

**CULTURAL TOLERANCE AND MUSIC PREFERENCE: THE EFFECT OF INTERDISCIPLINARY LESSONS ON STUDENTS' AESTHETIC RESPONSE**

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**Abstract:** The objective of the present study was to evaluate the effect of interdisciplinary lessons on students' aesthetic preference for African and Asian music. Nine graduate students, all Caucasians, enrolled in master's degree in music education participated in the program. Subjects expressed, on a Likert-type scale, their aesthetic preference for seven excerpts of African music and seven excerpts of Asian music before and after interdisciplinary lessons. The lessons presented information about geography, history, social studies, and music of the African and Asian continents. Results show that subjects evaluated both music styles as being equally attractive in the pre-test. However, only the African musical excerpts were considered as being more pleasant after the interdisciplinary lessons. Such findings may be explained by subjects' familiarity with the rhythm present in African music and lack of familiarity with the quarter tones featured in Asian vocal music.

**Key Words:** music; tolerance; aesthetic response; interdisciplinary

**TOLERÂNCIA CULTURAL E PREFERÊNCIA MUSICAL: EFEITO DE CURSO INTERDISCIPLINAR SOBRE JULGAMENTO ESTÉTICO EM ESTUDANTES**

**Resumo:** O objetivo do presente estudo foi avaliar o efeito de lições interdisciplinares sobre o julgamento estético de músicas africanas e asiáticas. Participaram do estudo 9 músicos caucasianos matriculados em um programa de pós-graduação em educação musical. Foram obtidos os escores de preferência musical para 7 trechos de música africana e 7 de músicas asiáticas antes e depois de aulas interdisciplinares. As aulas apresentaram informações sobre geografia, história, estudos sociais e música dos continentes africano e asiático. Resultados mostraram que os sujeitos avaliaram os dois tipos de música como sendo igualmente atraentes no pré-teste. No entanto, apenas os trechos de música africana foram julgadas como sendo mais agradáveis após as aulas interdisciplinares. Assim, tais resultados podem ser explicados pela maior familiaridade com o ritmo das músicas africanas, pelos participantes do estudo e pela falta de familiaridade com os quartos-de-semi-tons presentes nas músicas vocais asiáticas.

**Palavras-chave:** música, tolerância, estética musical, interdisciplinaridade

## **Introduction**

The literature recommends that learning tolerance for other cultures should start several years earlier than the college years. Brand, Ruiz, and Padilla (1974) suggested that ethnic awareness emerges about age four; once positive or negative attitudes are formed, they tend to increase with

age. The recommendation to start teaching world's musical cultures as early as possible seems advisable.

Katz (1976) reported that developmental changes in attitudes toward other ethnic groups were attributed to the growth of cognitive skills. Aboud and Skerry (1984) showed that the development of ethnic attitudes was found to parallel certain developments in affective, perceptual, and cognitive processes such as the differentiation between groups and between individuals. Doyle, Beaudet, and Aboud (1988), investigating the developmental patterns in ethnic attitudes, concluded that positive attributions to their own ethnic group and negative attributions to other ethnic groups were less frequent in older children suggesting the importance of cognitive rather than social desirability factors in the development of children's ethnic attitudes.

Since cognition skills are such an important element in the development of children's ethnic attitude, it seems appropriate to start teaching from a multicultural perspective as early as possible. The effect of multicultural education on peoples' attitude toward other ethnic groups has been previously investigated. Isma (2001) examined the effects of a cross-cultural awareness program on middle school students' attitudes toward people whose ethnic and cultural backgrounds were different from their own. The cross-cultural awareness program was an integrated educational approach and included a variety of literary, musical, and visual art activities. Results showed that the cross-cultural awareness program was successful in changing students' attitudes toward people who

are ethnically and culturally different. Glen (2001) compared the attitudes and beliefs about music education of a class of 2001 high school seniors and 1975 high school graduates. She recommended teacher sensitivity toward individual needs as well as awareness of multicultural populations through the implementation of cultural and non-talented musical activities. At the college level, non-auditioned world music ensembles have provided invaluable musical experiences to students of various fields as well as an awareness of world people's cultures.

