AN ANALYSIS OF THE LISTENING PREFERENCES OF ELEMENTARY SCHOOL
CHILDREN FOR WESTERN CLASSICAL ART MUSIC IN THE ORCHESTRA SETTING

By

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and approved by

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ABSTRACT

The scope and volume of research of music preference is vast with a strong tradition in music education. Many studies examine particular musical factors such as tempo, volume, timbre, genre, style, and performing medium. Many educational and social factors have been investigated as well, such as gender, age, influence of peers, influence of adults, popularity, and familiarity.

Despite the number of studies concerned with music preference, there appears to be little or no documentation on the effects of concert preparation on the students’ listening preferences for Western classical art music. The purpose of the proposed study was to determine if the students’ participation in pre-concert lessons designed by the Master Teachers’ Collaborative of the New Jersey Symphony Orchestra has any effect on influencing the Western classical art music listening preferences of students. Qualitative and quantitative methods were used to analyze third grade students’ (N = 74) listening preferences for Western classical art music. A pre-test, treatment, posttest design was employed, supplemented by student interviews, surveys, questionnaires, field notes, and journaling. Both pre- and post tests consisted of a listening preference test based on the orchestra concert program the students were to attend. The treatment consisted of lessons intended to direct the students in their listening to Western classical art music performed by an orchestra. There was a highly significant increase in the general population for Listening Example 3 with a \( p \) value of < .01. It was also found that there was a significant difference between the listening preferences of male and female subjects for the Listening Example 3 (Movement 3 from Scheherazade, Festival at Baghdad – The Sea – Shipwreck from Nickolay Rimsky-Korsakov, Scheherazade/Capriccio espagnol recorded by The
Boston Symphony on Deutsche Grammophon CD# 289 469 659-2). Male subjects showed a significant increase for Listening Example 3 in the posttest with a $p$ value of $< .05$. Female subjects rated the Listening Example 3 highly in both the pretest and in the posttest, showing a significant increase with a $p$ value of $< .05$. Interviews conducted revealed that the subjects recollected events in the concert visually rather than musically. The majority of subjects interviewed claimed that the pre-concert lessons were helpful in helping them prepare for the concert experience. An unexpected result emerged in that the listening preference for 8-year-olds declined for Listening Example 2 while the listening preference for 9-year-olds increased. It is hoped that this study will serve as an impetus for further research in this area.
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This document is dedicated to the loving memory of my husband

Gerald Melech

(1944 – 2009)

and to the loving memory of my parents

Dr. Herbert N. Richardson

(1919 – 2004)

Mrs. Fannie F. Richardson

(1925 – 2005)
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CHAPTER ONE
Introduction

As an expansion of mission beyond purely providing performances or exhibitions, many arts organizations offer educational opportunities as a means of enriching and supplementing arts instruction in schools. There is tremendous diversity in the kinds of organizations that have adopted this model, including opera, dance, theater companies, museums, and symphony orchestras (Fowler, 1985; Fowler, 1985b).

Snowden (1975) stated that arts institutions and orchestras have been in the business of education and outreach for decades. However, he maintains that these organizations have neglected to declare a basic philosophy for their existence writing,

…little or nothing has been done in the way of attempting to establish a basic position, an overall educational strategy, or a serious rationale. Most research is simply a survey of existing conditions without a guiding philosophy or even a carefully prepared set of goals and objectives. As in other educational procedures and programs, a basic philosophical foundation is considered necessary. (p. 12)

Snowden (1975) also states that the orchestra in particular needs to establish and maintain a basic philosophical foundation in order “…to justify itself in American education and accomplish any sort of reasonable objective (p. 13).

Early in the twentieth century, many adults considered children’s concerts to be an integral part of their children’s general education (Knussen, 2003). In the last two decades of the twentieth century, the pattern of immigration has shifted from a population dominated by Western Europeans to a population with growing groups from Africa, Asia, and Latin America “…for whom traditional Western art forms have no intrinsic resonance” (Knussen, 2003, p. 240). The focus of general education has been diverted from the classical, European curriculum to
subjects that are considered to be more practical such as mathematics and science (Knussen, 2003). The relevance of orchestral education, which is rooted in Western European culture, therefore presents a challenge when reaching this new population. Knussen (2003) described the phenomenon in this way: “Therefore, orchestral music, with its European roots and associations, became more and more marginalized in the education world” (p. 240).

MENC (1994) has stated that students should be able to listen to and analyze aural examples of a varied repertoire of music that represents diverse genres and cultures. Preferences for certain musics may be related to the musical characteristics with which the listener prefers or is familiar (Fung, 1994; Fung, 1996; Morrison & Yeh, 1999; Pembroke, 1997). Tolerance for and acceptance of different ethnic groups could be related to a willingness to listen to music of other cultures (Fung, 1994). Age might be a factor; younger subjects may accept the music of different cultures more readily than older subjects (Fung, Lee, & Chung, 1999/2000).

Introducing children to music of various styles and cultures, including classical music of the Western European tradition, remains a challenge in music education. The planning of educational concerts for school children should be a major component of a symphony orchestra’s concert season in order to address this challenge (Keisling, 2006; Leach, 1996; Veremeychik, 1987). However, educational planning should be the domain of the symphony’s education department, and not that of the conductor. Veremeychik (1987) claimed that conductors of symphony orchestras often have little or no training in education. Therefore, the end result of a concert geared for school children planned by conductors could well be educationally questionable (Veremeychik, 1987). Symphony orchestra education departments were initiated in part to service school children in the orchestra’s communities by broadening their musical knowledge of Western art music literature (Keisling, 2006; Leach, 1996; Snowden, 1975;
Veremeychik, 1987). The American Symphony Orchestra League (1993) has described the symphony orchestra’s role in education in this way:

> Orchestras and communities working together can identify cultural, educational and social roles that orchestras may fulfill successfully. The new American orchestra might find that a broad conception of its educational role makes education essential to its mission. It may work with the community to promote education, particularly music education, as a life-long endeavor. (p. 10)

The orchestra’s role in music education requires planning specifically geared toward the students. Veremechik (1987) stated that:

> Audiences of orchestral education concerts, especially students of the primary grades, are at an impressionable age and their exposure to the orchestra should be stimulating and aesthetically rewarding. Those responsible for planning orchestral education concerts should then be cognizant of appropriate educational planning while meeting the musical concerns of the conductor and orchestra performers… . (p. 3)

French (1992) discussed the orchestra’s role in music education and brought up the following questions in relation to the role of the orchestra in music education:

> Is education a primary mission in our orchestra, or a secondary one? …why do we offer education programs? What do our musicians have to say about education and our orchestra? How does the work we do in K-12 education complement and supplement what’s happening in our schools? What can we do to support—or reestablish—school music programs? How does our orchestra contribute to continuing life-long learning about music? (p. 76)

Korn (2000) identified several shortcomings in orchestra education activities. Some of these concerns included programs that lacked age-appropriate learning activities, were deficient in relationships to academic needs, and demonstrated an arrogance and insensitivity to students’ cultures and challenges. Korn (2000) emphasized, “If orchestras are to build truly meaningful and effective music education initiatives, they need to improve dramatically the methods and skills they employ in this work” (p. 58).

Many orchestras rely on the “exposure-enhancement” model of content and delivery as an approach to orchestra education (Korn, 2000). Korn (2000) claimed that this particular model
adopted by many symphony orchestras is more than 30 years old and may no longer be applicable. The “exposure-enhancement” model was typified by Leonard Bernstein’s Young People’s Concerts and was developed as a means of enhancing a music education curriculum that was already in existence in schools. Korn (2000) also stated that neither exposure nor enhancement is adequate for symphony orchestra music education to be effective, but learning should be acquired through teaching and experience, that is, the students should learn the craft by singing, or playing a musical instrument. This seems to imply that orchestra programs should be considered differently, in that students should be involved in a psychomotor activity in addition to active listening.

In order for orchestra education programs to succeed, Korn (2000) suggests that orchestra education program development should be approached through: 1) identification of school and student needs, 2) collaborating with classroom and arts-specialist teachers to seek their direction and experience so that the programs bear relevance in the classroom, and 3) the development of collaborative relationships among area schools, arts and community providers, foundations, and corporate philanthropies.

It is not clear if these orchestra education concerts have any effect on its target audiences: school-aged students. Documentation does exist that details adults’ perceptions of the effectiveness of education programs (Chi, 2004; Veremechik, 1987), descriptions of orchestra education outreach programs (Leach, 1996; Rozen, 1998; Skornia, 2004; Veremechik, 1987), and challenges confronting an orchestra’s youth activity program (Chung, 1990).
Background

**Early Orchestra Education Programs**

Orchestra education programs have been presented almost exclusively by American orchestras (Veremeychik, 1987) and by orchestras in the United Kingdom (Knussen, 2003). Theodore Thomas, Walter Damrosch, Leopold Stokowski, Frederick Stock, Lillian Baldwin, and Leonard Bernstein are individuals who were influential in the development of orchestra education programs (Leach, 1996; Skornia, 2004; Snowden, 1975; Veremeychik, 1987). Leach (1996) declared that these pioneers in orchestra education contributed meaningful listening experiences for young people. They have also influenced the future of orchestra education development.

Theodore Thomas founded the Chicago Symphony Orchestra (Skornia, 2004) and is considered by many to be the father of the American symphony orchestra (Leach, 1996). Thomas’s goal was to educate and expose the American public to great music (Snowden, 1975). Walter Damrosch was the conductor of the New York Symphony and presented educational concerts by way of the NBC radio network (Leach, 1996; Skornia, 2004; Veremeychik, 1987). Leopold Stokowski, conductor of the Philadelphia Orchestra, took advantage of both radio broadcasts and the movies to present orchestral music to youngsters (Leach, 1996; Snowden, 1975; Veremeychik, 1987). Frederick Stock became director of the Chicago Symphony Orchestra upon the death of Theodore Thomas (Leach, 1996; Skornia, 2004) and started the Chicago Symphony Orchestra’s *Young People’s Concerts* (Berglund, 1955).

Leonard Bernstein took advantage of television in order to reach the American masses as Damrosch took advantage of radio broadcasts and Stokowski of records (Rozen, 1998; Skornia, 2004; Snowden, 1975; Veremeychik, 1987) and educated the public through the New York
Philharmonic’s televised *Young People’s Concerts*. Knussen (2003) wrote that “…Bernstein’s infectious enthusiasm, extraordinary ability to communicate, prodigious musicality, and probing intelligence, all in the service of a mission to teach, were inimitable” (p. 244). Bernstein’s enormous success in the *Young People’s Concerts* was attributed to numerous factors, including his appeal to a varied public (Snowden, 1975) and his humorous persona and salesmanship (Skornia, 2004). Upon analysis of Bernstein’s 53 *Young People’s Concerts* programs, Rozen (1998) identified four components in these programs that were consistently employed by Bernstein. The first was the initial question or statement. The second component was the answer segment, which consisted of various pedagogical techniques used by Bernstein. Among those techniques listed were the use of humor, use of visual aids, use of analogy and imagery, and non-musical demonstrations. The third component was the summary of the lesson, which was then followed by the fourth, which was another musical presentation. Rozen (1998) concluded that Bernstein used several effective and creative teaching techniques within the programming of the lessons. The longest amount of time spent in the lesson was during the second component, which was the answer segment. Recommendations for further study included seeking out original audience participants and interviewing them to determine if their experience at the taping of these programs aided or hindered their music appreciation.

Lillian Baldwin was hired as the Supervisor of Music Appreciation for the Cleveland, Ohio public schools in 1929 (Leach, 1996; Skornia, 2004; Veremeychik, 1987). Her primary role was to serve as liaison between the Cleveland public schools and the Cleveland Orchestra (Leach, 1996). Baldwin’s work in Cleveland during the period of 1929 through 1956 was influential for symphony orchestra education (Massmann, 1973). Baldwin’s collaboration among the Cleveland Board of Education, the Cleveland Orchestra, and the Cleveland community
produced an internationally recognized plan for children’s concerts called the Cleveland Plan (Massmann, 1973). It is directly related to the present research study in that it was developed to prepare students for concert attendance. Baldwin’s gift for writing vivid and educational preparatory material was a major factor in the success of the Cleveland Plan (Massmann, 1973). The Cleveland Plan consisted of objectives and processes in order to present a concert that encouraged the development of knowledgeable listening skills (Leach, 1996; Skornia, 2004; Snowden, 1975; Veremeychick, 1987). This plan was an attempt for the professional orchestra to connect with younger listeners in order how to teach them to listen actively rather than passively.

**Current Orchestra Education Programs**

Meyers (1996) found that 91 percent of orchestra education programs assessed effectiveness employing only on informal feedback. Chi (2004) claimed that there is little information on orchestra education assessment that is available to the public. Chi (2004) claimed that:

Most of the evaluation of orchestra education programs comes from internal information, and often orchestra education directors are reluctant to share much detail from their evaluations for the fear of negative publicity. (p. 12)

Informal feedback is often shared with the public, but does not provide enough information about what the students have learned from the concert experience (Chi, 2004). However, “…orchestras are gradually paying more attention to assessment of their education programs as the call for accountability made the assessment issue difficult to avoid” (Chi, 2004, p. 13). The question remains if the educational departments of symphony orchestras actually accomplish the goal for which they have been established.

DeNardo (1997; 2001) described a partnership between the Milwaukee Symphony Orchestra and school districts in the Milwaukee area. The prevailing goal was to advance
students’ overall learning and development by integrating the arts across the curriculum. Students were to plan and produce various components of the project, which were videotaped. This was to show how musical, artistic, and literary aspects were combined into one cohesive unit. The students then performed their projects for another class, who wrote critiques of the performance. The students reflected on their performances and critiques after viewing their videotapes.

Elementary students who were involved in a partnership with an area chamber orchestra were assessed on academic achievement, spatial intelligence, attitudes toward school, and classroom climate (Cutietta, 1998). Third graders who were involved in the program were significantly more positive about completing schoolwork than their peers who were not involved in the program. Not only did these students state that the classroom climate was positive, but also they surpassed their peers who were not involved in this partnership in students’ attitudes toward staff, and students’ feelings of competitiveness and friction.

The activities of two orchestras that are striving to make tangible contributions to music education will be briefly discussed. The first, The Boston Symphony Orchestra, was cited by Meyers (1996) in *Beyond Tradition: Partnerships among Orchestras, Schools, and Communities*. Meyers wrote that:

> Early in the 1990’s, two overlapping concerns at the BSO provided an impetus for broadened education initiatives: a) the ongoing challenge of connecting the orchestra with a culturally diverse community, and b) growing sentiment that the orchestra should play a more active role in supporting music education in the public schools. (Meyers, 1996, p. 47)

Myran Parker-Brass, educational director of the Boston Symphony Orchestra, stated that this organization was formed in 1881 and performed its first youth concert in 1887 (M. Parker-Brass, personal communication, interview, April 15, 2004). This shows an historical
commitment to presenting performances for children. Currently, this organization develops curricular materials that a classroom teacher or music specialist could use in order to prepare the students for the concert. However, these materials are not always directed toward programs of the current season. Resources are made available on the BSO website for teachers to use as they see fit. The online conservatory is geared for adult and high school users, which incorporates music history and music analysis activities (M. Parker-Brass, personal communication, interview, April 15, 2004).

The New York Philharmonic was cited in Beyond Tradition II (Meyers, 2006) as another orchestra that used promising practices in the field of music education. Meyers (2006) wrote that:

The New York Philharmonic … strives to foster an enjoyment of music and to instill an interest in symphonic music in its community and in the nation at large. By focusing on listening, on the orchestra, and on specific pieces of orchestral repertoire, the … program supports this mission with young audiences. A board committee on Education Policy and Planning oversees education work generally, and musicians have recently elected an Education Committee of four members. The first mission of this committee is to work with the board committee on strategic planning for education. (pp. 12-13)

Shino Fukui, Education Administrative Assistant for the New York Philharmonic stated that educational activities were handled for many years by volunteers until the Board of the New York Philharmonic decided to organize the education department in 1970 (S. Fukui, personal communication, telephone interview, November 1, 2007). Activities and lessons are made available on their website. The School Partnership Program is assessed and evaluated at the end of each year by using student, teacher, parent, and coordinator surveys. Qualitative and quantitative information is analyzed to determine learning outcomes (S. Fukui, personal communication, telephone interview, November 1, 2007).
Even though these two orchestras are taking an active and unique role in music education, there is yet to be any evidence of an assessment that measures the impact that any orchestra has on the listening preferences of the students for the style of music that is presented at concerts, particularly classical Western art music. The New York Philharmonic is currently working on developing assessment tools that will give its education department a concrete idea of the students’ learning outcomes with regard to recorder playing and listening skills (S. Fukui, personal communication, telephone interview, November 1, 2007). Here, listening skills mean that the students are being taught how to listen. How the New York Philharmonic is making an impact on the students’ listening preferences for Western art music has yet to be determined. The Education Department of the Boston Symphony Orchestra evaluates all of their programs every year (M. Parker-Brass, personal communication, interview, April 15, 2004). An outside evaluator is used at the end of each year to get feedback on what was and was not successful in the classroom (M. Parker-Brass, personal communication, interview, April 15, 2004). Even though an evaluator is used annually to determine success in the classroom, how and if these methods influence the students’ listening preferences for this style of music has yet to be determined.

The New Jersey Symphony Orchestra is also attempting to be involved in the students’ music education within its community. The Master Teachers’ Collaborative is a program developed by the New Jersey Symphony Orchestra “… which identifies and recognizes the unique contributions that creative and inspirational teachers have made to their students and to their profession” (proposal for the Master Teachers’ Collaborative, August 6, 1992). The program is a “…direct outgrowth of the [Geraldine R.] Dodge Foundation’s interest in education and excellence and it supports the NJSO’s goal of working more intensively in the area of
interdisciplinary classroom curriculum development...” (Memo from Judith Nachison to Lawrence Tamburri, Executive Director of the NJSO, July 12, 1993). The New Jersey Symphony Orchestra submitted a proposal to The Dodge Foundation on August 6, 1992 in order to obtain a grant in order to establish The Master Teachers’ Collaborative. The Master Teachers’ Collaborative is responsible for designing pre-concert lesson plans for the New Jersey Symphony Orchestra’s annual youth concert series. The designing of these lessons typically takes place from January until April, is compiled and published during the summer, and then distributed to public school teachers in the fall.

Judith Nachison, the first educational director of the New Jersey Symphony Orchestra, stated that The Master Teachers’ Collaborative began as a symposium on the Role of the Orchestra in Education in New Jersey held by The New Jersey Symphony Orchestra on February 27, 1992 (proposal for the Master Teachers Collaborative, August 6, 1992). Those present at this symposium were representatives from foundations and corporations, trustees, volunteer leaders, members of the orchestra, practicing educators and administrators, and members of the press (proposal for the Master Teachers Collaborative, August 6, 1992).

