be seen from how students use and utilize the tools around them to create musical compositions; (3) Evaluation and assessment, responses or reactions from other people, especially classmates and teachers, to the children's musical works that they produce, as well as the students' ability to analyze and evaluate music [27].

3. Results and Discussion

This research was conducted in class III of Muhammadiyah Al-Mujahidin Elementary School, Wonosari which was held on November 26, 2024. The research sample used in this study amounted to 24 students. This study aims to determine whether or not there is an effect of the application of the Value Clarification Technique learning model on the ability of musical creativity in playing on the introduction of rhythmic and melodic musical instruments of class III students of Muhammadiyah Al-Mujahidin Elementary School, Wonosari. This study uses a test in the form of Pre-test questions, see Fig. 2 (a) and Post-test, Fig. 2 (b) as a tool to determine whether or not there is an effect before and after giving actions using the Value Clarification Technique (VCT) learning method to improve students' musical creativity. Learning begins according to the learning design that has been prepared in the learning module, starting with an opening greeting, praying together, checking student attendance, giving a speech, explaining the learning objectives, and providing motivation to raise students' enthusiasm for learning. After that, students are given a Pre-Test consisting of 10 descriptive questions that aim to determine the benchmark for students' initial abilities. Furthermore, learning activities are carried out using the Value Clarification Technique learning model by applying syntax in the Value Clarification Technique learning model in the form of independent group formation and explanation of the material and practice using musical instruments in groups.



Fig. 2. (a) Implementation of Pre-Test; (b) Implementation of Post-Test

The stages implemented by learning using the Value Clarification Technique learning model or value-based learning model are as follows:

- **Choosing Freely:** Learning using the VCT (Video-Clip Technique) model begins with an engaging and motivating activity, posing trigger questions about musical instruments. These questions aim to arouse curiosity and spark interest in the material being studied. Afterward, students are invited to form groups freely, with each student able to choose their own group members, consisting of 4 to 5 people, Fig. 3. This freedom in choosing group members provides opportunities for students to interact socially and feel more comfortable expressing their opinions during the learning process. Next, the teacher displays pictures of various musical instruments, and students are given the freedom to choose one of the pictures according to their interests. During this process, one representative from each group that has been formed will come to the front of the class to take a picture of the chosen musical instrument as material for

discussion and further learning. This approach not only increases active student participation but also helps them develop self-confidence and effective communication skills, making the learning process more enjoyable and meaningful.



Fig. 3. Choosing Freely

- **Selecting Several Alternative Choices Freely:** The second step in implementing the VCT model, namely the teacher explains the material on "Getting to Know Rhythmic and Melodic Musical Instruments" and students are asked to listen, see Fig. 4 (a). Continued with students being asked to gather with their respective groups that have been selected and identify the musical instruments they have previously chosen with the musical instruments that have been determined, the teacher asks questions related to the material with pictures of musical instruments that they have freely chosen in each group, see Fig. 4 (b) which previously was one example of a rhythmic or melodic musical instrument.



Fig. 4. (a) Teacher Presents Material Steps for Choosing Several Alternative Choices Freely; (b) Picture of the selected musical instrument Steps for choosing several alternative choices freely.

- **Choosing after analyzing:** Next, the teacher shows one of the musical instruments that will be used and practiced in the learning material (see Fig. 5). In the classroom there are keyboard and piano musical instruments, where in this learning activity the piano musical instrument is chosen to make it easier for students to practice playing the musical instrument. The teacher provides an explanation of the piano, such as the parts of the piano and how to use and play the piano musical instrument properly and correctly.



Fig. 5. Selecting After Conducting Analysis

- **Feeling the joy and pride of the values chosen:** In each group, see Fig. 6 (a) and Fig. 6 (b). This activity can increase the value of creativity and the value of reciprocal cooperation (working

together) between students and their group mates. The teacher also gives each group the freedom to choose the song that they will play and perform in front of the class in groups and in turns.



