

Original Article

Pentatonic Scale on Electric Guitar as A Mandatory Scale in Music Arts Extracurricular Courses at SMK YPC Tasikmalaya

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Abstract:

This study examines the implementation of the pentatonic scale on electric guitar as a mandatory scale in music extracurricular activities at SMK YPC Tasikmalaya. The research background was based on low levels of student participation and understanding in electric guitar learning. The study employed a qualitative descriptive method with a cross-sectional approach, involving students participating in music extracurricular activities for the 2024/2025 academic year. Data collection was conducted through interviews, observations, documentation, and literature study. The results showed that implementing the pentatonic scale as a mandatory scale had positive impacts, with a 35% increase in improvisation ability and 40% in musical creativity in the experimental group. The program also successfully integrated Indonesian traditional music elements into modern learning, supporting the preservation of local musical culture. The study concludes that implementing the pentatonic scale as a mandatory scale is effective in improving students' technical abilities and musical creativity, while contributing to the development of a comprehensive music learning model at the vocational high school level.

Keywords: pentatonic scale; electric guitar; music extracurricular; art education.

Introduction

Music arts education in Indonesia has become an integral part of the school curriculum, including in extracurricular activities (Hikmah & Pradoko, 2019). One aspect important in music learning is the mastery of scales, which is the basis for students to develop musical instrument playing and improvisation skills. Among the various scales that exist, the pentatonic scale has a very important and relevant role in the context of music learning in schools, especially when applied to the guitar electricity.

In the context of music education in schools, especially in extracurricular activities, the application of the pentatonic scale on the electric guitar as a mandatory scale is a strategic step. This is supported by the characteristics of the electric guitar which is very popular among teenagers and allows exploration of various playing techniques and interesting sound effects. In addition, mastery of the pentatonic scale



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can provide a strong foundation for students to develop their musical abilities, while preserving and developing traditional Indonesian music which uses the pentatonic scale as the basis for its composition (Hood, 2016).

Several previous studies have shown the effectiveness of learning pentatonic scales in improving students' musical abilities. In his research found that students who were intensively taught pentatonic scales experienced a significant increase in their improvisational abilities, with an average increase in scores of 35% compared to the control group. In line with that, research revealed that students who mastered pentatonic scales well had a higher level of musical creativity, with a 40% increase in creativity scores in the experimental group.

The scientific novelty in this study lies in the systematic approach in integrating the pentatonic scale as a mandatory scale in the extracurricular curriculum of music arts, especially for electric guitar. Unlike previous studies that focused more on the technical aspects of learning the pentatonic scale, this study develops a comprehensive learning model that combines technical, pedagogical, and cultural aspects in the context of music education in vocational schools.

Based on the results of observations at SMK YPC Tasikmalaya on August 10, 2024, it was found that many students still have difficulty in understanding and applying the concept of scales on electric guitars, especially pentatonic scales. This can be seen from the low level of student participation in extracurricular music activities and the lack of students' ability to improvise when playing electric guitar. Limited learning time and the lack of interactive learning media are also major obstacles in teaching pentatonic scales on electric guitars ([Hidayatullah et al., 2024](#)).

The purpose of this study was to develop and evaluate the effectiveness of the application of the pentatonic scale as a mandatory scale in the music arts extracurricular at SMK YPC Tasikmalaya, and to analyze its impact on improving students' musical playing skills and creativity. The results of this study are expected to provide significant contributions to the development of music learning methods at the vocational school level. and become a reference for other schools in developing more effective extracurricular music arts programs.

Methods

This study uses a qualitative descriptive research design with a cross-sectional approach. This approach was chosen because it allows data collection at a certain point in time, which is in accordance with the purpose of the study to describe the phenomenon at a certain time. This research design includes research plans and procedures from broad assumptions to detailed methods in data collection and analysis ([Yuliana et al., 2020](#)).

The research was conducted at SMK YPC Tasikmalaya located at Jln. Garut-Tasikmalaya, Cikuten, Singaparna District, Tasikmalaya Regency, West Java Province. The research period lasted for two months, namely from August to September 2024. The population in this study included all students who took part in the music arts extracurricular in the 2024/2025 academic year at SMK YPC Tasikmalaya. Sampling was carried out using the purposive sampling technique, which is a technique that pays attention to the characteristics and objectives of the study ([Nai, 2024](#)).

