Assessment of Musical Intelligence of MAPEH Teachers towards a Proposed Action Plan

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Abstract — This research aimed to assess the musical intelligence of MAPEH Teachers in public elementary schools of Lubao West District in Division of Pampanga during the School Year 2024-2025. To ensure a comprehensive analysis and presentation of results, mixed method type of research was the center of the undertaking. Specifically, sequential-explanatory design was used. There was a total of 89 MAPEH Teachers from the entire district as respondents and 10 teachers were considered as participants. Questionnaire and semi-structured interview were utilized to gather data. Weighted mean, frequency and percentage, analysis of variance and thematic analysis were applied for interpretation. Results tell that 82 or 92.13% of the MAPEH Teachers do not have winnings in music. Furthermore, 98.88% of the teachers have no innovation. Lastly, 96.63% of the MAPEH Teachers do not have exposure related to music. MAPEH teacher-respondents agree that they are musically intelligent in affective (M=3.84), behavioral (M=3.65) and cognitive (M=4.30). Difference on musical intelligence of the MAPEH teachers recorded an F value of 2.5517 and p value of 0.0421 on winnings, an F value of 2.5982 and p value of 0.0428 on innovation and an F value of 2.9534 and p value of 0.0264 on exposure. Capacity Building on Music and Coaching by Musically Intelligent People are the needed support of the MAPEH Teachers to improve their musical intelligence. An action plan is proposed based on the findings of the study related to musical intelligence.

Keywords: musical intelligence, capacity building, coaching, MAPEH Teacher

I. THE PROBLEM AND ITS BACKGROUND

Introduction

Music, Arts, Physical Education and Health is one of the subjects that is offered in the curriculum. This subject has four components and each component affects each other in terms of teaching and learning. From the four components, music is said to be the most difficult ones. MAPEH teachers are expected to be good in Music because they are teaching it to their students in their respective classes.

The educational reform movement has spurred a search for novel techniques to instruction in recent years. The hypothesis of Multiple Intelligences (MI), which Howard Gardner first proposed in 1983, is one theory that has had an impact on the design of numerous school curriculum and learning environments. According to Mills (2001), this theory proposes that there are a number of different types of human intelligence, each of which functions independently of the others. These many forms of intelligence can be fashioned and combined in a wide range of adaptive ways by different individuals and civilizations. In order to incorporate the learning activities and assessment methodologies that have been recommended in the literature on multiple intelligences (MI) theory, certain schools have been altered, and in certain circumstances, newly established.

Musical intelligence is one of the least studied subjects. 3 Music permeates every aspect of human experience and offers a rich framework for the study of

fundamental, theoretical themes in marketing and advertising, claim Krishman, Sullivan, and Aurand (2016). However, being interested in and responding to music does not require musical training.

Musical competence is generally described as a “talent” for music. It is a perspective that is widely accepted that those who are musically skilled are gifted, and that they are born with this talent. In spite of the fact that only a select few achieve the pinnacle of musical achievement, it is not uncommon to discover that every single person have some degree of skill. Despite the fact that

it is obvious that musical competence is a continuum, quantifying musical skill has proven to be a difficult task. According to Howard Gardner's theory of multiple intelligences, musical intelligence is the ability to appreciate, compose, perform, and think critically about music. It exists in all people to varied degrees and is not just found in composers or professional musicians. This intelligence's significance goes well beyond the arts; it is essential for academic success, emotional development, cognitive progress, and cultural appreciation.

Hoekstra - de Roos (2014) cited that Individuals that possess a high level of musical intelligence are adept at thinking in terms of repetitive patterns, rhythms, and sounds. They have a deep appreciation for music and are typically skilled in the areas of musical theory, composition, and performing. With its location in the right hemisphere of the brain, musical intelligence possesses an almost unbounded capacity to comprehend subtleties and high levels of complexity. Music should be a regular part of a child's life for them to have the highest chance of succeeding. Cognitive development is supported by musical intelligence. According to research, kids who listen to music grow up with better memory, increased focus, and enhanced sequencing skills. While the rhythm and melody of songs facilitate language acquisition, mathematical thinking is directly linked to the ability to recognize rhythm and patterns in music. This illustrates how music strengthens fundamental abilities in communicating, reading, and numeracy.

Gardner (2004) made the argument that musical intelligence differs from person to person because each individual possesses their own unique musical skill, while other individuals have no connection to music at all. Musical intelligence includes the capacity to distinguish between tones, melodies, sounds, rhythms, and tempos. The capacity to perceive different types of tones, the construction of melodies, and sensitivity to sounds, as well as the ability to utilize charts for musical listening and understanding musical structure, are all aspects of musical intelligence.

Musical intelligence is the type of intelligence that is most noticeable for its development during the formative years of a person's life (Al-Ahdal, 2009). The following list of characteristics can be used to identify the phenomenon: an inclination to listen to music and an attraction to songs; a tendency to read articles that are related to music; playing musical instruments; writing songs; composing music; recognizing sounds that are consistent and inconsistent; memorizing more songs and melodies; self-singing while performing tasks; easily memorizing melodies; listening to bird

sounds; imitating sounds; and a desire to let others listen to the person's voice (Afnan & Alkzindar, 2004).

On the part of the teachers in the delivery of lessons, Music activities create a favorable environment in the classroom and encourage students to be more committed to class activities. Students pay more attention, participate more often, and complete all of their assignments with greater vigour and excitement as they become more involved in the class and interested in the subject matter (Aguirre, Bustinza & Garvich, 2016). A longer attention span, improved listening abilities, and the development of oral language are all benefits that can be attributed to music. In light of the fact that children have a natural affinity for music, it is possible that incorporating music activities into the preschool classroom could be an effective method of instruction. The academic performance of children, their positive behavior, their increased productivity, and their willingness to learn and work can all be improved via the participation in these activities (White, 2007)

Numerous studies have examined the effects of incorporating musical activities into the classroom. For instance, Sandberg, Cory, and Kathleen (2013) found that combining music and movement activities improved two focus first-grade students' attention and engagement scores. This study examined the effects of music and movement activities on improving learning states. Aguirre, Bustinza, and Garvich (2016) discovered in another study on the utilisation of music activities in the classroom that songs foster a positive learning atmosphere and increase students' commitment to class activities. Four teachers used the MI theory in their classroom curricula, namely in the integration of musical experiences, and observed improvements in their students' performance in yet another qualitative study by Mills (2001).

