

# **THE EFFECTIVENESS OF MUSIC INTEGRATION IN LEARNING AND FACILITATION SESSIONS FOR STUDENTS WITH SPECIAL EDUCATIONAL NEEDS: PERSPECTIVES OF SPECIAL EDUCATION TEACHERS**

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## **ABSTRACT**

The element of entertainment such as the use of music should be widely implemented in classrooms especially for Special Education Needs students to help enhance their learning process. This study was conducted to identify the effectiveness of incorporating music in the teaching and facilitating process of Special Education Needs students from the perspective of Special Education teachers. This study is a quantitative descriptive design and uses a questionnaire as an instrument for data collection. Convenience sampling was applied involving 31 respondents from 8 Special Education schools in Tuaran district. The findings were analyzed descriptively using SPSS software. The results indicated a high mean score regarding the effectiveness of music in the teaching and learning process for Special Education Needs students. Overall, this study demonstrates that the integration of music in teaching and learning has the potential to enhance the quality of learning process in classroom for students with special needs. The findings confirm that music can improve the attention, comprehension and engagement of Special Needs Students during learning sessions. Therefore, teachers are encouraged to creatively utilize music as a teaching aid tailored to the individual needs of each student to ensure a more effective and impactful learning outcomes.

**Keywords:** effectiveness of music; special education needs; teacher's perspective, special needs students

## **1. INTRODUCTION**

A subject can become enjoyable if teachers employ the "edutainment" technique in their teaching and facilitation sessions (PdPc). According to Ramuna and Mokhtar Tahar (2022), edutainment is adapted from the concept of "fun learning," which emphasizes enjoyable learning experiences. This approach often involves creative teaching aids that can capture students' attention effectively. Music is one of the key elements in edutainment. It has long been recognized as a method for enhancing students' learning experiences. Research shows that music can influence emotions, concentration, memory and creativity—all of which are essential aspects of learning. For example, integrating musical activities into mathematics lessons can create a more enjoyable learning environment while helping to eliminate the stigma and perception of mathematics as a rigid and

boring subject (Sajastanah et al., 2021). The same study also highlighted that incorporating musical activities in teaching mathematics allows educators to move beyond traditional teaching methods. Educators who integrate the arts into the curriculum can increase students' interest not only in arts-based lessons but also in non-arts subjects.

Music is not only used for mainstream students but is also applied in the teaching and facilitating sessions of students with special educational needs. These students who experience learning difficulties often face challenges such as limited attention span, restricted memory capacity, difficulty following instructions and challenges in mastering tasks assigned by teachers (Norbaidura Hainie, 2022; Ramuna & Mokhtar Tahar, 2022; Jamilahbi, 2022). Jacob, Pillay, and Olufunke (2021) also observed that many special needs students are reluctant to participate in activities that require continuous mental engagement or those that demand close attention. Special education teachers must be skilled in using appropriate teaching aids for students in the Special Education Integration Program. The use of teaching aids in audio, visual and kinesthetic forms is highly encouraged for teaching PPKI students (Nor Aqilah & Aliza, 2022). For instance, auditory teaching aids often incorporate music, rhythm and voice to enhance learning experiences.

Research in neuroscience has confirmed that individuals with disabilities often possess exceptional abilities in other areas. For example, blind individuals tend to have more accurate pitch perception and spatial sound localization (Abramo, 2012, as cited in Eshaq, 2019). Eshaq (2019) also noted that individuals with autism exhibit a higher prevalence of perfect pitch compared to those without autism. The extraordinary musical abilities of individuals with special needs can also be seen in renowned musicians such as Johann Sebastian Bach, who became blind and Ludwig van Beethoven, who experienced hearing loss in his later years and eventually became deaf. Despite these challenges, they produced extraordinary musical works that remain popular among classical musicians to this day. It is therefore unsurprising that many special education teachers incorporate music into their teaching, recognizing its effectiveness in stimulating the brain during learning sessions for students with special educational needs. Additionally, leveraging the musical talents of these students can further enhance their learning experience and help improve their overall performance.

If teachers are not aware of the effectiveness of using music in their teaching and facilitating process, particularly in Special Education, they are unlikely to incorporate music into their sessions. This would be a huge loss for both students and teachers as it neglects the full potential of music to enhance student performance while also creating a lively classroom atmosphere through the element of edutainment. Zakaria Khalid and Ariff Fadillah (2011), as cited in Azam Samsudin and Kamariah (2018), stated that edutainment, which can also be defined as learning through playing, is capable of increasing children's interest in reading while making the learning environment more enjoyable for them. Furthermore, edutainment can positively influence student behavior, leading to noticeable improvements. This makes the technique highly suitable for use in class as it benefits both the learning process and classroom dynamics.

Therefore, this study was conducted with a focus on examining the effectiveness of incorporating music in the teaching and facilitating sessions of students with special educational needs from the

perspective of special education teachers. A survey was administered to 31 Special Education teachers in the Tuaran district to gather insights.

