International Journal of Education and Practice

2025 Vol. 13, No. 1, pp. 81-97 ISSN(e): 2310-3868 ISSN(p): 2311-6897 DOI: 10.18488/61.v13i1.3962 © 2025 Conscientia Beam. All Rights Reserved.



Cultivating creative minds: Integrating imagination and innovation in primary school piano instruction

D Si Wu¹⁺
D Yumi Yoshioka²

U Yumi Yoshioka Zaihua Wen³ 1,2,8 School of the Arts, University Science Malaysia, Malaysia.

Email: wusi@student.usm.my

²Email: <u>yumi@usm.my</u> ³Email: <u>zaihuawen@student.usm.my</u>



Article History

Received: 28 May 2024 Revised: 30 September 2024 Accepted: 16 October 2024 Published: 1 January 2025

Keywords

Creative music education Cultural context in learning Experiential learning Imagination integration Pedagogical practices.

ABSTRACT

This study aims to show how creativity and imagination can be integrated into primary school instruction to foster creative musical minds. A mixed method was employed, examining the impact of various pedagogical practices, instructor experience, and cultural differences on students' creative music-making abilities, focusing on improvisation and composition. Participants included primary school students, piano teachers, and parents from diverse Chinese ethnic backgrounds. The study found that innovative approaches emphasizing creative and experiential learning significantly enhanced students' ability to structure and optimize music, compared to conventional methods. The cultural context and the teacher's expertise were also identified as critical factors in fostering students' creative musical development. Integrating creativity into music education is essential for primary school students. A learning environment that encourages experimentation, self-expression, and discovery plays a vital role in developing students' creative potential. Music educators should consider adopting teaching methods that prioritize creativity and imagination tailored to the cultural context and the teacher's expertise to better cultivate creative musical talents in young learners.

Contribution/Originality: This study uniquely integrates creativity and cultural context into primary school piano instruction, focusing on improvisation and composition. Unlike previous research, it examines the influence of diverse Chinese cultural backgrounds on students' creative music development, providing a new insight into culturally responsive music education.

1. INTRODUCTION

Classic thinkers were among the first to realize the centuries-long relevance of the arts in education. Academics and teachers concur that the curriculum should incorporate the arts from the beginning of a child's growth. Western child-centered ideals and educational approaches have greatly impacted many Asian early childhood education systems following decades of globalization and massive social development (Lim, Martin, & Kwak, 2016). Preschool teachers may use the arts in a range of contexts, both educational and non-educational. In addition to being receptive to each student's unique interests and needs, a child-centered teacher also fosters strong and secure relationships with the students by offering feedback and posing follow-up questions that encourage critical thinking (Goldman, 2012). Unlike the child-centered teaching methodology, studies carried out in Asian countries (including

China, Hong Kong, Japan, Taiwan, South Korea, and Singapore) show that rote learning, programmed instruction, and standardized testing are common learning contexts for many preschoolers (Johnson, 2022).

Music education usually has its own unique methods. Preschool and postsecondary music education has supported many teaching styles over the years. Occasionally, the "innocent method" appears to guarantee that if a series of guidelines are followed, learning occurs and educators succeed (Kelly, 2003). Of the numerous teaching techniques employed in elementary music classes today, some are well known and have withstood the test of time and experience, while others have only recently come into being as a result of shifts in values, philosophy, and way of life (Stevens, 2004). While some consider themselves "eclectic," others insist on employing a variety of techniques to teach the same musical topic using a consistent methodology (Rogers, 2004).

While paraprofessionals and special education experts assist most classroom instructors, music educators are frequently required to handle this academic duty on their own for every student with a disability in a given school (Schedl, Lemmerich, Ferwerda, Skowron, & Knees, 2017). Furthermore, music programs need "rapid acquisition of many academic skills" and extensive group cooperation and participation, which sets them apart from traditional academic classes. Despite the growing importance of inclusive classroom management and teaching practices in teacher preparation programs, many music educators still feel overwhelmed and unprepared (Nordlund, 2006). The philosophy of music education may be viewed as a forum where opposing parties participate in a never-ending discussion regarding professional and ideological matters. One of the concepts that keeps cropping up is the notion of an aesthetic experience (Laukka, Eerola, Thingujam, Yamasaki, & Beller, 2013).

The term "aesthetic" alludes to an old artistic theory and is commonly used synonymously with "beautiful." The understanding of what is meant by "aesthetic experience" also seems to have been inspired by this larger conception. This dissertation aims to demonstrate the many ways in which competing actors employ the phrase in different academic domains related to the philosophy of music education (Fossum & Varkøy, 2012). In preschools that are primarily run by private schools, where gratifying parents (i.e., the customers) is crucial, many educators feel compelled to implement more conventional methods of instruction, turning to worksheets, memorization, and quantifiable academic learning objectives (Bautista, Moreno-Núñez, Bull, Amsah, & Koh, 2008). The belief in one's capacity "to organize and practice the course of action required to produce given achievements" is known as self-efficacy. Every task has a different degree of self-efficacy, and a teacher's self-efficacy is their conviction in themselves, confidence in their ability to finish a teaching task, their capacity for learning and engagement, and to help the students achieve the intended outcomes (Woodcock, Sharma, Subban, & Hitches, 2022).

The use of lyrics as a communication tool does not always spread to listeners. Furthermore, they are not ideal historical depictions. Such polarizing approaches to music ignore the inherent diversity of lyrics that already exist, which is a natural byproduct of the intellectual (and often anti-intellectual) character that permeates modern culture (Angelo, 2008). Records of oral histories are frequently accessible. Contemporary music paints a fragmented, incomplete image of life in America. Numerous items provide additional examples of the constrained perspectives found in recorded music (Byrne, Halliday, Sheridan, Soden, & Hunter, 2001). First, the physical constraints of capturing a single sound mean that a singer's commentary can only be captured for a brief period of time. A song typically lasts three or four minutes. Second, a song's popularity signifies its broad public acceptability (Godwin, 2016). This market-based reality frequently places restrictions on the climax of poetic transgression. Third, the majority of songs have a brief radio play life (Cooper, 1998).

