

The Development of Character Assessment Instrument in Music Learning to Elementary School Student

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Abstract. Teachers have not done a character assessment on Music learning in elementary schools because there are no available character assessment instruments, as well as the inability of teachers to develop independently. Therefore, the character assessment instruments developments were done, especially on learning music in elementary students. This is a research and development. The development model modifies the Four D model which includes: (1) define, (2) design, (3) development and (4) dissemination. The character assessment instrument shall be tested for the validity of the content qualitatively with expert validation. The construct validity test was also conducted quantitatively using the Exploratory Factor Analysis (EFA) approach with the instrument test to 150 students, and the reliability tested based on construct reliability and the practical test of 20 teachers as practitioners. Expert validation results show the instrument valuation of 4.72 with good criteria. The observation instrument construct validity test yielded 22 items and the questionnaire instrument yielded 20 items. Observation instruments and character assessment questionnaires have good construct validity and reliability where the value of observation point correlation to factor exceeds cut off point i.e. 0.45. The value of reliability coefficient through construct reliability has also exceeded the set limit of 0.70 with the practicality level of instrument 44.1 in the practical category. Based on the result, a valid, reliable, and practical character assessment instrument was produced which is packaged into character assessment instrument in music learning guide book for teacher.

Keywords: Instrument, Character, music learning, Elementary School

1 Introduction

Music learning process in elementary school aims to make and develop student's character. In the music learning process, the teacher can give moral and cultural value through songs that have provided by the teacher. The existence of music learning in the elementary school allows the teacher to develop student's behavior, attitude, and character since early stage (Mulyono, 2012). Furthermore, an aesthetic sense that trained through music learning is expected to build and develop student's personality to a better way (Wicaksono, 2009).

Music learning in the elementary school is an important process to tell and remind the student about Indonesia's traditional songs wealth. Furthermore, Indonesia's traditional songs reflect people's character who lived in the origin of traditional song (Suharto et al., 2017; Alfianto et al., 2014). Indonesia's traditional songs have deep moral value and can be learned

through the learning process (Indrawan et al., 2016). Some Indonesia's traditional songs also have spiritual significance as thanks to God (Wijayanto et al., 2015; Septiana et al., 2016).

Based on interview and observation in the music learning process, we found that the aim of music learning was not delivered well to the student. We saw some students were not paying attention to the material that given by their teacher. Students felt bored because a lot of music learning process was delivered by theoretical and directly practice with a musical instrument, not playing songs directly (Kusumadewi et al., 2011).

Character education in schools aims to develop the potential at the same time to appreciate the values of characters owned by students to become intelligent humans as well as noble morals (Pujiastuti, 2012). Character education implement a habit of good things so that learners become aware of what is right and wrong, able to determine good value and regularly perform every day (Ridlo, Saiful.,&Irsadi, Andin 2012). Character education is integrated with classroom learning, but many teachers assume that character education is less important (Akbar, 2012). Because of these assumptions, elementary schools rarely performed character assessment that are integrated with learning activities, especially in music learning which is considered to emphasize merely on affective and psikomotor (Milson, A. J., &Mehlig, 2012).

The problems faced by teachers in schools when implementing character education in learning include: (1) Teachers assume that Music learning covers the cognitive aspects only; (2) Teachers have difficulty in assessing the character displayed by students during the Music learning learning process in classroom; (3) Teachers do not have the right instruments for character assessment, especially in Music learning. Based on these conditions so the valid, reliable and practical instrument for character assessment in music learning is developed.

All the learning content in the classroom can be integrated with character education let alone the learning of Music which contains many goodness values contained in shaping the character of the students, such as the value of independence, discipline, honesty and responsibility (Sunyoto, 2013).

Human character is formed from the attitude shown daily so assessing the character means assessing students' attitudes during classroom learning (Revell, 2007). Character assessment can be done using the observation instrument (observation) and student self-assessment (questionnaire) as confirmation for the teacher (Kemendiknas, 2015). The most appropriate character assessment implemented by classroom teachers and integrated in learning, especially on Music learning that facilitate students to learn by doing themselves so that students are active during learning (Setiani, 2011).