## **2. LITERATURE REVIEW**

In the context of education, music serves not only as a medium of entertainment but also plays a crucial role in enhancing motivation, memory and conceptual understanding. Collins (2018), an expert in education, research and writing on brain development and music learning, stated that the benefits of studying music are extensive and can be categorized into three main areas: language development, executive skills and social skill development. Research by Begley (2000) demonstrated that learning music can improve an individual's performance in other fields. For example, a study by Shaw, Irvine and Rauscher (1977), as cited in Chai et al. (2003), found improvements in students' mathematics performance as a result of studying music.

In addition, music plays a vital role in enhancing children's skills across various aspects of development where activities such as singing can encourage the cultivation of positive behaviors. Md Jais Ismail (2017) highlighted the Dalcroze music approach, which successfully improved students' musical coordination skills. The findings of the study revealed that most students were able to clap rhythmic patterns accurately while singing, demonstrating that their coordination skills could be enhanced through the Dalcroze music approach. This approach involves multitasking sessions that stimulate the use of both hemispheres of the brain. Moreover, the use of music or singing can serve as an effective pedagogical tool for teachers in the classroom. Music has been shown to aid in students' social development. According to Medina (2002) and Mora (2000), as cited in the study by Azam Samsudin and Kamariah (2018), the positive impact of music and singing extends to improved information retention and recall, making it a valuable educational tool.

Furthermore, the integration of music in teaching and facilitating sessions has proven to be effective in supporting the learning process of students with special educational needs. This is evident from a study by Zubaidah Mohaidin (2019), who implemented the N.I.B.T. method (Nyanyi, Ingat, Baca, Tulis) 'sing, recall, read, and write' to enhance the ability of special needs students to pronounce and write letters. Hanisah Saari (2014) stated that singing is an activity that can support teachers in achieving learning goals and objectives particularly in reading. This is because singing inherently requires individuals to articulate sounds with accuracy and clarity, aligned with the tempo and melody, while delivering appropriate stress, intonation and tone.

The use of music in learning sessions can help stimulate the senses, support emotional and social development and serve as a therapeutic tool for students with special needs. Therefore, the integration of music into teaching and learning is a comprehensive and beneficial approach.

Saiful Azam Khoo Abdullah (2017) and Mohd Najib Ghafar (2006) stated that students with special educational needs are children with disabilities that distinguish them from other children in terms of their mental abilities, sensory capabilities, behavior, physical, social and emotional attributes. These differences require schools to make adaptations or provide specialized services within Special Education to maximize their abilities. This is because teachers believe that special needs students can achieve their full potential if educators adapt and modify teaching methods to

meet their specific needs (Escoto-Kemp, Rohani, Rosmawijah, & Ratna Suraini, 2019, as cited in Rozila Muda, Kway Eng Hock & Abdul Rahim Razalli, 2023). These adaptations include tailoring techniques and activities to suit the needs of these students. Research by Valerie Wheelervon Primus and Musirin Mosin (2021) emphasized that all students, including those with special needs, are unique individuals with diverse strengths. They also have the same rights as mainstream students to access high-quality education at all levels of schooling.

Students with special educational needs often face challenges and difficulties in mastering the basic skills of 3M '*membaca, menulis mengira*': (reading, writing and counting). These students require a longer period to process and acquire learning compared to mainstream students. According to a study by Norbaidura Hainie (2022), the Individuals with Disabilities Education Improvement Act (IDEA 2004) (Public Law 108-446) defines learning disabilities as difficulties in one or more basic psychological processes related to understanding or using language whether spoken or written. This can manifest as challenges in abilities such as listening, thinking, speaking, reading, spelling or mathematical calculations (National Research Center on Learning Disabilities, 2007).

In addition to challenges in reading, writing, and mathematical skills, most students with special educational needs have very limited memory capacity (Jamilahbi Mohamad Ishaque, 2022). Majority of them also struggle to follow instructions and often appear as though they are not listening, even when spoken to directly (Christiansen et al., 2015, as cited in Jacob, Pillay & Oyefeso, 2021). Therefore, a teaching method that can help strengthen and extend their memory retention should be incorporated during teaching and facilitation sessions.

According to the study by Eshaq (2019), various types of music can help enhance foundational life skills including social, emotional, communication, cognitive and behavioral aspects. Teachers who participated in the study observed that the behavior and attention of students with special educational needs improved when music was incorporated into their learning sessions. The hypothesis derived from the research by Jacob, Pillay, and Olufunke (2021) which indicates that music therapy and visual illustrations have a significant effect on the attention span of special needs students. This aligns with the findings of Sze and Yu (2004), who suggested that integrating music into students' learning provides opportunities for realistic and hands-on interactions. These interactions are essential for developing skills in reasoning, reflection and conflict resolution among students.