1.1. Research Significance

Historically, technical proficiency and rote learning have dominated music instruction in primary schools, with little emphasis on uniqueness and creativity. However, it's becoming clear how important it is to link creativity to contemporary approaches to develop creative musical brains, including improvisation and composition. China offers a unique, researchable educational environment where cultural heritage and fast development meet. Focusing on

improvisation and composition approaches, this study intends to investigate how creativity and imagination have been included in Chinese primary school piano instruction and how it affects students' abilities to create music. The influence of teacher skills and cultural differences on students' musical growth are also considered in this study. By examining effective music teaching methods in accordance with Chinese instruction, this study aims to fill a gap in the literature.

1.2. Research Gap

While creativity and innovation are often emphasized in studies on music education, there is a dearth of focus on piano instruction in primary schools, particularly in China. Studies on the integration of creativity and sophisticated teaching strategies in piano instruction at the primary school level are conspicuously lacking in China. Furthermore, little research has been done on the effects of cultural factors and piano teachers' abilities on students' creative minds. This study aims to reduce this gap by analyzing the relationships among teaching methodologies, teacher experience, and cultural variance in Chinese primary school piano instruction.

1.3. Research Questions

- How does the integration of imagination and innovation in primary school piano instruction impact students' creative musical ability, specifically in improvisation and composition skills?
- What role does teacher expertise play in shaping students' creative musical development in primary school piano instruction in China?
- How do cultural factors influence students' musical learning experiences and creative musical ability in primary school piano instruction in China?

1.4. Research Objectives

- Evaluate the effectiveness of integrating imagination and innovation in primary school piano instruction on enhancing students' improvisation and composition skills.
- Examine the influence of teacher expertise, including knowledge, skills, and teaching methods, on students'
 creative musical development in piano instruction.
- Investigate the impact of cultural factors, such as cultural values, beliefs, and practices specific to China, on students' musical learning experiences and creative musical ability in primary school piano instruction.

2. LITERATURE REVIEW

This literary review aims to examine prior research on music education, creativity, and innovation to set the stage for the current study's focus on developing creative music minds by bridging knowledge gaps and combining imagination and innovation in primary school piano education in China.

An alternative perspective on the aim of education is subjective, in which the goal is determined by what each person needs, desires, or truly gains from the educational process. Education is viewed from either an individualistic or a social perspective, and frequently the two are discussed independently without taking into account how the subject is interrelated with the world. Subjectively speaking, the goals of learning and education are the same: bettering one's own life and fostering personal development (Ferm & Thorgersen, 2007).

In fact, the aesthetic is typically connected solely to the arts in the more restrictive definition. The development of an aesthetic sense of the beautiful and a sense of proportion; the development of aesthetic perception; the experience, creation, evaluation, and expression of the beautiful; the development of a relationship with nature; and the beautiful in interpersonal relationships are the main objectives of aesthetic education (Boer et al., 2012). According to modern pedagogy, all children should have the chance to hone their skills in observing, experiencing, evaluating, and creating beauty (Denac, 2014).

In music instruction, there is a disagreement between rotating pedagogy and note-by-note pedagogy. Music reading research states that "nothing in the literature indicates a strong correlation between performance abilities and music reading success." Some scholars claim that teaching early instrumentalists to look before they play might have advantages (Barresi, 1987).

Technique and interpretation have replaced composition, improvisation, and interpretation as teachers' focus areas over time (Grey, 2020). Research indicates that different teaching approaches have various effects on students' musical preferences. In contrast to teaching music preferences, what happens when someone is repeatedly exposed passively, or not at all, is unknown. For instance, extended passive exposure to particular musical genres enhances the preference or choice for such genres through improved orientation (Vaughan & Myers, 1971). While some research indicates that directed listening and other teaching methods are less effective in shaping students' musical preferences than repetition or any exposure, other studies demonstrate that training results in higher preferences (Tso & Chung, 2016).

When two or more musical styles are compared, no one academic approach seems to dramatically improve students' preferences for one over the other (McKoy, 2002). It's unclear how ensemble directors select the instructional materials they employ. It appears that music teachers will be able to make better judgments regarding music performance and reading if they compare the usage of foundation exercises to the perspective of music content (Andrews, 1996). While numerous studies have addressed reading music, very few have examined the effectiveness of any of these techniques. Reading music entails combining many components to create cohesive performance patterns. The significance of these patterns for an individual determines their aptitude for reading music (Sawyer, 2008).

A related study compared tonal concepts and technological skill development using early instrumentalists' performance success. Conceptual tonal elements include hearing, playing and harmonizing techniques as well as the division of instructional books' tonal patterns (Stevens, 2004). Rather than focusing on sound and harmony, the emphasis is on developing technical proficiency through the instruction of musical symbols and a variety of pitches through notation (Price, Blanton, & Parrish, 1998). Currently, the phrase "aesthetic experience" is sometimes employed in ways that suggest there is widespread agreement on its definition in both Nordic and international music education debates. It is said that when a perceiver concentrates only on a musical work's structural components, an aesthetic experience occurs. A truly musical experience is useless from an aesthetic standpoint (Laukka et al., 2013).

Awe-inspiring experiences are (and should be) fundamental, instantaneous, detached, independent, and remote. Any meanings, purposes, or experiences that are not directly associated with the structural patterns of composition are considered incidental, non-musical, irrelevant, or referential (Fossum & Varkøy, 2012).

There is a lengthy history behind the concept of musical skill. The initial evaluation of musical proficiency was created in the 1800s. This was able to differentiate between students who said they were not musical and those who were experienced musicians, which allowed for the evaluation of musical aptitude (Standley & Madsen, 1991). Prior studies hold that fundamental sensory discrimination skills, which are genetically based, loosely coupled, and do not change over time (with the exception of attention variations), are the components of musical competency. Hallam and Prince (2003) believe it would be better to construct a profile that could be broken down into several different, unconnected elements rather than integrating the findings of sub-testing to produce a single measure of musical skill.

The phrase "music ability" is "the most extensive and secure" as it denotes the capacity to play but "says nothing about the legacy or birth of the pictured potential" (Schalock et al., 2005). According to the third definition, everyone is capable of generating music since "average musical ability" is as universal as "average linguistic competence". It is truly expected of young children born into particular households to have extraordinary musical abilities. Few have the talent to be exceptional musicians. The amount of labor that those who do perform sets them

apart (Sacks, 1995). The capacity to utilize language is by no means a universal quality shared by all people, whether they are performers, writers, or astute listeners. Instead, it requires a special talent that only certain people possess (Schedl et al., 2017). Infants' communication, and communication in general, is reciprocal since they convey their wishes using the same modes of expression, such as noises, gestures, and touch (Davis, 2005). It has been observed that neonates' capacity to convey their inner moods differ; some are better than others at conveying "their needs more readily". Even fundamental skills such as communication are subject to individual differences (Noy, 1968).