Based on the description, then the research problem are: (1) How characteristic of character assessment instrument on learning of Music of grade IV in Elementary School developed?; (2) Are the character assessment instruments in the fourth grade of Music learning in elementary schools developed valid content or constructive and reliable?; (3) What is the character assessment instrument of Music learning in Elementary School grade IV that is developed practically for the teacher?

Novelty this research is developing Standardized instrumen to measure caracter in music learning to elementary school student. The developed character assessment instrument includes 7 character value variables corresponding to the content of the characters on the learning of Music and 2013 curriculum. These character values include honest; discipline; hard work; think logically, critically, creatively; independent; curiosity; and responsibilities.

2 Research Method

This research is a development research with the aim to produce a non-test instrument that is a character assessment instrument on music learning in grade IV of elementary school which is packed in the form of practical guidebook for teacher. This is a research and development that refer to 4-D model which include: (1) defining; (2) design; (3) development; And (4) dissemination(Thiagarajan in Asyhari et al, 2016). In this study, the stage is done until the stage of development.

Define is done by literary study to know the conceptual and operational definitions of the various character variables to be measured. Design is a planning stage that determines the time, location, and research sample. Research is conducted in Sekaran elementary schools District Gunungpati grade IV with research subjects 150 students. The product development trial is done through 3 stages: expert test, individual test and field test. Expert tests were conducted on 5 experts in the instrument and material development, children character, language, and grade 4 teacher of elementary school.

Data retrieval in this development research using Non-Test techniques that include: (1) Content validity test by Expert using content validation assessment questionnaire; (2) construct validity and instrument reliability test using developed character assessment instrument, that is observation sheet and self-assessment (questionnaire) and; (3) practicality test using questionnaire of practicability to 20 teachers (5 practitioners, and 15 perception assessor) because practicality can be assessed based on experience of usage and perception (Gerson, 2011).

There are two kinds of data obtained from product trial, that is Qualitative and quantitative data. Qualitative data is in the form of inputs from experts, both obtained orally/ interviews and filling out questionnaires. Quantitative data is in the form of scores on observation and questionnaire which then analyzed using factor analysis to know the construct and reliability validity.

3 Results and Discussion

Character assessment instrument characteristic on Music learning for Elementary school grade IV.

Product developed in this research is non-test instrument that is character assessment instrument on music learning consist of observation instrument for teacher and instrument Questionnaire for students. The preparation of the instrument grid refers to the guidelines for character assessment of the National Education Ministry, character education, as well as from the 2013 curriculum content. After the grid is made the next step is the preparation of the statement items on the observation instrument and the questionnaire instrument in accordance with the indicators developed. The initial design is shown in table 1.

Table 1. Music learning character assessment instrument design

No.	Character	Observation	Questionare
1	Honest	6	7
2	Discipline	7	6
3	Hard work	7	7

4	Think Logic, Logic, Critical and Creative	6	6
5	Independent	7	6
6	Curiosity	7	6
7	Responsible	5	7
	Total	45	45

The developed instrument contains 7-character values, each represented by valid and reliable test items. Instruments consist of grids, observation instruments and questionnaires, as well as scoring editors. The scoring technique of both the observation sheet and the self-assessment sheet (questionnaire) is by using a Likert scale of 1 - 5. The score 1 is given when the character shown by the student is totally invisible, and the score 5 is given when the student character is seen and in accordance with the observation point (Poerwanti, 2008). The number of scores on observations and questionnaires is then categorized according to the following table. Through that results, teacher able to know the student character category. Teacher can give feedback as well as integrated character education emphasize in the study in order to make the student get used to have a good behavior so they will show good character.

Developed Validity and Reliability Instrument

Music learning character instrument plans were analyzed by the expert to know the content validity. Expert validation results indicate that the instrument of character assessment on Music learning for Elementary school grade IV meets the criteria of "very good". This criterion based on result of score analysis from 5 experts reached total score 23,6 with average 4,72 so instrument can be used for field trial (Azwar, 2014).

Then the instrument is tested to 30 students (small scale) to know the validity of the item and the reliability of the instrument. Item valid if $r_{table} \geq 0.361$ (subject 30 students (Torang, 2014)). Small test on the observation instrument obtained 24 items of valid observation instrument ($r_{count} \geq 0.361$) and can be done further test. While the questionnaire instrument obtained valid results 23 ($r_{count} \geq 0.361$).

