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The Impact of Keyboard Media on Students' Ability to Read and Apply Music Notation

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Abstract: The teaching of staff notation in music is often perceived as abstract and confusing by students, especially when delivered solely through theoretical methods without sufficient practical support. This study aims to describe the process and outcomes of learning to read staff notation using the keyboard as a practical medium among 12th-grade students (Class XII-1.2) at SMA Negeri 11 Surabaya. This research employs a descriptive qualitative method, with data collected through observation, documentation, and individual performance assessments. The study involved 30 students as research subjects.

The findings indicate that the use of the keyboard as a music learning tool significantly enhances students' understanding of staff notation. Students were better able to associate musical symbols with concrete pitches through direct practice. Furthermore, the learning process became more engaging and active, contributing to increased learning motivation (affective domain), improved accuracy in reading and playing notation (cognitive and psychomotor domains), and greater confidence in musical performance. The keyboard also facilitated individual participation, both in independent practice and performance assessments. In conclusion, media-based learning strategies such as the keyboard effectively bridge the gap between theory and practice in music education, particularly in mastering staff notation. This strategy offers an innovative and meaningful alternative in arts and culture education.

Keywords: *Staff Notation, Keyboard, Music Learning, Practical Media, Student Skills.*

1. INTRODUCTION

Education plays a crucial role in shaping the quality of human resources, as the level of education attained greatly influences an individual's competence and capacity. According to Law No. 20 of 2003, Article 3, the purpose of education in Indonesia is to develop students' potential to become individuals who are faithful, devoted to God Almighty, possess noble character, are physically and mentally healthy, knowledgeable, capable, creative, independent, and responsible citizens who uphold democratic values (Tim Redaksi Pustaka Yustisia, 2013).

The structure of the 2023 high school (SMA/MA) Merdeka Curriculum is divided into several groups: national compulsory subjects that aim to build basic literacy, national insight, and language skills; local compulsory subjects related to regional wisdom; elective subjects tailored to students' interests and majors; technology and engineering subjects that support digital literacy and computational thinking; religious and Pancasila education for moral and character development; and finally, arts, culture, and physical education (PJOK).



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In the subject of Arts and Culture—specifically Music—students are encouraged to express themselves, communicate, and develop their talents and potential. One key material in music education is the mastery of staff notation (*notasi balok*), which functions as a music writing system that enables students to read and perform musical works structurally. As supported by Penttinen (2013), although reading notation is not always a prerequisite, it significantly facilitates musical activities such as practice, performance, composition, and arrangement.

However, in practice, staff notation is often difficult for students to understand when taught only theoretically. The abstract symbols and technical nature of the material tend to make it confusing and unappealing, especially when not supported by sufficient practical media. This challenge was clearly observed during the author's field teaching experience (PLP) at SMA Negeri 11 Surabaya, particularly in class XII 1.2, where most students struggled to understand staff notation. They found the material overly theoretical, complicated, and disengaging, leading to poor abilities in reading and applying notation in music performance.

To address this issue, a practical and hands-on learning approach is required—one that connects theory directly with practice. The use of keyboard instruments serves as an effective solution in this context. Keyboards are user-friendly and provide immediate auditory feedback, allowing students to associate notation symbols with corresponding sounds in real time. This supports cognitive and motor development and aligns with 21st-century learning principles, which, according to Yilmaz et al. (2020), emphasize the integration of technology to enhance critical and creative thinking skills.

Moreover, the interactive nature of keyboard use can foster greater student engagement and motivation, creating a more enjoyable and meaningful learning environment. Therefore, implementing staff notation learning using keyboards presents a practical and innovative strategy to enhance students' understanding of music theory while promoting active and enjoyable learning experiences.

2. METHOD

This research used a descriptive qualitative method to understand the implementation of keyboard-based instruction in teaching staff notation. The study was conducted at SMA Negeri 11 Surabaya, involving 30 students from Class XII 1.2. Data were collected through participatory observation, documentation (photos, student worksheets), and performance assessments. The researcher acted as both instructor and observer during the teaching process.

The implementation took place over four sessions, each lasting 90 minutes. The sessions were designed to gradually build students' understanding and skill in reading staff notation using the keyboard. Data analysis followed Miles and Huberman's interactive model: data reduction, data display, and conclusion drawing. To ensure credibility, data triangulation and prolonged engagement techniques were applied.