The employment of music as a facilitating approach in the teaching-learning process has also been relevant in Guatemala. There, researchers have found that music education is not employed as an instrument in the teaching-learning process by all teachers (Vides, 2013). It has been demonstrated in this investigation that at the primary level, teachers occasionally use musical intelligence in just six functions, whereas at the basic and diversified levels, the results have shown that they sometimes utilize it in only three functions. As a result, it is corroborated that musical intelligence is not always implemented by teachers in classrooms. In Ecuador, the observation of

experiences has been undertaken in order to provide training for new generations, and it has been recognized that thorough training in contemporary times helps us to understand, know the world, and behave in a manner that is the consequence of desirable behaviors for social growth (Estévez & Rojas, 2017). It is important to note that these criteria are already being considered at the preschool level in the country's teaching and learning processes.

There are very limited studies regarding the musical intelligence of teachers. It seems that preschool teachers recognize the value of incorporating musical activities into their lessons. According to a research conducted in Puerto Rico by Almodovar (2010), teachers saw music integration as a means of meeting the needs of their pupils and employed music activities daily for a number of reasons. Malin (1993) conducted another study on the use of music in the curriculum and discovered that over 70% of primary school teachers included musical activities in their sessions. These results are consistent with research conducted in Kenya by Sinyei, Mwonga, and Wanyama (2012), which found that songs were the most often utilized teaching tool in ECEs and were utilized in all pre-schools. In fact, a careful examination of ECEs in Kenya shows that the majority of teachers do incorporate musical activities into their lessons (Muya 2016).

In order to primarily build musical intelligence in pupils, nursery teachers must utilize motivational techniques that emphasize this type of intelligence; this ensures that the teaching-learning process will be focused on musical intelligence (Picie et al., 2012). According to Velez (2017), music education supports meaningful learning, and he makes the argument that the human brain possesses the capability to learn rapidly throughout the initial years of life by means of music. Other authors have made similar claims.

The elements that determine an individual's musical preferences can be said to include intelligence, personality, gender, ethnicity, sociocultural and socioeconomic group status, geographical location, life experience, age, and level of education, according to Pirgon (2021). After these aspects have been thoroughly explored, it is possible to predict that musical preference is a form of preference that can be generated, changed, and differentiated according to changes in the aforementioned characteristics.

According to Konecni (1982), music is always perceived in the context of a social environment. It is perceived at a particular point in time and at a certain location. It is perceived either in the company of other people or in one's own company. It is perceived in conjunction with other activities, each of which has its own unique and complex emotional origin and significance. An individual's musical preferences can be influenced by a number of different factors, including but not limited to personal qualities, environment, life experience, and socioeconomic level. It is the individual, along with their cultural and social environment, who gives a live idea of musical genres that is always evolving and updating (Demirtaş & Köse, 2018). Social class, family, peers, culture, media, and the prestige effect are all significant social elements that influence musical preference. The social environment in which the music is encountered is the most significant determinant of musical taste, according to the majority of scholars who have investigated this topic. Despite the fact that the significance of other listening settings and the structural characteristics of music are indisputable, the significance and value of music to individuals cannot be comprehended without taking into consideration the influence of social situations (Şenel, 2014).

The given literature and studies show that musical intelligence is a concept that is introduced by Gardner in his multiple intelligences. This means that it is a construct that is existing which is also anchored on individual differences of people. The presented literature also magnifies that studies on musical intelligence are more on the part of the students. Music is mostly used in teaching students in elementary level. This means that there is scarcity of available studies regarding the musical intelligence of teachers especially those who are teaching MAPEH considering music is one of the components. The situation convinced the researcher to come up with a study that centered on assessing the musical intelligence of MAPEH teachers in public elementary schools of Lubao West District in Division of Pampanga during the School Year 2024-2025 as inputs for action plan.

Conceptual Framework

The study was anchored on multiple intelligence theory of Gardner. In this theory, it was emphasized that each individual is unique and multiple intelligence is one of the intelligences

wherein a person may excel. The theory is suited on the purpose of the study because it centers on assessing musical intelligence, which is one of the intelligences.

The study used IPO model as the paradigm of the study.

The input had the profile of the MAPEH teachers including their membership in musical group, assigned grade level, and trainings related to music. The input also collected musical intelligence based on affective, behavioral and cognitive.

The process included securing permit, distributing survey, collecting survey, applying statistics and interpreting results. It also had creation of interview guide, validation, conduct of interview and application of thematic analysis.

The output was the proposed action plan.