Moreover, the use of music can assist students with special educational needs who have communication difficulties in interacting, even if the interaction is simple. A study by Lee and Lin (2023) highlighted positive changes in a student with Autism Spectrum Disorder (ASD) in terms of learning, communication and interaction with teachers and peers compared to before the implementation of music activities in their learning. This is because music, particularly singing, can help improve or enhance students' speech and language skills. Songs with repetitive lyrics can be effectively used as a teaching technique to support special needs students in improving their reading fluency (Iwasaki et al., 2013). According to behaviorist theory, repetition in the learning process—where language skills are practiced repeatedly until they become habitual or routine—helps students master the skill over time when practiced consistently (Jamilahbi Mohamed

Ishaque, 2022) Furthermore, using songs as a learning tool has a significant impact on communication among children, especially those with ASD (Wiseman, 2015, as cited in Kryeziu & Avdiu, 2021). A study by Norbaidura (2022) employed the BAYI Technique, which stands for BAca dan nyanYI (Read and Sing), incorporating repetitive song lyrics to help students with special educational needs improve their skills in reading KV (consonant and vocal) syllables. The use of engaging and rhythmic melodies added enjoyment to the learning process while also enhancing the students' focus. This finding is further supported by Zubaidah Mohaidin (2019), who demonstrated that the lyrics used in her method, Nyanyi, Ingat, Baca, Tulis (Sing, Recall, Read, Write), were repetitive and featured clear and accurate pronunciation of letters. This helped special needs students memorize and quickly recall the letters being learned. In addition to singing, the song lyrics required students to write the letters in sequence, effectively aiding them in remembering how to write each letter correctly.

In addition to supporting special educational needs students in academics, music is also an effective tool for helping them regulate and manage their emotions. Techniques such as relaxation music, emotional exploration through music, movement and rhythm activities and music therapy can assist special needs students in positively controlling their emotions. According to Eshaaq (2019), teachers involved in his study reported that music has the ability to influence special needs students' emotions and behaviors in a positive direction. This is because students can express their emotions through motor movements during classroom activities involving music. Additionally, music can serve as a psychological tool to help reduce or cope with the psychological stress faced by students with special needs, as noted by one of the teachers utilizing this method in Eshaaq's study.

### **3. RESEARCH METHODOLOGY**

This study aims to examine the effectiveness of incorporating music in the teaching and facilitation sessions of students with special educational needs from the perspective of Special Education teachers. To achieve this, the research employs a descriptive quantitative, non-experimental design using a survey method. The study involves 31 Special Education teachers from 8 schools in the Tuaran district. The survey method was deemed appropriate for managing this type of research as it seeks to gather respondents' opinions on the research questions posed. For the researcher, this method provides accurate and clear information while offering the potential to address the objectives of the study effectively.

#### **3.1. Population and sample**

A population refers to a group of individuals who share similar characteristics or face similar issues, while a sample is a smaller subset of the population targeted by the researcher for the study.

In this study, the researcher chose to conduct the research in the Tuaran district, Sabah. The sampling technique employed was convenience sampling, also known as haphazard sampling or accidental sampling. In convenience sampling, samples are selected based on ease of access, geographical proximity, availability and willingness to participate in the study at a given time

(Etikan et al., 2016). A total of 31 Special Education teachers from 8 Special Education schools participated as the sample and respondents for this study.

### **3.2. Research instrument**

The instrument used by the researcher to collect data was a questionnaire developed specifically for this study, designed to address the research questions on the effectiveness of incorporating music in the teaching and facilitation of students with special educational needs from the perspective of Special Education teachers. The researcher also referred to the structure and item arrangement of questionnaires from previous studies to ensure a logical flow and facilitate respondents' understanding of the questions. To ensure validity and reliability, the items and questions in the questionnaire were reviewed and improved by a Deputy Head of Special Education, a Special Education coordinator and a teacher with 20 years of experience in Special Education. These individuals, who were from different schools and not part of the study's respondents, contributed to refining the instrument. Additionally, an analysis was conducted to obtain the Cronbach's alpha value for the Likert Scale section of the questionnaire, which indicated a high reliability score of 0.99.

The questionnaire consists of four sections. Section A is designed to collect demographic information about the respondents. This section requires respondents to provide details such as their gender, age, ethnicity, teaching experience in Special Education, their area of specialization as Special Education teachers and whether they have a musical background. The purpose of gathering this information is to gain an initial understanding of the respondents' backgrounds.

Section B requires respondents to indicate how music is utilized in their teaching and facilitation process. This section comprises four questions, all of which are close-ended, with predefined answer choices provided by the researcher. Respondents who do not use music in their teaching and facilitation process can simply select the option "do not use music" for each question.

The effectiveness of incorporating music in the teaching and facilitation of students with special educational needs from the respondents' perspective is addressed in Section C using a 5-point Likert scale. This section contains six questions where respondents are required to indicate their level of agreement with each statement ranging from scale 1 (Strongly Disagree) to scale 5 (Strongly Agree). Additionally, this section includes one open-ended question that asks respondents to provide examples of positive changes they have observed when music is used in the teaching and facilitation process of students with special needs.