The primary question that was addressed concerned the orchestra’s connection to education (J. Nachison, personal communication, March 28, 2004). The New Jersey Symphony Orchestra sought to identify and gather a group of teachers who demonstrated excellence in their field (J. Nachison, personal communication, March 28, 2004). The goal was to develop an integrated music curriculum for grades K through 6. It was stressed that teachers often work in isolation from one another; by working together, the teaching and learning outcomes would enhance academic performance and artistic achievement of the students.
Four points of agreement emerged from this initial symposium:

1. Music is a discipline that must be taught sequentially in a structured curriculum;
2. Music education and music teachers are at risk because they are not perceived as central to the academic process, or even connected to it;
3. Music, and the arts in general, form a core of knowledge that should be accessible to all students and it should be possible to identify those with exceptional gifts in this area for special development; and
4. Orchestras should be more than advocates for music education; they need to take an active role in developing curriculum-based programs that are integral to classroom curriculum and they should be available to provide expertise, personnel and other forms of support to school and to teachers. (proposal for the Master Teachers’ Collaborative, August 6, 1992)

The New Jersey Symphony Orchestra proposed to identify successful teachers in New Jersey who promoted music education in their districts. It was recognized that:

1. Teachers are the key to successful learning;
2. Teachers who are successful are often unrecognized and unrewarded for their efforts;
3. Music teachers in particular are often isolated from the other curriculum areas, and;
4. Successful teachers can impart knowledge, skills, and techniques to others in the same field. (proposal for the Master Teachers’ Collaborative, August 6, 1992)

With this in mind, the New Jersey Symphony Orchestra sought to establish the Master Teachers’ Collaborative. The Collaborative was expected to:

1. Publicly recognize creative and successful teachers for their unique contributions to their profession and to their students’ growth in music education;
2. Involve teachers in creative collaborations with teachers in other subject areas;
3. Recruit teachers to plan and develop multi-disciplinary programs that connect the arts, with music in particular, with the curriculum in the public schools, and;
4. Develop a revolving pool of exceptional teachers who share ideas and develop collaborations with their colleagues and form a network of creative resources. (proposal for the Master Teachers’ Collaborative, August 6, 1992)
The New Jersey Symphony Orchestra Education Committee sought to accomplish this with the recommendation of two committees to:

1. Oversee research into the relationship between music education and academic performance, and
2. Develop a sequential classroom-based curriculum that would integrate the resources of the orchestra into basic educational planning and structures on all grade levels. (proposal, Master Teachers Collaborative, 1992)

The next step was to identify New Jersey teachers who would assist the New Jersey Symphony Orchestra in developing curriculum-based programs that were accessible to teachers in the state. Twenty-one teachers from a total of 75 who applied were selected to participate during the first year of the Master Teachers’ Collaborative program. As part of the application, each person submitted an original lesson that incorporated music with another subject area. Applications were judged on a 10-point scale with 10 representing “outstanding,” 7 to 9 representing “worthy of consideration,” and less than 6 being “not exemplary” (memo, January 7, 2000 from Judith Nachison to Master Teacher Collaborative Evaluators).

The Governing Committee established guidelines to follow when evaluating the lesson plan submissions. Some of the guidelines were age-appropriateness, clarity, conciseness, inclusion of at least one other subject area, variety of instructional approaches to reach children with different learning styles, and evidence of the lesson lending itself to critical thinking and analysis skills (memo, January 7, 2000 from Judith Nachison to Master Teacher Collaborative Evaluators). The format for each lesson included the name of the program, title of the piece, goal, materials, objective, procedure, closure, and evaluation (Master Teacher Collaborative unit guidelines, no date provided). Teachers who were identified designed lessons rooted in Gardner’s (1983) *Theory of Multiple Intelligences*. It was expected that these lessons would integrate music into the curriculum so that the students could discover connections among
different subjects. The lessons were compiled in *The Teacher Resource Book*, which was a collection of educational resources such as websites, information on concert etiquette, historical information in relation to the pieces chosen for the concert program, in addition to the lessons produced by the members of the Master Teachers’ Collaborative. The book could be used not only by music specialists, but also by general classroom teachers as well. It is produced annually in order to coincide with the concert season. The end result would include music within the larger school curriculum rather than making music a subject that was separate and therefore possibly viewed as marginal, isolated, and peripheral. Maria Araujo, Vice President of Education and Community Programs from 2000 to 2005, confirmed that the teachers’ collaborative worked across the curriculum for the purpose of connecting music with subjects in other curricular areas (M. Araujo, personal communication, interview, April 13, 2004).

**Purpose of the Study**

The purpose of the study is to determine if the subjects changed their listening preferences toward Western classical art music during the study and if participation in the study had any effect on listening preferences for Western classical art music. From the main question are derived several ancillary questions:

1. What did the students like most about the concert experience?
2. What did the students dislike most about the concert experience?
3. Does gender have any effect on students’ listening preferences for Western art music?
4. Did the students feel that the pre-concert lessons were helpful or not helpful in preparation for the concert experience and why?
Need for the Study

Even though orchestra education programs exist that provide students with the opportunity to listen to instrumental music of different styles, genres, and cultures, there is not adequate study to determine if these programs are having an impact on modifying students’ listening preferences. This study seeks to examine the perception of the students concerning this specifically designed educational experience.

Local orchestras should be able to successfully assist music educators achieve their goals of directing students to learn to listen intelligently, actively, with purpose and intent. The American Symphony Orchestra League described an exemplary collaboration between music educators and symphony orchestras:

Orchestras and communities working together can identify cultural, educational and social roles that orchestras may fulfill successfully. The new American orchestra might find that a broad conception of its educational role makes education essential to its mission. It may work with the community to promote education, particularly music education, as a life-long endeavor. It may expand its views about appropriate roles for orchestra personnel in the community, including performance, teaching, mentoring, social action and advocacy. The new American orchestra has the potential to draw upon a range of community members to serve as volunteers in a variety of capacities, from governance to fundraising to programming and staff support. (p.10)

The ideal scenario between music educators and orchestras would consist of a symbiosis between these two groups in order to provide the environment necessary for intelligent listening that the MENC describes when referring to exposing students to a varied repertoire of music that represents diverse genres and cultures (1994). Research exists that examines listening preferences of students in a variety of contexts such as tempo, rhythm, performance medium, familiarity, and genre. However, there appears to be a paucity of research on listening preferences for Western classical art music conducted with a symphony orchestra context.
This research study seeks to investigate third grade students’ listening preferences for Western classical art music performed in a symphony orchestra context. The Master Teachers’ Collaborative designs cross-curricular lesson plans annually to be used in conjunction with the Spotlight Concerts and the Young People’s Concerts. These lessons were intended to be taught before the elementary school students attended the live performances. Does the work of the Master Teachers’ Collaborative make an impact on the students for whom it is designed? Are the students gaining from attending concerts given by the New Jersey Symphony Orchestra? It was the intent of the researcher to discover if the presentation of these pre-concert lessons had any effect on the students’ listening preferences for Western classical art music after musical training using the New Jersey Symphony Orchestra’s instructional designs.
CHAPTER TWO

Review of the Literature

Listening Skills

Learning how to listen is a skill that is promoted not only in music, but also in other subject areas as well. The development of listening skills was emphasized in order to be successful throughout life (Sandall, Schramm, & Seibert, 2003) and was used as a tool to promote students’ academic success (Owca, Pawlak, & Pronobis, 2003). Salt (1981) wrote of the development of general listening skills in children and believed that these skills should start to be cultivated as early as possible. Ilari and Sundara (2009) wrote of auditory preferences in infants, noting that preferences in the music perception of infants referred to the attention span directed toward a stimulus, rather than choosing one stimulus over another. Children should learn how to discriminate between sounds that are high-low, soft-loud, and near-far. Salt (1981) also believed that children’s development of inner hearing greatly contributed to acquiring general listening skills.

The ability to teach children how to listen with purpose, knowledge, and intent is a major goal in music education. According to Sims (1986), “Listening appears to be the primary modality through which music is learned and enjoyed” (p. 173). Reimer (2003) recognized that all people enjoy music through its essential behavior, listening, and wrote:

The entire body of music, historically and culturally, can be directly experienced and more fully shared by even young children through listening. Very little of that music will ever be experienced by most people in any other way. The development of every student’s listening intelligence, therefore, is a crucial obligation of music education. (p. 225)

Listening to music should be an activity that requires active thought. Elliott (1995) described listening to music as an action that is “cognitive and constructive” (p. 81). Therefore,
listening to music should not be passive and lacking focus, but should be an activity that engages
the listener to effectively comprehend what is being heard.

LeBlanc (1983) wrote that:

Music training that allows a listener to get more out of a piece of music has been a
constant endeavor in music education. When listeners develop their musical memory,
they can understand form and they can develop their cognitive memory to retain and
apply background knowledge about music. (p. 48)

Madaule (1998) stressed that two things, music education and learning how to listen, are
instrumental for human communication. In order to speak, children must be able to learn how to
listen. He believed that:

… listening is so crucial to the acquisition of speech and language that defective
listening can lead to impaired learning. Hence, the music teacher who trains
children to listen contributes significantly toward their readiness and ability to
communicate, talk, learn, and optimize their potential. (p.35)

Colwell and Davidson (1996) share this point of view about knowing how to listen to
music and stated:

Changes in U. S. lifestyles have reduced the former emphasis on teaching music
listening in schools, and the music program has become one of activities and
performances. The listening curricula for all students disappeared along with all-school
assembly sings. But listening intelligently is a skill central to the development of
musical intelligence and its presence should be reinstated. (pp. 56-57)

Listening Preferences

Music education in the student’s early years contributes to the development of the child’s
listening skills (Salt, 1981), yet the purpose of music education does not end with this objective.
Exposing students to a wide range of listening experiences is a major goal of music education
(MENC, 1994; Hui, 2009; Wiggins, 2001). However, guiding students to listen to a variety of
musical styles and genres remains a challenge. Students may be resistant to different and
unfamiliar music, preferring to listen to music that is popular and familiar to them (Greer, Dorow, & Randall, 1974; May, 1985). Szabo (2001) stated that:

With each advancing grade level from kindergarten through to high school, most children’s musical interests become more firmly entrenched in the popular culture to the extent that they regard anything that is not of that ilk with suspicion and/or disdain. (p. 5)

Szabo (2001) also advocated discovering factors that contributed to a positive disposition toward classical Western art music because school children should be educated about different styles of music that have emerged from the Western social and cultural fabric. Rheingans (2005) concurred with this fact, stating that introduction of Western classical art music remains a challenge for music educators and wrote:

For many teachers, delving into the classical masterworks is an overwhelming ambition – one that is easily neglected for lack of time, energy, or resources. Yet, most music teachers would agree that exposing our students to classical music is of critical importance. The unfortunate truth for many students is that their exposure to classical music will be limited if it is not provided by their music teacher. (p. 26)

A number of factors influence the listening preferences of students. Shehan (1986) determined that several variables have direct implications for the school music curriculum such as peer group approval, teacher and adult approval, repeated exposure, and teacher-guided listening. LeBlanc (1982) wrote that:

Incidental conditioning of the listener, as well as the opinions of the listener’s peer group and family, influence the music preference decision. Educators, authority figures, and the media influence music preference decisions. These influences will vary in intensity and direction at different stages of the listener’s life. (p. 31)

A survey of the literature shows that empirical research that currently exists which examines human musical and listening preferences. Such studies include preferences for tempo (LeBlanc, 1981, LeBlanc et al, 1988; Sims, 1987; Flowers, 1988); style (LeBlanc, 1979; May, 1985; LeBlanc et al, 1996); the effects of repeated exposure (Hargreaves & Castell, 1987;
Shehan, 1979); the effects of peer influence, the effects of teacher and adult influence (Greer, Dorow, Wachhaus, & White, 1973; Sims, 1986; Gault, 1998), and preference for Western art/classical music (Byrnes, 1994; Hash, 2009; Haack, 1982; Hui, 2009; Kallinen, 2005)

**Studies of Preference for Tempo, Rhythm, and Beat**

Studies of preference for tempo generally show that children prefer faster tempos to slower ones (Acevedo-Hernandez, 2006; LeBlanc, 1981; LeBlanc & Cote, 1983; LeBlanc, Jin, Chen-Hafteck, Olivera, Oosthuysen, & Tafuri, 2000-2001; LeBlanc & McCrary, 1983; Montgomery, 1996; Montgomery, 1998; Osborn, 1999). LeBlanc (1981) found that students often responded to faster tempos by tapping their feet or moving their bodies to the music while slower tempos were often met with derision. Interesting rhythm patterns also influenced preference (Walker, 2006). LeBlanc (1981) also concluded that teachers should introduce fast musical examples first and slow musical examples second in order to encourage a positive listening experience.

LeBlanc and McCrary (1983) investigated the effect of four levels of tempo on the preference choices of 163 fifth- and sixth-grade students in south central Michigan. The four levels of tempo were identified as slow, moderately slow, moderately fast, and fast. Students listened to a tape of 24 instrumental examples of jazz from approximately 1925 until 1940. It was found that there was a significant correlation between increases of tempo and increases in preference. The investigators claimed that this study is the most conclusive of its series on the effects of the tempo preferences of students at the time this particular study was conducted since there were no other independent variables present to complicate the results.

A study similar to that of the LeBlanc and McCrary study was expanded to include five countries (LeBlanc, Jin, Chen-Hafteck, Olivera, Oosthuysen, & Tafuri, 2000-2001). Nine
hundred and fourteen participants from Brazil, China, Italy, South Africa, and the United States took part in this study. Four levels of tempo, slow, moderately slow, moderately fast, and fast, were again used in this study. Here, as in the previous study, tempo proved to be a highly significant factor in listening preference. Each increasingly faster level of tempo received significantly higher preference ratings from the participants.

LeBlanc et al. (1988) examined the tempo preferences of music listeners of different ages. The subjects who participated in the study consisted of students from third grade through college-level age. The participants in this study showed a preference for pieces with fast tempos. The implications of the study suggest that teachers should use fast tempos when introducing unfamiliar or less preferred music to their students as was concluded in LeBlanc’s 1981 study. LeBlanc et al. (1988) wrote:

This does not mean that slow music should be discarded or that teachers should cater to the popular culture, but fast tempo examples can be used effectively to motivate listeners. (p. 167)

LeBlanc and Cote (1983) investigated the effect of tempo on the preferences of 314 fifth-and sixth-grade students in central Michigan. The researchers corroborated previous research involving tempo preference because the results showed that students consistently preferred faster tempos rather than slower tempos. The implications for teaching suggested that fast selections should be used before progressing to slow selections when introducing unfamiliar music for listening lessons.

Untrained musicians often listen for the fastest subdivision of the beat instead of the actual beat when determining tempo (Novak, 1990). Subjects in this study were 70 high school choir students enrolled at Reagan and Stephen F. Austin High Schools in Austin, Texas and 76
non-music majors attending the University of Texas at Austin. The results showed that untrained subjects might perceive the fastest subdivision of the beat instead of the beat itself. This fast subdivision of beat might also influence tempo preference, which then in turn could influence style preference.

Duke (1987) found similar results concerning the perception of melodic rhythm on tempo. The purpose of the study was to investigate the effect of melodic rhythm on undergraduates’ perception of relative tempo. The subjects for this study included 64 undergraduate non-music majors from the University of Texas at Austin. The stimuli were four variations of the chaconne theme from the first movement of the *First Suite in E-flat for Military Band* by Gustav Holst. Each variation was performed by a microcomputer at two different tempi. The eight versions of the theme were then arranged in a paired comparison format with each selection paired with itself and with each of the remaining versions, resulting in 36 pairs. The subjects were to compare the chaconne variations with different levels of melodic activity that were performed at various tempo relationships. It was found that subjects could discern tempo changes when the stimulus was presented with identical melodic material. Yet, the subjects detected tempo changes when the melodic material was different between the two examples in the pair but the tempo remained unchanged.

Montgomery (1996) studied the tempo preferences of elementary- and middle-school aged children. The participants in this study were 505 students from kindergarten through eighth grade who attended four elementary schools. Montgomery found that the relationship between tempo and preference was positive and significant. The correlation between tempo preference and listener age was significant at every grade level except kindergarten, first grade, and second
grade. Those in grades three through eight indicated a significant preference for music with faster tempos.

Montgomery (1998) also conducted a study to obtain a clearer understanding of the relationship among musical preference, tempo, melodic rhythm, and tempo perception. A total of 469 students in kindergarten through sixth grade participated in the study. Musical preference was determined using a three-choice pictographic response mode with happy, neutral, and sad faces anchored with the words like and dislike. The subjects were instructed to circle the happy face or the word “like” if they liked the music, the neutral face if they had a neutral opinion of the music, or the sad face if they disliked the music. Tempo perception of fast, moderate, and slow was assessed using another pictographic design. The subjects were instructed to circle the picture of a child running if they thought the music was fast, the picture of a child walking if they thought the music was moderate, or the picture of the turtle crawling if the thought the music was slow. The results showed that the relationship between preference and tempo was positive and significant. The results also showed that the more excerpts the subjects perceived to be fast, the higher their preference scores.

Preschool through fourth grade children were examined for the effect of tempo on music preference (Sims, 1987). A total of 247 children participated in this study, which sought to determine when tempo becomes a basis for preference judgments. Five fast and five slow musical excerpts were presented to the students, who were given a three-choice pictographic response mode. The students were instructed to circle the smiling face if they liked the music, the neutral face if they thought the music was satisfactory, or the frowning face if they disliked the music. The results showed that there was a strong, positive correlation between item ratings and tempo. The tempo-preference relationship was positive and significant at every grade level
except for kindergarten. The study also showed that preference judgment based on tempo is probably acquired by fourth grade. The results of the subjects in preschool through third grade showed that some of the children were making preference decisions based on tempo.

Flowers (1988) examined the effect of tempo on undergraduates and children’s symphonic music preferences. Participants included 29 undergraduates and two hundred seventy-nine (279) children from preschool through sixth grade. All students were given a pre- and posttest consisting of four musical examples from the standard symphonic repertoire of the Romantic period. Two of the pieces were fast and two were slow. All age groups preferred the two faster symphonic pieces over the two slow symphonic pieces.

Brittin (2000) studied the responses of 343 students in second through sixth grade in regards to the effect of tempo in their music listening preferences. The students were required to listen and respond to ten musical examples. Students rated pieces with a faster chordal or melodic rhythm as having a faster tempo, when actually all ten selections were played at the same tempo of 108 beats per minute. With the exception of the second grades, all groups showed a positive relationship between perceived tempo and preference.

A total of 96 undergraduate music students participated in a study to determine pitch, tempo, and timbral preferences in recorded piano music (Wapnick, 1980). These participants were randomly assigned to four treatment groups. All subjects heard twelve excerpts of familiar and unfamiliar solo piano music. Group 3 was measured on preference for tempo. The results showed that these subjects showed a greater bias for fast tempos for familiar excerpts. The researcher concluded that preference for faster tempos might be a linked to age. It is possible that undergraduate musicians prefer faster tempos than do older musicians. Another possible explanation given by the researcher is that musicians perform compositions at slower tempos
than tempos at which they prefer to listen. This could be attributed to the technical demands of performing the piece.

Yarbrough (1987) investigated the effect of musical excerpts on tempo discrimination and preferences of musicians and non-musicians. Four hundred musicians (400) and non-musicians enrolled at the Syracuse University participated in the study. Subjects were tested in small groups of ten to fifteen and then were instructed to listen to tapes containing twelve pairs of musical excerpts. The subjects were to determine if the second excerpt of the pair was the same tempo, or faster, or slower than the tempo of the first excerpt. In addition to this task, the subjects were also required to specify their tempo preference. Contrary to previous research on tempo preferences, Yarbrough discovered that the ability to discriminate faster tempos correctly does not necessarily result in a preference for them. This is in contrast to preferences for faster tempos as found by Duke, 1987; LeBlanc, 1983; LeBlanc et al. 1988; Montgomery, 1996; and Montgomery, 1998.

Madsen and Geringer (1987) investigated the tempo preferences of 500 subjects from fifth grade through college age. Four hundred (400) subjects were selected from public schools in Austin, Texas and Tallahassee, Florida. Fifty music majors and 50 non-music majors from the University of Texas at Austin and the Florida State University also served as subjects (N = 500). The stimulus used was recorded popular music that was selected from top-selling records listed by Billboard Magazine at the time of the study. Tapes were prepared so that the subjects could hear pairs of ten excerpts twice for comparison. The first excerpt of the pair was the original, unaltered version. The second excerpt of the pair was altered in terms of tempo only, pitch only, or both elements. A second combination of no alterations in either pitch or tempo was incorporated for additional control. It was found that the subjects significantly preferred the
unaltered versions to the ones with pitch and or tempo changes. When the preference responses for the altered excerpts were considered, it was found that subjects significantly preferred faster tempo changes. The researchers surmised that popular songs are familiar to the general public through repeated exposure by the media, and are usually heard in only one version. Listeners are then disappointed when the original, familiar version is altered in some aspect.