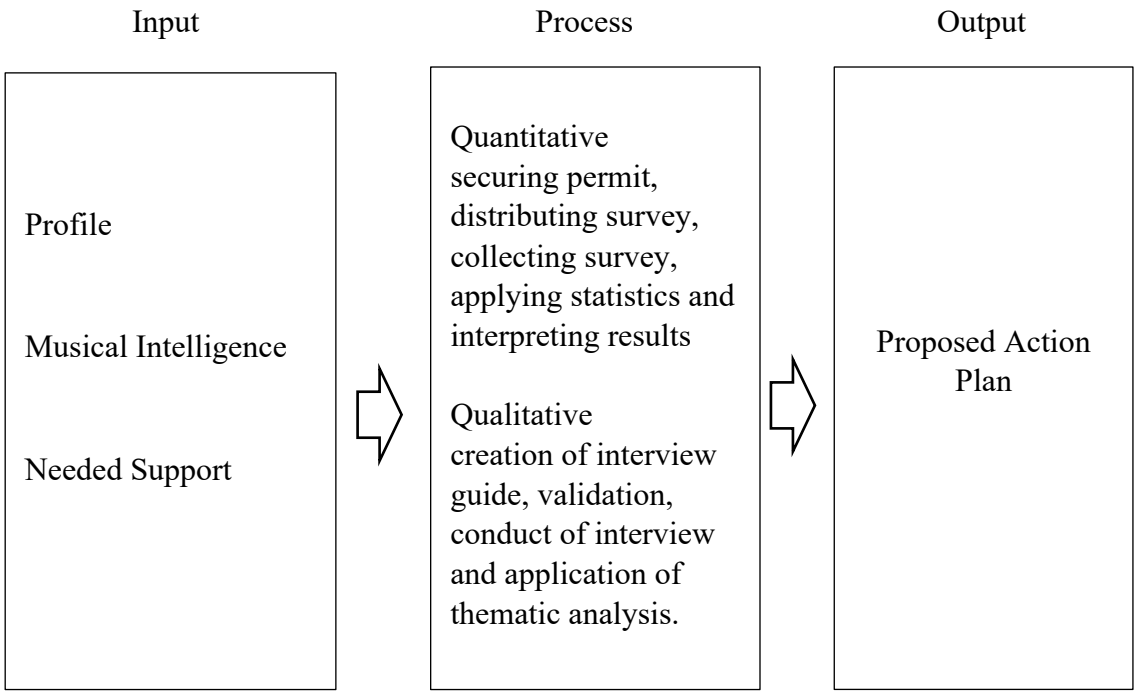

FIGURE 1
PARADIGM OF THE STUDY

Statement of the Problem

This research aimed to assess the musical intelligence of MAPEH Teachers in public elementary schools of Lubao West District in Division of Pampanga during the School Year 2024-2025.

Specifically, it sought to find answer on the following questions:

1. How may the profile of the MAPEH teachers be described based on the following parameters:

1.1 membership in musical group,

1.2 assigned grade level, and

1.3 trainings related to music?

2. How may the musical intelligence of MAPEH Teachers be assessed in terms of the following indicators:

2.1 affective,

2.2 behavioral, and

2.3 cognitive?

3. Is there a significant difference between the musical intelligence of the MAPEH teachers when grouped according to profile?

4. What support do the participants need to further improve their musical intelligence?

5. Based on the findings of the study, how may an action plan may be proposed?

Hypothesis

There is no significant difference between the musical intelligence of the MAPEH Teachers when grouped according to profile.

Significance of the Study

The following will benefit from the study after its completion:

Education Program Supervisors of MAPEH. The study will give them idea regarding the musical intelligence of teachers. Knowing this, they can have the most suited instructional supervision that the MAPEH Teachers will need.

School Heads. Knowing the strengths and needs of the MAPEH Teachers in musical intelligence, they will have better options on how to give guidance to their teachers to improve their musical intelligence.

MAPEH Teachers. They are one of the primary beneficiaries of the study because they are the main concern. The proposed action plan will help them to improve their musical intelligence. To have a good musical intelligence will help them in teaching music component of MAPEH with ease.

Pupils. The improvement on teaching of their teachers may also help in improving their acquisitions of competencies in music component of MAPEH. With this, they may discover their innate ability related to music or may further increase their interest on MAPEH subject.

Future Researchers. The study will be added to the existing body of knowledge related to musical intelligence of teachers. The study may be used as reference for future researchers who will have topic related to it. In addition, the study may provide future direction to researchers which will be found in recommendation section.

Scope and Delimitation

The main locale of the study was the Lubao West District of Division of Pampanga. It is one of the 33 districts in the division.

From the district, MAPEH teachers in the public elementary schools were the respondents.

The main purpose of the study was to assess on the musical intelligences of MAPEH teachers during the School Year 2024-2025.

To realize it, data on profile of teachers were collected focusing on membership in musical group, assigned grade level, and trainings related to music. Also, the musical intelligence of the respondents was gathered focusing on affective, behavioral, and cognitive. Using the two pieces of information, difference on their musical intelligences was tackled.

In addition, the needed support of participants on musical intelligence was also discussed.

An action plan was proposed based on the findings of the study.

Definition of Terms

The following terms are defined for better understanding:

Musical Intelligence is the abilities to produce and appreciate rhythm, pitch, and timbre; appreciation of the forms of musical expressiveness. The study coined it into affective, behavioral and cognitive.

Plan of Action. It deals with the activities to be taken that will help in attaining the objectives of improving the musical intelligence of the MAPEH Teachers.

Profile. This focuses on membership in musical group, assigned grade level, and trainings related to music.

Support. This deals with the desired support of the MAPEH teachers that will help them in improving their musical intelligence further.

II. METHODOLOGY

This chapter discusses research design, respondents and sampling technique, instrumentation, data collection and statistical treatment.

Research Design

To ensure a comprehensive analysis and presentation of results, mixed method type of research was the center of the undertaking. This type of research focuses on the use of numerical figures as representation of data and combined with qualitative data collection and analysis. It is a scientific and systematic process of measuring a certain variable which can be used to provide an exact measurement or result of a change. Specifically, it answers questions through the use of numerical assessment and presentation. The idea of Benny (2016) posits that testing hypothesis or making predictions through the results of the study is one of the functions of quantitative research. These numbers are taken from the dimensions measured when the researcher ventured to gather data that will answer the specific questions of the research.

Specifically, this study employed sequential-explanatory design. From the idea of Baraceros (2016), the main purpose of applying a research is to have a thorough investigation of a certain issue by answering the questions who, when, where, what and how using both quantitative and qualitative data. Its goal is to provide a concrete detail about the phenomenon being described.