In Section D, respondents are required to provide their suggestions for enhancing the use of music and proposing improvements for its implementation in the teaching and facilitation process of students with special educational needs. This section consists of open-ended questions. Allowing respondents the freedom to express their answers. The complete content of the questionnaire is outlined in Table 1.

Table 1: Contents of the questionnaire

SECTION	ASSESSMENT ASPECTS	NUMBER OF QUESTIONS	TYPES OF RESPONSES
A	Demographic information: Gender, age, ethnicity, teaching experience in Special Education, area of specialization, and musical background.	8	Multiple-choice answers. (close-ended question)
B	Usage of music in teaching and facilitation process: How music is applied in teaching and facilitation.	4	Multiple-choice answers. (close-ended question)
C	i. Effectiveness of music in teaching and facilitation sessions.	6	Likert Scale
	ii. Observed positive changes when incorporating music in teaching and facilitation sessions of students with educational needs.	1	Multiple-choice answers. (open-ended question)
D	Suggestions for improvement: Respondents' recommendations for enhancing and improving the use of music in teaching and facilitation sessions.	1	Multiple-choice answers. (open-ended question)
<b>NUMBER OF QUESTIONS</b>		<b>20 questions</b>	

### 3.2. Data Collection and Analysis Procedure

The data collection and analysis procedure began with the preparation of a questionnaire using the 'Google Form' application. Each question item was constructed based on the themes of the study and aimed to address the research questions. The questionnaire was then reviewed and referred to three experienced Special Education teachers: a Deputy Head of Special Education at a secondary

school, a Special Education coordinator and a Special Education teacher with 20 years of experience. After the wording and structure of the questions were refined based on their feedback, the questionnaire was analyzed for reliability using Cronbach's alpha. Following this validation and improvement process, the distribution of the questionnaire commenced.

The questionnaire was distributed using the 'WhatsApp' application. The researcher contacted each Special Education teacher in the Tuaran district to request their cooperation in participating and completing the questionnaire. Additionally, the researcher sought the assistance of fellow Special Education teachers to obtain the contact numbers of other teachers and to share the questionnaire link in a 'WhatsApp' group specifically for Special Education teachers in the Tuaran district. This approach was intended to facilitate the data collection process for the study involving teachers from the targeted schools. The questionnaire distribution began with a brief explanation from the researcher about the purpose of the survey. The researcher clarified to respondents that the questions in the questionnaire were not a test and there were no right or wrong answers. Respondents were also assured that their information would remain confidential and be used solely for research purposes.

Subsequently, the raw scores obtained from the questionnaires were analyzed using the Statistical Package for Social Sciences (SPSS) software. The data were processed and translated into a more interpretable format. The results of the data analysis were presented in the form of tables, which included frequency distributions, percentages, standard deviations and mean scores as required by the study.

#### **4. RESEARCH FINDINGS**

This section provides a detailed discussion of the research findings obtained through a questionnaire administered to 31 respondents, comprising Special Education teachers from the Tuaran district, Sabah. The results of the study will be analyzed and elaborated in detail. Based on the research questions outlined in the study's objectives.

This study was conducted to assess the effectiveness of incorporating music in the teaching and facilitation process of students with special educational needs from the perspective of Special Education teachers. To obtain findings for each research question, an analysis will be conducted to address the two questions outlined in the study:

- i. What is the impact of using music in teaching and facilitation process for students with special educational needs from the teachers' perspective?
- ii. What are the recommendations for improving the use of music in teaching and facilitation process for students with special educational needs?

##### **4.1. Sample demographics**

The demographics of the study sample include gender, ethnicity, age and teaching experience of the respondents in the field of Special Education. A total of 31 Special Education teachers participated as the study sample. The sample demographics are presented in the table below. Based on the gender of the teachers, 5 respondents (16.1%) were male teachers, while 26 respondents

(83.9%) were female teachers. A total of 26 respondents (83.9%) were Indigenous People of Sabah, 1 respondent (3.2%) was an Indigenous Person of Sarawak and 4 respondents (12.9%) were Malay. Additionally, 24 respondents (77.4%) specialized in Special Education for learning disabilities, 4 respondents (12.9%) specialized in Special Education for visual impairments, and 3 respondents (9.7%) specialized in Special Education for hearing impairments.