Fig. 6. (a) Students Are Happy and Proud of Their Chosen Musical Instrument Steps for Feeling Happy and Proud of the Chosen Value; (b) Practicing Playing Musical Instruments Feelings of Joy and Pride with the Values Chosen

- **Affirming Selected Values:** The benefit is independence. Students are given 30 minutes for each group to practice the song they choose to play freely, so they can see how far the students' creativity is in playing the song on the piano. When students practice using the pianica, the teacher asks if they face any obstacles or difficulties in playing the instrument (see Fig. 7), in each group, although the number of pianicas in the class is not enough, other students can take turns and practice singing the chosen song.



Fig. 7. Affirming Selected Values

- **Ability and Willingness to Try:** The next step, each group practiced randomly by going to the front of the class to play the song they chose with other members who did not get a piano (see Fig. 8) because the number did not allow all students in the class to sing the song played confidently with their group. Students were given appreciation in the form of applause for practicing playing musical instruments and singing with their chosen song.



Fig. 8. Ability and Willingness to Try

- **Repeating Behavior According to Choice:** In the last step in implementing this VCT learning model, participants are given activities that they must work on together with their group members (see Fig. 9) to assess students' knowledge of the material "Getting to Know Rhythmic

and Melodic Musical Instruments" and to find out the value of creativity and cooperation between members in each group with a predetermined time.



Fig. 9. Repeating Behavior According to Choic

Data analysis conducted in this study, namely using normality test and hypothesis test. The normality test aims to determine whether the data obtained is normally distributed or not. The normality test for this research data uses the Shapiro-Wilk test. The Shapiro-Wilk test is an effective and valid normality test method for use on small samples, namely less than fifty samples. The test can be said to be normally distributed if it has a Sig value or significance or probability value > 0.05 (sig > 0.05). The normality test uses the help of the IBM SPSS version 30.0 software program. The results of the Pre-test and Post-test data normality tests to understand the introduction of rhythmic and melodic musical instruments by playing the piano as an example of a melodic musical instrument to improve students' musical creativity are presented in the following Table 2.

Table 2. Results of the Pre-test and Post-test Data Normality Test for Understanding the Material on Recognizing Rhythmic and Melodic Musical Instruments

Tes	Sig	Alpha	Description
Pre-test	0.296	0.05	Normally Distributed Data
Post-test	0.150	0.05	Normally Distributed Data

This study uses the Paired Sample t-test hypothesis test (see Table 3). The hypothesis test aims to determine the effect of implementing the Value Clarification Technique (VCT) learning model or value-based learning model on increasing students' musical creativity with the introduction of rhythmic and melodic musical instruments in grade III students. This hypothesis test uses IBM SPSS for Windows software version 30.0. The decision to accept and reject H_0 is as follows; (1) Significance value > 0.05 then H_0 is accepted and H_1 is rejected; (2) Significance value < 0.05 then H_0 is rejected and H_1 is accepted. Based on the table above (see Table 3) it is obtained that the Pre-test value has a reactance of 52.08 with a standard deviation of 18,877 and the Post-test value has a reactance of 76.67 with a standard deviation of 7,470. It can be concluded that there is a difference in the reactance value of the results of the material understanding test in the introduction of rhythmic and melodic musical instruments, namely the Pre-test value $<$ Post-test value.

Table 3. Paired Sample Statistics Test

Paired Sample Statistics					
		Mean	N	Std. Deviation	Std. Error Mean
Pair 1	Pre-test	52.08	24	18.877	3.853
	Post-test	76.67	24	7.470	1.525

Based on the table above (see Table 4), it shows that there is no relationship or correlation between the Pre-test and Post-test questions. This can be shown from the results of the correlation test calculation, which is $0.064 > 0.05$.

Table 4. Paired Sample Correlation Test

Paired Sample Correlations				
		N	Correlation	Sig.
Pair 1	Pre-test & Post-test	24	.0640	.000

Based on the table above (see Table 5) shows that the significance value of the paired sample t-test results is 0.000 which means that the value is smaller than 0.05 or can be written as $0.000 < 0.05$. this shows that H_0 is rejected and H_1 is accepted. So it can be interpreted that there is an influence of

the Value Clarification Technique learning model or value-based learning model on the ability of musical creativity in playing on the material about recognizing rhythmic and melodic musical instruments of grade III students at Muhammadiyah Al-Mujahidin Elementary School, Wonosari.