Larson (1998) concluded that the teaching of multicultural music and background information concerning different cultures affected the attitudes of fifth and sixth grade students towards various cultures. Kain (1997) realized that an integrated curriculum encompassing arts, literature, music, and composition was able to facilitate a multicultural experience in an American humanities classroom, grades 11-14. The study focused upon the Asian, African, Native, Hispanic, and European cultures represented in the American humanities classroom. Withers-Ross (1999) introduced cultures through the use of folksongs to promote cultural awareness and respect to a sixth-grade social studies classroom in a rural community. The study integrated various disciplines in teaching about people with different customs and beliefs. Findings for this study indicated that the students gained respect for themselves and their peers, demonstrating a change in their perception of the world.

Although previous studies have suggested that multicultural music education might affect ethnic attitudes and cultural awareness, it is not

clear how it might affect listener's preference. Early studies on listeners' preference for music style indicate that children prefer popular and rock music to classical music (LEBLANC, 1981; SHEHAN, 1981). Lately, Dekaney and Coggiola (2005) investigated the aesthetic response of musicians and non-musicians while listening to a Brazilian pop song in the samba-reggae style with and without instruction. Students expressed their aesthetic response to the music example using the Continuous Response Digital Interface (CRDI). Examination of the CRDI dial means indicated a greater aesthetic response for the non-musician participant group with instruction.

Research in preference for world's musical cultures suggests that it is important for the students to gain familiarity through intense exposure and training. Shehan (1985) observed that the discussion of non-Western musical styles at the elementary and middle school levels was not able to affect enthusiastic response from children. On the other hand, Heingartner and Hall (1974) investigated how familiarity affects music preference for world music in college and fourth grade students and found that increased frequency of exposure to Pakistani music selections increased preference.

In studying the relationships among musical style, ethnicity, age, gender, musical training, familiarity, intercultural tolerance, and music preferences of Malaysian students Mohamad Shah (2000) concluded that ethnicity, gender, and musical training were significant sources of variation in music preference decisions. Subjects within each ethnic group were more inclined to select music of their own culture over music of

other cultures. Results also indicated a positive relationship between familiarity and preference for each of the musical style categories.

Convinced that multicultural music education could affect students' expectations, and consequently, broaden their music preference, Butler (1996) decided to investigate the effects of ethnicity on the stated music preferences of university non-music majors. Results of his study showed that the ratings assigned to music of African American and European American composers by all listeners, without regard to ethnicity, were significantly different though there was no relationship found between the ethnic attitudes and music preferences of European and African Americans.

As one understands the pressing need to start teaching as early as possible about the world and its multicultural character, one questions the preparation of those who are being trained to teach. Researchers have been investigating how undergraduate programs in music education are facing the challenge of appropriately preparing pre-service teachers to teach about the world's musical cultures. Okun (1998) looked into how teacher preparation programs can respond to these new demands, specifically those concerning cultural diversity in the schools. He suggested that pre-service music teachers need to have a balance of experiences including listening and/or appreciation of various styles of music and music cultures, performance on a non-Western music instrument, in-depth study of one or more unfamiliar cultures, and opportunities to investigate teaching strategies and materials which

include multicultural perspectives. Teicher (1997) developed an exploratory study to determine the effects of multicultural music lesson planning and implementation on pre-service elementary teachers' attitudes toward teaching from a multicultural perspective. Results revealed that the experience of developing and implementing multicultural music lessons positively affected pre-service teachers' attitudes toward multicultural music teaching.