LeBlanc et al. (2002) sought to examine the listening preferences of subjects ranging in age from 9 – 13 for musical excerpts with strong a rhythmic beat. Participants included 1,093 subjects from Brazil, Greece, Japan, Portugal, and the United States. The listening test consisted of 26 excerpts of jazz, popular, and Western art music that represented presentations of weak and strong rhythmic beat. It was found that music with a strong rhythmic beat had a significant influence on listening preference.

Walker (2006) found that beat and rhythm was the contributing factor for preference in a study involving 976 African American students in grades five through twelve. The stimulus CD contained 14 excerpts representing Western and non-Western styles. The Western styles included in the CD included rock, soul, pop, spiritual, gospel, rhythm and blues, jazz, classical, folk, and hip hop. The non-Western styles included African, Mexican, and Japanese. The subjects reported that familiar styles of pop, gospel, rhythm and blues, and hip hop were the most preferred. Of the musical characteristics presented for consideration of preference, which were beat, instrumentation, lyrics, tempo, or timbre, the beat was named the decisive factor in preference.

**Studies of Preference for Consonance and Dissonance**

Preference for consonance and dissonance has also been taken into consideration by researchers. McDermott and Hauser (2005) suggested that the aesthetic responses to consonance and dissonance could be acquired through cultural exposure, therefore making this a learned
behavior. Some intervals may intrinsically be perceived to be more pleasing to the ear than others. Davies and Barclay (1977) declared that the octave, Perfect fourth, and Perfect fifth were perceived as the most consonant intervals and the second and seventh as the most dissonant.

Butler and Daston (1968) led an experiment in order to determine college students’ preferential ranking for differing types of two-note chords. The twelve two-note chords under consideration corresponded with twelve intervals of the Western diatonic system: minor and major second, minor and major third, Perfect fourth, tritone, Perfect fifth, minor and major sixth, minor and major seventh, and the octave. A method of paired comparisons was used to derive a list of intervals ranking from most preferred to least preferred. The pairings consisted of a two-note chord paired with a very similar two-note chord, and a two-note chord that was paired with itself. The results showed that the minor second was the least preferred interval and the octave was the most preferred interval.

Martindale and Moore (1990) examined preference for pure tone pairs in terms of dissonance. Forty-one (41) subjects enrolled in introductory psychology courses at the University of Maine participated in the study. They were to listen and to rate 85 tone pairs twice: once for dissonance and once for preference. The stimuli consisted of pure sine-wave tone pairs in which A440 was always included as one member of the pair. A440 was also paired with four tones that did not occur in natural musical scales. A seven-point Likert scale was used anchored with the terms “like a lot” for 1 and “dislike a lot” for 7. The results of the experiment determined that the unison of A440 – A440 was the most preferred and the interval of A440 – A’’460 was least preferred.

Consonance was used as one of the variables considered to influence college students’ preference for world music (Fung, 1994). The subjects were 59 undergraduate non-music majors.
enrolled in four-year undergraduate colleges in Ohio, Indiana, and Minnesota. Two instruments were used in the study: Musical Characteristics Rating Form and World Music Preference Rating Scale. Both instruments contained the same 36 musical excerpts from Africa, Latin America, and Asia. Only instrumental excerpts were used in order to control for intervening factors such as language and the gender of the singer. The Musical Characteristics Rating Form contained 17 characteristics: ranging from slow-fast to no embellishment-rich embellishment. The Musical Characteristics Rating Form used a seven-point Likert scale. Subjects were instructed to listen to each 40-second excerpt before making their preferences choices. Consonance proved to be influential in preference choices.

Studies of the Effects of Tonality on Preference

Tonality is another concept that could have an effect on musical preference. Children’s concept of tonality was tested through singing songs and singing scales (Wassum, 1980), over the period of five years. The researcher questioned if the concept of tonality was developed as the student matures, was related to vocal range, and if there were significant differences between the longitudinal groups and the sample population. The longitudinal groups had a total of 40 elementary school children that were tested over the five year period. The sample population was comprised of 496 elementary school children, which resulted in a total of 1,062 tests for song and scale singing.

The children were tested individually while singing ascending and descending major scales and a favorite song. Data were maintained on a master card file that recorded pitches sung for the ascending and descending scales, and song performance in terms of pitches, phrases, stanzas, and interval accuracy. The results for the sample population showed that their performance was better for song singing. The longitudinal groups performed better on scale
singing. The researcher concluded that the development of the concept of tonality was a result of a learned behavior through education and not through the development of vocal maturity.

In order for students to prefer one tonality over the other requires having the ability to discriminate between the two tonalities. Crowder (1984) wrote that the concept of major and minor related closely to emotion and stated that the “… association of the major mode with happy and minor with sad is the most solid link we have between music structure and the language of human emotions” (p. 4). Kostka and Riemer (1994) conducted a two-fold study that sought to determine if non-musical terminology such as “bright” for major and “dark” for minor would facilitate the discrimination of modes for elementary school children. In addition, concepts such as tempo and register were also combined with mode to determine if these concepts had any effect on children’s ability to identify the mode. The results of this study revealed that students had the ability to discriminate between major and minor without the aid of additional, non-musical terms. The study also showed that mode may be confused with other musical concepts such as tempo and register, resulting in the identification of a song with a high register as major.

Flowers (1988) investigated the effect of the major and minor tonality on undergraduates and children’s music preferences. Sixty-two undergraduate students majoring in elementary education participated in the study. Four movements from the standard symphonic repertoire of the Romantic period were chosen because they clearly represented major and minor characteristics. The subjects were to listen to excerpts from the four musical examples and circle their preference from a 5-point Likert scale anchored with the words “like very much” to “dislike very much.” The results indicated that major and minor characteristics appeared to have little influence over preference ratings.
Studies of the Effects of Dynamics on Preference

LeBlanc (1987) summarized The Interactive Theory of Music Preference as follows:

Music preference decisions are based upon the interaction of input information and the characteristics of the listener, with input information consisting of the musical stimulus and the listener’s cultural environment. (p. 139)

LeBlanc (1981, 1987) identified physical properties, complexity, referential meaning, and performance quality of music as contributing factors leading to preference. Dynamics is one of the physical properties associated with music, and therefore, according to LeBlanc’s theory, could influence preference decisions. LeBlanc (1982) also noted that young students generally prefer loud playback levels when listening to music that they like.

A series of three studies was produced to examine the effects of dynamics on the preferences of elementary students, middle school students, and conductors (Burnsed, 1998; Burnsed, 2001; Burnsed & Sochinski, 1995). The first in the series dealt with the effects of expressive variation of dynamics on the musical preferences of middle school students (Burnsed & Sochinski, 1995). The subjects for the study were 45 middle school students who were attending a band and choir camp at Virginia Polytechnic and State University.

Ten folksongs of two versions each were prepared using a computer music sequencing program. One version of each folksong used expressive variations of dynamics while the other version used consistent, unchanging dynamics and expression. Subjects were instructed to listen to both versions and choose the version that they preferred. The results of the study suggested that middle school students preferred expressive variations of dynamics. The researcher noted that these subjects were somewhat select because they attended a music camp and had received performance group training in their band and choir classes.
The second study of the series targeted elementary school students in grades 1 through 5. The purpose of the second study was the same as the first: to determine the effects of expressive variation of dynamics on musical preferences. Three hundred and fifteen students from two urban elementary schools in southwest Virginia participated in this study. Ten folksongs were again prepared using a computer music sequencing program. One version of each folksong used expressive variation of dynamics while the other used consistent, unchanging dynamics and expression. Subjects again were instructed to listen to both versions and choose the version they preferred. The results of the second study showed that subjects of both schools significantly preferred the unexpressive version of the first song and were undecided about the sixth and eighth songs. Subjects at one of the schools significantly preferred the expressive versions of the fourth and seventh songs. Subjects at both schools significantly preferred the expressive versions of the remaining five songs.

The third study was expanded to include 288 elementary school students in grades 1 through 5 (Burnsed, 2001). The independent variable of dynamic nuance was modified for this study in that the dynamic curvatures of the expressive versions of the folksongs were smoothed. The examples were recorded on high-quality audiotape instead of a computer music sequencing program. The instructions again were to listen to both versions of the same folksong and choose the preferred rendition. The results showed that the elementary school subjects did not perceive a difference between the expressive and non-expressive versions. The research then sought to administer the modified test to an older population of 78 middle school students and 22 conductors. The results for the older population showed that preference was significant for one expressive version for middle school student subjects. The conductor subjects showed that
preferences were significant for five expressive versions. The researcher concluded that preference for dynamics may be acquired with age and musical training.

**Studies of Preference and Performing Medium**

Two studies have examined the relationship between preference and performing medium (LeBlanc, 1981; LeBlanc & Cote, 1983). The first study (LeBlanc, 1981) selected 107 fifth grade students from four classes in central Michigan as subjects. One of the purposes of this study was to test the effect of performing medium on children’s expressed music preferences. A listening tape was prepared with 24 vocal and instrumental musical examples from the styles of rock/pop, country, older jazz, newer jazz, art music, and band music. The subjects recorded their responses to the 24 musical examples on a sheet with a 7-point Likert scale anchored with the words “like” and “dislike.” Behavior observation was also noted as the subjects listened to help with the interpretation of the results. Subjects preferred instrumental examples to vocal examples in the art music category, vocal examples to instrumental examples in the rock/pop category, and instrumental examples over vocal examples in the old jazz category.

The second study (LeBlanc & Cote, 1983) tested the effect of performing medium on the expressed preference of 354 fifth and sixth grade students in central Michigan. The testing instrument consisted of a listening tape with 36 vocal and instrumental musical examples. The response sheet had 36 seven-point Likert scales anchored with the words “like” and “dislike.” The excerpts were examples of jazz dating from approximately 1925 through 1940. This was intentionally done to present a style that was presumably unfamiliar to the subjects and had been rated favorably by students in previous research. It was shown that the students preferred the instrumental examples rather than the vocal examples. It was also seen that fifth grade female
subjects significantly preferred female vocalists while male subjects significantly preferred male vocalists.

LeBlanc and Sherrill (1986) measured the effect of vocal vibrato and the performer’s gender on student’s preference. A listening tape of music examples exemplifying high and low amounts of vocal vibrato performed by male and female vocalists was prepared. The principal investigator and a panel of seven members of the Michigan State University School of Music faculty determined the amount of vocal vibrato from low amounts to high amounts. One hundred and twenty-seven students from grades 4, 5, and 6 participated in the study. The test design was test-retest with a two-week interval between tests to assess the stability of student preference responses across time. The students were to respond to four criteria: the student’s perception of the performer’s gender, the student’s perception of the amount of vibrato, the student’s perception of the strength of the performance, and the student’s preference for the musical example. The results showed that both male and female subjects preferred low amounts of vocal vibrato and male performers. Female subjects rated female performers and high amounts of vibrato more favorably than did the male subjects. There was also an interaction between subject gender and the vibrato and performance gender variables.

**Studies of the Effects of Musical Experience on Preference**

It has been hypothesized that the more a person understands music, the greater likelihood that the person will like that particular music (Gordon, 1971). Research has shown that music training and experience has an effect on music preference (Greer, Dorow, & Hanser, 1973; Gregory, 1994; Moore & Johnson, 2001; Palmquist, 1988). LeBlanc (1982) noted that a person with a high level of musical ability might value music with high levels of complexity more so than music with low levels of complexity. Jin (1999) found a significant relationship between
music experience and music listening preference. Rose and Wagner (1995) found that subjects with approximately ten or more years of music study were better equipped to complete orchestral and choral/operatic listings that contained musical works that the subjects considered eminent. Arkes, Rettig, and Scougale (1986) concluded that subjects with more musical training preferred listening to simple music while completing complex tasks.

Greer, Dorow, and Hanser (1973) sought to determine if students who were taught simple music discriminations would increase their listening time to the music associated with the particular discrimination that was taught. The researcher conducted two experiments in order to achieve this task. The first experiment had 39 subjects randomly selected from the entire second and third grade population from a middle-class school. The subjects were individually pre-tested and randomly placed in one of two treatment groups. One group received music discrimination training for 20 minutes each day over five consecutive days. Subjects in this group were taught to match pictures of instruments with symphonic music selections. The other group received non-music related activities such as coloring, making paper designs, and playing number and word games during listening times. The subjects were pre- and posttested individually. Each subject was seated at a device that had three sound options: symphonic music, rock, and white noise. The subjects were instructed on how to use the equipment for the pre-and posttests. Both second and third grade students preferred rock in the pre-test. No significant difference in preference between rock and symphonic music for the posttest.

The second experiment was the same as the first, but with 24 nursery school children as the subjects. Subjects were matched in equivalent pairs after the pre-test. One student received music discrimination training and the other subject participated in non-music activities. The discrimination group increased their selection and listening time for symphonic music and their
total selection and listening time between the pre-and posttest. The music activities group did not increase their selection times for any of the sound options. The researchers found that both groups preferred symphonic music in the posttest. The discrimination group had significant increases in symphonic selection and total selection time.

Music and non-music majors were tested for music preference relative to apparent duration of music stimuli (Palmquist, 1988). Two research questions were asked: 1) Does apparent time passage vary according to music preference? and; 2) Are there differences in responses between music and non-music majors concerning preference and apparent time passage? Eighty music and non-music majors from the University of Texas at Austin ranging in age from 18 to 28 served as the subjects for the study. The stimuli were chosen from playlists of Austin, Texas radio stations, national rankings of popular music, and results from Palmquist’s previous study from 1986. Four audiotapes were prepared for the experiment. Subjects were to indicate when they thought that 25 seconds of music had passed by tapping a pencil eraser on a microphone. The subjects were also requested to mark their preference for the musical excerpts on a 7-point Likert scale where (1) indicated “extreme liking” and (7) represented “extreme disliking.” It was found that there was no significant difference between time judgments or preference ratings by music and non-music majors. There was no significant difference between time judgments and preference ratings. Lastly, there was no significant interaction between level of music experience and music preference or time passage measurements.

Gregory (1994) sought to determine if music training broadened or narrowed listening preferences. Eight music professors in eight universities throughout the United States participated. Three groups of subjects were located at each site. The groups consisted of sixth
grade students, high school juniors and seniors who participated in musical performing groups, and college juniors and seniors who were music majors at the participating universities.

The stimulus was an audiotape of thirteen musical excerpts. Subjects operated a Continuous Response Digital Interface (CRDI) while listening to music. The data was collected by means of four preference CRDI dials, two “knowledge” overlay for the CRDI dials, and CRDI data collections software. The knowledge overlay had eight possible responses ranging from “totally unknown” to “performed/analyzed or taught it.” It was found that music performance apparently plays a role in the preference of musicians. The degree of familiarity with a piece appeared to have no predictive connection with preference for the piece. The researcher concluded that music training contributes to broadening an individual’s receptivity to music within and across all genres.

Studies of Repeated Exposure and Familiarity on Preference

It has been a general assumption in music education that students tend to prefer music with which they are familiar (Bartlett, 1973; Burnsed & Price, 1987; Carper, 2001; Getz, 1966; Peery & Peery, 1996; Rodacy, 1982; Shehan, 1985; Tramell, 1978). Jin (1999) found a significant relationship between familiarity and music listening preference. Shehan (1979) claimed that repeated exposure might increase familiarity, resulting in a greater understanding and increased preference. Getz (1966) observed that seventh grade students listed familiarity with a piece of music as the most important factor contributing to musical preference. According to Bradley (1971):

It appears that repetition not only is an important factor in bringing about a more favorable response to music, particularly unfamiliar music, but also is a very useful pedagogical routine in any serious listening program. (p. 298)
Moskovitz (1992) observed that repetition could apply to children’s preference for any unfamiliar genre or style of music. Geringer (1982) found that music students who were familiar with composers and their works preferred them over popular songwriters and their works. Non-music students who were exposed to the popular genre preferred this over classical works.

Trammell (1978) emphasized that the primary student does not know how to listen to music of quality with understanding and enjoyment. She sought to determine the value of repetition, the value of guided listening, the significance of the two strategies combined, and the consequences of the absence of both repetition and guided listening. An additional goal was to seek an efficient way to help students develop the ability to understand and enjoy music of quality. A total of 137 second grade students served as subjects for the study. They were then divided into three groups. Group R was experimental with 54 subjects. These subjects received five music lessons that focused on one musical concept per lesson. The concepts were mood, tone color, melody, form, and rhythm. Four music compositions were repeated over the five lesson session. Group N was also experimental and was comprised of 55 subjects. These subjects received music lessons that also focused on mood, tone color, melody, form, and rhythm, but used 20 musical compositions that did not repeat. Group C was the control group with 28 subjects, and did not receive guided listening or repetition, but did receive their regular music class. The researcher found that the combination of guided listening and repetition produced a higher level of enjoyment than guided listening alone. The researcher also concluded that while five repetitions of the pieces were effective, more repetitions would have been advantageous.

Moskovitz (1992) measured the effect of repeated listening in children’s preferences between selected slow and fast excerpts of art music. The sample consisted of 235 fourth grade students from a South Carolina elementary school. The subjects were randomly assigned to
control and experimental groups. The stimulus consisted of selected examples of slow and fast art music recorded on a listening tape. The excerpts were limited to western European orchestral works in baroque, classical, romantic, and atonal styles. The repetition factor was applied to the experimental tape which paired a slow excerpt with a fast excerpt. The control tape had pairs of only fast excerpts. Both groups were pre-tested by marking their preferences between pairs of orchestral excerpts in the same style for each of the four style categories. The experimental groups then listened to repeated slow excerpts that were paired with fast excerpts. The control group had the same procedure with the exception of that the paired excerpts were always a pair of slow or a pair of fast excerpts. Z-test analyses allowed for independent comparison of the proportions of control and experimental responses of each style category. The results showed that the control groups’ choices for preferences remained relatively stable while the experimental groups’ choices began to show preference for the slow excerpts. Significant differences were found throughout the four style categories. The researcher concluded that repetition had an effect on the preferences of children for slow art music.

Burnsed and Price (1987) conducted a study to compare the effects of traditional music instruction and repeated exposure on the musical preferences of kindergarten and primary grade students. Twenty-five (25) students participated in the study. Music classes met twice a week for 30 minutes per session. Pre- and posttests were administered to the students to measure preferences for classical, jazz, or music composed specifically for children. Traditional music lessons were given for five weeks concluding with a second administration of the preference test. The next five weeks consisted of repeated exposure to Mozart’s Piano Concerto in D Major (K. 537) where students were allowed to listen quietly or work on art projects with no other music instruction given. The repeated listening to Mozart took place during the subjects’ regularly
scheduled music class. The music preference test was re-administered at the conclusion of the
five weeks of repeated exposure. Traditional music instruction resumed for five additional
weeks. A final preference test was re-administered at the conclusion of the five weeks of
traditional music instruction. The results of the study indicated that neither traditional music
instruction nor repeated exposure had an effect on students’ preference for music composed
specifically for children or for jazz. Traditional music instruction appeared to have a negative
effect on children’s preference for jazz. The researcher surmised that the students may have
reached their optimal level of familiarity with Mozart before or during the repeated exposure
section of the experiment, therefore preferences may have declined.

The optimal level of familiarity related to Hargreaves’s report of an inverted-U effect of
repeated exposure and music preferences (Hargreaves, 1984). Hargreaves theorized that pop
songs gain in popularity with repeated exposure, reach a peak in popularity, and then decline.
Two experiments were conducted to test predictions about two different forms of the inverted-U
theory on the effects of repetition on different styles of music. Hargreaves sought to manipulate
the objective complexity and familiarity of music in order to produce changes in subjective
complexity, which would result in a prediction of preference for certain pieces of music.
Hargreaves (1984) stated that:

If the initial level of subjective complexity of a piece is higher than the subject’s
optimum level, repetition will tend to increase liking for it as its complexity will be
reduced, and move nearer to the subject’s optimum level. If the initial level is too low,
however, further exposure will tend to decrease liking for the piece as its subjective
complexity will move even further away from the optimum level. Such a model may be
able to explain how musical preferences evolve and change over long periods of time. (p. 37)
The first experiment was short-term and had 59 subjects (Hargreaves, 1984). The stimulus consisted of two tape-recorded excerpts of about one minute each. The first was avant-garde jazz and the second was easy-listening. The subjects were scheduled to meet for one 3-hour class. The two excerpts were played at the beginning, at the middle, and at the end of class, and were repeated in the same order each time. The subjects were to mark their preference for each piece on a 5-point Likert scale anchored with the words “strongly dislike” (1), to “strongly like” (5) after each playing of the excerpts. Two-way analysis of variance showed that the easy listening piece was rated more familiar and was preferred over the avant-garde jazz. The easy listening piece was closer to the subjects’ optimum level of subjective complexity.