There is a lengthy history behind the concept of musical skill. Music ability tests were created in tandem with the IQ exam. People were thought to be born with variable levels of intelligence that were mostly dictated by their genetic composition and remained constant throughout the early and mid-20th century (Kelly, 2003). These intelligence tests are still often used to identify people who have difficulty learning new things, as well as to choose candidates for occupations or programs with few educational possibilities. In order to assist music teachers in identifying pupils who would most benefit from individual music instruction, music capacity tests were first developed in combination with cognitive tests (Hallam, 2010). Scholars and musicologists alike are eager to see changes made to the field of music education.

Practitioners have written a great deal on the benefits of reforming music education (Clarke, DeNora, & Vuoskoski, 2015). Previous research has demonstrated that, according to the structure, sounds generated during improvisation are "the result of purposeful, non-random movements to produce musical sounds over time" and that they cannot be altered once generated (Parkes & Wexler, 2012). It was also discovered that improvisation allows an actor to choose the rhythms and pitches that comprise the improvisation, with certain restrictions for self-contained, instrument-specific, or musical genres (Chandler, 2018). Composing assignments provided in the learning community's classroom setting as a logical extension of the curriculum align with Dewey's philosophy of working with children in an educational context. Students gain knowledge in the affective domain of learning through composing in a variety of ways; they have to decide how to use sound for personal expression, they sometimes learn through group decisions and social interactions, and they interact socially with musicians whose works serve as models for them during the composition process and whose meanings are reflected in their music (Guderian, 2012).

Observing proficient music educators engaging with their students is like witnessing a seamless mosaic of comprehension, expert technique, profound insight, and lucid expression. Like specialists in any discipline, specialist music teachers base their conclusions on two things: (a) a wealth of relevant past experiences that illustrate the significant linkages between variations in musical performance, and (b) a keen visual and aural awareness that accurately depicts pupils' actions, thoughts, and feelings (Millican & Forrester, 2018). The capacity to recognize pertinent details and determine whether they can help or impede the attainment of objectives is the most crucial component of becoming an expert in each field of human endeavor (Hicken & Duke, 2023). Prior studies have examined the capacity of certified educators to employ particular skill sets in the classroom. These studies' findings demonstrate that whereas inexperienced instructors tend to record classroom interactions and activities more accurately, experienced teachers prefer to make inferences based on their observations. Experienced educators handle issues practically and automatically, but knowledgeable educators frequently take the bigger picture into account and must be ready for a range of responses throughout classes (Sogin & Wang, 2002). Teachers' relationships and interactions with one another can facilitate the sharing of information in the classroom. Investigating how effectively teacher-student interactions foster the growth of capacity and relational trust is part of this. The assumption that education and learning are complicated processes is strongly supported by the literature on teacher education (Shaw, 2020).

The fundamental cause of the frequent discrepancy between theory and practice in teacher education may be the challenges experienced by novice educators in incorporating their coursework and subject-matter expertise into their instruction. The focus is on basic activities in an attempt to address the "grain size" of these interactive teaching methods; if the concentration is too narrow, a starting instructor will not be able to apply an extended number of effective teaching strategies (Sogin & Wang, 2002). However, if the concentration is too high, first-service teachers might not be able to visualize or use these approaches in their growth (Millican & Forrester, 2018). Under the direction of an exceptional instructor, an inexperienced student can perform above their boundaries at a higher level.

When students are able to do specific tasks independently, the teacher gradually reduces their help. Our research aims to determine whether applied studio teachers teach for this kind of freedom and, if so, what strategies might be employed with the aid of this conceptual framework (Hicken & Duke, 2023). Along with thinking that students should, within reasonable bounds, develop their views about music and that musical expressiveness can and should be taught, instructors also value lessons that bring about transformative experiences (Chandler, 2018). The findings also support the notion that studio instructors expect to take on a lot more responsibilities in addition to teaching instrument skills and promoting expressiveness. Instead, they regard themselves as career mentors who assist students in making the move from studio study to the workforce (Parkes & Wexler, 2012).

Gender, income level, ethnicity, color, language, religion, geographic area, and even uncommon occurrences, such as bright and talented people and people with impairments, are just a few examples of the many variables that make up cultural diversity (Hallam, 2010). To educate pupils from different backgrounds without dividing them, teachers must be aware of specific social skills, such as tolerance, and other cultures. Cultural influences may impact a person's values, both personal and professional, which in turn can impact the social skills that educators must acquire in order to work with a varied student body in the classroom (Noy, 1968). Research has indicated a robust association among educators' personal convictions, their classroom conduct, and the learning environment they instruct in.

The classroom setting that teachers choose might also be influenced by their own values (Kelly, 2003). The inventive and prosperous nineteenth-century era has often been replicated in the recent history of music education, highlighting the brittle boundaries of ideas of cultural life that appear unchangeable or incompatible in the acts of politically astute people (Hallam & Prince, 2003). In an attempt to provide a solid foundation for culturally integrated yet openly inclusive music education, scholars have turned to ethnomusicology and cognitive psychology as a result of Herder's desire for a programmatic knowledge of music development in the central domain of the mother-child dyad. By avoiding overly stringent hierarchical correlations or dangerously essential connections between musical awareness and ethnic or linguistic identity, this method seeks to confirm claims of cultural individuality (Davis, 2005). Recognizing the differences in national music tastes and their relationship with socioeconomic and cultural aspects can aid in developing prescription systems and recovering culturally conscious music. Additionally, in cases when a new user's nationality is known but not their musical tastes, it might lessen the cold start issue (Price et al., 1998). The significance of intercultural studies lies in their ability to clarify the meaning and application of quality of life both within and between respondent groups and geographically, as well as whether it is a universal or relative term (Grey, 2020). The cross-cultural study mentions a construction or phenomenon's etic (universal) and emic (culture-linked) qualities. Quality of life is a sensitive term that is being utilized globally in the field of intellectual impairment as a topic for social construction, and in the design, provision, and assessment of personalized services and support (Schalock et al., 2005). Figure 1 illustrates the conceptual model showing how teacher expertise, instructional approach, and cultural factors influence creative musical ability, including improvisation and composition skills. Teacher expertise directly impacts the instructional approach, while cultural factors shape the instructional approach, ultimately fostering students' creative musical abilities.