This is the most suited type of research because of its objective of assessing the musical intelligence of MAPEH teachers of Lubao West District in Division of Pampanga during the School Year 2024-2025.

Respondents/Participants

The main locale of the study was the Lubao West District where the researcher is currently located and assigned as public school teachers. The district is under the leadership of public schools

district supervisor. MAPEH teachers were requested as the respondents. From this point, the total population of the MAPEH teachers in the district was requested to participate. This means that universal sampling was applied. This will give everyone the chance to be represented in the study.

TABLE 1
RESPONDENTS OF THE STUDY

Schools	Frequency	Percentage
School 1	10	11.24
School 2	6	6.74
School 3	5	5.62
School 4	7	7.87
School 5	6	6.74
School 6	7	7.87
School 7	5	5.62
School 8	5	5.62
School 9	4	4.49
School 10	6	6.74
School 11	8	8.99
School 12	6	6.74
School 13	6	6.74
School 14	8	8.99
Total	**89**	**100.00**

Table 1 shows the distribution of the respondents according to school. It can be seen that there was a total of 89 MAPEH teachers from the entire district. A closer look on the table revealed that 11.24% of the respondents are from School 1, while 4.49% are from School 9.

For the qualitative part, there were 10 MAPEH leaders who were requested as participants of the study.

Research Instruments

As mentioned, the study employed the quantitative-descriptive method. To gather data from a large number of individuals, survey questionnaire tool was used. It is designed to specifically answer the presented questions in the previous chapter.

The instrument used is the questionnaire of Krishman, Sullivan and Aurand (2016) about musical intelligence. It is a prevalidated instrument that is used to measure the musical intelligence of the respondents. It is divided into affective, behavioral and cognitive. The tool underwent series of validation and reliability check before it was finalized. It can be answered using five-point likert scale.

The researcher also used semi-structured interview. These questions were prepared by the researcher based on qualitative question. They were presented to adviser and panel of experts for validation before the actual use.

Data Collection

As part of protocol, a letter of request was sent to the Schools Division Superintendent. This was prepared by the researcher and the research adviser affixed his signature to conform it. After getting all the necessary approval, the researcher started communicating with the school heads of the teacher-respondents.

The researcher considered using the online platform to gather the needed data. This helped both the researcher and the respondents to save time and have easy way to answer the questions.

However, the researcher also consider giving hard copies of the questionnaire to the teachers so they had the options what to use. This increased the participation and retrieval rate during the data collection.

The interview was also conducted online to ensure that teachers can still work and were not disturbed during class hours.

Ethical Considerations

In any research, it is very important that ethical consideration is being practice. To do this, protocols on visiting schools were reviewed by the researcher and was done religiously. For this part, the permits to be secured were prioritized. No action was done without the knowledge and approval of the adviser.

In addition, the researcher explained to the respondents the purpose of the study. This gave them the chance to make some clarifications if needed. Furthermore, participation was on voluntary basis. No teacher will be forced to participate.

Also, the right of the teachers to withdraw anytime during the research undertaking was respected. They were given the chance not to right their name to protect their identity. All of the information that were collected were only used for the purpose of this study.

Statistical Treatment/Data Analysis

The following statistical treatment were used to interpret the data.

1. Frequency and percentage, to summarize the profile of MAPEH teachers

2. Weighted mean, to measure the musical intelligence of the respondents using this scale

Scale	Descriptive Equivalent	Numerical Rating
1	Strongly disagree	1.00-1.50
2	Disagree	1.51-2.50
3	Somewhat Agree	2.51-3.50
4	Agree	3.51-4.50
5	Strongly agree	4.51-5.00

3. Analysis of variance, to determine the difference on musical intelligence based on profile

Transcripts of the information gathered from semi-structured interviews will be created. These straight quotes were categorized based on their commonalities, and each set of quotes was given a theme to symbolize them.

Formulation of themes was done using the following steps: (a) convert the recordings to transcript, (b) identify key points, (c) code the key points, (d) group similar codes, and (e) assign themes.

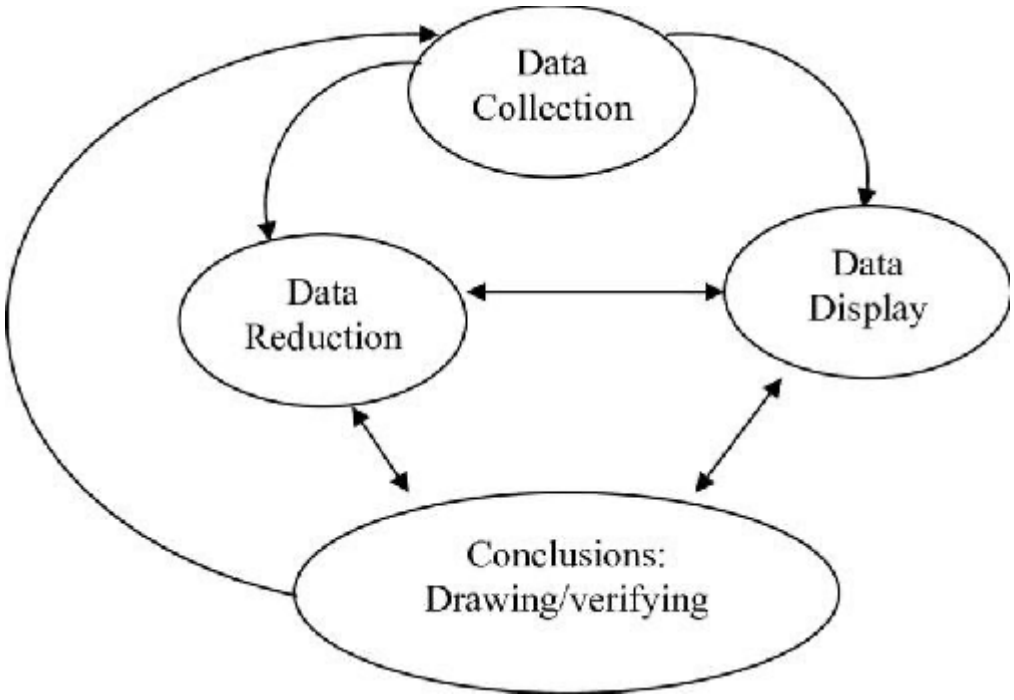

FIGURE 2
DIAGRAM OF QUALITATIVE DATA ANALYSIS

The heart of data analysis in this part is on thematic analysis of the data.