The second experiment had 40 subjects who were undergraduates randomly selected in terms of musical training and experience (Hargreaves, 1984). The stimuli were excerpts from avant-garde jazz, popular music, and classical music, deliberately chosen to relatively obscure to the subjects. The subjects were assembled in groups of approximately 5-10, and were tested at one-week intervals over three weeks. The excerpts were recorded on a listening tape and were played four times each during a 20-minute session. The subjects were required to rate each excerpt on two 7-point Likert scales anchored with the words “strongly dislike” (1) to “strongly like” (7), and “very unfamiliar” (1) to “very familiar” (7).

The results showed that the popular pieces were the most preferred, followed by classical, with avant-garde jazz the least preferred. Hargreaves (1984) stated that:

Any progress achieved along these lines would have clear implications for music education. The inverted-U theory could be used to make predictions about the probable effects of listening training on pupils’ liking for and eventual appreciation of particular pieces of music… . Training pupils to listen to pieces possessing this optimal level of discrepancy would maximize the likelihood of an increase in liking; of moving along the rising part of the inverted-U curve toward its peak. (p. 46)
Hargreaves (1987) continued work with the inverted-U theory with a study that examined the subjects’ preferences for familiar and unfamiliar melodies. Ninety-six subjects were divided into six groups of 16 subjects each in the following age categories: 4 – 5 years, 6 – 7 years, 8 – 9 years, 10 – 11 years, 13 – 14 years, and over 18 years. The stimuli were five familiar melodies, which consisted of common nursery tunes and carols, unfamiliar melodies from little-known English folk songs, five near approximations, and five far approximations. The subjects rated preferences on twenty 5-point Likert scales with the choices ranging from “dislike” (0) to “like” (4). The results showed that familiar melodies were the most preferred, followed by unfamiliar melodies, near approximations, and far approximations. The results also showed that there was a decline in preference for the stimuli with the increase in age of the subjects.

Shehan (1979) investigated the effect of a music television series on the listening preferences of elementary general music students. Seventy-two students in three intact sixth grade classes from a suburban middle-class elementary school participated as subjects. Two classes served as the two experimental groups and one class served as the control group. Subjects in the experimental groups took a pre-test in the form of a 5-point Likert scale and were instructed to mark their preferences for five musical styles that were rock, orchestra, folk, ethnic, and piano. These styles were chosen because of their predominant use in the television series. The two experimental groups were then directed to watch ten installments of a music series for television followed by a posttest in the form of a 5-point Likert scale. The control group did not watch the series, but did complete the preference pre- and posttests. The pre- and posttests indicated that both experimental groups showed an increase in preference for the music types presented during the experiment after treatment with the exception of ethnic music. Both
experimental groups showed achievement test scores that were significantly higher than the control group.

The effect of familiarity on the music preferences of elementary school children was investigated as well as the relationship between Asian and Western music and the preference of children for singing songs in a foreign language versus English (Shen, 1998). The subjects for the study were 15 third grade students and 19 fifth grade students from an elementary school in Austin, Texas. A listening tape of eight different types of music excerpts was developed consisting of four examples of Western and four examples of Asian music. This same listening tape also included four familiar songs, four unfamiliar songs, four Asian and four Western songs. The experimental procedure obligated the subjects to either sing each of the songs in its English translation or in its original language. The subjects read through the English translation if the song was sung in English initially, or listened to a pronunciation tape if the song was sung in its original language first. The subjects then rated preference for singing the songs in English or in the original language on a 5-point Likert scale anchored with the words “liked it” (5) to “didn’t like it” (1). Subjects were also asked questions about singing songs in a foreign language, such as if the task was interesting, difficult, or boring. The results of the study showed that the majority of third grade students preferred singing a song in its English translation to singing the song in its original language, while the majority of fifth grade students preferred singing a song in its original language to singing the song in its English translation. The results also indicated that the subjects were more familiar with Mexican, French, and Korean songs, and therefore, these were the most preferred.

Parisi (2004) assessed fourth- and fifth-grade students’ affective response and ability to discriminate between melody and improvisation. The subjects (N = 102) were divided into three
groups. The first group received instruction on how to sing a blues melody, the second group received instruction on how to play a blues melody on the recorder, and the third group served as the control, receiving non-specific instruction in singing and playing various melodies. A Continuous Response Digital Interface (CRDI) overlay was used to measure the subjects’ responses to the familiarity and likeability of five musical excerpts. The CRDI overlay was divided into two regions: “I Don’t Know It” and “I Know It.” Each of the two regions had graduated smiling faces from small to large. Subjects manipulated the CRDI dial according to how they liked the excerpt. The more the subject liked the excerpt, the larger the smiling face, and vice versa. The results of the study showed that the groups who received specific instruction in melodic and improvisatory discrimination responded with a higher level of positive affective response and discriminatory skill.

**Studies of the Effects of Peer Influence on Preference**

Young people use music as a means of creating new symbols, learning society’s norms and rules, introducing new topics, and unifying social collectives (Lull, 1985). Lull continued to say:

> Young people use music to achieve their personal and interpersonal goals, to resist authority, to establish their identities, to develop peer relationships, and to learn about the world outside the home, neighborhood, or school. (p. 365)

Research has shown that students tend to like the same music that their friends or peers like (Baptiste & Agustin, 2009; Boyle, Hosterman & Ramsey, 1981; Inglefield, 1968; Inglefield, 1972; LeBlanc, 1982; Roe, 1985). Finnäsi (1987) discovered that 12 through 14 year old public school students publicly declare that they prefer the same musical styles that they believe their
peers prefer, but give a lower rating to traditional styles such as classical and folk. Finnäs (1989) stated that:

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\text{… young people’s musical preferences have tended to conform to the perceived preferences of peer group leaders. There is also considerable evidence that peers and disc jockeys have a greater affect on students’ musical preferences than do teachers and other adults. (p. 1)}
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Jin (1999) found that subjects’ perception of their peers’ music listening preferences had a greater influence on the subjects’ listening preferences than the perception of the mothers’ and fathers’ listening preference.

The opinions of peers were taken into consideration in a study that examined the musical preferences of fourth, fifth, and sixth grade students (Webster & Hamilton, 1982). In addition, the researchers sought to investigate the effects of marked versus unmarked rhythmic quality and the presence or absence of violin timbre. One hundred and seven (107) fourth, fifth, and sixth grade students from a suburban public school participated in the study. Three treatment groups were drawn from this number. All three were instructed to rate 16 musical excerpts from the styles of classical, rock, folk-country, and jazz using a 5-point Likert scale with categories ranging from “really like it” to “really don’t like it.” The first group was labeled “positive peer influence” and was told that the musical excerpts they were about to hear were rated highly by other children their age. The second group was the “negative peer influence” group and was told that the musical excerpts they were about to hear were rated poorly by children their own age. The control group was the “no peer influence group” and was told nothing about other ratings. The study concluded that fourth, fifth, and sixth grade students are not easily influenced by peers when required to make independent and private decisions about various styles of music. The results also revealed that marked rhythmic quality and non-violin timbre were the most preferred.
Killian and Kostka (1992) sought to determine if peer influence was a significant factor in the choices of favorite songs of children of varying ages and designed two studies for this purpose. The first study had 370 subjects from Austin, and Dallas, Texas serving as subjects. The subjects consisted of 40 third graders, 39 fourth graders, 129 fifth graders, 51 sixth graders, and 111 seventh and eighth graders. The students were asked to list their six favorite holiday songs a few days before Christmas without listening to music. The researchers showed the students the top ten favorite holiday songs from the survey conducted a few days later, and asked the students to relist their six favorite holiday songs. The researchers included a counterfeit holiday song in the list of top ten songs to determine if peer influence had an effect on the students’ song preferences. The students chose the counterfeit song significantly more often on this second ballot.

The second study (Killian & Kostka, 1992) was similar to the first study but used 168 students in grades 5 through 8 in suburban Dallas. The counterfeit song again appeared to have a significant influence on the subjects’ song choices; however, the older students in this study were more consistent on the first and second ballots.

Peer approval had an effect on the music selection behaviors of fifth grade students (Alpert, 1982). Four fifth grade classes from two demographically similar elementary schools were randomly assigned to one of three treatment groups or a control group. The treatment groups were to rate 18 excerpts of classical, rock, and country based on preference. Each treatment group listened to these excerpts that were either teacher, disc jockey, or peer approved. The control group listened without any approvals. Ratings were obtained from music selection behaviors. The subjects chose which channel and which excerpt to listen to on a music selection recorder. The subjects were instructed to turn a dial on the music selection recorder to choose
their preferred music. Ratings were also obtained through verbal preference responses while using a 5-point Likert scale anchored with the words “strongly like” and “strongly dislike.” The results showed that approvals had an effect on musical selection behavior and verbal preference responses. Peer approval decreased the subjects’ classical music listening behavior as measured on music selection recorder.

**Studies of Adult Influence on Preference**

Expanding and broadening children’s listening experiences is a major goal of music educators. Teachers present lessons to students with the expectation that a change in the students’ listening preference will occur (MENC, 1994). The review of the literature indicated that numerous studies exist that have examined the effect of teacher and adult influence on preference (Greer, Darow, Wachhaus & White, 1973; Hughes, 1980; Hedden, 1981; Sims, 1986; Sims & Kuhn, 1993; Sims, 2005).

Eighty-five subjects from two college music appreciation classes served to provide information on the effect of teacher approval of classical music pieces on students’ music preference (Pantle, 1978). The stimuli were fifteen popular songs and fifteen classical pieces, which included five approved pieces, five pieces that were not approved, and five pieces that were not taught. Two posttests given at the conclusion of the study were used to determine the results. The first posttest measured the subject’s time spent listening to selected pieces which were recorded on the Operant Music Listening Recorder (OMLR). The second posttest consisted of a 5-point Likert scale anchored with the words “strongly like” (5) to “strongly dislike” (1). The researcher found that teacher approval did not cause the subjects to select approved works more often. Familiarity did not cause the subjects to select approved and not approved taught
pieces more than similar but untaught pieces. Students preferred popular pieces as measured by the Likert scale results, but did not choose popular pieces more often when using the OMLR.

Preschool children’s listening time responses to free versus directed listening activities were compared (Sims, 2005). The free listening time required no response from the child, and the directed listening had a teacher-imposed listening strategy imposed on the child. Thirty-one children participated in the study. The children were told that they could listen to each of two pieces on a cassette player equipped with headphones for as long as they desired. The two pieces used were “The Cuckoo” and “The Lion” from The Carnival of the Animals by Camille Saint-Sëans. The directed listening task consisted of furnishing the children with sheets of paper containing small pictures of either lions or cuckoos. The children were instructed to circle the pictures every time they heard the lion’s roar or the cuckoo in the music. The results showed that the children did not listen to the music for a longer period of time when instructed to perform a specific task.

Greer, Darow, Wachhaus and White (1973) sought to determine if the rate of adult approval during music listening lessons had an effect on the subjects’ post-training music selection behavior. One hundred and ten fifth grade students from the metropolitan New York area served as subjects for the study. They were divided into four treatment groups consisting of: high-approval instruction, low-approval instruction, high-approval listening, and low-approval listening. The instruction groups used a clinician-artist to present three categories of music; jazz, electronic, and classical. The basic design used was a pre- and posttest. Subjects were required to select what they chose to listen to by depressing a key on an Operant Music Listening Recorder (OMLR). The groups received six days of music listening with taped music or six days of clinician artist presentations of the aforementioned music styles for 30 minutes each day. The
results showed that subjects in the high-approval groups selected more of the music that was taught than subjects who were taught under low-approval conditions.

Gault (1998) determined that active listening lessons are more beneficial than passive listening lessons for students. Similarly, Sims (1986) examined the effect of high versus low teacher affect and active versus passive listening with preschool children. Ninety-four children ranging in age from 3 to 6 years served as subjects in the study. They were randomly divided into twelve treatment groups of eight students each. Groups were then randomly assigned to treatment conditions. Teacher affect was manipulated by teachers maintaining eye contact with the subjects during listening activities and using facial expressions that reflected excitement, happiness, and enthusiasm during listening lessons for high-affect. Low-affect was achieved by teachers avoiding eye-contact with the students and using bored facial expressions during listening lessons. The lesson structure was a pair of listening activities and a singing activity, concluding with two more listening activities. The subjects were individually tested 1 to 2 days after the final lessons. The results showed that children were most attentive during high teacher affect and when they were given an active listening activity in which to participate.

Two experiments on music selection behavior with high school subjects explored the effects of modeling alone, and then modeling and approval together (Hughes, 1980). Experiment 1 used 40 twelfth grade music students randomly selected and assigned to four groups of ten subjects. The first group received peer modeling and approval; the second group received adult modeling and approval, the third group received repeated listening, and the fourth group was a no-contact control group. Training was conducted on the Operant Music Listening Recorder (OMLR). This device also recorded the amount of time spent listening to each type of music. Mozart symphonies were available on one button, and popular music was available on the other
button. The location for each type of music was switched frequently. The training session consisted of one minute of modeling and approval with the trainer selecting Mozart and delivering four pre-planned approvals. This was followed by one minute of free-choice time, when the subject could listen to any type of music desired. Training sessions continued until the subjects chose to listen to Mozart at least 45 seconds in each of three consecutive free-choice minutes in the same training session. The posttest contained three ten-minute subtests. The subject operated the two buttons in order to choose either Mozart or popular music for the first subtest. The other two subtests required that the subject choose between Dvorak and popular music for the second subtest and Bartok and popular music for the third subtest. The results for Experiment 1 showed that the peer modeling and approval group chose music classics significantly more so than the control group did on all three subtests. Adult and peer training were equally effective in Experiment 1.

Experiment 2 was a replication of Experiment 1 but with a different population. The repeated listening group was eliminated, and two modeling-only groups were added. Experiment 2 used 100 randomly chosen high school students which were then placed into five groups of twenty subjects. The first group received peer modeling, the second group received adult modeling, the third group received adult modeling and approval. The fifth group served as a no-contact control group. Adult training was significantly more effective in Experiment 2.

Adult communication concerning negative feedback and specific directives was the focus of a study conducted by Duke and Henninger (1998a, 1998b). It compared two methods of communicating corrective information to students who were learning a music performance skill. The subjects for the study were 25 undergraduate non-music majors enrolled at the University of Texas at Austin and 25 fifth and sixth grade students enrolled at an elementary school in Austin,
Texas. Each subject was individually taught an accompaniment to the Sesame Street theme song on a soprano recorder. The lessons were given by one of the researchers under two conditions, which were direction and negative feedback. This researcher gave corrections in the direction condition by stating specific directions, such as specific ways on how to improve the musical performance. In the negative feedback condition, the researcher identified what was wrong with the performance, but did not give specific directions on how to improve the performance. All lessons were videotaped. The subjects were asked to respond to a questionnaire of eleven statements supported with a 4-point Likert scale at the conclusion of the lessons. The results of the study showed that the subjects’ accomplishments of a music performance task led to positive attitudes and self-efficacy that were not affected by negative or directive communication from the instructor. The researchers concluded that this finding emphasized the importance of student performance influencing attitudes and self-efficacy.

Fifty graduate and undergraduate music therapy majors and 59 music education majors participated in a study concerning perceived teacher approval and disapproval in a kindergarten music class (Madsen & Duke, 1985). The subjects viewed a 23-minute tape of a kindergarten music class and were asked to write as many statements as possible about the setting, teacher behavior, teacher approvals and disapprovals, student musical behavior, and student social behavior. The purpose of the study was to determine what specific variables operated within a group of behaviorally trained individuals that would influence their perceptions of how feedback from a music teacher functions in the classroom. Students were asked to evaluate several aspects of the observed approvals and disapprovals using a 7-point Likert scale. Subjects were also asked to estimate time devoted to approvals, disapprovals, and instruction. The results showed that there were significant differences between the music therapy group and the music education
group in that the music education group estimated a greater amount of time devoted to teacher approval. There was also a significant difference between the groups in terms of the number and content of written statements. Music therapy subjects made more comments about the activities used than did the music education subjects. Music education subjects made more comments that were teacher-related than did the music therapy subjects.

Droe (2006) found that teacher approval had a significant effect on student preference for rehearsed band pieces. Four hundred and forty subjects in grades 6 through 8 in eight schools were involved in the study. Each school was assigned a different treatment condition during rehearsals: approval, disapproval, or instruction only. The teachers participating in the study were given one or two pieces to rehearse with their bands for five sessions in one of the assigned conditions. The students were given a listening survey to complete after the fifth rehearsal that consisted of six pieces of music. Two of the pieces used in the study were also included in the listening survey. The results showed that the approval condition was significantly different from the disapproval condition for both rehearsed pieces. The approval condition was not significantly different from the instruction only condition.

**Studies of the Influence of Gender on Preference**

Contributions of gender on preference choices range from selection of musical instruments (Delzell & Leppla, 1992; Harrison & O’Neill, 2003; Hallam, Rogers, & Creech, 2008; Pickering & Repachali, 2001) to listening preferences (Hargreaves, Comber, & Colley, 1995; LeBlanc, Jin, & Stamou, 1999), and to participation in the music class (Harrison, 2003). LeBlanc (1982) wrote that a listener’s gender can influence music preference decisions. According to Christenson and Peterson (1988), “Males and females use and respond to music in
different ways” (p.265). Harrison (2003) stated that the problem of male non-participation in class has been an area of concern in research for many years.

Millar (2008) emphasized that gender preference, as well as genre preference, is a prominent feature of overall music preferences. The study consisted of 50 male and 50 female subjects from an Australia university. The mean age of the subjects was 19.7 years. A questionnaire consisting of three lists measured the attitudes and preferences of the subjects. The three lists were identified as favorites, canon, and music that is listened to. The favorites list asked the subjects to name their five favorite music acts. The canon list asked the subjects to name who they believed were the most popular music acts since the 1950s. The listened to list asked participants to identify five music acts that they listened to in the past three months. The results showed that more male artists were named as favorites than female artists and more male artists were named as those listened to most frequently. The study also showed that male listeners significantly preferred male artists on all three lists.

Fucci, Petrosino, and Banks (1994) examined the effects of gender and listeners’ preference on the subjective intensity of rock music. Participants consisted of four groups of 14 subjects each which were drawn from a Midwestern university. Subjects were instructed to assign numbers to represent the loudness of the rock music stimuli. The results showed that there was a significant difference in perceived loudness between females who like rock music and females who disliked rock music. Females who disliked rock music claimed that the examples were louder than they were presented. There was no such difference between males who liked rock music and males who disliked rock music.

Christenson and Peterson (1988) investigated the music preferences of 229 undergraduate students from Pennsylvania State University of which 54% were male and 46% were female.
The subjects responded to a series of 26 attitude items, each labeling a different genre of music. Some of the labels included general classical music, blues, folk, mainstream pop, heavy metal, and punk. The results showed that female preferences included mainstream pop, contemporary rhythm and blues, soul, Black gospel, and disco. Genres preferred by males included 1970s rock, southern rock, psychedelic rock, and blues. Males were drawn to music that was defined as masculine such as hard rock. Males avoided music that was associated with romanticism. Females listened to music to alleviate loneliness, improve moods, and to divert worries. Females preferred to listen to music as a background activity while males preferred to listen to music that was a foreground activity.