- H: There is an association between creative musical ability and instructional approach.
- H₂: There is an association between creative musical ability and teacher expertise.
- H_s: There is an association between teacher expertise and instructional approach.

H.: Teacher expertise mediates the relationship between creative musical ability and instructional approach.

Hs. Cultural factors moderate the relationship between teacher expertise and instructional approach.

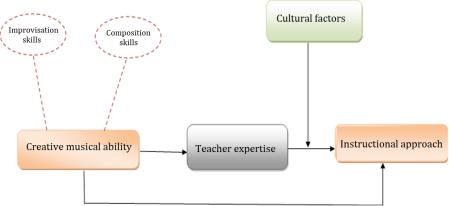


Figure 1. Conceptual model.

3. METHODOLOGY

3.1. Population

In the quantitative phase, the data was collected from 250 different primary school students, piano teachers, parents/guardians, school administrators, and community music educators from Beijing, Hubei Province and Jiangxi Province to ensure a representative sample that captures the diversity of the cultivation of creative minds through integrating imagination and innovation in primary school piano instruction in China.

3.2. Sample Size

The research employs a mixed-methods approach, combining qualitative and quantitative techniques to gather comprehensive insights. Selecting the appropriate sample size is critical and can be determined using statistical methods or general guidelines. Ideally, the sample size should be 10–20 times the number of variables. Random sampling was employed to ensure equal representation.

3.3. Research Design

A meticulously altered questionnaire from past studies was used to gather data from the physical interviews. This survey comprised 5-point Likert scale items, as well as open-ended and closed-ended questions. The study used SmartPLS 3.0, a statistical software tool that employs partial least squares (PLS) path modeling, to conduct structural equation modeling (SEM). The analysis was conducted in two steps. Initially, the accuracy and stability of the measurement model was checked. The structural model was then tested to confirm the hypotheses regarding the relationships among the variables. SmartPLS 3.0 is flexible software with powerful analytical capabilities that simplify analysis and validation. Factor loading, absolute reliability, and the use of Cronbach's alpha to assess the validity and precision of the measurement model are all included, after which the structural model is tested to determine path coefficients, significance, and appropriate structure. Appendix 1 presents the survey questionnaire used to gather data on the respondents' demographic characteristics, instructional approaches, teacher expertise, creative musical abilities, and cultural factors.

3.4. Measurement Scales

The variables used in this study are instructional approach, creative musical ability, teacher expertise, and cultural factors. References and the number of items are detailed in Table 1.

Table 1. Measurements used in the study.

Variable	No. of items	References
Instructional approach	5	Abril (2006)
Creative musical ability	5	Grey (2020)
Teacher expertise	5	Hicken and Duke (2023)
Cultural factors	5	Trehub, Becker, and Morley (2015)

3.5. Demographic Analysis

This section discussed the respondents' demographic characteristics, focusing on gender and experience. As shown in Table 2, 63% of the respondents are female and 37% are male. Regarding experience, 10% of employees have one year of experience, 18% have two years, 22% have three years, 24% have four years, and 26% have five years or more.

 Table 2. Demographic profile of the respondents.

Characteristic	Variables	Frequency	Percentage
Gender	Male	94	37%
Gender	Female	156	63%
	1 year	24	10%
	2 years	46	18%
Experience	3 years	54	22%
	4 years	60	24%
	5 years and above	66	26%

4. RESULTS

Table 3 presents the reliability statistics for the major variables in this study, including Cronbach's alpha, composite reliability, and average variance extracted (AVE) values, which assess the internal consistency and reliability of the measurement scales. The results the confirmatory factor analysis (CFA) for these ideas prove they are reliable and work well together. The table shows that the Cronbach's alpha score for creative musical ability is 0.749 (CR = 0.833; AVE = 0.506); Cronbach's alpha for cultural factors is 0.823 (CR = 0.877; AVE = 0.591); Cronbach's alpha for instructional approach is 0.754 (CR = 0.833; AVE = 0.523); and Cronbach's alpha for teacher expertise is 0.759 (CR = 0.837; AVE = 0.507). These AVE values are higher than the suggested limit of 0.50, showing that the scales used to measure are reliable and match well. The strong composite reliability (CR) values paired with high AVE scores confirm that the constructs' internal consistency and reliability are good.

Table 3. Reliability statistics.

Variables	Cronbach's alpha	CR	AVE
Creative musical ability	0.749	0.833	0.506
Cultural factors	0.823	0.877	0.591
Instructional approach	0.754	0.833	0.523
Teacher expertise	0.759	0.837	0.507

Table 4 and Figure 2 show the CFA results for the measured items. It looks at factor loadings and how much each relates to their different builds. The creative musical ability measure is shown in five parts and has values ranging from 0.433 to 0.799. These values show a close link between the items and the hidden concept. The cultural factors include five parts, and the factor scores range from 0.622 to 0.845. The instructional approach is shown with five items, and the connection between them varies from 0.359 to 0.819. Teacher expertise includes five items with factor ratings from 0.348 to 0.826. These calculations show that the model is reliable, meaning observed items accurately measure what they were meant to. The results of the CFA show that the tests used in this study are trustworthy and accurate.

Table 4. Factor loadings.

Variable	Item	Indicator
Creative musical ability	CMA1	0.672
Creative musical ability	CMA2	0.805
	CMA3	0.787
	CMA4	0.761
	CMA5	0.482
Cultural factors	CF1	0.591
	CF2	0.796
	CF3	0.785
	CF4	0.857
	CF5	0.787
Instructional approach	IA1	0.819
••	IA2	0.802
	IA3	0.253
	IA4	0.801
	IA5	0.771
Teacher expertise	TE1	0.638
	TE2	0.672
	TE3	0.738
	TE4	0.756
	TE5	0.750

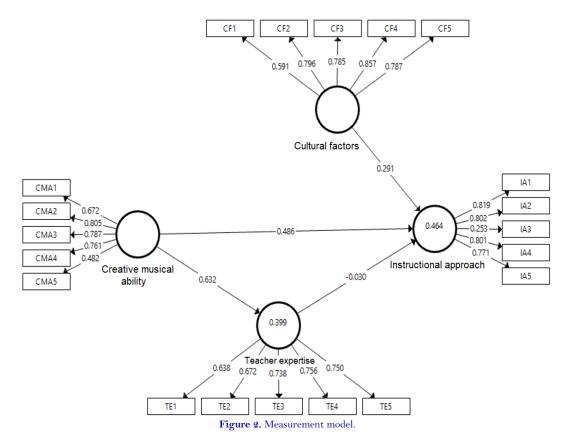


Table 5 compares the fitness of the estimated model to the saturated model to assess the appropriateness of the structural equation model. Key fit statistics, such as SRMR (standardized root mean square residual), NFI (normal fit index), and likelihood ratio chi-square tests, are used to evaluate model fitness. The SRMR values indicate that the estimated model has a slightly higher residual error (0.113) compared to the saturated model (0.095). The NFI

values show that the estimated model (0.674) fits the data less well than the saturated model (0.701). Additionally, the likelihood ratio chi-square tests reveal significant differences between the estimated and saturated models (p-values < 0.05), suggesting a lack of fit for the esteemed model. The chi-square values further confirm these findings, showing substantial differences between the baseline and saturated models. Overall, while the esteemed model demonstrates a reasonable fit, the discrepancies between the models highlight potential areas for improvement in the structural equation model.