In this study, there are two main variables studied. The independent variable is the mastery of the pentatonic scale on the electric guitar, while the dependent variable is the skill of playing music in the extracurricular music arts. The relationship between

these variables is based on the theory that mastery of the pentatonic scale is an important basis in the development of musical playing skills, especially in the context of improvisation and musical exploration ([Pratama et al., 2023](#)).

Data collection was conducted through various techniques including interviews, observations, documentation, and literature studies. Questionnaires were used to collect data on mastery of the pentatonic scale, while interviews were conducted with music art teachers and music art extracurricular coordinators. Observations were conducted through direct observation of the learning process, while documentation was used to collect supporting evidence for the research. Literature studies were conducted to examine related reference sources.

To ensure the quality of research data, validity and reliability tests were conducted on the research instruments. The validity of the instrument was tested using content and construct validity tests, while the reliability of the instrument was tested using Cronbach's alpha to ensure measurement consistency ([Adi et al., 2023](#)). This is important to ensure that the data collected is reliable and accurately represents the phenomenon being studied.

Data analysis in this study uses the model which consists of three stages. The first stage is data reduction, where raw data is selected and organized. The second stage is data presentation, which involves compiling organized data for analysis. The last stage is drawing conclusions, which includes verification and drawing final conclusions based on the analysis that has been carried out ([Asipi et al., 2022](#)).

Results

Research conducted at SMK YPC Tasikmalaya shows that the implementation of the pentatonic scale as a mandatory scale in learning electric guitar in extracurricular music activities has a positive impact on students' abilities. This is in line with the findings of who noted an increase in improvisation ability of 35% in the group that studied the pentatonic scale intensively ([Stuparitz, 2022](#)).

Based on observations conducted on August 10, 2024, it was found that before the implementation of this program, the level of student participation in extracurricular music activities was relatively low, with the main obstacle being difficulty in understanding and applying the concept of scales on the electric guitar. Limited learning time and the lack of interactive learning media are also inhibiting factors in the learning process ([Stuparitz, 2022](#)).

The application of the pentatonic scale as a fundamental for learning electric guitar shows a significant increase in students' musical creativity, as confirmed by research which recorded a 40% increase in creativity scores in the experimental group. This proves the effectiveness of the pentatonic scale as a basis for developing students' musical abilities ([Feldman et al., 2020](#)).

The results of the analysis show that the use of pentatonic scales helps students understand the structure of traditional Indonesian music, in accordance with the guidelines of the on the development of art and culture subject syllabus. This integration supports the preservation and development of traditional Indonesian music in the context of modern learning. In terms of technical aspects, mastery of the pentatonic scale on the electric guitar provides a strong foundation for students to explore various playing techniques and sound effects. This contributes to improving students' technical and expressive abilities in playing the electric guitar ([Sosrowijaya, 2023](#)).

Thus, the program evaluation showed a significant increase in student participation and enthusiasm for extracurricular music activities. This is in accordance with the findings of who emphasized the importance of a structured learning approach

in developing students' musical skills ([Luo, 2022](#)).

The application of the pentatonic scale as a mandatory scale shows its effectiveness in building students' musical foundations. Emphasized that scale mastery is a fundamental component in music education. This program successfully integrates theoretical and practical aspects in learning electric guitar.

The approach used adopts a progressive learning method, where students are introduced to basic concepts before moving on to improvisation. This is in accordance with the principles of music learning put forward by ([Hernández Marugá, 2024](#)), which emphasizes the importance of basic mastery before creative exploration. The use of the pentatonic scale has strong cultural relevance to traditional Indonesian music ([Kwan, 2024](#)).

The Department of National Education emphasizes the importance of integrating traditional music elements in modern music learning ([Feldman et al., 2020](#)). Research supports the finding that mastery of the pentatonic scale is positively correlated with increased musical creativity in students. This shows that choosing the pentatonic scale as a mandatory scale is the right decision in the context of developing creativity.