Table 2: Research's sample demographics (N=31)

Sample's background		Frequency	Percentage (%)
Gender	● Male	5	16.1
	● Female	26	83.9
Race	● Indigenous People of Sabah	26	83.9
	● Indigenous People of Sarawak	1	3.2
	● Malay	4	12.9
Special Education teacher specializes in	● Learning disabilities	24	77.4
	● Visual impairments	4	12.9
	● Hearing impairments	3	9.7
Teaching experiences	● 1 - 5 years	5	16.1
	● 6 - 10 years	5	16.1
	● 11- 15 years	12	38.7
	● 16 years above	9	29
Musical background	● Has a musical background, understands the basics of Music Education and can play a musical instrument.	7	17.1
	● Does not have a musical background (cannot read music notation) but can play a musical instrument.	17	41.5
	● Does not have a musical background and cannot play a musical instrument.	17	41.5

In terms of teaching experience, 5 respondents (16.1%) had 1 to 5 years of teaching experience, representing teachers who are relatively new to the education field. Another 5 respondents (16.1%) had 6 to 10 years of teaching experience. Additionally, 12 respondents (38.7%) had 11 to 15 years of teaching experience, while 9 respondents (29%) had over 16 years of teaching experience in Special Education. This indicates that the majority of the respondents were experienced teachers in the education field.

Furthermore, 7 respondents (17.1%) reported having a musical background and the ability to play a musical instrument. A total of 17 respondents (41.5%) stated that they did not have a musical background (could not read music notation) but could play a musical instrument, while another 17

respondents (41.5%) had no musical background and could not play a musical instrument. This indicates that the majority of respondents did not have a musical background.

#### 4.2. Analysis of Questionnaire Instrument Section B: Usage of Music in Teaching and Facilitation Sessions

The analysis of the questionnaire instrument on the usage of music in teaching and facilitation is presented in Table 3.0 below. The items under this aspect include the use of music in teaching and facilitation process, the types of music used, the frequency of music usage in teaching and facilitation process and the situations where teachers frequently use music. The data analysis is described descriptively in terms of frequency and percentage.

Table 3: Usage of music in teacher's teaching and facilitation process

Usage of Music in Teacher's Teaching and Facilitation Process	Frequency	Usage (%)	
Using Music in Teaching and Facilitation Sessions	<ul style="list-style-type: none"> <li>● Yes</li> <li>● No</li> </ul>	<ul style="list-style-type: none"> <li>27</li> <li>4</li> </ul>	<ul style="list-style-type: none"> <li>87.1</li> <li>12.9</li> </ul>
Types of Music Used	<ul style="list-style-type: none"> <li>● Instrumental music</li> <li>● Children's music</li> <li>● Relaxation/therapeutic music</li> <li>● All of the above</li> <li>● Does not use music in teaching and facilitation sessions</li> </ul>	<ul style="list-style-type: none"> <li>4</li> <li>13</li> <li>4</li> <li>6</li> <li>4</li> </ul>	<ul style="list-style-type: none"> <li>12.9</li> <li>41.9</li> <li>12.9</li> <li>19.4</li> <li>12.9</li> </ul>
Frequency of Music Usage in Teaching and Facilitation Sessions	<ul style="list-style-type: none"> <li>● Daily</li> <li>● Several times a week</li> <li>● Several times a month</li> <li>● Rarely</li> <li>● Never uses music in teaching and facilitation sessions</li> </ul>	<ul style="list-style-type: none"> <li>1</li> <li>15</li> <li>6</li> <li>6</li> <li>3</li> </ul>	<ul style="list-style-type: none"> <li>3.2</li> <li>48.4</li> <li>19.4</li> <li>19.4</li> <li>9.7</li> </ul>
Situations Where Teachers Frequently Use Music	<ul style="list-style-type: none"> <li>● Induction set</li> <li>● Learning activities</li> <li>● Relaxation activities</li> <li>● Closing activities</li> <li>● Never uses music in teaching and facilitation sessions</li> </ul>	<ul style="list-style-type: none"> <li>7</li> <li>19</li> <li>1</li> <li>1</li> <li>3</li> </ul>	<ul style="list-style-type: none"> <li>22.6</li> <li>61.3</li> <li>3.2</li> <li>3.2</li> <li>9.7</li> </ul>

Based on Table 3.0, the majority of respondents (27 respondents, 87.1%) reported using music in their teaching and facilitation sessions. Regarding the types of music used, most respondents (13 respondents, 41.9%) utilized children's songs. Additionally, 4 respondents (12.9%) used instrumental music and relaxation/therapeutic music, while 6 respondents (19.4%) used all types

of music mentioned. However, 3 respondents (9.7%) indicated that they did not use music in teaching and facilitating sessions.

For the frequency of music usage in teaching and facilitation, only 1 respondent (3.2%) used music daily. The majority of respondents (15 respondents, 48.4%) used music several times a week, while 6 respondents (19.4%) used music several times a month and another 6 respondents (19.4%) rarely used music. Three respondents (9.7%) stated they never used music in teaching and facilitation process. In terms of situations where music was frequently used, the majority (19 respondents, 61.3%) used music during learning activities. Seven respondents (22.6%) used music during set induction, while only 1 respondent (3.2%) used music for relaxation and closing activities. Additionally, 3 respondents (9.7%) indicated they never used music in teaching and facilitation. Interestingly, while 4 respondents initially stated they never used music in their teaching and facilitation process, responses in subsequent sections revealed that only 3 respondents consistently selected "never use music in their teaching and facilitation sessions" for both frequency and situational questions. This suggests that one teacher who initially chose "never uses music" may have used music occasionally, albeit infrequently.