McCown, Keisur, Mulhearn and Williamson (1997) asked whether gender and personality played a role in preferences for enhanced and exaggerated bass in popular and more traditional forms of music. The hypothesis in this study was that exaggerated bass would be primarily preferred by males. The stimuli of 21 musical selections included rap, rock, new rock, country and western, classical, and opera. Subjects were instructed to indicate their preference between pairs of the same musical selection, one of the pair with and the other without bass enhancement. The results concurred with the hypothesis that males demonstrated a preference for bass enhanced music. The researchers suggested that female preference for normal treble may be biologically rooted.

LeBlanc, Jin, Stamou, and McCrary (1999) conducted a study that involved 2,041 (980 males and 1,062 females) subjects of from Greece, Korea, and the United States to investigate listening preferences. One of the research questions asked if there was a significant difference in scores between genders when responding to a music preference opinion survey. Art music, traditional jazz, and rock were used in an 18-item listening test that served as the survey. The
researchers computed a Pearson correlation between gender and preference by country. It was found that the correlation in Greece was significant and indicated that females had a higher music preference than males. There was no meaningful relationship between gender and preference in Korea and the United States.

Hargreaves, Comber, and Colley (1995) found that girls expressed a liking for a wider variety of musical styles than did boys. Twelve musical styles were presented to the 278 British secondary school students: rap, house/acid, reggae, blues, heavy metal, jazz, classical, country/western, chart pop, folk, opera, and rock. Subjects also stated their musical training, such as participation in a musical group in school. The subjects were divided into two age groups: 11-12 year olds and 15-16 year olds. A “like” response was coded 1, a “neither like nor dislike” was coded 2, and “dislike” was coded 3. It was found that heavy metal and rock were favored by boys. That was explained by the stereotype of masculinity that these styles represented, as was in the Christenson and Peterson study. Girls had a preference for reggae, chart pop, jazz, classical, folk, and opera. Girls expressed a preference for a wider variety of styles than did boys. This was attributed to the girls having more musical training than boys. It was also found that younger students were more receptive to a variety of musical styles.

Gender was one of the factors examined in a study that concerned students’ song preferences in elementary music classes (Siebenaler, 1999). One hundred and sixty students from nine intact third, fourth, and fifth grade classes were employed as subjects. These subjects were drawn from an urban school. Ten songs from the Music Educators’ National Conference’s published list of 42 songs that should be included in every American’s repertoire were chosen as the stimulus. The ten selections were limited to a one octave range and were considered by the research to have some appeal to the students. The results showed that gender was involved in a
significant two-way interaction between gender and language spoken at home in regard to song preference. A significant three-way interaction among grade level, gender, and language spoken at home was also found.

**Studies of Preference for Music of Other Cultures**

Students in grades 9 through 12 should be able to listen to and analyze aural examples of a varied repertoire of music that represents diverse genres and cultures (MENC, 1994). Preferences for certain world musics may be related to the musical characteristics of those musics with which the listener prefers or is familiar (Fung, 1996). LeBlanc (1982) concurred with this view and stated that:

> Music preference decisions are based upon the interaction of input information and the characteristics of the listener, with input information consisting of the musical stimulus and the listener’s cultural environment. (p. 29)

Shehan (1986) noted that:

> It has been the conjecture of music educators that the more one “understands” music the greater are the chances that one will like that music. The diversity of musical styles available for study cannot be overlooked but should be used to its best advantage in the understanding of world cultures. It may be that the arts (including music) of a region hold the very key to this understanding. (pp. 162-163)

Knussen (2003) stated that the present pattern of immigration to the United States now includes large groups from Asia, Africa, and Latin America, whose music cultural training may not be comprised of Western tonal centers, scales, cadences, intervals, and timbres. Listeners may not listen for the best interpretation or may not conceptualize the Western form of a musical piece, but may be listening for a work that reflects their own culture. Elliott (1995) described the student’s acceptance of cultural ideals in this way:
… when a… student says, “I know what I like,” what he or she actually means is “I like what I know.” And what young listeners often know best (or hold the most assumptions about) is neither musical design nor artistic interpretation but the cultural-ideological dimension of particular music works. In more elaborate terms, then, ‘I know what I like’ most often means “I prefer musical works that I believe to be (and therefore hear as) consistent with my cultural-ideological values, affiliations, and beliefs.” (p. 195)

Students may or may not be open to listening to the music that is different than their own ethnic heritage. Schmid (1994) wrote that: “Most people grow up assuming that their own culture’s way of doing things is the ‘right’ way. Ethnocentricity of this sort survives only in an atmosphere of isolation.” (p. 36) Schmid (1994) compared the tone qualities of European culture and African cultures and said:

Musical tone quality – what is a “good” tone – is one of the most interesting of all studies. European cultures favor a “clear” tone, free of raspiness or other “noise,” while Sub-Saharan African cultures often favor a tone that has a “buzzy” quality. (p.37)

Twenty-six students in a Midwestern kindergarten through eighth-grade parochial school participated in a study that sought to achieve two goals: 1) to determine the effects of familiarity through performance oriented instruction in unfamiliar non-Western music and 2) to examine the transfer of preference from taught pieces of one genre to untaught pieces of another genre. The study examined the effects of familiarity of performed non-Western pieces on verbal preferences and transfer of preferences from taught music of an unfamiliar genre to untaught music of the same genre. A listening tape comprised of twelve musical examples from African, Hispanic, Asian, Indian, Japanese, current popular and Western classical music was prepared. Students marked preferences on a 0 through 6 continuum. The investigator taught five weekly 35-minute sessions. The lessons consisted of listening to the songs, then singing them in English and performing simple ostinati on recorders and classroom percussion instruments. A posttest was then administered. It was found that a transfer of preference from a known and taught piece to an
unknown and untaught piece was not applicable in this study. The instructional method that emphasized singing and instrumental participation showed significant increases in preference for the treatment pieces.

Pembrook (1997) compared the preferences of 28 musicians from Mexico, 30 musicians from the United States, and 30 non-musicians from the United States for Mexican popular music, classical western music, American popular music, and salsa. The purpose of the study was two-fold: 1) to determine if the subjects from the United States and Mexico assign similar ratings and descriptors to these four types of music, and 2) to determine to which extent these descriptors were influenced by previous musical experience. The subjects listened to eight musical examples and responded on a 5-point Likert scale anchored with the words “like” and “dislike.” The subjects were also required to write three reactions for each musical example. The results showed that there were significant differences between preference responses of the three groups for Mexican music and classical music. Mexican musicians rated Mexican music very highly while American musicians and non-musicians rated this category in the middle of the 5-point Likert scale. There was no difference between American musicians and non-musicians in rating Mexican pieces. Mexican and American musicians rated classical pieces with a 1 out of the 5-point Likert scale with 1 representing the highest score for liking the piece. Thirty percent of American non-musicians rated classical pieces with a 1. The three groups did not differ significantly in Latin American popular music or salsa. Yet American non-musicians rated popular music higher than the other two groups did. Also, Mexican musicians rated Salsa higher than the American subjects did. The results were significantly different in the three groups’ use of social and academic descriptors.
Fung and Gromko (2001) sought to examine the effects of active and passive listening in the quality of children’s invented notations and preferences for two pieces from an unfamiliar culture. Thirty-five (35) American children ranging in age from 7.5 years to 12.8 years served as the subjects for the study. Eighteen children assigned to the active listening group moved spontaneously while listening to two Korean pieces. Children used props such as a scarf, a fan, or a foil streamer for movement during the first listening. These children also were instructed to move their hands in a sandbox to correspond with their interpretations of the music during the second listening. The seventeen children in the passive listening group were told to sit quietly or lie on their backs while listening to the musical examples. The active and passive listeners were then instructed to use colored pens to draw the way they felt the music went while listening for the final time. All participants were videotaped for data collection and scoring. Five judges scored each participant’s notation in conjunction with the videotapes. The results showed that there were significant differences between active and passive listeners in that active listeners referenced their perception of rhythm and phrasing more often in their notations than subjects in the passive group.

Fourth-grade students’ preferences for an untaught selection of indigenous Ghanaian folk, Western European classical, and current American popular music was the focus of a study conducted by McKoy (2004). The researcher sought to investigate the effects of Orff Schulwek and traditional music instruction on fourth-grade students’ preferences for an untaught selection of indigenous Ghanaian folk, Western European classical, and American popular music. A secondary research purpose was to examine the potential relationships among music preference, listening frequency, and willingness to purchase the three types of music under investigation. Thirty-nine students from two intact classes in a North Carolina suburban public elementary
school served as subjects for the study. The researcher instructed each class for forty minutes once a week for thirteen weeks. The experimental group ($n = 18$) received Orff Schulwerk instruction while the control group ($n = 21$) received traditional music instruction. A preference test was administered to the subjects before and after the treatment period. The test consisted of four bi-polar scales anchored with the words “like – dislike,” “interesting – uninteresting,” “good – bad,” and “valuable – not valuable.” In addition to the preference test, subjects were also required to indicate how often they listened to the musical styles presented on the listening tape on their own time. They also were to indicate their intentions of purchasing a commercial recording of the musical styles presented in the study. The data was analyzed using two-way factorial analysis of covariance (ANCOVA) with music styles serving as the repeated measure. The results showed that the experimental group preferred Ghanaian folk music more than did the control group. The Orff Schulwerk type of instruction appeared to reduce the preference for the popular style, while the control group preferred the classical style. The correlation between listening frequency, music preference, and intention to purchase recordings was significantly positive. The relationship between listening frequency and preference for popular music was moderate.

Britten (1996) compared response modes of listeners while testing the listeners’ preferences for music of other cultures. The two response modes used were a 10-point Likert scale and ratings taken throughout the duration of each excerpt with a Continuous Response Digital Interface (CRDI). Two hundred and twenty-five subjects were included in the study: music majors ($n = 75$), non-music majors ($n = 75$), and junior high school musicians ($n = 75$). Musical selections were representative of the Caribbean, Africa, East India, and Australia. One third of each group rated selections with the Likert scale, one third of each group manipulated a
single CRDI dial, and the remaining third of each group manipulated two CRDI dials, where one
dial indicated preference and the other indicated complexity of the selection. It was found that
subjects using the continuous measurement rated selections significantly higher than subjects
using the Likert scale. The researcher suggested that teachers should schedule more responses
across the listening event. Students are more likely to respond negatively when using static
measures. Continuous response demands more on-task listening.

Fung (1996) explored the influence of musical characteristics, familiarity, and musicians’
and nonmusicians’ preferences for world musics. The subjects for this study were 449
undergraduate students, 180 of which were music majors and 269 of which were non-music
majors. The world music selected for the study came from Africa, Asia, and Latin America. Two
researcher-developed instruments were used in this study: the Musical Characteristics Rating
Form and the World Musics Preferences Rating Scale. Both instruments contained the same 36
instrumental examples. Music majors enrolled in doctoral programs at a midwestern university
served as judges \( n = 24 \). They provided the ratings for the musical attributes of each example
for the Musical Characteristics Rating Form. Nine pairs of musical concepts were used for the
study which were: slow-fast, soft-loud, redundant pitches-different pitches, nontonal centered-
tonal centered, consonant-dissonant, dull timbre-bright timbre, smooth-percussive, simple
texture-complex texture, and little or no embellishment-rich embellishment. The subjects used
the World Music Preference Rating Scale with a 7-point Likert scale for familiarity, and a 3-
point Likert scale for preference for the excerpts. The results showed that musical characteristics,
musical training, and familiarity were significant factors in world music preferences. Both
musicians and nonmusicians demonstrated a preference for world music that contained fast
tempos, loud dynamics, tonal centers, many different pitches, consonance, moderate
embellishments, smooth and connected sounds, moderate or complex textures, and bright
timbres.

Fung (1994) sought to examine the relationship between world music preferences and
multicultural attitudes of nonmusic major undergraduate students. World music preferences were
examined as a function of the subject’s ability to identify the geographical origin of the excerpts.
Attitude and music-preference variables were also examined according to the variables of the
subject’s age and training in foreign languages. Two tests were used as instruments to measure
the subjects’ preferences and attitudes toward world music and multiculturalism. These
instruments were The World Music Preference Inventory (WMPI) and the Multicultural Attitude
Inventory (MAI). These were administered to the fifty subjects drawn from a large midwestern
university. The eight geographic regions selected to provide musical examples were Africa,
China, India, Indonesia, Japan, Korea, the Middle East, and Thailand. Two instrumental and two
vocal excerpts were selected from each region, resulting in a total of 32 musical excerpts for the
WMPI. The subjects responded to a 7-point Likert scale anchored with the words “strongly
dislike” and “strongly like,” and circled one of eight geographic regions from which the subjects
believed the excerpts came. The MAI consisted of a multicultural attitude questionnaire that
examined preferences for items such as social diversity, acceptance of others, and social
distance. Both instruments were administered to small groups of subjects in 50-minute sessions
and then re-administered one week later to determine retest reliability. The results from the study
revealed that there was a significant correlation between world music preference and
multicultural attitudes. This supports the view that social and cultural attitudes play a role in
world music preferences.
Fifth-grade students’ preference for authentic or arranged versions of world music recordings was examined in two separate studies (Demorest & Schultz, 2004). In addition, the teachers’ ability to predict their students’ preferences and the correlation of student preference and familiarity were investigated. The first study included 224 subjects from ten intact fifth-grade classes. The subjects were randomly assigned to listen to the arranged or the authentic version of 19 world music songs, and were instructed to mark their preference on a 6-point Likert scale. Their teachers rated the relative tempo of each song on a 6-point Likert scale, rated the expected student familiarity for the songs, and predicted student preference. The results showed that there was no significant difference between the subjects’ preferences between the arranged and the authentic world music recordings. Familiarity for the arranged versions was significantly higher than that for the authentic versions.

The second study required 113 fifth-grade subjects to choose their preference between both versions of 19 pairs of world music songs. They were then instructed to indicate their strength of preference and familiarity on a 6-point Likert scale. The subjects significantly preferred the arranged versions of the world music songs. Familiarity played a role in subject preference in both studies. The teachers’ predictions of subject preferences and familiarity were significantly related to the subjects’ ratings for both studies.

**Studies of Preference for Style/Genre**

MENC’s National Standards for Arts Education (1994) stated that every student in grades kindergarten through eight should be exposed to music of various styles and genres. Wiggins (2001) agreed stating that, “Young children should have many opportunities to listen to music of all styles and genres, from all sorts of historical contexts” (p. 119). Byrnes (1997) also agreed and said that, “Few will dispute the claim that it is the responsibility of music educators to
broaden their students’ musical taste to include music of a wide variety of forms and styles” (p. 568). Western classical and art music needs to be preserved and treasured since they are unique human achievements. Small (1998) confirmed this by stating that Western classical music “…is claimed to be an intellectual and spiritual achievement that is unique in the world’s cultures…” (p. 3).

Students generally prefer styles of music with which they are familiar (LeBlanc, 1979; LeBlanc et al., 1996). Sims (2005) stressed that:

Listening to a variety of styles of recorded music gives children the opportunity to encounter music beyond the level of their own performance ability and can provide them with a variety of positive musical experiences upon which future learning can be built and future choices may be based. (Abstract section, ¶ 2)

Studies have also shown that students’ preference for popular music styles increase with advancing age and grade level (Greer, Darow, & Randall, 1974; May, 1985). Therefore, introduction to different styles and genres of music should begin as early as possible. Musical preference is often firmly established by early adolescence and further develops through late adolescence and early adulthood (Mulder, Ter Bogt, Raaijmakers, Gabhainn, & Sikkema, 2009). It would be preferable that musical tastes be broadened by music educators while youngsters’ tastes are still pliable. Sims (1986) also concluded that:

Through early exposure to, and interaction with, appropriate “quality” music literature, in addition to the traditionally used nursery and children’s songs, children might develop a history of positive experiences and familiarity with music upon which to base future listening and learning experiences. (pp. 187 – 188)

The purpose of Dove’s (1976) study was to establish a procedure to measure operative preference in listening to selected styles of music. A secondary purpose was to investigate the data for interactions between gender and college major. The subjects were fifty college students
of music majors and non-music majors who listened to classical, popular, avant-garde, and non-Western musical styles on a terminal box with headphones. The subjects had the choice of listening to any style desired. Time spent listening to styles was monitored by the researcher. Significant differences were found between males, who listened to more popular musical styles, and females, who listened to more classical musical styles. Significant differences were also found in that music majors spent more time listening to classical, avant-garde, and non-Western musical styles than did non-music majors, who spent more time listening to popular musical styles.

Bletstein (1984) sought to investigate the musical capabilities of three-year olds in the areas of music preference, concept formation, and pitch discrimination. Thirty-three subjects were given a three-part test. The parts consisted of a pitch-discrimination test, a music preference test, and a concept formation test. The first part measured the subjects’ ability to identify ten paired pitch patterns, three notes in length, as being the same or different. The second part consisted of five paired items designed to measure the subjects’ preference for pre-twentieth or twentieth century music. The third test analyzed the subjects’ ability to aurally label concepts such as high-low; loud-soft; fast-slow and movement in pitch. It was found that three-year olds preferred twentieth century music rather than pre-twentieth century music.

Fifty-five subjects were tested for stylistic preference and identification abilities in music and the visual arts (Haack, 1982). The subjects were high school students from a nationally oriented summer music camp. The primary purpose of the summer music camp was performance. The investigator posed four research questions to guide the study:

1) Which stylistic emphasis is preferred as concerns a) music and b) the visual arts?
2) Which style and medium are most accurately identified by the high school music participants involved in the study?

3) How does a self-assessment of personal preferences relate to the subjects’ indicated preferences for the examples and to their ability to identify examples stylistically?

4) What, if any, relationships are evident between the amount of experience in school music performing classes and subjects’ preferences for, and abilities to identify, the basic styles of the exemplars used in the study?

Preference and identification tests consisted of 20 musical examples and 40 visual arts examples in the Classical and Romantic styles. The preference test required the subjects to respond to a ten-point continuum. The stylistic identification test required for the subjects to respond to each musical and visual arts example by checking a column marked “Classical,” “Romantic,” or “Uncertain” on the answer sheet. The results of this study demonstrated that there was a slight preference for the Classical style in general, and an interaction between Classical music and Romantic visual art. The subjects identified Classical styles more accurately than Romantic styles and the visual arts medium more accurately than the music medium, which was deemed statistically significant by the investigator.

Britten (1991) conducted research to determine the effect of overt listener categorization on preference for “crossover” excerpts. This refers to such examples as an instrumental performer nominated for a Grammy award in more than one popular style per year. Five hundred and thirty-four non-music majors were assigned to one of three different treatment groups. All of the subjects rated the styles of jazz, country, rock, pop, and classical on a ten-point Likert scale. The subjects’ responses to these five categories were averaged to produce one “taste” score. The subjects then listened to music examples and rated their preferences on a ten-point Likert scale.
Group 1 was to classify the excerpts as pop, rock, or jazz. Group 2 did not classify the excerpts, and Group 3 was to classify the excerpts in any way that they desired. The results indicated that little difference in preference was found between subjects using their own stylistic labels and those who used the pop, rock, or jazz categories.

Morrison and Yeh (1999) sought to discover if there were any differences in musical preferences among listeners from the United States ($n = 119$), Hong Kong ($n = 136$), and the People’s Republic of China ($n = 124$). If differences were found, the researcher sought to discover if they reflected the listener’s cultural background and were present in the listener’s written descriptors of the music. Another objective was to discover if there were any differences between the preferences of the music and the non-music majors. The musical stimuli consisted of nine examples; three drawn from Western classical, three from jazz, and three from Chinese classical. The subjects were to listen to the examples and respond on a 9-point Likert scale anchored with the words “Don’t like it at all” (1) and “Like it a lot” (9). Subjects were also requested to write statements justifying their responses. The results showed that subjects from the United States gave the highest ratings to jazz, followed by Western classical, and then Chinese classical. Subjects from China rated Chinese classical excerpts the highest, followed by Western classical, and then jazz. Subjects from Hong Kong rated Western classical slightly higher than either Chinese classical or jazz. The researchers concluded that subjects preferred musical examples reflecting their own cultural environment. The researchers also stated that the findings do not necessarily advocate the use of a music curriculum built solely upon local music traditions.