Table 5. Model fitness

Variable	Saturated model	Estimated model
SRMR	0.095	0.113
d_ULS	1.912	2.686
d_G	0.527	0.592
Chi-square	688.7	749.4
NFI	0.701	0.674

Table 6 provides the R-squared values for each latent construct in the structural equation model, indicating the proportion of variance in each endogenous variable that is explained by the model's exogenous factors. The R-squared value of 0.464 shows that the exogenous components explain 46.4% of the variance in the instructional approaches. Similarly, the R-squared value of 0.399 indicates that the exogenous variables account for 39.9% of the variance in teacher expertise. These R-squared values demonstrate the predictive power of the exogenous factors on the endogenous variables, highlighting their significant influence on instructional approach and teacher expertise.

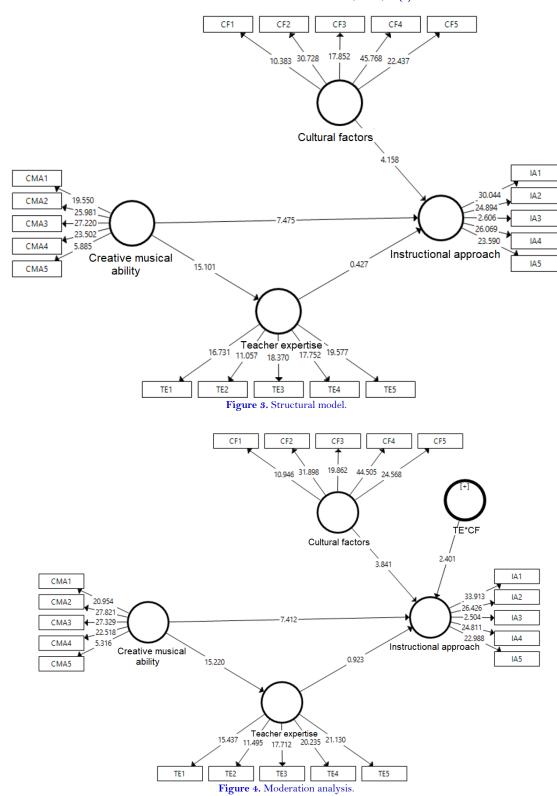
Table 6. R-square values.

Variable	R-squared	Adjusted R-squared
Instructional approach	0.464	0.457
Teacher expertise	0.399	0.397

Table 7 and Figure 3 show the findings of the straight-line study, mainly about how creative musical ability affects instructional approach. The connected p-value is 0.000, which is less than the usual importance level of 0.5. This confirms that creative musical ability has a big effect on the numbers. Creative musical ability affects teacher expertise, with a p-value of 0.000, and teacher expertise affects instructional approach, with a p-value of 0.042. The findings of the straight-line study show that teacher expertise positively mediates creative musical ability and instructional approach, with a p-value of 0.023. Figure 4 depicts the findings of the moderation analysis, mainly showing how cultural factors positively moderate teacher expertise and instructional approach.

Table 7. Path analysis.

Hypothesis	Beta	Std. Dev.	T value	P-value	Result
Creative musical ability -> Instructional approach	0.461	0.062	7.412	0.000	Accepted
Creative musical ability -> Teacher expertise	0.632	0.042	15.220	0.000	Accepted
Teacher expertise -> Instructional approach	0.361	0.066	0.923	0.042	Accepted
Creative musical ability -> Teacher expertise -> Instructional approach	0.239	0.042	7.911	0.023	Accepted
Teacher expertise*Cultural factors -> Instructional approach	0.100	0.042	6.401	0.017	Accepted



5. DISCUSSION

This study conveys a correlation regarding creative musical ability, the adopted method, and teacher effectiveness; it emphasizes the interaction between all three to improve music learning. A very strong relationship was identified between creative musical ability and instructional approach, implying that students with higher levels of creative ability require proper instructional treatment. Therefore, the significance of innovation to the course requires instructional strategies that foster creativity in musical learning. This insight is especially important to the learners in primary school who are going to reputable schools where enhancing creativity enhances learning.

Teaching expertise showed a strong interaction with students' creative musical talent from the beta coefficient of 0.632 (see Table 7) and a T value of 15.220 (see Figure 4). This relationship also highlights the proposal that teachers could help students develop their creative selves. For piano teachers, this holds a lot of implications as they would need to keep up to date with tools to help them nurture talents within their learners. This is something parents and guardians can consider when choosing an educator for their children or centers where the children will be taken care of with a focus on the growth and development of their creativity by professionals. Furthermore, the direct effect of teacher expertise on instructional approach supports the notion that a teacher's expertise has a strong influence on the adopted teaching approach (beta = 0.361, T value = 0.923). This is particularly important for school administrators who are charged with the responsibility of hiring and training teachers so that their faculty has the necessary expertise to deliver sound educational practices to their students through the implementation of the most effective strategies. The dependence on the mediation role of a teacher's experience in the correlation between creative musical ability and instructional approach (beta = 0.239, T value = 7.911) reveals these factors' interdependence. This implies that improving a teacher's knowledge can help to magnify the social value of students' creativity skills. Community music educators can use some of these findings to encourage programs and policies to support music teachers' professional development due to the significant educational quality that is involved. Cultural factors (TE*CF) also influence the findings and are the most influential among all the factors when it comes to the instructional approach, with a beta value of 0.100 and a T value of 6.401. From this discovery, the application of cultural sensitivity in the approaches to teaching music is emphasized. These cultural factors include a student's origin, concept of music, background knowledge, previous exposure to music, and lifestyle, among others. For the institution of the Central Conservatory of Music and other institutions, these factors can be integrated into teaching principles to make the approaches used in teaching music more effective. It can also be culturally relevant to students since it will enhance their learning experience and draw them to their cultural and musical traditions. In conclusion, the research outcome highlights that creative musical ability, teacher proficiency, and cultural influences define musical teaching methods. Thus, paying attention to these aspects, educational institutions along with teachers, parents, and community educators can further develop the quality of musical upbringing by fostering students' creativity.