#### 4.3. Analysis of Questionnaire Instrument Section C: Teachers' Perspectives on the Effectiveness of Music in Teaching and Facilitation Process

This section utilizes a Likert scale, where respondents were required to select a score ranging from 1 (strongly disagree) to 5 (strongly agree). The data analysis is presented in terms of frequency, percentage, mean, standard deviation and mean score interpretation.

Table 4: The Effectiveness of Music from Teachers' Perspectives

Point		n (%)				
		1	2	3	4	5
Bil.	Likert Scale	Strongly disagree	Disagree	Somewhat agree	Agree	Strongly agree
1.	Music helps students pay attention	0	0	3 9.7%	14 45.2%	14 45.2%
2.	Music helps reduce students' negative behavior.	0	1 3.2%	11 35.5%	13 41.9%	6 19.4%
3.	Music helps improve students' social interaction.	0	0	5 16.1%	14 45.2%	12 38.7%
4.	Music helps students	0	0	8	18	5

	understand the lesson content.			<b>25.8%</b>	<b>58.1%</b>	<b>16.1%</b>
<b>5.</b>	Music helps maintain students' motivation to stay focused and continue learning.	<b>0</b>	<b>1</b> <b>3.2%</b>	<b>7</b> <b>22.6%</b>	<b>17</b> <b>19.4%</b>	<b>6</b> <b>54.8%</b>
<b>6.</b>	Students show positive changes when music is played.	<b>0</b>	<b>1</b> <b>3.2%</b>	<b>7</b> <b>22.6%</b>	<b>16</b> <b>51.6%</b>	<b>7</b> <b>22.6%</b>

Table 5.0: Mean Score Interpretation

<b>Items</b>	<b>Min</b>	<b>Standard deviation</b>	<b>Mean score interpretation</b>
Music helps students maintain attention.	4.35	0.661	High
Music helps reduce students' negative behavior.	3.77	0.805	Moderately High
Music helps enhance students' social interactions.	4.22	0.717	High
Music helps students understand the lesson content.	3.90	0.651	Moderately high
Music helps sustain students' motivation to stay focused and continue learning.	3.90	0.746	High
Students show positive changes when music is played.	3.94	0.772	Moderately High

Table 6.0 Mean Score Interpretation

<b>Mean Score</b>	<b>Mean Score Interpretation</b>
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1.00 – 2.00	Low
2.01 – 3.00	Moderately Low
3.01 – 4.00	Moderately High
4.01 – 5.00	High

Source: Nunnally & Bernstein, 1994

#### **4.4. Analysis of Questionnaire Instrument Section C: Teachers' Perspectives on the Effectiveness of Music in teaching and Facilitation Sessions**

Table 5.0 shows that overall, the average mean score for the aspect of music helping students maintain attention, based on teachers' perceptions, is 4.35, which falls into the very high category. The findings indicate that among the five aspects of the effectiveness of music, as perceived by teachers, the statement "*Music helps students maintain attention*" achieved the highest mean score of 4.35 (high). This was followed by the statement "*Music helps improve students' social interaction*" with a mean score of 4.22 (high). The third-highest mean scores were observed for the statements "*Music helps students understand the lesson content*" and "*Music helps sustain students' motivation to stay focused and continue learning,*" both of which scored 3.90 (moderately high). Meanwhile, the statement "*Music helps reduce students' negative behavior*" had the lowest mean score at 3.77, which is still within the moderately high range according to the mean score interpretation.

This section also required respondents to answer an open-ended questionnaire, where all respondents were asked to describe the positive impacts they observed in their students when music was used in teaching and facilitation sessions. The majority of respondents stated that students became more focused with the use of music, followed by improved memory retention of lessons through song lyrics. Respondents also noted that music reduced student tantrums, encouraged active and enjoyable participation and prompted previously quiet students to vocalize during music-based teaching and facilitation activities. Some respondents mentioned that music provided temporary focus for students. For students with hearing impairments, respondents observed positive changes only in those with residual hearing and the ability to speak, where music helped them follow rhythms more easily and respond to gestures from teachers. Additionally, other respondents noted that music had positive effects such as making students happier, creating a cheerful classroom environment and prompting students to move their bodies in time with the music.

#### **4.5. Analysis of Questionnaire Instrument Section D: Respondents' Suggestions for Encouraging Other Teachers to Incorporate Music in Teaching and Facilitation Sessions for Students in Special Education Needs.**

This section asked respondents to provide suggestions for enhancing the use of music in teaching and facilitation sessions for special educational needs students. The majority of respondents recommended exposing teachers to music-based teaching strategies through courses or workshops.