Fung, Lee, and Chung (1999/2000) conducted a study to determine the effect of grade level, gender, and musical style on the preferences of students in Hong Kong. The 3,715 subjects
ranged in age from about 6.5 to about 15.5 years. These subjects were from fifteen elementary schools and ten junior high and high schools in Hong Kong. The musical styles involved were Western art music, jazz, rock, Cantonese popular music, and Chinese Sizhu music. Chinese Sizhu music utilizes bamboo and sparse percussion instrumentation. A music preference opinion form with thirty listening excerpts was used for this study. A 5-point Likert scale was employed. Elementary school students were given a pictorial answer sheet with smiling, frowning, and neutral faces while students in fifth grade and higher received a verbal answer sheet with the words “I like” and “I dislike.” The listening tape took about thirty minutes to complete. Each excerpt ranged in duration from 22 to 48 seconds with a 6-second interval for the subjects to respond. The results showed that the younger students had the highest level of acceptance for different and unfamiliar musical styles. These students tended to have a greater preference for all styles compared to the older students.

Hargreaves and North (1999) described three studies that investigated different responses to musical styles that were listened to as a person ages. The first study consisted of 105 subjects between the ages of 8 and 14. The subjects were to discriminate between styles within the popular or classical genres. In order to accomplish this task, subjects were to listen to three musical excerpts and choose the excerpt that stylistically did not belong. This study showed that the number of correct answers was considerably higher for popular than classical excerpts at all age levels.

The second study examined the stylistic knowledge of 196 subjects between the ages of 8 and 80. The subjects were required to list what they considered to be eight prominent styles of music. The subjects were divided into four age groups: 9 through 15 years of age; 16 through 21 years of age; 22 through 49 years of age; and 50 through 80 years of age. The classical style was
named the most frequently by all age groups. It was also found that subjects made finer distinctions within styles with which they were the most familiar.

The third study consisted of 275 participants between the ages of 9 and 78 who were required to list as many styles as possible within the three genres of classical, jazz, and pop/rock. The participants were divided into five age groups: 9 through 10 years of age; 14 through 15 years of age; 18 through 24 years of age; 25 through 49 years of age; and 50 through 78 years of age. The styles that were listed were then rated according to preference. Preference for pop/rock styles decreased as the ages of the subjects increased. Also, preference for classical styles increased as the age of the subjects increased.

Hui (2009) sought to examine the effects of age and gender on the listening preferences of Macau students. Participants (N = 2,495) ranged from fourth-grade to university level. The participants were required to listen to twenty excerpts of music from five genres, which included Western Pop/Rock, Western Classical, non-Western, traditional Chinese, and Cantopop. Cantopop was defined by the researcher as Hong Kong pop music sung in Cantonese. It was found that the preferred genre of music was Cantopop, as was expected by the researcher. This was followed by Western Pop/Rock, Western Classical, non-Western, and traditional Chinese music as the least preferred genre. It was found that listening preference declined with age. The researcher attributed this to lack of mandatory music education at the secondary level. It was also found that gender was not a significant factor in the listening preferences of Macau students.

The music preference formation processes of fourth-, eighth-, and twelfth-grade students was examined in order to determine the subjects’ degree of preference, time spent listening prior to making a preference decision, and their verbal explanations of their listening experiences (Acevedo-Hernandez, 2006). One hundred and thirty-five students in grades four, eight, and
twelve were chosen to participate in the study. Six styles of music were presented to each participant. The participant was to rate their preference level on a scale. It was found that popular music was the most preferred style for all age groups.

Pursell (2006) examined the interactions of age, musical training, and gender on the music preferences of Australian university students. The researcher recorded the 163 subjects’ preferences on a 10-point Likert scale for 12 labels of genres of music instead of requiring that the subjects listen to examples of the music. The results showed that there was a significant relationship between musical training and style. The style by training, style by age, and the three-way interaction of training, style and age were all significant.

**Studies on Western Art/Classical Music Listening Preferences**

One of the major goals of music education is to introduce students to Western art and classical styles of music that they might not encounter on their own (MENC, 1994; Rheingans, 2005; Woody and Burns, 2001). Szabo (2001) stated:

> It is important to give young people positive experiences that will keep their minds and hearts open to Western art music. Their worlds are inundated with pop music. They hear it on the radio, on television, on video, and in films. They hear it in commercial establishments. They see the glamorous images associated with it, the thrills, the high fashion, the romantic tales spinning from the song texts, and they deem popular music relevant to their lives. Western art music is seldom played in establishments, and receives only limited time and space on the airwaves. It is also not typically associated with young people and their interests. Popular music is “cool” and Western music is not! Forming positive attitudes towards Western art music requires many positive encounters that build on one another until the young person considers this music as part of the bank of other musics that they enjoy. When there has been a positive association with it in their childhood (the earlier the better) there is more likelihood that they will come back to it later in life as the sounds and structures of it are already present in their musical subconscious. (p. 298)

Kuzmich (2005) concurred and wrote:
There is a need for greater involvement in Western classical music. After all, it is a tradition which has absorbed and continues to absorb influences from many different sources. To know and to understand what is happening in Western classical music, then, is to connect with the music of other cultures or societies. (p. 4)

Jorgensen (2003) also agreed that Western classical music is actually a blend of other cultures and societies and stated:

. . . the term “Western classical music” is a mis-nomer. It is really a multi-cultural and international tradition forged by musicians around the world who brought their various individual and cultural perspectives to a music that grew up in Europe but that from its infancy drew upon African and Near Eastern roots. Its widespread influence as one of the great musical traditions does not make it necessarily better than others but does make it worthy of study. A music that is known so widely, has captured the interest and participation of so many musicians and their audiences internationally, has such a rich repertory, and represents so many cultures strikes me as a human endeavor of inherent interest and worth. (p.134)

Music educators expose their students to these styles of music hoping that an appreciation of this style will be acquired and that the students will listen to classical music on their own (Woody & Burns, 2001). Haack (1982) reported a slight preference for the classical style of music and art among 55 high school music performance students, thus suggesting that familiarity could influence preference. Moore and Johnson (2001) found that participation in school performance groups correlated highly with preference for Western art music. However, past research suggests that music education is not often successful in influencing students to prefer music in the classical style (Finnäs, 1989b). Johnson (1994) agreed with Finnäs and found that low-income, urban-minority middle school students disliked and rarely participated in activities that involved classical music. Szabo (2001) suggested that music education should look to other avenues to present Western art music to students, such as using a non-didactic approach when introducing classical music to students. Mauerhofer (1997) reported that 88 percent of young
Austrian people between 16 and 24 years of age preferred rock, pop, and disco music while only 12 percent of this same group preferred classical music.

Custer (2003) sought to examine the effects of passive and background music listening on the preferences of fifth and sixth grade students toward classical and concert music. It was found that there was no significant difference between control (n = 307) and experiment (n = 354) groups with regard to responding to classical music when used as passive classroom listening.

Woody and Burns (2001) found that there was a significant relationship between certain musical background factors and responsiveness to classical music among non-musicians. Five hundred and thirty three undergraduate non-music majors participated in a study that investigated the subjects’ musical backgrounds and their relationship to music appreciation. It was found that subjects with more exposure to classical music rated the perceived emotion and expression of the musical examples higher than those subjects with less exposure. Subjects who had previous emotional responses while listening to classical music were more responsive to the expression of the musical excerpts, and were also significantly more willing to listen to the musical examples at home.

Walker (2005) concurred with Woody and Burns (2001) and found a significant relationship between musical background and responsiveness to classical music among musicians who were not exposed to the promotion of popular music by the entertainment media. The group that participated in the study had to meet two criteria: 1) the group could not be exposed to media promotion that surrounded popular music today, and, 2) the group had to have classical music as an important part of their education. The group that met these criteria was members from the Westminster Abbey in London, England during the 1920s and 1930s. This
time period was chosen by the researcher because entertainment media was not as pervasive at that particular time as it was during later time periods. The choir members were heavily involved in musical performances for royal obligations. The researcher’s questions asked the former choir members for recollections of the music performed or listened to during this period, how they encountered this music, and what music ultimately meant to them in their lives. The former choir members reported that music was a very important component of their lives. Sung services were performed every morning and evening until 1931. Only evening services were performed after this date. The services consisted of complex musical settings for 4 – 8 part choir and organ by major European and English composers. All choristers were also required to take piano or violin lessons. Practicing for the performances demanded a great deal of time. Each chorister spent six hours per day, six days a week in performance for the five years spent in the Abbey. This was averaged to be a total of 5,900 hours spent in musical service during the five year period. The choristers did not experience popular music at all during this time. Most of the subjects continued their participation in music and became professional musicians and clergymen. The researcher suggested that media pressure influences those students who are not engaged in music, but classical music is valued where this genre is culturally and institutionally promoted.

Ho (2001) sought to examine gender differences in musical learning and practice among young Hong Kong students. The sample included 877 secondary school students, 414 boys and 463 girls. The hypothesis was that boys and girls were musically differentiated and preferences for musical activities were based on gender. Music genre listening preferences of boys and girls and the attitudes of boys and girls towards the promotion of classical and popular music in school was investigated. The study revealed that boys were less inclined to like Western classical instrumental music than were girls. The study also showed that boys’ and girls’ agreement for
the promotion of learning classical and popular music in school was significant. However, boys and girls did not have the same level of agreement about these two genres. More girls than boys preferred to learn about classical music in school. The sample also showed that girls had broader musical tastes than did boys.

Hash (2009) conducted a study that examined the listening preferences of 95 non-music majors for Western art music. The two research questions guiding the study were: 1) Was there a significant difference between undergraduate non-music major preferences for Renaissance Baroque, Classical, Romantic, and Twentieth Century music and, 2) Was there a significant difference in preferences for Western art music between undergraduate non-music majors with and without musical training? A listening survey was devised that consisted of fifteen music examples. The examples consisted of three excerpts each from the eras of the Renaissance, Baroque, Classical, Romantic, and Twentieth Century. The subjects marked their preferences on a 7-point Likert scale. The results showed that the subjects preferred music from the Classical era significantly more than any other period; the Baroque, Classical, and Romantic eras significantly more than the Renaissance and the Twentieth Century eras; and the Renaissance era significantly more than the Twentieth Century. It was also found that there was no significant difference in the preferences of undergraduate non-music majors with and without musical training. Preferences may have been influenced by timbre, texture, and referential elements.

Ninety-nine subjects’ emotional ratings of Western art music excerpts were examined in two experiments (Kallinen, 2005). The researcher also investigated if the subjects agreed on different emotional intensity levels expressed in the Western art music excerpts, and if music based on tonal or atonal/invented scales had more emotional suggestibility. Fifty music professionals contributed Western art music excerpts that suggested certain emotions. Specific
emotions noted were joy, sadness, fear, anger, surprise, and disgust. The subjects were presented with six pairs of facial photographs that represented each of the six emotions. The subjects were then required to listen to excerpts of instruments Western art music and choose a pair of photographs that corresponded to the emotional tone and intensity of the passage. The subjects were also instructed to evaluate the emotion that the composer wanted to express and not to consider their own emotional reaction to the excerpt. It was found that the subjects’ evaluations corresponded highly to that of the music professionals. Joy and sadness were more easily recognized in music, whereas fear, anger, surprise, and disgust were more difficult to identify. It was also found that tonal music was more easily identified as having an emotional label than music that was atonal or was based on invented scales.

Choi (2003) examined the association between moods by exploring the connections among moods, music preference, and music listening habits. Two hundred and thirty-one (231) subjects with a wide range of ages participated in the study. It was found that those subjects who were educated listened to more classical music than their counterparts who had less education.

Byrnes (1997) sought to examine the musical responsiveness of different groups of participants toward Western art music. These participants consisted of 163 subjects from grades 2, 5, 8, 11/12, and trainable mentally handicapped students. The subjects were required to listen to Western art music excerpts while manipulating a CRDI dial. The overlays on the CRDI dial had a pictograph scale continuum that was designed for the populations tested. The results showed that the second-grade subjects rated all of the excerpts more favorably than the other groups and that the instrumental excerpts were preferred over vocal excerpts.

Significant differences in music appreciation students’ attitudes toward Western art music resulting from traditional or Web-based instruction were the focus of Hinson’s (2004) study. The
design consisted of a pre-test, treatment, and posttest. The subjects were divided into one intact traditional music appreciation class \((n = 18)\) and one intact Web-based music appreciation class \((n = 24)\). The treatment consisted of a 14-week period of music appreciation instruction. The posttest showed that there was no significant difference in the subjects’ attitudes toward Western art music based on instruction style. However, significant differences were found in the subjects’ attitudes toward Gregorian chant, a Mozart aria, and a Schubert lied.

Hamlen and Schuell (2006) conducted a study with 172 seventh grade students from a middle school in New York State as subjects. Three research questions guided the study:

1) Does familiarity with a piece of classical music influence preference?

2) Does audiovisual stimuli affect students’ preference for classical music?

3) Does the type of audiovisual stimuli affect the students’ preference for classical music?

The subjects of the study listened to 12 classical music excerpts either with or without audiovisual stimuli. The audiovisual stimuli consisted of video presentations that were either related to the classical excerpt, unrelated to the classical excerpt, or of a professional orchestra or chorus. The results showed that there was a significant correlation between familiarity and preference for classical music. It was also found that higher ratings of familiarity and preference were noted when an excerpt was presented with a audiovisual stimuli than with an aural stimuli alone. It was also found that the unrelated audiovisual stimuli were preferred out of the three audiovisual conditions.

Fredrickson and Kirchoff (2007) sought to determine if eighth-grade general music students’ \((N = 91)\) perceptions of five different styles of music were affected by controlling the
focus of their attention during listening. The five styles of music were calypso, South African, South American, ragtime, and Romantic Western art music. The subjects were divided into a control and an experimental group. The control group heard musical examples in their entirety before noting in their listening journals on a 1 – 5 scale their like or dislike of the example, with 1 noting extreme dislike and 5 noting liking very much. The experimental group were given cues after 30 seconds and at the halfway point to note their like or dislike of the music. It was found that ragtime and Romantic Western art music were rated significantly lower in the experimental group as compared to the control group.

Simons-Bester (2008) investigated high school vocal music students’ preferences for world music. Three research questions guided the study:

1) Does the study and performance of a piece of world music influence high school vocal music students’ preference for world music in general?

2) Does the study and performance of a piece of world music influence males’ and females’ preferences for world music differently?

3) Does the study and performance of a piece of world music effect the preferences for students who have lived outside of the Midwest differently than those who have lived in the Midwest?

One hundred and twenty subjects enrolled in a vocal music program participated in the study. The World Music Preference Inventory (WMPI) (Fung, 1994) was administered as a pre-test prior to the 6-week treatment period. The treatment period consisted of the rehearsal of an Indian song or an African song. Study of the culture of India or Africa was done concurrently depending on the song that was rehearsed. The WMPI was administered at the conclusion of the
treatment period. The results showed that there were no significant differences found between pre-test and posttest scores; between male and female pre-test and posttest scores; or between students who lived in the Midwest or outside of the Midwest.

In conclusion, students in the school system should be exposed to classical Western art music, and in particular, music of classical symphony orchestra literature (MENC, 1994). Szabo (2005) wrote:

Young people are capable of responding to Western art music. All they need is the opportunity to hear it. Play it for them. Discuss it with them. Communicate your love of it to them. School music programs can nurture a love of music that lasts a lifetime. Such appreciation can lead students to deeper study and lifelong support of music in school and the community. The first step in this process is for teachers to give students a chance to listen to it, talk about it, and enjoy it. (pp. 42-43)

Summary

A review of the literature appears to suggest that despite the amount of research done in the area of students’ listening preferences, there does not exist any documentation on the effects of concert preparation on the students’ listening preference for classical Western art music. In particular, there is no documentation on how the factors of gender, familiarity, or musical experience would affect preference for classical Western art music in the context of listening to a symphony orchestra concert. One study discussed the children’s perception of the concert experience (Himes, 1992). This study found that 53 % of the fourth graders surveyed indicated that what they liked best about the concert they attended was listening to the music, 8 percent enjoyed learning about the instruments. Twenty-seven (27) percent claimed that the opportunity to leave school for the day was the best part of the concert experience (Himes, 1992).

Music training and experience showed that subjects who were of nursery school age and exposed to symphonic music preferred this style when given a posttest. Subjects who were older
did not prefer symphonic music in the posttest and did not show any significant difference in selection behaviors (Greer, Darow, & Hanser, 1973). Gregory (1994) concluded that music training contributed to broadening the individual’s acceptance of music within and across all genres.

Familiarity also plays a role in music preference. Students tend to like what they know (Elliott, 1995) and what is already familiar to them (Hargreaves, 1984; Hargreaves, 1987). Repeated exposure lends itself to familiarity, but this runs the risk of the musical piece gaining in acceptance and popularity and then declining (Hargreaves, 1984; Hargreaves, 1987). Shen (1998) found that subjects who were more familiar with Mexican, French, and Korean songs preferred these songs. The combination of repeated exposure and guided listening provided a higher level of enjoyment than guided listening alone (Trammell, 1978). Repeated exposure had an effect on the preferences of children for art music with slow tempos (Moskovitz, 1992).

Students tend to like what their peers like (Boyle, Hastermann & Ramsey, 1981; Hanser, 1982; Killian & Kostka, 1992; Roe, 1985). Peer modeling was used as an effective tool in the teaching and learning of music (Hughes, 1980). Conversely, Webster and Hamilton (1982) found that fourth, fifth, and sixth grade students are not easily influenced by the opinions of their peers when preference choices were private.

Students who were taught under high teacher approval conditions (Droe, 2006; Sims, 2005) and high teacher affect (Gault, 1998) tended to select more of the music that was taught and approved by the instructor. Student musical performance had an effect on attitudes and self-efficacy that remained constant despite negative or directive communication from an adult (Henninger, 1998; Henninger, 1998b).
Subjects tended to identify with and prefer music that was reflective of their own culture (Pembrook, 1997). Fung (1996) found that familiarity, musical characteristics, and musical training were all significant factors contributing to preference for music from other cultures. However, an experimental group preferred an unfamiliar Ghanaian folk song when presented repeatedly over thirteen weeks using Orff Schulwerk methodology (McKoy, 2004).

The review of the literature seems to suggest that younger rather than older students are more “open-eared,” value the opinions of parents and teachers (LeBlanc, 1982), and are more accepting of music of different styles, genres, and cultures (Hargreaves, Comber, and Colley, 1995). Students prefer instrumental performing mediums rather than vocal performing mediums (LeBlanc, 1981). Repeated exposure and familiarity contribute to the listening preferences of children, but care must be taken in order to ensure that boredom with certain musical pieces does not negatively influence preference choices. A listener’s gender can have an influence on music preference decisions (LeBlanc, 1982; LeBlanc & Sherrill, 1986). Christenson and Peterson (1988) claim that males and females respond to music in different ways. The challenges of introducing children to music of other cultures, styles, and genres are also part of the many goals of music education programs (MENC, 1994; Shehan, 1986; Wiggins, 2001).
CHAPTER THREE

Methodology

This study examined the effect of pre-concert lessons on the listening preferences of third grade subjects for Western classical art music through an interpretive lens. Despite the number of studies concerning listening preferences, there appears to be little or no documentation on the effects of concert preparation on the students’ listening preferences for Western classical art music. Each year, the New Jersey Symphony Orchestra prepares concerts that are geared for this age group. Teachers from various subject areas throughout the state of New Jersey write preparatory lessons based on the particular concert that the students will be attending. This particular study investigated third grade students’ listening preferences of the New Jersey Symphony Orchestra’s performance of Nicolai Rimsky-Korsakov’s *Scheherazade* during the Spring 2009 concert season. The study employed both quantitative and qualitative methods.