Table 5. Paired Sample t-test Results

		Paired Samples Test					T	df	Sig. (2-tailed)
		Paired Differences							
		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
					Lower	Upper			
Pair 1	Pretest- Posttest	-24.583	20.743	4.234	-33.342	-15.825	5.806	23	.000

The next step that can be taken is to calculate the effect size to determine the magnitude of the influence of the application of the Value Clarification Technique learning model or value-based learning model on the ability of musical creativity in playing on the material about recognizing rhythmic and melodic musical instruments of grade III students at Muhammadiyah Al-Mujahidin Elementary School, Wonosari. The effect size test uses Cohen's d formula [23], as follows:

$$ES = \frac{\bar{d}}{SD} = \frac{(76.67-52.08)}{20.743} = \frac{24.590}{20.743} = 1.185 \quad (2)$$

After the calculation, the effect size value was obtained as 1.185. based on the criteria, the effect size obtained was greater than 1.00 (> 1.00), so it can be concluded that the effect of the Value Clarification Technique learning model on the ability of creativity in playing music on the material about recognizing rhythmic and melodic musical instruments of grade III students at Muhammadiyah Al-Mujahidin Elementary School, Wonosari has a high effect. The criteria for determining the effect size in this study follow the effect size criteria according to Cohen [23]; (1) 0.00 – 0.20 = Weak Effect (Very Low); (2) 0.20 – 0.50 = Low Effect; (3) 0.50 – 1.00 = Medium Effect; (4) > 1.00 = High Effect. Data analysis of the observation results was carried out on every aspect of the learning stages well and all learning activities can run according to the stages that have been planned and arranged previously. Starting from the preliminary activities to the closing activities, it was found that out of 27 learning activities, 13 activities were found which included orientation activities, which consisted of three activities, namely, apperception, motivation, and trigger questions, core activities which included choosing several alternative choices freely, choosing after analyzing, confirming the chosen values, the ability and willingness to try, and closing activities which included reflection and praying together so that everything could run well. There were 14 learning activities that went even better in the core activities, such as choosing freely, choosing several alternative choices freely, choosing after analyzing, choosing after analyzing, feeling happy and proud of the chosen values, confirming the chosen values, the ability and willingness to try, and repeating behavior that was in accordance with the choice. Closing activities included evaluation and conclusion activities which went even better. The following is a table of observation results of learning activities (see Table 6).

All preliminary activities, which include orientation, apperception, motivation, and preliminary questioning, received a score of 3. This score indicates that these activities have been carried out adequately, demonstrating that students were introduced to the learning topic in a structured and supportive manner. These components are essential in preparing students psychologically and cognitively to engage in the learning process. Moving into the core activities, which were implemented using the syntax of the Value Clarification Technique (VCT) learning model, the class presentations yielded scores of 3 and 4. These scores reflect a range between "adequate" and "good," suggesting some variation in the effectiveness of student participation and understanding during the main instructional phase. This also points to areas of potential improvement, especially in enhancing the depth of student responses and the clarity of value-based arguments during presentations. In the closing activities, the evaluation and conclusion components received a score of 4, suggesting that while some elements were effectively executed, there remain areas that did not fully meet expectations. Interestingly, the reflection and group prayer components scored a 3, again indicating satisfactory execution but with room for improvement. These components, although often seen as supplemental, are crucial in reinforcing learning outcomes and promoting personal and spiritual growth. Overall, these scores highlight that the learning process is running relatively well but still lacks optimal cohesion across all phases. If every step of the learning process, from the preliminary

stage to the conclusion is executed in full alignment with the planned learning framework, it is likely that the quality of student learning outcomes would improve significantly. Consistency in implementing each stage with intentionality and precision is key to fostering a meaningful and effective learning experience.

