



## Development Of Music Aptitude Test Instruments For The Student Of Music Education Departement

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### Abstract

It is necessary to develop a music aptitude test instrument as students, basic music knowledge is not optimally developed yet. Due to the inavailability of such instruments in the music education department, this study sained to design and develop music aptitude test. The testsin used to measure students skills in understanding basic musical skills. This study used experimental quantitative approach. The findings resulted in 40 test items covering 8 teaching goals and 35 indicators aligned to the Semester Learning Plan (RPS) of solfeggio class. Further, the future research will focus on music aptitude test in audio form for the students.

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## INTRODUCING

Department of Drama, Dance, and Music (Sendratasik) FBS UNNES is an international conservation program aimed at producing creative and competent graduates in the field of drama, dance, and music in line with society demand. Specifically, it is well understood that music is among the components of culture (Rohendi 2014). To achieve its vision, the Department of Drama, Dance, and Music sets its mission, i.e., develop a conducive academic culture for the lecturers as to improve their professionalism as functional staff in higher education.

There have been complex problems in the department of music. Many students excel in playing musical instruments, yet there is no guarantee that they master a basic music sense. Meanwhile, the students are required to master such basic music skills as they act as the foundation in developing musicality. It is the basic knowledge for those involved in the field of music. It is therefore important to master the skills as everyone in the music industry such as music practitioners, teachers, and other roles are expected to work professionally. The knowledge on basic music theories are covered in Solfeggio materials covering the teaching and learning process of reading, writing, listening to basic and numbered musical notation (Fitriyana 2019). A research finding (Putra 2015) revealed that the implementation of Solfeggio method in teaching music is effective and efficient in attracting those working in the field of music. Therefore, the researchers chose solfeggio as the method to teach basic music skills.

The short two-semester period of basic music class (Solfeggio) has caused students to have low awareness on the importance of independent learning. Further, lecturers have a significant role in affecting students' success in their learning. Therefore, it is

necessary for the lecturers to understand students' characteristics and find relevant solutions to improve the teaching and learning quality. Among the biggest challenges in teaching is understanding students and the various methods of learning in the classroom (Sukaisih and Muhali 2014). To overcome the challenges, the lecturers might extend the class meetings or add the semester credits. However, both are impossible to do as the curriculum has been arranged. It is clear that students are unable to optimally master basic music skills. In the long run, it may cause a bigger problem in regards to the students' music mastery. Despite having a degree in arts, they might not have a strong sense of musicality and are unable to professionally work in the music field. There is the risk that they will be looked down upon and it will eventually damage the reputation of the music department. Here is the SWOT analysis to solve the aforementioned problems.

	STRENGTHS (S)	WEAKNESSES (W)
<b>Internal Factors</b>	reputable institution	low quality human capital
<b>External Factors</b>		
<b>OPPORTUNITIES (O)</b>	Strategy (SO) plenty job vacancies music aptitude test	Strategy (WO) motivating the students , informing the opportunities to be professional workers
<b>THREATS (T)</b>	Strategy (ST) poor evaluation from stakeholders teaching quality improvement	Strategy (WT) reward provision

Table SWOT Analysis

In conclusion, based on the SWOT analysis, the Strategy (SO) was used as the base of this research. The

researchers aimed to develop music aptitude test instruments for the students.

## METHOD

This research used experimental quantitative approach. Experimental method is used to find specific treatment in regards to teaching problems in the classroom (Daniel and Harland 2017). The goal of this research as to design and develop new music aptitude test. First, the researchers developed the indicators as the guidelines in developing the test instruments. The indicators covered reading and listening to music. The sub-indicators were reading and listening to rhythmic, interval, melodic, and harmonic aspect. Next, the researchers developed test instruments aligned to the indicators and arranged them randomly based on the levels of difficulty. Several question items were based on musical notations and required the use of a music software (Sibelius) to ease the test item development.

## RESULT AND DISCUSSION

Development of test instrument not only covers the material and literacy aspect but also the construction aspect. It means that the order of the test instruments has to be in line with the materials specified. In other words, a good construction will result in good test instruments (Adawiyah and Wisudawati 2017).

The materials on music aptitude test include rhythmic, interval, melodic, and harmonic material. Rhythmic is defined as the basic movement to develop physiological range and as a combination between mobility or agility and understanding on long and short sounds (Nasution 2016). In total, there are eight test items on rhythmic materials. To identify

rhythmic, there needs to be sufficient understanding on rhythm. The second materials are about interval related to the distance between a note and the other. Each interval has quality and quantity among seven notes (Mudjilah 2012). The test items require students to predict the interval of two tones from interval 1 to 10. It consists of 7 test items. Specifically, the questions require students to identify two played tones and two other tones depending on the determined interval. To answer the questions, the students need to be able to sense the distance of one to two octave notes appropriately. Next, melodic is a form of sound art in the form of songs or musical compositions (Putra 2015). There are 15 question items on melodic material. Students are asked to guess the melodic of a specific melody bar, guess a tone in a melody bar, determine the music scores of a heard melodic with a specific root note. To correctly answer the questions, the students need optimal mastery of musical sense. The last questions are on harmonic materials. Harmonic is defined as a combination of tones consisting of chord elements. Further, chords are combinations of three or more notes producing a beautiful sound. For instance, the C chord consists of do, mi, sol or the notes c, e, and g (Susilo Pradoko dan Wien Pudji Priyanto 2557). The questions on harmonic are about notes played together and there are 5 questions in total. The other questions are about predicting major and minor chords (natural, melodic, harmonic, and Zigana). Students need to have strong hearing sensitivity, strong musical sense, and strong intensity of listening to chords.

The test instrument development is started by determining the goals and indicators. It is important to formulate teaching goals to reveal the objectives to achieve and the measurement of

teaching achievement (Aisjah and Tajunnisa 2018). Regarding the developed test instruments, there are 8 teaching goals and 32 indicators. After that, the test items are developed in which one indicator may have more than one question. A sample on the elaboration of two teaching objectives developed into 13 indicators put on separate file.

## CONCLUSION

The findings resulted in 40 music aptitude test items covering 8 teaching goals and 35 indicators. The materials included rhythmic, interval, melodic, and harmonic reading and listening. The future research is aimed to design the audio form of music aptitude test instruments for the 7<sup>th</sup> semester students before they join PLP program. In brief, in the future, the music aptitude test instrument is designed to act like TOEFL-test, yet it is specifically design to measure musical knowledge.

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