Quantitative research was used to examine the differences between two populations, male and female, concerning their listening preferences for Western classical art music. This approach was also used to examine pre-treatment, treatment, and post-treatment effects on the subjects. The pre-treatment was the status of the subjects before the preparatory lessons, the treatment was the preparatory lessons, and the post-treatment was the interviews of randomly selected subjects. It was expected that the preparatory lessons would have a significant effect on the subjects’ listening preferences for Western classical art music performed by a symphony orchestra.

Qualitative techniques provide a narrative that gives voice to the subjects from whose perspective, experiences, and viewpoints have traditionally been dismissed as being unimportant or irrelevant. The qualitative aspect combined a large sample size with details concerning the reactions of the population and depth of explanation. A definition of this type of research
“…generally involves the concurrent, but separate analysis of quantitative and qualitative data so that the researcher may best understand the research problem” (Creswell & Plano Clark, 2007, p. 64). The role of teacher-researcher was adapted to allow a study that combined qualitative and quantitative methods to examine the effects of pre-concert lessons on students’ listening preferences for Western classical art music over a 5-month period. The researcher also prepared and taught the pre-concert lessons to the subjects.

Data Collection

Context and instructional setting

The research setting was a school that housed kindergarten through fourth grade in an urban school district in central New Jersey. The total population of the school is approximately 550 students. Approximately 92% of the student population is of Hispanic descent from the Caribbean as well as Central and South America. The ethnicity of the remaining students is 5% African-American, 2% White, and 1% Asian-American. The secondary setting for this study was the State Theatre in New Brunswick, New Jersey, part of the New Brunswick Cultural Center. This is where the subjects attended a live performance of the New Jersey Symphony Orchestra in the spring of the school year of 2009 after the completion of the pre-concert lessons.

Sample

The sample consisted of the third grade population from the urban elementary public school described above. There were 6 third-grade classrooms in this school during the 2008-2009 school year. These subjects attended the performance at the State Theatre in New Brunswick, New Jersey having received parental consent to participate in the study (see Appendix B). The letters of consent for the parents were produced in both English and Spanish. The total population of the third grade was 102 students; fifty-nine 59 boys and 43 girls. The number of parental consent letters that were returned was 77; which represented approximately 75% of the
total third grade population. Twenty-five subjects did not return the parental consent letter, which was about 25% of the total third grade population. The letters of assent were produced in English for the subjects’ signatures (see Appendix B). Written permission from the assistant superintendent of schools and the principal of the elementary school was also obtained (see Appendix A). The criterion for participation of the subjects was that the subjects were able to read, write, and speak in English since the researcher does not read, write, or speak any other language. This criterion did not eliminate any subjects as all were able to complete the above tasks in English.

Subjects who did not receive parental consent to participate in the study took part in the preparatory lessons as part of their music classes and attended the concert with their grade level. However, these subjects did not take the pre- and posttests. Seatwork was assigned to those subjects whose parents did not consent to the study during administration of the pre- and posttests. Subjects who did not receive parental consent did not participate in the interviews.

Data Collection Procedures

Pre- and Posttests

Since this study that employed both quantitative and qualitative aspects, it also utilized multiple methods of data collection. Data consisted of a pre- and posttest, with surveys and questionnaires, supplemented by field notes, observations, and documents such as student work. The quantitative portion of the study was a basic pre-test, treatment period, posttest design. Each subject in every third grade home room was assigned a number. This number corresponded with his or her pre- and posttest sheet. This was done in order to ensure that the subject would have the same test number in order to compare pre- and posttest results. The pre- and posttest sheets were separated according to the subject’s home room and placed in manila folders with the home room teacher’s name printed on the folder. These envelopes were in turn kept in a locked file
cabinet when not in use. The subject marked his or her gender and age on the pre- and posttest. The pre-and posttests were in the form of a 5-point pictographic Likert-scale with the words “Really like it” (5), “Like it” (4), “Don’t know (3), Don’t like it (2), and “Really don’t like it” (1) (see Appendix C). This followed a procedure suggested by Flowers (1988) and LeBlanc et al. (1998), who found that elementary students in grades 3, 4, 5, and 6 preferred using a pictographic Likert-scale as opposed to those using verbal labels. Sims (1987) found that students who could read benefitted by the inclusion of word cues in addition to the pictographs. The scores were transferred to an Excel spreadsheet, separated by homeroom, with each subject’s identification number and pre- and posttest scores. The pre-and posttest excerpts were drawn from the selections from the concert program. The sample excerpts were recorded on a compact disc. The stimuli was paused by the researcher between excerpts to allow time for the subjects to respond. The length of the actual excerpt varied in length to accommodate the musical phrase, and lengths ranged from 43 to 45 seconds. The subjects were required to listen to the entire excerpt before making their response. The pre-test was administered in November 2008. The results from the pre-test were analyzed as soon as possible. The lessons and treatment began in January 2009 after *The Teachers’ Resource Book* containing the lessons arrived at the primary research site.

**Surveys and Questionnaires**

Surveys and questionnaires were distributed to the subjects directly before and as soon as possible following the concert in order to determine if the students changed their listening preferences toward Western classical art music during the study and if participation in the study had any effect on listening preferences for Western classical art music. Knussen (2003) stated that traditional Western art forms have no intrinsic value for ethnic groups from Africa, Asia, and Latin America. According to Moser (1958), the purpose of surveys in social research is to
simply provide information to the researcher. Fowler (1993) noted that survey research: “. . . is aimed primarily at tapping the subjective feelings of the public. There are, in addition, numerous facts about the behaviors and situations of people that can be obtained only by asking a sample of people about themselves” (p. 2).

In this study, the subjects were asked about their perceptions of what they liked best and what they liked least concerning the entire experience, including the preparatory lessons and the concert attendance. Surveys and questionnaires were distributed to the subjects during seatwork time in their music class as part of regular class activities. In addition to learning about the listening preferences of subjects, this research gathered opinions from the subjects about the music that they heard. The surveys had multiple choice answers and space for the subjects to write their own comments.

**Interviews**

Twenty subjects were randomly selected and interviewed about their experiences. The names of all of the subjects were typed on slips of paper and then entered into a container. The principal of the school then withdrew ten slips of paper with the subjects’ names on them. The subjects were assigned numbers, 1 through 20, in order to protect their anonymity. The subjects were asked about what they liked most and what they liked least about the experience. The subjects also provided reasons for their answers. Interviews took place both before and after concert attendance to determine if a change in listening preference for Western art music was present. Ten subjects were interviewed before the concert and ten subjects were interviewed as soon as possible upon return from the concert. Interview questions were prepared and scripted prior to this time. With this approach, subjects were allowed the opportunity to provide information that the interview questions may not have addressed. Interviews were audio recorded
as described below in the digital audio recording section. Interviews were supplemented by written field notes taken at the time of the interviews. Interviews were reread and transcribed as soon as possible after they have taken place.

Field notes, journaling and observation

Field notes of selected comments made by the subjects about the concert experience were collected during the interviews that took place at the primary setting of the public school and were kept in two separate notebooks: pre-concert, and post-concert. Field notes were also taken at the end of the lessons for reflective purposes and were placed in the journal. Notes were read and examined as soon as possible and marked to identify the speakers with the day and time. The researcher kept a journal and wrote reflections and subjects’ reactions to the pre-concert lessons, activities, and concert. Observation occurred during the interviews and lessons and while field notes were taken.

Audio tape recording

A small microcassette audio recorder with a built-in microphone (Radio Shack Micro-44 microcassette recorder) was used during subject interviews. While the audio recorder was placed out of sight, the subjects had prior knowledge that they were to be recorded. A letter was sent to parents and guardians before the interviews took place seeking permission for their children to be recorded. Audio recordings were transcribed as soon as possible after data collection in order to establish exactly what the subjects said during these interviews. Post-concert interview transcribing was completed by a professional medical transcribing service.
Documents

_The Teachers’ Resource Book_, which is published by the New Jersey Symphony Orchestra, was previewed by the researcher before the lessons began and reviewed continuously throughout the study. _The Teachers’ Resource Book_ contained the pre-concert lessons that corresponded with the selections in the concert program. Reflections of the teacher-researcher on lesson presentation in the form of memos were also collected. All materials were secured in a locked filing cabinet when not in use since subject data were included herein.

Entry into the music classroom

For this study, the researcher assumed the role of teacher-researcher. This function was established at the beginning of the school year and prior to the introduction of the pre-concert lessons. The researcher was also established as the subjects’ primary general music teacher. A relationship of trust and rapport with the subjects was established by the time the research began. Lytle and Cochran-Smith (1990) defined teacher-research as “systematic, intentional inquiry by teachers about their own school and classroom work” (p. 84). They further explained the definition in this way:

By systematic we refer primarily to ways of gathering and recording information, documenting experiences inside and outside of classrooms, and making some kind of written record. By intentional we signal that teacher research is an activity that is planned rather than spontaneous. And by inquiry we suggest that teacher research reflects teachers’ desires to make sense of their experiences – to adopt a learning stance or openness toward classroom life. (Cochran-Smith & Lytle, 1990, p. 3)

Teacher research has also been described as:

... essentially a new genre not necessarily bound by the constraints of traditional research paradigms; they urge teachers to identify their own questions, document their observations, analyze and interpret data in light of their current theories, and share their results primarily with other teachers. (Cochran-Smith & Lytle, 1990, p. 4)
By maintaining a teacher-student relationship, the researcher observed firsthand the subjects’ reactions to the lessons and to the concert. Because the study took place over a 5-month period, the teacher-researcher was able to observe the subjects’ reactions and perceptions in depth over the course of the study. The researcher’s role as teacher-researcher was gained as preparation and teaching the lessons to the subjects began.

**Quantitative Data Analysis Procedures**

The purpose of the study was to determine if participation in pre-concert lessons had any effect on the subjects’ listening preferences for Western classical art music. The researcher sought to determine if third grade subjects’ participation in pre-concert lessons had an effect on listening preferences for Western classical art music. Quantitative data were analyzed through the use of a matched pairs t-test. This was done to analyze the outcomes within each matched pair before and after treatment (Moore & McCabe, 1999). There were four questions in the study:

1. What did the students like most about the concert experience?
2. What did the students dislike most about the concert experience?
3. Does gender have any effect on students’ listening preferences for Western art music?
4. Did the students feel that the pre-concert lessons were helpful or not helpful in preparation for the concert experience and why?

The null hypothesis in this study will be that there is no difference between genders in listening preference for Western classical art music. This t-test was also used to determine if there was a difference in listening preferences for Western classical art music between genders. Statistical analysis was handled by a statistician from the Statistics Department at the Graduate School of Education at Rutgers University.
Qualitative Data Analysis Procedures

Qualitative analysis in a case study consists of making a detailed description of the case and its setting. There were two distinct settings in this study. The classroom within the public school was the primary setting, and the concert hall was the secondary setting. Detailed descriptions of the public school setting and the concert setting were provided in the narrative. The researcher also used a combination of the methods of data management and analysis as outlined in Cresswell (1998) and Marshall and Rossman (1999). Once qualitative data collection and transcriptions were completed, then the data were reread and organized. Memos of particularly striking comments and occurrences said and done during the interviews were recorded in the margins of the transcripts while the memory was fresh.

The interviews took place in two phases: before and after concert attendance. The transcriptions were dated and titled according to the phase of the interview. Qualitative data containing striking statements made by the subjects were also organized on index cards. Qualitative data reduction took place simultaneously and continuously.

Qualitative data were then reread and categorized. The researcher looked for recurrent patterns in the subjects’ language, attitudes, and ideas. Categories that were included were: 1) the likes, dislikes, and neutral perceptions about the pre-concert lessons; 2) the likes, dislikes and neutral perceptions about the concert experience; 3) what the subjects expected the experience of attending a concert to be; 4) what the subjects liked best of the experience and; 5) what the subjects liked least of the experience. Once categories were identified, the data from the categories were color coded and organized.

As categories emerged, the researcher looked for relationships between them in order to determine possible themes and patterns that would shed light on the research questions. The
results in the table were translated in narrative form. Other patterns in the data were also examined at this point in the analysis.

**The Pilot Study**

A pilot study was done to test the hypothesis of the researcher. The general supposition was that the subjects’ participation in preparatory lessons would influence the subjects’ listening preferences for Western classical art music performed by a symphony orchestra. Phelps (1986) advised to conduct a pilot study “. . . to determine whether the intervention hypothesized between independent and dependent variables will materialize in a situation comparable to the one proposed for the actual study” (pp. 243-244).

A fourth grade class was randomly chosen at the teachers’ meeting on the first day of school on September 2008. All of the fourth grade home room teachers’ names were written on individual slips of paper and placed in a container. The principal of the school drew one slip of paper from the container. Permission slips describing the study in English and Spanish were distributed to the subjects in the class to take home to the parents. Twelve permission slips were returned out of a class of eighteen subjects. The twelve subjects who returned the permission slips with their parents’ or guardians’ signatures then served as the research subjects for the pilot study. The subjects were given two copies each of the letters of assent during their scheduled music class. The letters were read aloud in class by the researcher. The subjects then signed both copies. One copy of the letter of assent remained with the researcher and the other copy was given to the subjects to take home to the parents. Letters of consent for audiotaping were distributed. A survey was given to the subjects during their music class. The directions were read aloud by the researcher. The statements on the questionnaire were then read aloud by the researcher with time allowed for subject response.
Preparatory lessons geared for the concert were begun in late September 2008. The lessons were adapted from *The Teachers’ Resource Book* prepared by The Master Teachers’ Collaborative of the New Jersey Symphony. The lessons consisted of reading simple rhythms and playing classroom percussion instruments with selected pieces of music, practicing concert etiquette, identifying the instruments of the orchestra visually and aurally, and categorizing the instruments according to the particular family to which they belong. The pre-concert surveys were distributed in the pilot study class. Subjects were randomly selected to participate in pre-concert and post-concert interviews.

The concert took place at the Patriots Theatre in the Trenton War Memorial on November 12, 2008 at 11:00 am. The concert consisted of Benjamin Britten’s *The Young Person’s Guide to the Orchestra*, Gounod’s *Funeral March of a Marionette*, Rossini’s *William Tell Overture*, and Kabalevsky’s “Galop” from *The Comedians*. The concert lasted approximately one hour. The posttest was administered in the classroom as soon as the subjects returned from the concert. The pre-test and the posttest scores of males and females were compared using a matched pairs *t*-test.

**The Main Study and the Preparatory Lessons**

Pre-concert lessons were begun for all of the third grade classes in February 2009. The researcher told the synopsis of the *Scheherazade* story to the subjects. A lesson on aural and visual identification of instruments was chosen and modified from page 77 of *The Teachers’ Resource Book*. The listening lesson consisted of an excerpt from Movement 2, *The Kalendar Prince*. The researcher made index cards with the name of the instrument on one side and clipart that represented the instrument on the other side before the lesson began. Instruments represented were the violin, harp, clarinet, bassoon, and flute. The subjects also classified the instruments
according to their instrumental family, either strings or woodwinds. The subjects listened to approximately 6 minutes of the 12-minute movement, as recorded by The Boston Symphony Orchestra conducted by Seiji Ozawa on Deutsche Grammophon, CD# 289 469 659-2, 1978. The subjects listened for the solo instruments and held up the index card with the correct solo instrument as the researcher pointed to a sign reading, “Which instrument do you hear?” This made the cue for the subjects nonverbal to allow for listening.

The second lesson modified from The Teachers’ Resource Book concerned Movement 3, The Young Prince and the Young Princess. The subjects were to write original stories to coincide with the first three minutes of the movement. Some subjects did not write original stories, but had taken comic or cartoon characters and wrote a story that revolved around pre-existing characters. Some of the subject’s stories did not reflect the mood of the music, but illustrated violence between good and evil comic or cartoon characters. This was more prevalent in the stories written by the male subjects. The researcher surmised that the subjects lacked experience with creative writing, and looked to familiar scenarios with media geared toward young males. The stories were read in class and different groups of subjects were required to critique each others’ stories. Subjects were asked if their stories reflected the mood of the music. Opportunities to edit the stories were given during class time in music. Musical concepts were reviewed, such as loud-soft and fast-slow. An extension of this lesson involved subject nonverbal dramatization of their stories the following week against the music. The third grade class that was labeled as Gifted and Talented did the best job in writing and performing stories that coincided with the music from The Young Prince and the Young Princess.

The third and fourth lessons were modified from pages 80 - 84 of The Teachers’ Resource Book. Subjects recalled different ways of telling a story, including orally, through
pantomime, drama, and/or through music. Subjects listened to Movement 1, *Sinbad and the Ship*. Subjects were guided and practiced making up stories. This was done by one subject starting the story while holding a yarn ball. The next subject continued the story as the ball was passed through the class. Subjects then created paper bag puppets with character drawings of Sinbad, the Sultan, the Ship, and Scheherazade provided by the *Teachers’ Resource Book* for duplication. The subjects were divided into groups of four while listening to Movement 1 and recreating Scheherazade telling the story of Sinbad to the Sultan.

The last lesson modified from *The Teachers’ Resource Book* was about proper concert etiquette. The titles “Rock Concert” and “Symphony Orchestra Concert” were written on the board. Behaviors that appropriate for a rock concert and a symphony orchestra concert were written on slips of paper and placed in a box. The subjects took turns drawing slips of paper from the box and deciding under which title the behaviors should be listed. A Venn diagram was drawn that showed where behaviors were common to both venues.

Additional lessons on instrumental tone color, visual categorization and identification were taught. Subjects watched *Instrumental Classmates* DVDs on the string, brass, woodwind, and percussion families over a span of four weeks. The subjects were shown posters of the individual instruments and of the families of instruments in orchestral arrangement. Subjects were quizzed on visual and aural identification of the instruments when they finished watching the DVD.

The subjects were taken to the State Theatre in New Brunswick, NJ on Friday, May 22, 2009 for the 11:30 am performance of *Scheherazade: Arabian Tales*. The performance lasted approximately 1 hour. The subjects returned to the primary research site and were posttested on four excerpts from *Scheherazade* after lunch. The results will be discussed in Chapter Four.
Summary

Western classical art music is a humanistic art form that must be preserved in order to endure (Small, 1998). Subjects must be taught while they are still in public school that this type of art form need not be elitist, but is attainable for all, no matter what age, race, or class (MENC, 1994). For this type of art form to be relevant, the individual should presumably be introduced to it at an early age.

The opinions and viewpoints of subjects who had little prior experience with attending live concerts were recorded at various times with the anticipation that their opinions would change significantly after exposure to the concert. They were introduced to a series of lessons that prepared them to listen to Western classical art music while at a symphony orchestra venue. This study aimed to present the subjects’ views and opinions after attending a live symphony orchestra concert. Yet, research concerning children’s listening preferences for Western classical art music in this context is extremely rare. Not only can these types of studies inform general music educators of their students’ reactions to this style of music, but these studies can also inform symphony orchestra education directors as well. Since very little research has been done in the area of positive effects of orchestra education and listening skills, this study has the potential to generate further research in this area.
CHAPTER FOUR

Results

The opinions and listening preferences of students who have had little experience attending live concert performances of symphony orchestras were documented in order to determine if their opinions and listening preferences would significantly change after participation in preparatory lessons and concert attendance. These students were taught a series of modified lessons that were drawn from *The Teachers’ Resource Book* designed by the Master Teachers’ Collaborative of the New Jersey Symphony Orchestra. These lessons were intended to introduce and prepare children to listen to Western classical art music performed by a symphony orchestra. This study sought to determine if exposure to these lessons had an effect on their listening preferences for Western classical art music. Little research currently exists that examines students’ listening preferences for Western classical art music performed in a symphony orchestra context.