Table 6. Observation Results of Learning Activities with the Value Clarification Technique (VCT) Learning Model

Part of Learning	Syntax	No	Skor			
			1	2	3	4
Introduction	Orientation	1			√	
		2			√	
		3			√	
	Apreseption	4			√	
	Motivation	5			√	
	Initiating questions	6			√	
Core Activities	Choosing freely	7				√
		8				√
		9				√
	Choosing several alternative choices freely	10				√
		11				√
		12			√	
	Choosing after conducting an analysis	13			√	
		14				√
	Feelings of joy and pride with the chosen value	15				√
		16				√
	Affirming the chosen value	17			√	
		18				√
		19			√	
	Ability and willingness to try	20				√
		21			√	
Closing	Repeating behavior that is in accordance with his choice	22				√
		23				√
	Evaluation	24				√
	Conclusion	25				√
	Reflection	26			√	
	Praying together	27			√	
Total Skor					13	14

4. Conclusion

Value Clarification Technique or value-based learning model by increasing students' musical creativity with the material of introducing rhythmic and melodic musical instruments by playing the piano in class III of Muhammadiyah Al-Mujahidin Elementary School, Wonosari. This can be seen from the results of observations that all learning activities run well and smoothly. The results of the study stated that out of 27 learning activities, 13 activities ran well and 14 learning activities ran very well. If all learning activities are carried out in accordance with the learning steps that have been planned and arranged starting from the opening activities, core activities, and closing activities, then satisfactory learning outcomes will be obtained. This can also be seen from the average value of the test results before and after the application of the Value Clarification Technique learning model or value-based learning model to improve students' musical creativity has increased. The increase in the average Pre-test score was 52.08 and the average Post-test score was 76.67. In addition, it can also be seen from the results of the hypothesis test with the Paired Sample t-test technique processed using the IBM SPSS for Windows version 30.0 program, the Sig (2 Tailed) value was obtained as 0.000, which means the Sig value < 0.05 , which means H_0 is rejected and H_1 is accepted. In addition, after calculating the Effect Size value, the value was obtained as 1.185, which means the effect is high. So it can be concluded that the application of the Value Clarification Technique (VCT) learning model by increasing students' creativity in playing music with the introduction of rhythmic and melodic musical instruments through playing the pianica in class III of Muhammadiyah Al-Mujahidin Elementary School, Wonosari and has a strong or high influence effect. This study has limitations in its implementation, so it is expected to be an input for further researchers with similar further research so that their research can be more optimal. This study contains suggestions from teachers, students,

and further researchers so that this research can be further developed with different learning model innovations.

Acknowledgment

The authors would like to express their sincere gratitude to all individuals and institutions that have supported this research. Special thanks are extended to Universitas Ahmad Dahlan Yogyakarta Indonesia for providing the necessary facilities and resources. We also thank colleagues and reviewers for their valuable feedback and constructive suggestions, which have significantly contributed to the improvement of this study. This research was conducted without any conflicts of interest.

Declarations

- Author contribution** : Sularso, as the second author, was responsible for the entire research project. He also led the writing of the manuscript and collaborated with the first author. Alifah Puspita Gayatri participated in the data collection, transcription, and analysis. He also revised the manuscript. Both authors approved the final manuscript.
- Funding statement** : None of the authors has received any funding or grants from any institution or funding body for the research.
- Conflict of interest** : The authors declare no conflict of interest.
- Additional information** : No additional information is available for this paper.