The ethnomusicology discipline has insisted upon the need to study the world's musical cultures in their social and cultural contexts. Instead of studying music as an isolated phenomenon, educators at all levels are encouraged to use an interdisciplinary approach to teaching world's musical cultures. Yigzaw (1999) explored multicultural issues through an interdisciplinary curriculum, which comprised of social studies, art, and music in a junior high setting of an International Baccalaureate program. He concluded that an interdisciplinary curriculum may possess some potential advantages such as generating opportunities for students to work in multiracial groups, allowing students to contribute to the classroom discussions with personal, familiar, or social group experiences, and revealing biases within the environment. It seems that an interdisciplinary approach to teaching and learning might be an important element in the development of tolerance for other ethnic groups.

Earlier studies on multicultural education have recommended the interdisciplinary approach as a means of effectively teaching world's musical cultures (ISMA, 2001; LARSON, 1998; KAIN, 1997; WITHERS-

ROSS, 1999). Previous research examining preference for multicultural music focused upon university non-music majors only (BUTLER, 1996). This study was designed to investigate the effect of interdisciplinary lessons on music preference of graduate music education students.

### **Method**

Nine graduate students, 2 males and 7 females with mean age of 24 (SD=5,23), all Caucasian, pursuing a master's degree in music education, participated in the study. These students were enrolled in the World Music and the Interdisciplinary Curriculum course offered during a summer session at a large northeastern university in the United States of America. This specific course was designed to prepare music teachers to teach music from other cultures in an integrated curriculum. The course was condensed on an intense six-week period.

The study was divided into two phases with pre and post-test measurements. The measurements were obtained from subjects' ratings of their aesthetic response to seven excerpts of African music, in the first phase, and Asian music in the second phase. Each one of the excerpts was exactly seventy seconds long. Students were asked to rate on a Likert-type scale (one is lowest and ten is highest) how much they liked the excerpts being played. The order of the excerpts in the stimulus recording was randomly assigned.

**Figure 1. Stimulus Recording with African Music Excerpts**

Song	Performer	Medium
1. Borhomasi fare	Wassa	Instrumental (African Drums)



2. Ewe Arsimevu	Mustapha Tettey Addy	Instrumental (African Drums)
3. Dagomba drums	Mustapha Tettey Addy	Instrumental (African Drums)
4. Ansu Machine Manneh	Sounds of West Africa	Vocal (with melodic instruments)
5. Cothoza Mfana	Lady Smith Black Mambazo	Vocal (group, a cappella)
6. Dembo	Sounds of West Africa	Vocal with melodic instruments
7. Oshika	Mustapha Tettey Addy	Instrumental (African Drums)

**Figure 2. Stimulus Recording with Asian Music Excerpts**

Song	Performer	Medium
1. Tabuh Kenilu Sawik	Kulintang Ensemble	Instrumental (Gong Ensemble)
2. Yendisare Aimanado	Paduan Suara P.W. G.K.I Jemaat Mara	Vocal (group, a cappella)
3. The Language Suite	Fong Naam	Vocal (accompanied)
4. Cherd Chin	Prasit Thawon Ensemble	Instrumental and Vocal (Piphat Ensemble)
5. The Nang Hong Suite	Fong Naam	Instrumental and Vocal (Double Piphat Ensemble)
6. Dengyue jiaohui	Wu Man	Instrumental (Pipa with gongs and drums)
7. Ma Ram	Lamoon Phuakthongkham of Fong Naam	Instrumental

Between the first and the second phases the researchers administered the treatment, which consisted of two interdisciplinary lessons. In the first phase the lesson was about the African continent (Sub-Saharan region) and in the second phase the lesson was about the Asian continent (Bali, India, China, Japan, and Korea).

In the first phase, the integrated approach focused upon social, geographical, historical, and musical aspects of the African continent. The

lesson format consisted of professor's lecture, the video *Music of Africa* from the Our Musical Heritage Series (North Hollywood, CA: Hollywood Select Video, 1987, # 4004), listening examples, and hands-on activities with the performance of specific African rhythms. The duration of the lesson was three and half-hours with a fifteen-minute break.