It consists of three four stages or 'streams' including data collection, data reduction, data display and data conclusion-drawing/verifying.

Data collection is the first part of this model. The researcher needs to gather first the data to be interpreted from the target source.

Data reduction is the second stage in data analysis according the Miles & Huberman (1994) model. It includes the process of selecting, simplifying and transforming the data.

The third main step of the Miles & Huberman Model (1994) is data display. This step involves retrieving data using data display. It cannot be separated from data reduction because it complements the former. Data display is “the organized, compressed assembly of information” (Ibid p.11). It aims to make sense of the data that is collected. Data display organizes data, helps to arrange concepts and the thoughts (Miles & Huberman 1994).

The last step of the Miles & Huberman Model comprises data drawing and conclusions (1994). These workers have suggested the use of some points to assist researchers to draw conclusions having displayed data in a variety of ways. Some of their ideas to generate meaning from the data were adopted by this research.

These included: 1- The notation of any patterns or themes and the relevance of any statement especially if similar or contrasting

2- Grouping or establishing categories of ‘information that can go together

3- Identifying interrelations among factors and variables

4- Building conceptual coherence and consistency, which at the end it should use to explore the validity of the findings so that they fit the theoretical framework of the study.

III. RESULTS AND DISCUSSION

This part of the study deals with the results of the statistical treatment and thematic analysis applied in the data.

1. Profile of the MAPEH Teachers

The profile of the MAPEH teachers was described based on winnings in music contest, innovation related to music, and exposure to music.

Table 2 tells that 82 or 92.13% of the MAPEH teachers do not have winnings in music, while there was only one or 1.12% who has winnings. The findings show that MAPEH teachers do not participate in music-related competitions to a satisfactory extent. It is reasonable to assume that, despite the fact that they are required to teach music, they do not participate in competitions that are related to music.

Tucker et al. (2023) emphasized the fact that when it comes to teaching music, there is nothing more important than practice. It is essential that a person be capable of carrying out the information that he or she is teaching to the students. However, it does not imply that winnings in the music industry are required. It provides support solely for the assertion that one is proficient in music. Going beyond the potential for winning prizes, instructors who participate in competitions contribute to their own personal growth, professional development, and general influence in the field of education.

TABLE 2
SUMMARY OF WINNINGS IN MUSIC

Number of Winnings	Frequency	Percentage
0	82	92.13
1	2	2.25
2	2	2.25
3	1	1.12
4	2	2.25
Total	**89**	**100.00**

Considering the data on innovation related to music, 98.88% of the teachers have no innovation. Only one or 1.12% has innovation related to music that are approved in the school level.

The findings suggest that teachers of MAPEH are unable to come up with innovations that would result in improved teaching methods in their classrooms. These teachers are nevertheless required to think beyond the box as part of their fundamental behavioral functions in their performance rating, despite the fact that there are few of them who are able to have one.

According to Rosy (2024), teachers can give creative methods for teaching music, even if they only use materials or provide novel tactics. Nevertheless, teachers are preoccupied with the actual implementation of their teachings, which means that not all of these are being captured. The methods used in teaching have come a long way over the years, with fresh developments continually influencing the way that educators approach learning. Teachers are always discovering new techniques of engaging with their students and improving their learning experiences, ranging from the integration of technology to personalized learning approaches. In this article, we will investigate the impact that some of the most recent breakthroughs in teaching methods have had on education, as well as the innovations themselves.

TABLE 3
SUMMARY OF INNOVATION RELATED TO MUSIC

Innovation	Frequency	Percentage
None	88	98.88
School	1	1.12
District	0	0.00
Division	0	0.00
Total	**89**	**100.00**

Table 4 provides information that 96.63% of the MAPEH teachers do not have exposure related to music. However, there is one or 1.12% of them who have is singer, choir member or instrumentalist.

As a consequence of this, the majority of them do not participate in activities that are associated with music. The majority of them are more involved in the field of education. Li (2023) presented the idea that being exposed to music causes a person to become more skilled in the field of music. It can be beneficial to listen to music since it enhances the experience, which in turn can be beneficial to the enrichment of information about music.

TABLE 4
SUMMARY OF EXPOSURE TO MUSIC

Exposure	Frequency	Percentage
None	86	96.63
Singer, Choir Member, Instrumentalists	1	1.12
Music Coach	2	2.25
Business related to Music	0	0.00
Total	**89**	**100.00**

2. Assessment of Musical Intelligence of MAPEH Teachers

Musical intelligence of MAPEH teachers was assessed based on affective, behavioral and cognitive. Using the survey questionnaire, data were taken directly from the respondents.

Affective musical intelligence of the MAPEH teachers got a grand mean of 3.84 (SD=0.36) or strongly agree. The same table reflects that highest mean of 4.17 (SD=0.37) or strongly agree is found on first indicator “On occasions, I have felt almost moved to tears while listening to music”. Also, third indicator “I get upset if someone disturbs me while I am listening to music” marked a mean of 3.12 (SD=0.38) or agree.