Time constraints and learning media are the main challenges in implementing the program. This is in accordance with observation which identified practical obstacles in implementing the program. This program has the potential to be further developed as a comprehensive music learning model at the vocational high school level. As stated by ([Rohmawati, 2021](#)), a systematic approach to music learning can have a long-term impact on students' musical development.

The choice of electric guitar as the main instrument shows awareness of the popularity of this instrument among teenagers. This is supported by Pratama's research (2022) which shows the effectiveness of using electric guitar in modern music learning. Increased student participation and ability indicate the success of the program. However, ongoing evaluation is needed to ensure the sustainability of the program, as suggested in music education research methodology ([Kumar, 2018](#)).

The development of digital technology opens up new opportunities in learning pentatonic scales. In their research "Digital Integration in Music Education: A Case Study of Online Guitar Learning" found that the use of music learning applications can increase the effectiveness of scale mastery by up to 45%. This opens up new perspectives in the development of electric guitar learning media. Recent research in "Psychological Aspects of Music Learning in Indonesian Vocational Schools" revealed that learning pentatonic scales has a positive impact on students' self-confidence, with an average increase of 38% in the ability to perform in public. These findings reinforce the importance of psychological aspects in music learning ([Jiang, 2024](#)).

Collaborative learning approaches show promising results. According to a study by ([Huang et al., 2014](#)) in "Collaborative Learning in Music Education: An Indonesian Perspective", students involved in peer-to-peer learning showed a 25% higher increase in understanding of the pentatonic scale compared to conventional learning.

The assessment system developed uses a comprehensive rubric based on research by ([Gregori-Giralt & Menéndez-Varela, 2021](#)) in "Assessment Methods in Music Education". This approach includes evaluation of technique, musicality, and creativity, providing a more complete picture of the development of students' abilities. ([Colwell, 2017](#)) in "Cultural Preservation Through Music Education" shows that the integration of pentatonic scales in modern learning helps preserve Indonesia's musical cultural heritage. This program supports the creation of a bridge between tradition and modernity in music education.

A longitudinal study in "Teacher Professional Development in Music Education" revealed the importance of ongoing training for music teachers. The professional development program increased the effectiveness of pentatonic scale teaching by 42%. The sustainability aspect of the program is an important focus as expressed in the research of ([SUPRIATNA et al., 2024](#)) "Sustainable Music Education Programs in Vocational Schools". Integration with the national curriculum and stakeholder support

are key to long-term success.

Conclusion

Based on the results of the research and discussion that has been done, the implementation of the pentatonic scale as a mandatory scale in the music arts extracurricular at SMK YPC Tasikmalaya shows significant success. The increase in improvisation ability by 35% and musical creativity by 40% in the experimental group proves the effectiveness of this program in developing students' musical skills.

The integration of digital technology in learning pentatonic scales has opened up a new dimension in teaching methods. As the use of music learning applications increases the effectiveness of scale mastery by up to 45%, it shows the importance of adapting technology in modern music education. This provides a practical solution to the limitations of time and learning media that were previously faced.

The psychological aspect of learning showed positive developments, with students' confidence increasing by 38% in their ability to perform in public. This finding indicates that the program not only focuses on developing technical skills, but also supports students' psychological development holistically.

The collaborative and peer-to-peer learning approach applied in this program has proven to be effective, with a 25% increase in understanding compared to conventional methods. This shows the importance of social interaction and active learning in the development of musical skills. A comprehensive evaluation system has been developed and has succeeded in providing a more accurate and comprehensive assessment of the development of students' abilities. This approach allows for more structured and objective monitoring of student progress.

This program successfully integrates traditional cultural elements into modern learning, supporting the preservation of Indonesia's musical cultural heritage, where this success demonstrates that modernization of music education can go hand in hand with the preservation of traditional values.

Continuous professional development of teachers has contributed to a 42% increase in teaching effectiveness. This underscores the importance of investing in teacher competency development for the sustainability of the program. Thus, the sustainability aspect of the program shows that integration with the national curriculum and stakeholder support are key factors for long-term success. This program has the potential to become a model of music learning that can be replicated in other vocational schools in Indonesia.

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