Test instrument reliability using Alpha Cronbach reliability test. Reliability test was performed on valid item result from validity test on limited test ie 24 items of observation instrument and 23 items of questioner instrument. Based on Alpha Cronbach reliability measurements are using SPSS software with the results in the following table.

Table 3. Instrument Reliability in Low Scale

Instrument	Cronbach's Alpha	N of Items
Observation	0.905	24
Questioner	0.907	23

From the table it is known that 90.5% observed variance score is attributed to the true score variance of the individual group with a correlation between the observed score and the true score equal to 0.905 in the observation instrument. In the questionnaire instrument it was found that 90.7% observed variance score was attributed to the true score variance of individual groups (Zuliani, 2017). The reliability results of both instruments is greater than 0.8 so that the reliability in both categories and can be analyzed further (Benninga, et al 2003). The reliability value has exceeded 0.7 so that the instrument can be embedded for the

assessment sheet in the classroom learning (Wells, C.S., &Wollack, 2003). Instruments can be used or tested further on a broad class sample with a subject of 150 students. This test can be used to know the validity of the constructions by factor analysis. This test aims to identify the relationship between variables by performing a correlation test. This analysis is to reduce data by correlating through the process of constructing a set of new variables called factors (Kass, R. A. & Tinsley, H. E. A., 2009). In this study, the factor is the value of the character developed into the statement items on the instrument. Test of construct validity is done on observation instrument and questionnaire with result as follows.

Instrument of observation, In the KMO test and Bartlett's Observation Instrument shows a KMO value of 0.765 so it can be continued factor analysis (KMO value > 0.5). The value of KMO also shows that the assessment of the character of elementary school music learning through observation instrument is indeed determined by 24 points of observation (Zuliani, 2017). Then on the anti image is known that 24 items of observation each worth > 0.5 so it is eligible for further analysis with the process of extraction and rotated to find out how many factors formed from 24 items of observation. At spss output indicates that 7 factors are formed with eigenvalues above the number 1. The value of the construct particle value must be 0.45 in accordance with the number of research subjects of 150 students. At this stage, 2 items are wasted because they have a loading factor below 0.45 (items X6.1 and X7.5) so that the remaining 22 items are observed in the observation instrument. Then on the rotation process known which grains will enter the 7 factors formed according to table 4.

Table 4. Observation Instrument Point Rotation Result

Fakto r 1	Fakt or 2	Fakt or 3	Fakt or 4	Fakt or 5	Fakt or 6	Fakt or 7
X1.2	X2.1	X3.1	X3.7	X5.1	X6.2	X7.2
X1.3	X2.2	X3.2	X4.1	X5.3	X6.7	X7.3
X1.4	X2.5	X3.6	X4.2	X5.7		
X1.6	X4.4		X4.5			

From table 4 it is known that after the rotation process, there are 2 grains that jump ie X4.4 grains jump from factor 4 to get into factor 2, and point 3.7 which originally in factor 3 jumps to factor 4. This shows that actually factor 1 is formed Over 4 grains, factor 2 formed over 4 grains, factor 3 formed over 3 grains, 4 formed over 4 grains, 5 formed over 3 grains, 6 formed over 2 grains, and a factor 7 formed over 2 grains. So that the result of EFA test is the observation instrument of character assessment on learning music learning in elementary school class IV consist of 22 items.

In the KMO test and Bartlett's Instrument questionnaire shows a KMO value of 0.738 so it can be continued factor analysis (KMO value > 0.5 (Ghozali, 2011)). The value of KMO also shows that the assessment of the character of elementary music learning through questionnaire instrument is indeed determined by 23 points of observation (Zuliani, 2017). Then on the anti image is known that there is 1 item (X7.3) which is <0.5, so the grains are removed so that there are 22 grains of questionnaires that are eligible for further analysis with the extraction and rotated process. In spss output indicates that 7 factors are formed with eigenvalues above the number 1. The validity of the questionnaire construct must reach the value of the loading factor of 0.45 in accordance with the number of research subjects of 150 students. At this stage, there are 2 items wasted because it has a loading factor below 0.45

(items X1.7 and X6.5) so that the remaining 20 items in the questionnaire instrument. Then in the rotation process known which grains will enter the 7 factors formed according to table 5.