Results indicate that MAPEH teachers have love for music. They have strong attachment on music which is part of their work as public school teachers. Stavrou (2022) cited that love for music includes emotion and attachment to it. Every person loves music but it may differ on the kind of music that they love. If a teacher is truly passionate about music, they will be able to communicate that enthusiasm to their pupils, which will make the classes more captivating and

encouraging for the students. Teachers' enthusiasm for music motivates them to constantly investigate, practise, and perfect their craft, which in turn results in a more comprehensive understanding that they are then able to impart to their pupils.

TABLE 5
ASSESSMENT OF MUSICAL INTELLIGENCE BASED ON AFFECTIVE

Indicators	Mean	SD	Description
1. On occasions, I have felt almost moved to tears while listening to music	4.17	0.37	Agree
2. I have often experienced euphoric feelings while listening to music	4.02	0.32	Agree
3. I get upset if someone disturbs me while I am listening to music	3.12	0.38	Somewhat Agree
Grand Mean	**3.84**	**0.36**	**Agree**

MAPEH teachers rated their behavioral musical intelligence as agree as shown on its grand mean of 3.65 (SD=0.44). It is also glaring from the table that indicator “I make efforts to seek out good music” got the highest mean of 3.78 (SD=0.47). Also, indicator “I make extra effort to attain sophisticated musical taste” marked a mean of 3.57 (SD=0.44). All of the indicators got an agree rating from the MAPEH teachers.

The findings suggest that the musical intelligence of MAPEH teachers is at the intermediate level, meaning that they recognize the value of music based on their actions but do not demonstrate this recognition through their behaviors. In their 2014 publication, Krishnan et al. made the claim that people who possess a high degree of musical intelligence exhibit behaviors that demonstrate their passion for music. Even if they might not be obvious to the human eye all the time, they will certainly highlight behaviors that are not observed in persons who do not have an aptitude for music.

TABLE 6
ASSESSMENT OF MUSICAL INTELLIGENCE BASED ON BEHAVIORAL

Indicators	Mean	SD	Description
1. I tend to stop and notice sounds like an elevator chime or a ring tone	3.72	0.42	Agree
2. I tend to stop and notice any rhythmic sound pattern such as the whirr of a printer	3.60	0.41	Agree
3. I make efforts to seek out good music	3.78	0.47	Agree
4. I make extra effort to attain sophisticated musical taste	3.57	0.44	Agree
Grand Mean	**3.65**	**0.44**	**Agree**

Table 7 reflects that cognitive is rated as agree with a grand mean of 4.30 (SD=0.41). Even though all of the indicators are rated as agree on all of the indicators, the highest mean of 4.33 (SD=0.41) is listed on first indicator "I can easily recognize the logical structure underlying a musical composition merely by listening to it". The lowest mean of 4.28 (SD=0.43) is given to third indicator "I can recall the original music even if I hear a version on another instrument"

It is reasonable to assume that teachers who teach music, art, physical education, and health (MAPEH) have a base of expertise in music. Because they are the ones that teach it in MAPEH, this is what is expected of them. According to Kausar et al. (2023), in order to be musically inclined, one must be well-informed about music. Critical thinking and musical intelligence are two separate cognitive capacities that can, however, complement one another in a number of different ways. Musical intelligence is the ability to identify, categorize, change, and express sounds and musical forms, which allows people to create, communicate, and comprehend meaning via the use of sound.

TABLE 7
ASSESSMENT OF MUSICAL INTELLIGENCE BASED ON COGNITIVE

Indicators	Mean	SD	Description
1. I can easily differentiate between major and minor keys	4.32	0.42	Agree
2. I can easily tell the difference between original version and an adaptation	4.31	0.38	Agree
3. I can recall the original music even if I hear a version on another instrument	4.28	0.43	Agree
4. I can predict the next sequence in an unfamiliar music, after hearing the first part	4.31	0.42	Agree
5. I can easily recognize the logical structure underlying a musical composition merely by listening to it	4.33	0.41	Agree
Grand Mean	**4.30**	**0.41**	**Agree**

3. Difference on Musical Intelligence of MAPEH Teachers

After getting the first data, the researcher also examined the difference on the musical intelligence of teachers according to their profile.

As shown, difference on musical intelligence of the MAPEH teachers recorded an F value of 2.5517 and p value of 0.0421 on winnings, an F value of 2.5982 and p value of 0.0428 on innovation and an F value of 2.9534 and p value of 0.0264 on exposure. The data are enough to reject the null hypothesis and claim that there is no significant difference on the musical intelligence of MAPEH teachers based on their profile.

The information implies that the musical intelligence of an individual will vary in accordance with the experiences that they have had in their lives. When compared to individuals who do not develop their intelligence, their exposure to music and their activities in relation to music will make them more likely to be interested in music. Crisculou et al. (2019) put up the argument that musical intelligence can be cultivated, particularly when an individual is able to devote time to improving their skills in that area.

TABLE 8
ANALYSIS OF VARIANCE ON MUSICAL INTELLIGENCE OF TEACHERS

Profile	F-value	p-value	Decision
Winnings in Music Contests	2.5517	0.0421	Reject Null
Innovation Related to Music	2.5982	0.0428	Reject Null
Exposure to Music	2.9534	0.0264	Reject Null

4. Support Needed to Improve Musical Intelligence

Additionally, the researcher focused on the collection of data for the qualitative part of the study. In order to enhance the musical intelligence, the required support from the participants was examined, and the following themes were produced:

Theme 1: Capacity Building on Music

In order to be able to teach music, one must possess both knowledge and expertise in the subject. This is the fact that the world has come to recognize, as it is impossible for someone to share something that they do not possess. MAPEH teachers do not possess a particularly high level of musical intelligence, but there is room for improvement. They recognize the importance of receiving formal music instruction in order to continue making progress in the area of musical intelligence.