In the second phase, the integrated lesson focused upon social, geographical, historical, and musical aspects of the Asian continent. The lesson format consisted of professor's lecture, the video *Taksu: Music in the life of Bali* (Berkeley, CA: University of California Extension Center for Media and Independent Learning, c. 1991), listening examples, and hands-on activity with the singing of a few pentatonic and other types scales. An added lesson with a Chinese music professor provided a more authentic approach to experiencing Chinese music with hands-on activities such as playing on authentic Chinese instruments, understanding the Beijing Opera, and seeing Chinese folk costumes. The duration of both lessons was three-and-half hours with a fifteen-minute break.

## **Results**

The purpose of this study was to investigate the effect of interdisciplinary lessons on students' preference for African and Asian music. At the completion of the study, two sets of pre and post-performance scores were analyzed statistically. The four observations comprised sixty-three scores each, which represent the students' ratings (N=9) for each one of the seven music excerpts. Paired *t*-tests were used to determine significant differences between observations.

Results indicate that there was a significant statistical increase between observations in the first phase ( $t_{[62]}=3,65$ ;  $p<0,05$ ) but not in the second phase. Students' preference for African music increased after the first treatment, but students' preference for Asian music was not affected by the second treatment. Subjects' pre-test scores for both music styles were close to 5, which correspond to the central value in the Likert-type scale, indicating that there was no previous preference for both music styles. The pre-test scores for both groups also show that the random order of the musical excerpts was balanced. Table 1 illustrates the mean scores for the observations in both phases. Pearson correlation analyses indicate high correlation between the first and second observation for the Asian musical excerpts ( $r=0,82$ ;  $p=0,006$ ).

**Table 1. Mean and Standard Deviation in Pre and Post-test for Both Music Styles**

Condition	Pre-test	Post-test	<i>t</i> -value	P
African Music	5.44 (0,70)	6.24 (0,85)	2,46	0,04
Asian Music	5.38 (0,72)	5.55 (0,66)	1,23	0,24

The mean score for each of the seven excerpts of African and Asian music was also calculated. Non-parametric tests were also used to identify which musical excerpts had higher variation between pre- and post-test. Results reveal that, although there was an increase in the mean scores between all African excerpts, this increase was only significant for excerpt 7 (Oshika). On the other hand, although there was a noticeable increase

in mean scores in the second observation for Asian musical excerpts 1, 5, 6, and 7, in none of them this difference was significant. Table 2 summarizes the mean scores for each musical excerpts before and after the interdisciplinary lessons.

**Table 2. Mean and Standard Deviation for Each Musical Excerpts Before and After the Interdisciplinary Lessons**

Origin	Song	Pre-test	Post-test	Z-score	P
African	1. Borhomasi fare	7,33 (0,71)	7,89 (1,17)	1,31	0,21
African	2. Ewe Arsimevu	4,78 (1,30)	5,67 (1,22)	1,58	0,10
African	3. Dagomba drums	4,89 (1,17)	5,11 (1,27)	0,14	0,75
African	4. Ansu Machine Manneh	3,44 (1,59)	4,56 (1,13)	1,71	0,12
African	5. Cothoza Mfana	7,44 (1,01)	8,44 (1,59)	1,21	0,22
African	6. Dembo	4,00 (1,87)	5,00 (1,50)	1,12	0,24
African	7. Oshika	6,22 (1,20)	7,00 (1,50)	2,07	0,02*
Asian	1. Tabuh Kenilu Sawik	5,67 (1,94)	6,11 (1,17)	1,19	0,27
Asian	2. Yendisare Aimanado	7,22 (1,09)	7,00 (1,32)	-0,82	0,45
Asian	3. The Language Suite	3,44 (1,67)	3,22 (1,30)	-0,63	0,56
Asian	4. Cherd Chin	3,22 (1,39)	3,22 (0,97)	0,00	1,00
Asian	5. The Nang Hong Suite	5,67 (1,22)	6,11 (1,76)	1,00	0,31
Asian	6. Dengyue jiaohui	6,56 (1,24)	6,78 (1,39)	0,51	0,71
Asian	7. Ma Ram	5,89 (1,54)	6,44 (0,73)	1,19	0,25

\* Significant level at 5%.