References

- [1] H. Kirschenbaum, "Clarifying Values Clarification: Some Theoretical Issues and a Review of Research," *Gr. Organ. Stud.*, vol. 1, no. 1, pp. 99–116, Mar. 1976, doi: [10.1177/105960117600100109](https://doi.org/10.1177/105960117600100109).
- [2] D. Destari, H. Kurniawati, A. Tesalonika Yolanda, H. Tannady, and M. Magdalena, "The Analysis of Improving Student Learning Outcomes Using The Value Clarification Technique Learning Model," *J. Educ.*, vol. 6, no. 1, pp. 3300–3305, 2023, doi: [10.31004/joe.v6i1.3395](https://doi.org/10.31004/joe.v6i1.3395).
- [3] R. Y. Ula, S. Sarkadi, and A. Badrujaman, "The Effectiveness of Value Clarification Technique Learning Model on Students' Learning Outcomes," *J. Pendidik. dan Pengajaran*, vol. 54, no. 1, p. 38, 2021, doi: [10.23887/jpp.v54i1.29589](https://doi.org/10.23887/jpp.v54i1.29589).
- [4] Ultas, U. Dhyana, U. Pendidikan, and G. Singaraja, "Pengembangan Model Pembelajaran Value Clarification Technique (VCT) Berbasis Cerita Rakyat Dalam Pembelajaran PPKn di Sekolah Dasar," *Mataram, Fkip Univ. Ekon. Fak.*, vol. 9, no. 3, pp. 780–788, 2021.
- [5] A. Dewantoro and K. E. Sartono, "The influence of value clarification technique (VCT) learning model on homeland attitude at elementary school," *Sci. Pedagog. Educ.*, vol. 0, no. 5 (32), pp. 23–31, 2019, doi: [10.15587/2519-4984.2019.177106](https://doi.org/10.15587/2519-4984.2019.177106).
- [6] C. J. Maker, "Exceptional talent in the 21st century context: Conceptual framework, definition, assessment, and development," *Gift. Educ. Int.*, vol. 37, no. 2, pp. 158–198, May 2021, doi: [10.1177/0261429421995188](https://doi.org/10.1177/0261429421995188).
- [7] E. A. Nurdin and Wahyudin, "The Implementation of Project Based Learning to Improve Student Creativity and Learning Outcomes," *Proc. 7th Math. Sci. Comput. Sci. Educ. Int. Semin. MSCEIS 2019*, pp. 1–5, 2020, doi: [10.4108/cai.12-10-2019.2296340](https://doi.org/10.4108/cai.12-10-2019.2296340).
- [8] A. K. Sukandar and I. W. Astika, "Upaya Meningkatkan Kemampuan Bermain Alat Musik Anak dengan Pembelajaran Berbasis Kreativitas (Improving Children ' s Musical Ability through Creativity Learning)," vol. 2, no. 5, pp. 805–814, 2020.
- [9] M. A. Cardoso, E. M. G. Morgado, and L. Leonido, "Unleashing Creative Synergies: A Mixed-Method Case Study in Music Education Classrooms," *Appl. Sci.*, vol. 13, no. 17, 2023, doi: [10.3390/app13179842](https://doi.org/10.3390/app13179842).
- [10] K. Ulger, "The Effect of Problem-Based Learning on the Creative Thinking and Critical Thinking Disposition of Students in Visual Arts Education," *Interdiscip. J. Probl. Learn.*, vol. 12, no. 1, 2018, doi: [10.7771/1541-5015.1649](https://doi.org/10.7771/1541-5015.1649).
- [11] I. Supena, A. Darmuki, and A. Hariyadi, "The influence of 4C (constructive, critical, creativity, collaborative) learning model on students' learning outcomes," *Int. J. Instr.*, vol. 14, no. 3, pp. 873–892, 2021, doi: [10.29333/iji.2021.14351a](https://doi.org/10.29333/iji.2021.14351a).