. As it is well known, the objective of training is to bridge the gap between what is lacking and what is anticipated. The following significant statements from the participants underscore the significance of providing training in music:

It is better to have extra training related to music (P1)

Learning on how to play instrument for music classes (P4)

Teach us to use musical instrument (P6)

*Schooling on music (*P9)

Training related on music and how to use instrument for classroom instructions (P10)

The majority of formal training courses are designed to provide participants with instruction on a topic that they are unknowledgeable about, or they lack the knowledge necessary to understand it. Training sessions are considered to be a component of the professional development of instructors. Content-based instruction is what MAPEH teachers are seeking in the event that they are involved.

According to Mihailovic (2020), it is essential for those who will be teaching music to participate in training sessions on the subject. While it is true that not everyone is musically talented, anyone can gain musical skills via adequate and rigorous training.

Theme 2: Coaching by Musically Intelligent People

Even though they are in the process of teaching music, the participants are aware that there are aspects of their own performance that they must continue to work on improving. They come to the realization that they can learn a great deal from those who are musically intelligent.

Teachers may find it rather beneficial to have knowledge of what the general public already knows about music, since this knowledge could assist them in enhancing their musical intelligence and pedagogy. This is found on the following ideas of the MAPEH teachers:

Assistance from experts in music (P2)

Teachers who are musically intelligent may help us (P3)

If there is someone who will assist us in music (P5)

If they can give us a person who is good in music and teach us (P7)

There are a variety of ways to obtain knowledge from an expert. Personal training and assistance are two examples of this. People who have a high level of musical intelligence have a good understanding of music and are knowledgeable about it. The MAPEH teachers are aware that these individuals have the potential to be of assistance to them.

Dawson (2014) emphasized the fact that those who have an interest in music have a good understanding of it. Because of this knowledge, they are in a better position to provide more effective guidance to people who have an interest in developing their musical abilities.

5. Proposed Action Plan

Considering the findings of the study, the researcher came up with an action plan for MAPEH teachers in improving their musical intelligence. This action plan provides details on what are needed to be done and the time frame needed to be considered in actual implementation.

Objectives	Strategies/Activities	Timeline	Persons Involved	Success Indicators
1. Increase teachers' awareness of music integration in the MATATAG curriculum	- Conduct orientation/training on Multiple Intelligences with emphasis on Musical Intelligence - Workshop on integrating music into various learning areas	Month 1	School Head, EPS in Music/Arts, Teachers	At least 90% of teacher-participants complete orientation and demonstrate understanding through post-training reflection or quiz
2. Strengthen teachers' basic musical intelligence	- Coaching sessions on voice training, rhythm exercises, and use of simple classroom instruments - Peer demonstrations of musical strategies	Months 1–2	Music Coaches, LAC Leaders, Teachers	At least 80% of teachers can perform basic rhythm and melody exercises and apply them in classroom demonstration

Objectives	Strategies/Activities	Timeline	Persons Involved	Success Indicators
3. Build teacher capacity to use music as a teaching and motivational tool	- Training on songwriting, chants, and jingle-making for classroom instruction - Model lessons using music to reinforce concepts	Months 2–3	Master Teachers, Coaches, Teacher Participants	At least 3 music-integrated lesson plans produced and showcased per grade level; 75% of teachers apply strategies in their classes
4. Enhance collaboration and peer support in music-based teaching	- Organize PLC or LAC sessions focused on music integration - Share best practices, classroom innovations, and music-based lesson plans	Quarterly	School Head, LAC Coordinators, Teachers	100% of LAC sessions include sharing of at least one music-based lesson; teachers report increased collaboration in feedback forms
5. Sustain continuous teacher growth in musical intelligence	- Participation in district/division-level training, contests, and festivals - Access to digital platforms (DepEd Commons, OERs) - Reflection and evaluation sessions	Ongoing	Division EPS, School Heads, Teachers	Teachers consistently engage in music-related PD activities; documented evidence of integration in lesson plans and classroom observations

IV. CONCLUSIONS ANS RECOMMENDATIONS

This chapter presents the summary of findings, conclusions formed and the recommendations formed.

Summary of Findings

The following were the summary of findings:

1. 82 or 92.13% of the MAPEH Teachers do not have winnings in music. Furthermore, 98.88% of the teachers have no innovation. Lastly, 96.63% of the MAPEH teachers do not have exposure related to music.

2. MAPEH Teacher-respondents agree that they are musically intelligent in affective (M=3.84), behavioral (M=3.65) and cognitive (M=4.30).

3. Difference on musical intelligence of the MAPEH Teachers recorded an F value of 2.5517 and p value of 0.0421 on winnings, an F value of 2.5982 and p value of 0.0428 on innovation and an F value of 2.9534 and p value of 0.0264 on exposure indicating difference is statistically significant.

4. Capacity Building on Music and Coaching by Musically Intelligent People are the needed support of the MAPEH Teachers to improve their musical intelligence that they can apply in teaching.

5. An action plan is proposed based on the findings of the study related to musical intelligence.

Conclusions

The following conclusions were formed considering the findings of the study:

1. MAPEH Teachers low participation in music-related activities suggests that they are unable to show that they have musically inclined skills.

2. MAPEH Teachers musical intelligence is within minimum expectations from them as they are the ones who teach music in school.

3. There is significant difference on musical intelligence of the MAPEH Teachers based on their profile indicating that the more the exposure that the teachers have, the more improvement they will have in musical intelligence.

4. Participants notice that by receiving the proper instruction and support from school heads and music specialists, they may further develop their musical intelligence.

5. The proposed action plan aims to help MAPEH Teachers in improving further their musical intelligence.

Recommendations

The following are the recommendations of the study:

1. MAPEH teachers may start searching for ways to become more involved in musical activities, such as joining music-related clubs or playing on their affiliation's music team.

2. By concentrating on the indicators with the lowest scores and incorporating them into their personal development plan, MAPEH teachers' musical intelligence may be further enhanced.