Other respondents suggested that schools should be equipped with appropriate musical instruments. Such as providing pianos, which are more engaging compared to percussion instruments typically supplied to schools. As well as creating a conducive classroom environment. For instance, respondents proposed equipping schools with LCD projectors, white screens and speakers in every classroom to make it easier for teachers to integrate music into teaching and facilitation. One respondent suggested developing and exploring a greater variety of materials that incorporate music to give teachers more options. Some respondents also proposed using recycled materials to create homemade musical instruments. Furthermore, respondents teaching students with visual impairments recommended conducting courses for teachers on techniques for using music with these students. Similarly, respondents working with hearing-impaired students suggested more inclusive music education tailored for students with special educational needs with hearing difficulties.

## **5. DISCUSSIONS**

### **5.1. The Impact of Using Music in Teaching and Facilitating Sessions for Students with Special Educational Needs from the Perspective of Special Education Teachers**

The findings of the study indicate that incorporating music into the classroom can effectively capture students' interest and attention, thereby enhancing their focus on learning. Although not all respondents regularly use music in their classrooms, they acknowledged that music can serve as a medium or tool to engage students and help teachers maintain their involvement in teaching and facilitation sessions. This aligns with the study by Nor Aqilah and Alizah (2022), which found that the use of teaching aids incorporating visual, auditory and kinesthetic elements can stimulate students and foster their interest in learning, ultimately improving their performance. Additionally, music-based learning, such as singing, helps students with short attention spans remember text through the natural mental exercises it provides (Crisyanti & Rosadah, 2020).

Additionally, the findings revealed that Special Education teachers agree that music has a positive impact on students' social interactions. Social skills refer to an individual's ability to connect and communicate with others through shared activities (Ramuna & Mohd Mokhtar Tahar, 2022). Music-based activities, such as singing, can reduce passive behavior and encourage active student participation during teaching and facilitating sessions (Tan & Khalijah, 2023). Music activities such as dancing, singing or simply playing music while students work on tasks provide opportunities for them to communicate and collaborate in an enjoyable atmosphere. In these situations, music not only enhances their learning experience but also strengthens social relationships. The therapeutic nature of music brings joy and makes students feel happy and engaged (Ramuna & Mohd Mokhtar Tahar, 2022). A study by Clipper et al. (2021) found that students who typically remain silent often participate in musical activities by producing sounds with their voices. This finding is significant as it demonstrates that students who may struggle with verbal communication can use musical expression as an alternative medium to convey their thoughts and emotions. Therefore, incorporating music helps create a more inclusive, relaxed and cheerful learning environment. It provides a "comfort zone" for students who are usually less interactive in formal settings, fostering better engagement and social interaction.

Furthermore, the findings reveal that music is effective in enhancing students' understanding of lesson content. Students with special educational needs in the category of learning disabilities often face challenges in mastering reading skills (Ramuna & Mohd Mokhtar Tahar, 2022). Teaching aids incorporating visual, auditory and kinesthetic elements can help them to comprehend and master learning topics (Nor Aqilah & Aliza, 2022). As noted by the respondents, selecting song lyrics and melodies that align with the lesson content can make it easier for students to remember concepts. Crisyanti and Rosadah (2020) emphasized that using simple and repetitive song structures facilitates learning, as the level of language input is more accessible for students to understand. This is particularly beneficial for subjects requiring memorization and repetitive content. The repetition of lyrics, rhythm and melody in songs stimulates students' memory while offering them a more creative approach to mastering lessons. Additionally, incorporating music, such as singing, not only makes learning enjoyable and strengthens students' memory retention but also engages three primary domains: cognitive, affective and psychomotor (Tan & Khalijah, 2023).

The integration and use of music in teaching and facilitation session also help enhance students' motivation to stay focused and continue learning (Crisyanti & Rosadah, 2020). A livelier classroom environment energizes students and reduces boredom, fostering their enthusiasm to remain engaged in these sessions. Music's ability to sustain student motivation and maintain focus in class is a distinguishing feature of music-based teaching compared to traditional teaching methods.

Furthermore, the findings show that music has varying effects on students with different special educational needs. This is because students with special needs have diverse educational requirements due to their physical conditions or psychological differences (Jiang Xin, et al., 2024). For instance, in students with hearing impairments, positive changes are observed in those with residual hearing and the ability to interact verbally. While students with significant hearing loss may not fully perceive audio music, this does not mean auditory aids cannot be used in teaching as each student has varying levels of hearing capability (Nor Aqilah & Aliza, 2022). This highlights that music can be adapted to support learning based on the specific needs of students. Music not only facilitates interaction for these students but also helps them follow rhythms and respond to teachers' cues through gestures.

However, based on the study findings, the impact of music on reducing students' negative behavior varies depending on individual students and specific situations. Although the mean score interpretation falls within the high range, the findings also indicate that music does not necessarily produce the same effect for all students. Teachers need to consider factors such as the type of music used, how it is implemented and its suitability for the individual needs of each student as these factors significantly influence how effectively music can reduce negative behaviors. Therefore, teachers must develop a deeper understanding of the best methods for applying music in teaching to ensure optimal changes and positive effects on students' behavior.