Table 5. Questioner Instrument Point Rotation Result

Faktor 1	Faktor 2	Faktor 3	Faktor 4	Faktor 5	Faktor 6	Faktor 7
X1.2	X2.1	X3.1	X3.6	X5.1	X6.3	X3.4
X1.4	X2.4	X3.2	X4.1	X5.2	X6.4	X7.1
X1.6		X4.5	X4.2	X5.6		X7.6
				X 6.1		

From table 5 it is known that after the rotation process, there are 4 grains that jump ie X4.5 grains jump from factor 4 to get into factor 3, point 3.7 originally in factor 3 jumps to factor 4, point X6.1 originally in factor 6 Jump to factor 5, and item X3.4 originally at factor 3 jumps to factor 7. This indicates that actually factor 1 is formed on 3 grains, factor 2 is formed on 2 grains, factor 3 is formed on 3 grains, factor 4 is formed on 3 grains, 5 is formed on 4 grains, factor 6 is formed by 2 grains, and factor 7 Formed on 3 grains. So that the result of EFA test is a questionnaire instrument of character assessment on learning music learning in elementary school class IV consisting of 20 items.

Reliability test was conducted on 22 items of observation instrument and 20 items of questionnaire instrument. The reliability test is shown in table 6.

Table 6. Observation and questioner instrument reliability test result

Instrument	Construct Reliability	Total Item
Observasi	0.965	22
Angket	0.973	20

The results of the calculations shown in Table 6 show that 96.5% of the observational instruments and 97.3% of the questionnaire instruments are reliable in measuring the students character in the music learning in elementary school grade IV. The value also shows that the reliability of the observation instrument and questionnaire has been fulfilled which is more than 0.7 so that the observation instrument and the questionnaire as the student character assessment on the learning of Music learning can be used by teachers and students (Wells, C.S., &Wollack, 2003).

Table 7. Music Learning character assessment instrument design

No.	Character	Observation	Questionare
1	Honest	4	3
2	Discipline	4	2
3	Hard work	3	3
4	Think Logic, Logic, Critical and Creative	4	3
5	Independent	3	4
6	Curiosity	2	2
7	Responsible	2	3
	Total	22	20

The Practicality of Character Assessment Instrument on Music Learning for Elementary School Grade IV

Analysis of the practicality of the instrument is done by spreading the practical questionnaire to 20 teachers. The practicality of the instrument is done to see the quality and practicality of the instruments developed so that the product is beneficial to the teacher. This is because the development of assessment instruments is an effort to develop assessment instruments based on needs analysis into new products by testing their effectiveness first, thereby producing products that work and benefit the community (Wijayanti, et al 2015).

Practicality Test obtained teacher response result to observation instrument and questionnaire of math learning character of Elementary school have score 44,1. The results are consulted with the following table.

Table 8. Instrument Practicality Criteria

Value	Score Range	Categori
A	$X > 57,6$	Very Practical
B	$43,2 < X \leq 57,6$	Practical
C	$28,8 < X \leq 43,2$	Practical Enough
D	$14,4 < X \leq 28,8$	Less Practical
E	$X \leq 14,4$	Not Practical

From the table it is known that the instruments are included in the "practical" category (Madeamin in Mardhiyanti, D., Putri, R.I.I., & Nila Kesumawati, N 2011). From the test results of practicality is known that the observation instrument and questionnaire character assessment of VI grade students is practically used by teachers, both in whole and every aspect.

4 Conclusions

Conclusions from the research and development of character assessment instruments in grade 4 students in elementary schools are: (1) The assessment instrument consisted of an observation instrument measuring 7 character variables with 22 indicators and a questionnaire instrument measuring 7 character variables with 20 indicators; (2) Character assessment instrument on music learning in elementary school proved to have a good level of construct validity and reliability. The proof is done by power analysis which shows the value of grain correlation on factor beyond the cutoff point i.e. 0.45. The value of reliability coefficient through construct reliability has also exceeded the set limit of 0.70; (3) the practicality level of character appraisal instrument on elementary music learning learning goes into "Practical" category. This is evident from the questionnaire of practitioners (teachers) of 20 people, and analyzed showed a score of 44.1 categorize the practical instrument.

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