6. CONCLUSION

Increasing creativity in the development of musical abilities in primary school learners requires important factors. Among these are the cultural aspects that contribute to each child's musical background. The staff's flexibility and attentiveness to diversity and the university inviting students with multicultural backgrounds help students obtain a deeper understanding of the subject through embracing music's ability to communicate across diverse cultures. However, the methods used while teaching piano also have significance, and these include applying effective and efficient approaches of teaching that are sensitive to the students' abilities can immensely enhance their interest level and effectiveness. Teachers, who manage to balance conventional approaches with modern methods can help young learners develop their creative potential. Another important and possible determinant is the teacher's qualification as a learning facilitator. Holding significant knowledge of the theory and practice of music and being passionate educators are very helpful in coaching. For this reason, their role as trainers is to give constructive criticism based on a child's capabilities while encouraging them goes a long way in shaping their musical personality. Guardians also play a central role in this process. They need to offer support and provide a suitable learning environment at home by making sure their child practices on a regular basis, going to recitals, and focusing on accomplishments. This will help the students persist and succeed at music. According to the research, school administrators are responsible for improving music education. These include availing of all the resources available, maintaining all facilities, and recognizing the arts. This commitment can have a direct impact on the type of education that a student is likely to receive, especially when it comes to music programs. Lastly, community

music educators diversify the sphere of education. Thus, through the arrangement of workshops, showings, and group projects, they also develop other possibilities for students to address music. This will foster the growth and development of a vibrant musical society to support and instill the importance of music education. Therefore, the combined components of culture, instruction methods, professional teachers, parents, administrators, and community education is critical in fostering competencies in music among students in primary schools. Such diversification helps not only the personal development but also the musical culture of a society to thrive, and all the stakeholders will receive the desired result.

7. IMPLICATIONS

7.1. Practical Implications

Developing creative musical ability in primary school students cannot be overemphasized and may warrant a holistic approach. Therefore, it is necessary to understand the cultural aspects of music production in order to ensure that students are tolerant and respectful of other cultures. Assessment methods should also be unique, with ideas being part of the instructional planning procedures in encouraging creativity. Teacher qualification has a center-stage role here; only by constantly updating themselves with new forms of teaching practices can teachers meet the demands of the classroom environment. Primary school students can be encouraged by piano teachers if lessons are made interesting, full of energy and personalized according to the pupil development model. It is also important for parents or guardians to engage in their child's musical learning process by providing support and undertaking learning at home. School administrators need to ensure that music education is given the appropriate attention by providing resources and adopting policies that support music education. Teachers in community-based music centers may seek partnerships with institutional learning centers to avail of supplementary educational programs that will enhance students' music skills. By improving such facilities and caring for young music learners, this systematic planning will help to create and maintain a healthy and conducive atmosphere.

7.2. Theoretical Implications

When creating conditions to facilitate the development of musical creativity in the primary schools, the following theoretical significance can be considered. An appreciation of cultural impact is the key to Westbrook's claim that curricula should positively embrace and incorporate multicultural heritage. Since creativity is an important aspect of learning, the approach chosen to deliver instructions must be based on the approved paradigms, namely constructivism and experientialism. Teacher experience is essential; for a teacher to foster the students' talents, they must understand pedagogical theories and advanced musical knowledge. For piano teachers, it means using methods that allow students to be creative in relation to music. Parents and guardians present practical applications to the theory learned at home, forming a harmonized curriculum. Custodians of schools should apply up-to-date educational theories in their policies, where music education is also valued. Furthermore, community music educators can take these theoretical frameworks beyond the classroom and create a supportive structure contributing to students' musical growth.

8. LIMITATIONS AND FUTURE DIRECTIONS

Other parts of musical interpretation, which mostly concentrate on improvisation and composition within creative musical talents, have been neglected by research. Although cultural influences are acknowledged, particular cultural subtleties are not thoroughly explored in this study, which may result in the impacts of regional variances being overlooked. It's probable that not all of the most recent strategies were included in the study of instructional strategies, and that differences in the proficiency of teachers across the board in academic settings were not given enough weight. Further research can broaden the scope of creative musical abilities and go beyond structure. We can improve our comprehension of cultural aspects by investigating more specific cultural subtleties and regional

variations. Evaluating the efficacy of innovative teaching practices in various circumstances is important. Furthermore, the focus on individualized professional development programs can enhance educators' abilities in creative instruction and cultural sensitivity.

Funding: This study received no specific financial support.

Institutional Review Board Statement: The Ethical Committee of the Yingtan No. 8 Middle School, China has granted approval for this study on 4 January 2024 (Ref. No. BZ 20240104).

Transparency: The authors state that the manuscript is honest, truthful, and transparent, that no key aspects of the investigation have been omitted, and that any differences from the study as planned have been clarified. This study followed all writing ethics.

Competing Interests: The authors declare that they have no competing interests.

Authors' Contributions: Conceptualization, Methodology & writing-original draft, S.W.; data curation, writing-review & editing & software, Y.Y.; formal analysis & investigation, Z.W. All authors have read and agreed to the published version of the manuscript.