In order to verify the previous preference for each one of the musical excerpts, a one-sample *t*-test was used. Considering the mean

value of 5, the findings suggest that the more pleasant songs in the pre-test were 1, 4, 5, and 7 from Africa and 2 and 6 from Asia. The two musical excerpts considered as non-pleasant were 3 and 4 from Asia.

## **Discussion**

An interdisciplinary approach to teaching through a multicultural perspective has shown positive results in earlier studies (YIGZAW, 1999; GLEN, 2001; LARSON, 1998; KAIN, 1997; and WITHERS-ROSS, 1999) and has also been an effective tool to teach music in this particular study. Similar to previous findings (MOHAMAD SHAH, 2000), familiarity played a vital role in determining subjects' aesthetic responses for music from world's cultures.

Findings for this study reveal that the first treatment seemed to be an effective means in broadening students' preference and aesthetic response to African music. It is possible that, although taught in a more authentic way, Asian music is still less familiar to the students than African music and familiarity is certainly a variable that affects students' ratings and preferences for music of other cultures. Also, because the influence of African music upon American music appears to be stronger, it is possible that the students recognized more musical elements that were familiar to them which are present in jazz, blues, hip-hop, and other African-influenced styles to the extent that out of the 7 African musical excerpts, 4 were considered as pleasant by the students.

Another important factor to consider is that African music is rhythmically driven and might be more appealing to the students. LeBlanc

(1981) and Shehan (1981) have already found that children prefer popular and rock music to classical and African music, because of its fast tempi, abundance of drums, and complex layering of rhythms certainly seems to be a greater deal more appealing to graduate music education students.

It is necessary to point out that the only Asian musical excerpts that received a score significantly below the mean in the pre-test were 3 and 4. With the exception of the musical excerpts 2 and 3, which had lower ratings in the post-test and 4, which remained the same, all the other songs had a slight increase in preference. The fact that musical excerpts 2 and 3 are primarily vocal may explain students' non-significant aesthetic response to them. Most Asian vocal music utilizes a system that includes singing in intervals smaller than 100 cents, or a semitone. Since the Western ears are trained to aurally accept only the equal-temperament system as "right" (basically the sounds of the white and black keys in a piano), it may be that the notes sung in between semitones sound "out-of-tune" and, therefore, are less pleasing to these graduate music students, who have gone through extensive training to get their musical ears tuned to the equal-temperament tuning system.

Notwithstanding the fact that Asian music is less familiar to American students, one observes a slight tendency towards an increase in aesthetic preference. Findings for this study suggest that maybe if students had had an even more intense and repeated frequency of

exposure to Asian music their aesthetic response could have reached the same level of the African music (MOHAMAD SHAH, 2000).

Results for this study also support the role of interdisciplinary lessons in affecting and shaping students' aesthetic response to music if they had been earlier an effective tool in changing students' attitudes toward people who are ethnically and culturally different (ISMA, 2001). It seems that a more holistic approach that teaches across disciplines is recommended.

Because ethnic awareness emerges at such an early age and once positive or negative attitudes are formed they tend to increase with age (BRAND, RUIZ, & PADILLA, 1974), findings for this study recommend the teaching of world's musical cultures as early as possible, ideally at the kindergarten and preschool levels. This would certainly help students understand the characteristics of Asian music and value them as equally important, although they are different from the Western European tradition. If children at an early age are taught in music classes that there are many possibilities in sound variation within a semitone, they would hopefully understand the vocal sounds produced in Asian music and value them as equally important, even though they might sound different from what they are used to.

Further studies should continue to examine students' preference for other world's musical cultures. Interdisciplinary lessons including disciplines other than music, social studies, geography, and history should also be investigated. Students' familiarity with certain cultures and its

effect on aesthetic music preference should continue to be systematically investigated.

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