3. RESULTS AND DISCUSSION

3.1 Results

Session 1: Introduction to Notation and Keyboard Layout
 Students were introduced to staff notation fundamentals—such as the staff, clefs, note values, and rests—through visual aids and group discussions. They also learned to locate the notes C-G on the keyboard. The session emphasized the connection between the visual symbol (notation) and auditory feedback (sound).

Session 2: Guess-the-Tone Activity
 Students engaged in a group game where they were shown short notated musical excerpts and asked to guess the song and play it on the keyboard. This reinforced symbol recognition and keyboard mapping, while fostering collaborative learning.

Session 3: Skill Consolidation and Song Practice
 Students were grouped by proficiency levels. One group received intensive coaching to strengthen basic reading and playing skills. Another practiced reading and performing the song "Mengheningkan Cipta." The instructor provided real-time feedback on finger positioning, rhythm, and expression.

Session 4: Individual Performance Assessment
 Each student performed the song while being assessed on pitch accuracy, rhythm, musical expression, and confidence. A rubric-based scoring system was applied. Observations revealed three categories of student achievement:

- Advanced: High accuracy and expressive performance (e.g., students E.M., R.A., J.N.).
- Developing: Moderate skills with room for improvement in rhythm and coordination.
- Needs Support: Difficulty linking notation to keyboard and maintaining tempo.

Table 1. Learning Outcome Table Summary

Below is a summarized example of the result (note : actual data anonymized) :

Category	Number of Student	Description
Advance	8	Able to read/play notation fluently and expressively
Developing	15	Understand basics but need more practice
Needs Support	7	Struggled with applying notation into playing

3.2 Discussion

The results demonstrated that keyboard-based instruction can significantly enhance students' ability to interpret and apply musical notation. By engaging multiple learning modalities—visual, auditory, and kinesthetic—the keyboard helped demystify the abstract nature of staff notation.

Student reflections supported the effectiveness of this approach. Learners reported increased enjoyment, confidence, and motivation to practice music independently. Moreover, the integration of a familiar, interactive tool fostered a more inclusive classroom dynamic, especially beneficial for students with limited prior exposure to music theory.

Despite the success, the study encountered several challenges, such as the limited number of available keyboards (2 for 30 students), time constraints, and differing initial skill levels among students. These were partially addressed through group rotations, peer tutoring, and differentiated instruction.

The research supports previous findings by Penttinen (2013) and Gagne (1985) regarding the importance of practical engagement in music education. In this study, students not only learned to read music—they learned to make music. This practical reinforcement built a stronger, more lasting understanding than theory alone could achieve.

4. CONCLUSION

The implementation of keyboard-based instruction significantly improved students' understanding and application of staff notation. The integration of auditory, visual, and kinesthetic learning modalities enhanced engagement, confidence, and skill development. The use of practical media like keyboards can bridge the gap between abstract theory and musical expression.

AUTHOR CONTRIBUTIONS

Shaffatasya Equina Prasetyo designed the instructional framework, led the classroom sessions, gathered and analyzed data, and wrote the article.

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REFERENCE

- Arsyad, A. (2011). *Media pembelajaran*. RajaGrafindo Persada.
- Campbell, P. S., & Scott-Kassner, C. (2006). *Music in childhood: From preschool through the elementary grades*. Belmont, CA: Thomson Schirmer.
- Gagne, R. M. (1985). *The conditions of learning* (4th ed.). Holt, Rinehart and Winston.
- Lincoln, Y. S., & Guba, E. G. (1985). *Naturalistic inquiry*. Sage Publications.
- Miles, M. B., & Huberman, A. M. (1992). *Qualitative data analysis: An expanded sourcebook* (2nd ed.). Sage Publications.
- Penttinen, L. (2013). Reading music notation and its effect on musical performance. *Journal of Music Education Research*.

- Prihatni, Y. (2009). *Panduan pembelajaran musik sekolah*. Departemen Pendidikan Nasional.
- Slameto. (2010). *Belajar dan faktor-faktor yang mempengaruhinya*. Rineka Cipta.
- Sugiyono. (2017). *Metode penelitian kualitatif, kuantitatif, dan R&D*. Alfabeta.
- Swanwick, K. (1999). *Teaching music musically*. Routledge.
- Uno, H. B. (2012). *Model pembelajaran*. Bumi Aksara.
- Yilmaz, R. M., Baydas, O., Goktas, Y., & Karakus, T. (2020). Technology-enhanced learning and student engagement. *Journal of Educational Technology & Society*, 23(4), 19–32.