REFERENCES

- Abril, C. R. (2006). Learning outcomes of two approaches to multicultural music education. *International Journal of Music Education*, 24(1), 30-42. https://doi.org/10.1177/0255761406063103
- Andrews, B. W. (1996). Student team learning in music instruction: Restructuring the traditional task-incentive system. *McGill Journal of Education*, 31(2), 159–177.
- Angelo, E. (2008). Music educators' expertise and mandate: Who decides, based on what? . Action, Criticism & Theory for Music Education, 7(1), 105–138.
- Barresi, A. L. (1987). Edgar B. Gordon: A pioneer in media music education. *Journal of Research in Music Education*, 35(4), 259-274. https://doi.org/10.2307/3345078
- Bautista, A., Moreno-Núñez, A., Bull, R., Amsah, F., & Koh, S. F. (2008). Arts-related pedagogies in preschool education: An Asian perspective. *Early Childhood Research Quarterly*, 45, 277–288. https://doi.org/10.1016/j.ecresq.2017.12.005
- Boer, D., Fischer, R., Tekman, H. G., Abubakar, A., Njenga, J., & Zenger, M. (2012). Young people's topography of musical functions: Personal, social and cultural experiences with music across genders and six societies. *International Journal of Psychology*, 47(5), 355–369. https://doi.org/10.1080/00207594.2012.656128
- Byrne, C., Halliday, J., Sheridan, M., Soden, R., & Hunter, S. (2001). Thinking music matters: Key skills and somposition. *Music Education Research*, 3(1), 63–75. https://doi.org/10.1080/14613800123764
- Chandler, M. D. (2018). Improvisation in elementary general music: A review of the literature. *Update: Applications of Research in Music Education*, 37(1), 42–48. https://doi.org/10.1177/8755123318763002
- Clarke, E., DeNora, T., & Vuoskoski, J. (2015). Music, empathy and cultural understanding. *Physics of Life Reviews*, 15, 61–88. https://doi.org/10.1016/j.plrev.2015.09.001
- Cooper, B. L. (1998). Teaching with popular music resources: A bibliography of interdisciplinary instructional approaches. *Popular Music and Society*, 22(2), 85-115. https://doi.org/10.1080/03007769808591707
- Davis, R. A. (2005). Music education and cultural identity. Educational Philosophy and Theory, 37(1), 47-63. https://doi.org/10.1111/j.1469-5812.2005.00097.x
- Denac, O. (2014). The significance and role of aesthetic education in schooling. *Creative Education*, 5(9), 1714–1719. https://doi.org/10.4236/ce.2014.519190
- Ferm, C., & Thorgersen, K. (2007). Aesthetic communication in music education: Student's awareness. Retrieved from http://swepub.kb.se/bib/swepub:oai:ltu01:1114441?tab2=abs&language=en
- Fossum, H., & Varkøy, Ø. (2012). The changing concept of aesthetic experience in music education. *Nordic Research in Music Education*, 14, 9–25.
- Godwin, D. F. (2016). *Proceedings of the international society for music education*. Paper presented at the 32 nd World Conference on Music Education Andragogic Profile in Learning of Musical Language in Musical Education for Adults.
- Goldman, A. H. (2012). Aesthetic qualities and aesthetic value. Journal of Philosophy, 87(1), 23-37.

- Grey, A. N. (2020). Rote instruction in secondary instrumental music classrooms: A review of the literature. *Update: Applications of Research in Music Education*, 39(1), 59-69. https://doi.org/10.1177/8755123320909149
- Guderian, L. V. (2012). Music improvisation and composition in the general music curriculum. *General Music Today*, 25(3), 6-14. https://doi.org/10.1177/1048371311415404
- Hallam, S. (2010). 21St century conceptions of musical ability. *Psychology of Music*, 38(3), 308–330 https://doi.org/10.1177/0305735609351922
- Hallam, S., & Prince, V. (2003). Conceptions of musical ability. Research Studies in Music Education, 20(1), 2-22. https://doi.org/10.1177/1321103X030200010101
- Hicken, L. K., & Duke, R. A. (2023). Differences in attention allocation in relation to music teacher experience and expertise.

 *Journal of Research in Music Education, 70(4), 369-384. https://doi.org/10.1177/00224294221096701
- Johnson, J. L. (2022). Teacher self-efficacy and teacher work engagement for expats at international K12 schools in China: A correlation analysis. *International Journal of Educational Research Open*, 3, 100176. https://doi.org/10.1016/j.ijedro.2022.100176
- Kelly, S. N. (2003). The influence of selected cultural factors on the environmental teaching preference of undergraduate music education majors. *Journal of Music Teacher Education*, 12(2), 40–55. https://doi.org/10.1177/10570837030120020106
- Laukka, P., Eerola, T., Thingujam, N. S., Yamasaki, T., & Beller, G. (2013). Universal and culture-specific factors in the recognition and performance of musical affect expressions. *Emotion*, 13(3), 434–449. https://doi.org/10.1037/a0031388
- Lim, C. H., Martin, T. G., & Kwak, D. H. (2016). Examining television consumers of mixed martial arts: The relationship among risk taking, emotion, attitude, and actual sport-media-consumption behavior. *International Journal of Sport Communication* 3(1), 49–63. https://doi.org/10.1123/ijsc.3.1.49
- McKoy, C. L. (2002). A review of research on instructional approach and world music preference. *Update: Applications of Research in Music Education*, 22(1), 36–43. https://doi.org/10.1177/87551233030220010105
- Millican, J. S., & Forrester, S. H. (2018). Core practices in music teaching: A delphi expert panel survey. *Journal of Music Teacher Education*, 27(3), 155–168. https://doi.org/10.1177/1057083717736243
- Nordlund, M. (2006). Finding a systemized approach to music inclusion. *General Music Today*, 19(3), 13–16. https://doi.org/10.1177/10483713060190030104
- Noy, P. (1968). The development of musical ability. *The Psychoanalytic Study of the Child*, 23(1), 332-347. https://doi.org/10.1080/00797308.1968.11822961
- Parkes, K. A., & Wexler, M. (2012). The nature of applied music teaching expertise: Common elements observed in the lessons of three applied teachers. *Bulletin of the Council for Research in Music Education*, 193(193), 45–62. https://doi.org/10.5406/bulcouresmusedu.193.0045
- Price, H. E., Blanton, F., & Parrish, R. T. (1998). Effects of two instructional methods on high school band students' sight-reading proficiency, music performance, and attitude. *Update: Applications of Research in Music Education*, 17(1), 14–20. https://doi.org/10.1177/875512339801700104
- Rogers, M. R. (2004). Teaching approaches in music theory: An overview of pedagogical philosophies Southern Illinois University Press. https://books.google.com.my/books/about/Teaching_Approaches_in_Music_Theory.html?id=juFwS5HI0hsC&redir_esc=y.
- Sacks, O. (1995). Musical ability. Science, 268(5211), 621-622. https://doi.org/10.1126/science.7732360
- Sawyer, R. K. (2008). Improvisation as a pedagogical practice. Critical Studies in Improvisation/Études Critiques En, 3(2), 1-4.
- Schalock, R. L., Verdugo, M. A., Jenaro, C., Wang, M., Wehmeyer, M., Jiancheng, X., & Lachapelle, Y. (2005). Cross-cultural study of quality of life indicators. *American Journal on Mental Retardation*, 110(4), 298–311. https://doi.org/10.1352/0895-8017(2005)110[298:CSOQOL]2.0.CO;2