3. By creating events that will motivate teachers to engage with music more, such as encouraging them to enter competitions and contests, school heads can assist instructors become more familiar with music.

4. School learning action cell may include topics on musical intelligence wherein the resource speakers are people who are inclined in music.

5. The proposed training program may be used by the school as part of addressing the needs of their MAPEH teachers.

6. Future researchers may conduct study regarding the challenges of teachers in teaching music to enrich the findings of the study.

REFERENCES

[1.] Afanan, I., & Akzndar, N. (2004). Multi intelligence levels among basic education students stage in Gaza and their relationship to achievement in mathematics and orientation towards. *Humanists Studies Journal*, 12 (2), 323-366.

[2.] Aguirre, D., Bustinza, D., & Garvich, M. (2016) Influence of Songs in Primary School Students' Motivation for Learning English in Lima, Peru. *English Language Teaching*; 9 (2) 178-191.

[3.] Al-Ahdal, A. (2009). The efficiency of activities and approaches based on the multi-intelligence theory in improving the achievement of Geography and maintaining the learning effect among first year secondary students in Jeddah Province. *Journal of Science Education and Human*, 1 (1), 191-242.

[4.] Almodovar, M. (2010). *Integrating music, drama, and the visual arts in the early childhood curriculum: A study of early childhood teachers in a metropolitan area of Puerto Rico* (Doctoral Dissertation). Available from ProQuestDissertations and Theses database. (UMI No. 3397684)

[5.] Baraceros, E. (2016*). Practical Research 1.* Rex Publishing Company.

[6.] Benny, G. (2016). *Introduction to Quantitative Research*. Researchgate.

[7.] Crisculou, A., Bonetti, L., Sarkamo, T., Kliuckko, M., & Brattico, E. (2019). On the association between musical training, intelligence, and executive functions in adulthood. *Front. Psychol*.

[8.] Dawson, W. (2014). Benefits of Music Training Are Widespread and Lifelong A Bibliographic Review of Their Non-Musical Effects. *Medical Problems of Performing Artists* 29(2):57-63

[9.] Estévez, M., & Rojas, A. (2017). Artistic education in initial education. a requirement of the training of the professional. University and Society, 9(4).

[10.] Gardner, H. (2004). Audiences for the theory of multiple intelligence. *Teacher College Record*. 106(1), 212-220. Columbia University.

[11.] Hoekstra - de Roos, A. (2014). *Musical Intelligence*. International Montessori Schools and Child Development Centres Brussels, Belgium

[12.] Kausar, S. et al. (2023). The Relationship Between Musical Intelligence and Critical Thinking Problem-Solving Skill in Undergraduates. *International Journal of Academic Research in Progressive Education and Development*, 12(2)

[13.] Konecni, V. J. (1982). *Social interaction and musical preference. The psychology of music*. New York: Academic Press. https://doi.org/10.1016/B978-0-12-213562-0.50021-8

[14.] Krishman, V., Sullivan, U. and Aurand, T. (2016). Musical intelligence: explication, measurement, and implications for consumer behavior. *Journal of Consumer Marketing*.

[15.] Li, C. (2023). Research on the Influence Mechanism of Music Education on Preservice Teachers' Learning Ability. *International Journal of Education and Humanities* 8(2):172-177

[16.] Mihailovic, D. (2020). The Role of a Teacher in Music Education of Young Professional Musicians. *Facta Universitatis Series Teaching Learning and Teacher Education*

[17.] Mills, S.W. (2001) The Role of Musical Intelligence in a Multiple Intelligences focused Elementary School. *International Journal of Education and the Arts*, 2(4). (Sep 2001) (ISSN: 1529-8094) Copy of record can be obtained at: http://www.ijea.org/v2n4/index.html

[18.] Muya, F.K. (2016) Levels of teacher self-efficacy and use of music activities among preschool children. Kenyatta University.

[19.] Picie, AB, Ayvar, IE, Gómez, MTG, Ledesma, YR, & Benavides, ACS (2012). Evidence-Based Educational Innovation Project (IEBE): Pedagogical implications of music with plastic techniques in teaching and learning processes located in preschool students. *Latin American Journal of Educational Studies* (Mexico) , 42 (1), 85-121.

[20.] Pirgon, Y. (2021). A Comparison of the Multiple Intelligence Profiles of Trainee Music Teachers in Respect of Music Genre Preference. *International Education Studies*, 14(7)

[21.] Rosy, B. (2024). Innovations in Teaching Practices. *International Research Journal on Advanced Engineering and Management (IRJAEM)* 2(05):1469-1471

[22.] Sandberg, H., Cory, H. & Kathleen, P. (2013) Increasing Engagement through Music and Movement *Academic Exchange Quarterly* 17 (4)

[23.] Sinyei, C., Mwonga, J. & Wanyama M.N. (2012) An Assessment of the Availability of Resources to Facilitate Early Childhood Music and Movement Curriculum Implementation in Eldoret Municipality, Kenya. *Journal of Emerging Trends in Educational Research and Policy Studies* (JETERAPS) 3(5): 624-630

[24.] Stavrou, N. (2022). The Music Teacher I'd Like: Lessons Learnt From Students. *Frontiers in Education*, 6

[25.] Tucker, O. et al. (2023). Two Music Educators' Resistance to Competition. *Bulletin of the Council for Research in Music Education.*

[26.] Vélez, T. (2017). Reflection On Musical Intelligence. *Spanish Journal of Pedagogy*, LXXV(274),

[27.] Vides, A. (2013). Music as a Facilitating Strategy for the Teaching-Learning process. Rafael Landivar University. Faculty of Humanities

[28.] White, K. N. (2007) *Effects of Background Music in the Classroom on the Productivity, Motivation and Behavior of Fourth Grade Students* Unpublished Master's Thesis, Columbia College