- [12] W.-C. Ho, "Perceptions of values and influential sources of creativity, music types, and music activities in school music learning: a study of students in Changsha, China," *Music Educ. Res.*, vol. 24, no. 1, pp. 1–17, Jan. 2022, doi: [10.1080/14613808.2021.2007230](https://doi.org/10.1080/14613808.2021.2007230).
- [13] D. T. K. Ng, E. H. L. Ng, and S. K. W. Chu, "Engaging students in creative music making with musical instrument application in an online flipped classroom," *Educ. Inf. Technol.*, vol. 27, no. 1, pp. 45–64, Jan. 2022, doi: [10.1007/s10639-021-10568-2](https://doi.org/10.1007/s10639-021-10568-2).
- [14] V. Heap and J. Waters, "Data collection methods," in *Mixed Methods in Criminology*, Abingdon, Oxon ; New York, NY : Routledge, 2018.: Routledge, 2019, pp. 141–176. doi: [10.4324/9781315143354-8](https://doi.org/10.4324/9781315143354-8)
- [15] S. T. Fife and J. D. Gossner, "Deductive Qualitative Analysis: Evaluating, Expanding, and Refining Theory," *Int. J. Qual. Methods*, vol. 23, pp. 1–12, Jan. 2024, doi: [10.1177/16094069241244856](https://doi.org/10.1177/16094069241244856).
- [16] C. Viswesvaran and D. S. Ones, "Non-Test Methods and Techniques Used in Employee Selection," in *The SAGE Handbook of Industrial, Work and Organizational Psychology: Personnel Psychology and Employee Performance*, 1 Oliver's Yard, 55 City Road London EC1Y 1SP: SAGE Publications Ltd, 2018, pp. 451–472. doi: [10.4135/9781473914940.n16](https://doi.org/10.4135/9781473914940.n16)
- [17] S.-A. Mirhosseini, "Collecting Data Through Observation," in *Doing Qualitative Research in Language Education*, Cham: Springer International Publishing, 2020, pp. 61–84. doi: [10.1007/978-3-030-56492-6_4](https://doi.org/10.1007/978-3-030-56492-6_4)
- [18] Q. Yao, "Concepts and Reasoning: a Conceptual Review and Analysis of Logical Issues in Empirical Social Science Research," *Integr. Psychol. Behav. Sci.*, vol. 58, no. 2, pp. 502–530, Jun. 2024, doi: [10.1007/s12124-023-09792-x](https://doi.org/10.1007/s12124-023-09792-x).
- [19] I. M. Castillo-Martínez, M. S. Ramírez-Montoya, L. D. Glasserman-Morales, and J. A. Millán-Arellano, "eComplex: validity and reliability of rubric for assessing reasoning for complexity competency," *Qual. Quant.*, vol. 58, no. 2, pp. 1545–1563, Apr. 2024, doi: [10.1007/s11135-023-01697-6](https://doi.org/10.1007/s11135-023-01697-6).
- [20] R. B. D'Agostino, "Tests for the Normal Distribution," in *Goodness-of-Fit Techniques*, Routledge, 2017, pp. 367–420. doi: [10.1201/9780203753064-9](https://doi.org/10.1201/9780203753064-9)
- [21] S. Sovey, K. Osman, and M. E. E. Mohd-Matore, "Exploratory and Confirmatory Factor Analysis for Disposition Levels of Computational Thinking Instrument Among Secondary School Students," *Eur. J. Educ. Res.*, vol. volume-11-, no. volume-11-issue-2-april-2022, pp. 639–652, Apr. 2022, doi: [10.12973/eu-jer.11.2.639](https://doi.org/10.12973/eu-jer.11.2.639).
- [22] K. Okoye and S. Hosseini, "T-test Statistics in R: Independent Samples, Paired Sample, and One Sample T-tests," in *R Programming*, Singapore: Springer Nature Singapore, 2024, pp. 159–186. doi: [10.1007/978-981-97-3385-9_8](https://doi.org/10.1007/978-981-97-3385-9_8)
- [23] J. Cohen, *Statistical Power Analysis for the Behavioral Sciences*. Routledge, 2013. doi: [10.4324/9780203771587](https://doi.org/10.4324/9780203771587)
- [24] B. Kurniawan, S. M. Towaf, Sukamto, A. Purnomo, and Idris, "Outdoor learning based on natural laboratory as social studies learning resources for strengthening student's insights and characters," in *Community Empowerment through Research, Innovation and Open Access*, London: Routledge, 2021, pp. 145–150. doi: [10.1201/9781003189206-27](https://doi.org/10.1201/9781003189206-27)
- [25] N. Suryani, "VCT (Value Clarification Technique) learning model application to improve historical value understanding," *Hist. J. Pendidik dan Peneliti Sej.*, vol. 11, no. 2, p. 198, Aug. 2018, doi: [10.17509/historia.v11i2.12382](https://doi.org/10.17509/historia.v11i2.12382).
- [26] S. Hallam, "Music Learning," in *International Encyclopedia of Education*, Elsevier, 2010, pp. 407–412. doi: [10.1016/B978-0-08-044894-7.00520-0](https://doi.org/10.1016/B978-0-08-044894-7.00520-0)
- [27] S. Rimkutė-Jankuvienė, "Development of Musical Creativity of Higher Class Pupils Using Musical Computer Technologies (MCT)," *Soc. Technol.*, vol. 3, no. 2, pp. 303–315, 2013, doi: [10.13165/st-13-3-2-05](https://doi.org/10.13165/st-13-3-2-05)