- Schedl, M., Lemmerich, F., Ferwerda, B., Skowron, M., & Knees, P. (2017). Indicators of country similarity in terms of music taste, cultural, and socio-economic factors. Paper presented at the Proceedings 2017 IEEE International Symposium on Multimedia, ISM 2017, 2017-Janua, 308-311. https://doi.org/10.1109/ISM.2017.55.
- Shaw, R. D. (2020). Instructional expertise and micropolitics: The social networks of instrumental music teachers. *Journal of Research in Music Education 68*(3), 328-350. https://doi.org/10.1177/0022429420920634
- Sogin, D. W., & Wang, C. C. (2002). An exploratory study of music teachers' perception of factors associated with expertise in music teaching. *Journal of Music Teacher Education*, 12(1), e12-e18. https://doi.org/10.1177/10570837020120010101
- Standley, J. M., & Madsen, C. K. (1991). An observation procedure to differentiate teaching experience and expertise in music education. *Journal of Research in Music Education*, 39(1), 5–11. https://doi.org/10.2307/3344604
- Stevens, C. (2004). Cross-cultural studies of musical pitch and time. Acoustical Science and Technology, 25(6), 433-438. https://doi.org/10.1250/ast.25.433
- Trehub, S. E., Becker, J., & Morley, I. (2015). Cross-cultural perspectives on music and musicality. *Philosophical Transactions of the Royal Society B: Biological Sciences*, 37(1664), 20140096. https://doi.org/10.1098/rstb.2014.0096
- Tso, A. W., & Chung, J. S. (2016). Academic literacy development: University students' perceptions and experiences of English academic writing in Southeast Asia. *Pacific-Asian Education Journal*, 28(1), 51–61.
- Vaughan, M., & Myers, R. E. (1971). An examination of musical process as related to creative thinking. *Journal of Research in Music Education*, 19(3), 337–341. https://doi.org/10.2307/3343769
- Woodcock, S., Sharma, U., Subban, P., & Hitches, E. (2022). Teacher self-efficacy and inclusive education practices: Rethinking teachers' engagement with inclusive practices. *Teaching and Teacher Education*, 117, 103802. https://doi.org/10.1016/j.tate.2022.103802

Appendix 1. Survey questionnaire.

Questionnaire:

Dear Respondent,

Greetings for the day. The present survey is purely for research purposes. All information given by you will be kept confidential and will only be used for research. Your cooperation is greatly appreciated.

Respondent Name				
Gender Experience	 Female 2 years 2	3 years	4 years	5 years and above

Your feedback is very important for this research. Please read the following statements and answer accordingly:

 $1={\rm Strongly\ Agree},\,2={\rm Agree},\,3={\rm Neutral},\,4={\rm Disagree},\,5={\rm Strongly\ Disagree}.$

Instruction	nal approach					
An instruct	tional approach refers to the method or strategy used by educators to facilitate	e lear	ning.			
No.	Statement	1	2	3	4	5
1	An instructional approach is the method or strategy educators use to facilitate learning and achieve educational goals.					
2	It encompasses techniques, activities, and resources tailored to the subject matter and students' needs.					
3	Traditional approaches often involve teacher-centered methods such as lectures and structured exercises, while more modern approaches emphasize student engagement and active participation.					
4	Effective instructional approaches align with learning objectives and			,		

	.,					
	encourage critical thinking, collaboration, and problem-solving skills.					
5	Educators often blend different approaches to create a dynamic and					
	inclusive learning environment that caters to diverse learning styles and					
	preferences.					
Teacher ex	xpertise					
Teacher ex	pertise refers to the knowledge, skills, experience, and professional com	peten	cies	that o	educat	ors
	heir subject matter, pedagogy, and classroom management.					
6	Teacher expertise encompasses the knowledge, skills, and competencies					
	that educators possess in their subject area and teaching practices.					
7	It is developed through formal education, professional training, and					
	classroom experience, allowing teachers to effectively convey content					
	and engage students in learning.					
8	Expert teachers adapt their instructional methods to meet diverse					
	student needs, creating inclusive and supportive learning environments.					
9	They possess strong communication skills, empathy, and a passion for					
	teaching, which are essential for fostering student growth and					
	achievement.					
10	Continuous professional development and reflective practice are key					
	components of enhancing and maintaining teacher expertise over time.					
Creative m	nusical ability				•	
Creative m	usical ability refers to an individual's capacity to express themselves cr	eative	ely t	hroug	gh mu	sic,
	ng skills in improvisation, composition, interpretation, and innovative music					
11	Creative musical ability encompasses both improvisation and					
	composition skills, allowing individuals to spontaneously create and					
	structure musical ideas.					
12	Improvisation skills enable students to spontaneously generate melodies,					
	harmonies, and rhythms in real-time, responding to the musical context					
	and expressing their musical intuition.					
13	Composition skills involve crafting original musical pieces, arranging					
	musical elements, and organizing musical ideas into cohesive structures.					
14	Developing improvisation and composition skills nurtures students'					
	creativity, musical expression, and confidence in creating original music.					
15	These skills are essential for students to explore their unique musical					
	voice, experiment with different musical styles, and engage in					
	collaborative music-making.					
Cultural fa	ctors					
Cultural fac	ctors in music refer to the influence of cultural beliefs, values, traditions,	and p	racti	ces or	n mus	ical
	creation, and interpretation.					
16	Cultural factors deeply influence the creation, interpretation, and					
	appreciation of music, shaping its styles, genres, and performance					
	practices.					
17	Each culture contributes unique beliefs, values, and traditions that give					
	distinct identities to its musical expressions.					
18	Cultural factors influence musical preferences and aesthetics, defining				Ţ	
	what is considered meaningful or significant within a community.					
19	They also impact music education, with each culture having its own				Ţ	
	methods and approaches to teaching and learning music.					
20	Understanding cultural factors is essential for appreciating the diversity					
	and richness of global musical traditions and fostering inclusive and					
	equitable music education practices.					

Views and opinions expressed in this article are the views and opinions of the author(s). The International Journal of Education and Practice shall not be responsible or answerable for any loss, damage or liability, etc., caused in relation to/arising from the use of the content.