In summary, the findings clearly demonstrate that music is not merely an element of entertainment but a highly effective teaching tool that enhances students' attention, understanding, engagement and motivation. Thus, it is crucial for teachers to further expand the use of music in teaching and facilitating sessions to align with students' needs. Although certain factors such as the individual

condition of the student may influence its effectiveness, music holds significant potential to enrich the learning experiences of students with special educational needs in the classroom.

## **5.2. Proposed Recommendations for Enhancing the Use of Music in Teaching and Facilitating Sessions for Students with Special Educational Needs**

Based on the study findings, the majority of respondents suggested that teachers should be provided with exposure through courses or workshops related to the integration and application of music in their classroom. This recommendation is highly relevant as the lack of formal training on using music in the classroom was identified as a major challenge by teachers in integrating music into their teaching and facilitating sessions. Courses and workshops can provide valuable insights and help teachers gain a deeper understanding of effective methods for applying music as well as identifying suitable music and techniques for different types of student needs.

In addition, several respondents recommended that schools be equipped with appropriate musical instruments for students. High-quality and engaging instruments can enhance students' participation in activities. Specific suggestions included providing schools with pianos instead of percussion instruments. Pianos, with their diverse range of notes, can play chords and melodies that capture students' interest compared to percussion instruments that typically produce a single type of sound. Engaging sounds, varied melodies and cheerful tones can have a positive impact on the emotions of special educational needs students (Nor Aqilah & Aliza, 2022). Furthermore, providing instruments tailored to the needs of students, particularly those with hearing or visual impairments, is crucial to ensuring that music integration can be fully utilized to enhance their learning experiences.

Creating a more conducive classroom environment is another step that should be considered to enhance the use of music in teaching and facilitating sessions. Schools should be equipped with LCD projectors, white screens and speakers to facilitate the integration of music into teaching and facilitation. Additionally, students with hearing impairments require louder audio and voice output compared to other special educational needs students (Nor Aqilah & Aliza, 2022). These tools not only enable teachers to apply music more effectively but also enhance the visual and auditory aspects of teaching in the classroom.

Furthermore, teachers need to explore a variety of music-based learning materials for students with special education needs. Having diverse music resources allows teachers to select and tailor their teaching and facilitating sessions to incorporate music that aligns with the students' needs and interests. Creating musical instruments using recycled materials is another innovative idea. It not only reduces costs and promotes environmental sustainability but also develops students' fine motor skills and creativity. Integrating music and kinesthetic activities into the teaching and facilitating session creates an engaging classroom atmosphere and enhances critical listening and analytical abilities (Crisyani & Rosadah, 2020). Nor Aqilah and Aliza (2022) noted that teaching materials do not create themselves and require substantial effort from teachers to ensure they are effective and fully utilized during classroom sessions.

In addition, a specific recommendation for using music with visually impaired students is to adopt approaches that emphasize tactile engagement or utilize music to provide visual representation through suitable rhythms and melodies. Teachers should also attend specialized training to learn

techniques for applying music to meet the unique needs of these students. Sabuncuoglu (2020) developed a music platform for visually impaired students, offering them opportunities to create and learn music. This platform demonstrates the potential for music to be both an educational and creative tool for special needs students with visual impairments.

## 6. IMPLICATIONS

Overall, this study demonstrates that integrating music into teaching and facilitation sessions has the potential to enhance the quality of classroom instruction. The findings confirm that music can improve attention, comprehension and engagement among special educational needs students during teaching and facilitating sessions. Special Education teachers are encouraged to use music creatively as a teaching aid tailored to the specific needs of individual special educational needs students to ensure more effective and impactful learning outcomes. Professional training, such as courses and workshops, should be provided by the Ministry of Education Malaysia (KPM) to further strengthen and enhance teachers' skills in applying music in the classroom. Additionally, adequate resources and musical instruments should be supplied to schools to facilitate the effective implementation of music-based teachings. Further research is also needed to identify the effectiveness of specific types of music for students with varying special educational needs and diagnoses.

## 7. CONCLUSION

This study provides insights into the use of music in teaching and facilitating sessions for students with special educational needs and offers recommendations for improving its effectiveness. The integration of music has shown positive impacts on students' attention, social interaction, understanding of lesson content, motivation and reduction of negative behaviors. Overall, the use of music in teaching and facilitating sessions demonstrates significant potential to enhance their learning performance and classroom environment. Therefore, it is crucial for schools, teachers and the Ministry of Education to provide greater support by offering effective training, courses and workshops to equip Special Education teachers with the necessary skills to integrate music into their teachings. Additionally, schools should be supplied with adequate equipment and suitable teaching materials. With the active involvement of all stakeholders, music can become a highly effective tool for promoting academic and social skill development among students with special educational needs, while also providing them with opportunities to thrive in a more engaging and inclusive learning environment.

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