Both quantitative and qualitative methods were employed in the investigation. Quantitative research was used to examine the differences between two populations, male and female, concerning their listening preferences for Western art music performed in a symphony orchestra context. This type of research was also used to examine pre-treatment, treatment, and post-treatment effects on the subjects. The pre-treatment was the status of the students’ listening preferences during the pre-test, the treatment was preparatory lessons and any effect that these lessons had on listening preferences, and post-treatment, which was any significant change in these listening preferences revealed in the posttest. The pre- and posttests implemented in order to measure the subjects’ preferences were in the form of a 5-point pictographic Likert scale with the words “Really like it” (5), “Like it” (4), “Don’t know (3), Don’t like it (2), and “Really don’t
like it” (1) (See Appendix C). Qualitative research lends itself to the study because the narrative will give voice to the subjects from whose perspective, experiences, and viewpoints have traditionally been dismissed as being unimportant or irrelevant. The study employed a basic pre-test, treatment, posttest design for the qualitative aspect of the study. The qualitative aspect used interviews of randomly selected subjects drawn from a large sample size with details concerning the reactions of the population. Questions One and Two will be addressed first quantitatively, and then qualitatively. Question Three will be answered quantitatively and Question Four will be answered qualitatively.
### Table 1

Pre-Post Treatment Responses to Listening Examples of General Population

<table>
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<tr>
<th>Selections</th>
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<th>Post</th>
<th>Diff</th>
<th>n</th>
<th>t</th>
<th>p signif.</th>
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<tr>
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<td>0.12</td>
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*Note.* Superscript letters (e.g., <sup>a,b,c</sup>) denote <i>t</i> test results that are statistically equivalent in the vertical pre- and posttest columns. **Boldface type and **** denote results that are highly significant.
Question One

What did the students like most about the concert experience?

The Listening Examples from *Scheherazade* were as follows: Listening Example 1, The Sea and Sinbad’s Ship; Listening Example 2, The Story of the Kalendar Prince; Listening Example 3, Festival at Baghdad-The Sea-The Shipwreck; and Listening Example 4, The Young Prince and the Young Princess.

A Repeated Measures Analysis of Variance (ANOVA) with a Fisher’s Least Significant Difference (LSD) post hoc measure was employed to check how the students rated the various Learning Examples overall before and after the treatment experiences (lessons and concert). This analysis shows that before the treatment experiences the general population preferred Listening Examples 1, 2 and 4, which had mean pretest scores of 4.42, 4.34 and 4.35, respectively, as seen in Table 1, column 2. The superscript letter “a” indicates that at the 1% level of significance (F=4.21, \( p < 0.01 \); LSD = 0.17, \( p < 0.01 \)) these three examples were statistically equivalent to one another and also statistically greater than the mean Listening Example 3 pretest score of 3.92, superscripted with the letter “b.” Table 1 also shows that after the treatment experience, the general population decidedly preferred Listening Examples 1 and 3 (F = 3.98, \( p < 0.01 \); LSD = 0.12, \( p < 0.01 \)) with mean posttest scores of 4.47 and 4.39, respectively, and highly significantly more than Listening Examples 2 and 4 with mean posttest scores of 4.27 and 4.10, respectively superscripted with letters “b” and “c.”

To determine changes in scores before and after the treatment experiences, matched pair \( t \)-tests were conducted. Table 1 shows that for Listening Example 3 the general population demonstrated a highly significant increase in listening preference (\( t = 3.17, p < 0.01 \)), while none of the other Listening Examples had significant differences.
Post-concert interviews were conducted as soon as possible after the students returned from the concert. Ten subjects were interviewed as soon as possible upon return from concert attendance. The majority of the students seemed to focus on visual rather than on musical items from the concert. Subject 7 stated that she enjoyed the way that the music corresponded with the stage action. Subject 5 liked the way the music enhanced the story and said, “…they had good music and did a good story.” This same subject added that she enjoyed making up stories to correspond with music and added, “… if you do a story and you act it, it’s fun because you know what you’re doing and you got [sic] to follow the story.” This subject also stated that attending the concert was a favorite part. Subject 10 stated that she liked “the whole thing” and added that the reason why this was so was “… because I liked seeing the stories where they played the action part.” This same subject enjoyed the Scheherazade story because the characters on stage were changing costumes while appearing to talk but actually were making musical sounds (Interview, Subject 10). Another comment that dealt with the visual aspect of the concert was, “My favorite part is when the man was the monkey and they were trying to get him and he jumped up, then they got him. The reasons I liked that part is because it was cool when he jumped, and it was cool” (Interview, Subject 4). Subject 9 remarked on the visual aspects and said that he liked a part when the characters dressed in white were walking on stage and explained, “I liked it because it was fighting or something. It had those things, the stick that had the pointy end.” This same subject claimed that he enjoyed coloring pictures of Sinbad, Scheherazade, and the Sultan in class during the preparatory lessons. Additional comments ranged from, “I liked when the guy got the knife and defeated the monsters…” (Interview, Subject 6), to “When the Genie came out and granted this person three wishes. I liked that part
because when the Genie …popped out he got scared and the Genie was about to get him or just pop out and spook him away” (Interview, Subject 8).

Subject 8 commented on the musical rather than on the visual aspects of the concert. He stated that he enjoyed listening to the violin and hoped to have the opportunity to play this instrument. He claimed that his favorite preparatory lesson was about the character of Scheherazade. This subject also claimed that his favorite part of the concert experience was learning about how the violin corresponded with the character of Scheherazade.

Thirty percent of the subjects interviewed commented on what was learned during the preparatory phase. Subject 9 said that the preparatory lessons were a favorite part of the entire experience. Subject 6 claimed that he enjoyed everything from the lessons to attending the concert. Subject 3 said that learning about the different families of the instruments was a favorite part of the entire experience.

**Question Two**

What did the students like the least about the concert experience?

The data displayed in Table 1 showed that the general population uniformly liked Listening Example 3 the least out of the four listening examples in the pre-test with a mean score of 3.92. Table 1 also showed that the students liked Listening Example 4 the least in the posttest. While the general population showed the greatest increase in listening preference for Listening Example 3, it displayed the largest negative change for Listening Example 4, but this drop of 0.25 from 4.35 in the mean pre-test score to 4.10 in the posttest score was not significant ($t = -1.61, p < 0.01$).

The majority of subjects interviewed also seemed to focus on the visual aspects about the concert experience that they disliked the most. Items that the students liked the least about the
concert experience included the death of one of the characters (Interview, Subject 9). This subject complained that the character had a mask on for the entire performance and then died at the end. When asked why he did not like this particular part, Subject 9 responded that he did not like to see people die. Uninteresting stage action was named by Subject 2 and Subject 3 as parts that were liked the least. Subject 3 stated that watching the characters change costumes on stage was boring, while Subject 2 described a particular scene as uninteresting because of the actions. Stage action that was too frightening was named by Subject 8 as something he disliked and stated: “I didn’t like when the dragon came out and had great, big teeth. I didn’t like that part because it was too scary, too scary for me.” Subject 7 noted one preparatory lesson on writing a story to correspond with an excerpt from *Scheherazade* as being difficult and a least favorite part of the experience. However, she found that acting out the story while the music was playing was simple. Subjects 5, 6, and 7 stated that there was not part of the concert experience that they did not like.

Only two subjects interviewed identified musical aspects that they did not like. The music was named by Subject 10 as a least favorite part because “…a lot of the music they played too slow.” Subject 4 specified music that was too soft as a part that he did not like because he “…couldn’t hear that much.”
Table 2
ANOVA Analysis of Responses by Listening Examples and Gender

<table>
<thead>
<tr>
<th>Gender</th>
<th>Boys (n = 35)</th>
<th>Girls (n = 36)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Selections</td>
<td>Pre</td>
<td>Post</td>
</tr>
<tr>
<td>Example 1</td>
<td></td>
<td></td>
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<tr>
<td>Mean</td>
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<td>4.43&lt;sup&gt;a&lt;/sup&gt;</td>
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<td>St.Dev.</td>
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<td>0.88</td>
</tr>
<tr>
<td>Example 2</td>
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<td></td>
</tr>
<tr>
<td>Mean</td>
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<td>4.11&lt;sup&gt;b&lt;/sup&gt;</td>
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<tr>
<td>St.Dev.</td>
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<td>1.08</td>
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<td>Example 3</td>
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<td>Mean</td>
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</tr>
<tr>
<td>p signif.</td>
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<td>0.10</td>
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</table>

*Note.* Superscript letters (e.g., <sup>a,b,c</sup>) denote *t* test results that are statistically equivalent in the vertical pre- and posttest columns of boys and girls.
Table 3

Pre-Post Treatment Responses to Listening Examples by Gender

<table>
<thead>
<tr>
<th>Selections</th>
<th>Pre</th>
<th>Post</th>
<th>Diff</th>
<th>N</th>
<th>t</th>
<th>p signif.</th>
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<tr>
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*Note. Boldface type and * denote results that are significant.*
Question Three

Do males and females have different listening preferences for Western art music?

Similar to the responses to Questions 1 and 2, a Repeated Measures Analysis of Variance (ANOVA) with a Fisher’s Least Significant Difference (LSD) post hoc measure was employed to check how the students rated the various Learning Examples overall before and after the treatment experiences (lessons and concert), but this time the analysis was done by gender. As seen in Table 2, only the girls’ mean pretest scores displayed significant differences (F = 3.75, p < 0.05; LSD = 0.24, p < 0.05). However, the other pre- and posttest scores were also labeled with superscripts to indicate possible ranking preferences if the gender sample size were larger. The significance level is 10%, which is only marginally significant. For example, on pre-test scores, boys appear to favor Listening Examples 1, 2, and 4, but Listening Examples 2 and 3 are statistically tied as least preferred, hence the double letter superscript “ab” for Example 2. On the other hand, girls’ pre-test scores are definitely significantly different, with the strongest preference for Listening Examples 1 and 2. Listening Examples 1 and 4 are statistically tied as are Listening Examples 3 and 4. The overlapping tied rankings in the LSD measurement is attributable to the smaller sample sizes for gender, here n = 36 for girls.

As reflected in Table 3 the differences between boys’ and girls’ pre- and posttest scores by Listening Examples were explored using two sample t-tests, which appear in table rows, while the differences between mean pre- and posttest scores by gender are calculated using matched pair t-tests, which appear in table columns to the right. In Listening Example 3, both boys and girls displayed significant differences between mean pre- and posttest scores (boys: t = 2.38, p = 0.23; girls: t = 2.07, p = 4.046), which were found for both genders, while no significant differences were identified for the other Listening Examples. There was a significant
difference between boys’ and girls’ pre-test scores for Listening Example 2 when comparing boys’ and girls’ pre- and posttest scores by Listening Example. Girls ranked this the highest pre-test score of 4.61, while the boys only scored it a mean of 4.06 ($t = -2.22, p < 0.05$). All the other pre-test and posttest comparison by Listening Example was not significantly different.

Even though both boys and girls show an increase in listening preference for Listening Example 3, boys showed a significantly greater increase in listening preference for this example than did girls. Table 3 shows that the average score for the 35 boys for Listening Example 3 was 3.74 for the pretest and 4.31 for the posttest with a difference of 0.57. The $t$-value was 2.38 and the $p$ value was < .05 for boys, which shows a significant increase. Girls rated Listening Example 3 highly in the pre-test and show a slight increase in the posttest. The average mean score for the 36 girls was 4.08 for the pre-test and 4.47 for the posttest with a difference of 0.39. The $t$ value was 2.07 and the $p$ value was < .05, which demonstrate a significant increase.

**Question Four**

Were the lessons helpful or not helpful in preparation for the concert?

The majority of subjects interviewed thought that the preparatory lessons were helpful in learning about the concert. The reasons included learning about the instruments, learning how to listen and what to listen for, and knowing what to expect during a symphony concert. Typical comments were: “…you teach us all the instruments, and if you didn’t teach us all the instruments, we wouldn’t know which instruments there are, (Interview, Subject 7), “…you taught us how to do stories with the music and you showed us movies with music in them and we colored pictures and we played a little (Interview, Subject 5), “…it was very helpful because it teaches me stuff about instruments and I get to, like, maybe be able to do some of those things, like play the bass or some other instruments (Interview, Subject 6), “…it is, like, good for you to
understand and to know the sound and make sounds when you are taking a lesson. Just to read all the notes, (Interview, Subject 10) and “…it was very helpful to have the lessons and hear them in the symphony,” (Interview, Subject 8).

Two subjects interviewed did not believe that the lessons were helpful. Subject 4 claimed that he knew all about music from listening to it in his house and the lessons did not add anything to his experience. Subject 2 could not give a concrete reason why the lessons were not helpful.
Summary

Because listening is the primary modality through which human beings experience music, a major goal of music education should be to introduce students to listening experiences that includes music from a variety of cultures, genres, historical eras, and styles (MENC, 1994). As part of this larger goal, children should have the opportunity to listen to a live symphony orchestra, an event that would be even more meaningful when experienced at a formal concert hall. The observation made by Subject 6 in a post-concert interview helps to show the importance of attending such an event:

The best part was when I got to see the pictures and you told us how tall the bass is. When I went to the symphony, the bass was really high because I never saw the bass and other kinds of instruments and that was my first time I got to see pictures and in real life. (Interview, Subject 6)

Subject 8 also commented on how he enjoyed the trip to the symphony:

I think the symphony trip was kind of fun and seeing all the characters, all the instruments, the violin, the trip was so interesting. (Interview, Subject 8)

Research has shown that there have been studies on students’ listening preferences that have included such variables as tempo (LeBlanc, 1981; LeBlanc & Cote, 1983; LeBlanc & McCrary, 1983), dynamics (Burnsed, 1998; Burnsed, 2001; LeBlanc, 1982), gender (Christenson & Peterson, 1988; Fucci, Petrosino, & Banks, 1994), familiarity (Bartlett, 1973; Rodacy, 1982; Jin, 1999), and Western art music (Haack, 1982; Szabo, 2001; Woody & Burns, 2001). However, there appear to be inadequate studies about listening preferences for Western art music performed in a young person’s concert setting. This study investigated third grade subjects’
perceptions, experiences, and listening preferences for Western art music performed in a symphony orchestra context. This population had little or no prior experience with attending live concerts. The subjects (N = 74) were pre-tested on four listening excerpts from Scheherazade, taught lessons in order to prepare for the concert, and posttested on the same four listening excerpts following the performance. Ten subjects were chosen at random for interviews after they had attended the concert.

Conclusions

Question One

What did students like most about the concert experience?

The general population preferred Listening Examples 1, 2, and 4 in the pre-test, which were The Sea and Sinbad’s Ship, The Story of the Kalendar Prince, and The Young Prince and the Young Princess respectively. Listening Examples 1 and 3 were preferred by the general population in the posttest. Festival at Baghdad – The Sea – The Shipwreck had a highly significant increase in preference in the posttest ($t = 3.17, p = < 0.01$).

Students appeared to gravitate toward and comment on the visual rather than the aural aspect of the concert going experience. This may be so because children of this age may lack the vocabulary needed to adequately describe what they hear in musical terms. The stage action was provided by The Enchantment Theatre Company of Glenside, Pennsylvania. The company used props, oversized puppets, and costumes; they choreographed the stage action to coincide with the music.

Listening Example 3 (Festival at Baghdad – The Sea – The Shipwreck) showed the largest increase in preference in the posttest among all of the Listening Examples. This movement was the last in Scheherazade, and also had the most variety of stage action, which
corresponded with the increase in tempo and dynamics, the tone color of the brass, and the quick rhythmic figures. This movement showed the main male character and an actor with a horse’s head prancing quickly about the stage, two hooded characters with sabers attempting to slash at the main male character, three characters in white twirling about with sheer white veils, two characters dressed in dark costumes attempting to tie the main male character with a rope, and a character in red jumping and leaping across the stage while wrapping the main male character in a red veil. The red character eventually transformed into a red dragon with one actor manipulating the head, a second actor operating the midsection, and a third actor maneuvering the tail. This was the largest puppet used in the production to this point, and the transformation occurred with the loudest level in dynamics with the brass section featuring the most prominently at this point (Smith, 2009, archival DVD). This could have contributed to the subjects’ preference of this particular Listening Example. Since this was the last movement that was seen by the subjects, it could have been the freshest in their memories both visually and aurally when the subjects returned from the concert and then took the post test.

Exciting stage action was noted as the subjects’ favorite part of the concert experience during the interviews. Subject 3 stated that her favorite part was “when the ogre came out because it was big and scary.” Subject 9 said that his preferred section was when the characters on stage were all wearing white and were fighting with sticks. Subject 2 liked when the monkey was “…drooling and sweating” on stage “…because it was funny” (Interview, Subject 2). Subject 4 also stated visual reasons for identifying the segment where the monkey jumped up and was caught as a preference. Subjects 5, 7, and 10 remarked that they liked the way the music seemed to reflect the acting on stage. The majority of the subjects appeared to react to visual rather than to aural stimuli. The New Jersey Symphony Orchestra seems to intentionally plan
inclusion of visuals to coincide with their concerts for young listeners. Only Subjects 1 and 8 named aural aspects that were enjoyable and favorite parts for them. Subject 1 talked about the highness and lowness of the pitches while Subject 8 remarked about how he enjoyed the sound of the violin. Subject 6 claimed he enjoyed the entire concert experience from the lessons to attending the concert and said, “It was cool” (Interview, Subject 6).

**Question Two**

What did the students dislike most about the concert experience?

The general population liked Listening Example 3 the least in the pre-test, which was Festival at Baghdad – The Sea – The Shipwreck, with an average score of 3.92. Listening Example 4, which was The Young Prince and the Young Princess was liked the least in the posttest with an average score of 4.1.

Three of the subjects interviewed again named visual aspects of the concert when recalling their least favorite parts of the concert. This seems to support the findings of Hamlen and Schuell (2006) where subjects preferred classical music excerpts with audiovisual components instead of aural examples alone. Subject 8 was frightened by the dragon, Subject 9 did not like to see characters dying, and Subject 3 identified boring stage action when asked to recollect their least favorite parts of the concert. Reasons to explain this may include the lack of vocabulary to express thoughts in musical terms, difficulties with English as a second language, or visual aspects of the performance being easier to recall than aural aspects. Subject 7 stated that writing a story to correspond with an excerpt from Scheherazade was difficult. This may be explained because she was in a third grade bilingual class and was taking classes in English as a second language. Yet, this student was able to communicate orally in English. Subjects 4 and 10 were the only two that commented that the music was their least favorite part of the entire
experience. Subject 4 claimed that there were sections where the music was too soft for him to
hear while Subject 10 claimed that there were areas where the music was too slow for her liking.
This corresponds with previous research where it was found that children prefer loud dynamics
(LeBlanc, 1982) and fast tempos (LeBlanc, 1981; LeBlanc & Cote, 1983; LeBlanc, Jin, Chen-
Hafteck, Olivera, Oosthuyesen & Tafuri, 2000-2001; LeBlanc & McCrary, 1983; Montgomery,

**Question Three**

Do males and females have different listening preferences for Western art music?

There were four short excerpts taken from each movement of Rimsky-Korsakov’s
*Scheherazade*. The first listening excerpt was The Sea and Sinbad’s Ship, the second listening
excerpt was The Story of the Kalendar Prince, the third listening excerpt was Festival at Baghdad
– The Sea – The Shipwreck, and the fourth listening excerpt was The Young Prince and the
Young Princess. The subjects were instructed to listen to the entire excerpt before circling their
selection from a 5-point pictorial Likert scale. Boys preferred The Sea and Sinbad’s Ship and
The Young Prince and the Young Princess in the pre-test and The Sea and Sinbad’s Ship in the
posttest. Girls preferred The Story of the Kalendar Prince in the pre-test and Festival at Baghdad
Shipwreck the least in the pre-test and liked The Young Prince and the Young Princess the least
in the posttest. Girls liked Festival at Baghdad – The Sea – The Shipwreck the least in the pre-
test and liked The Young Prince and the Young Princess the least in the posttest. Boys showed a
greater increase in preference for Festival at Baghdad – The Sea – The Shipwreck than did girls;
however, this difference was not statistically significant. The difference from pre-test to posttest
in boys was 0.57. The difference from pre-test to posttest in girls was 0.39. However, the results
by gender are not statistically significant (at the .05 level) with the exception of the girls’ pre-
test.

The Listening Example of Festival at Baghdad – The Sea – The Shipwreck was of
particular interest. The general population showed a highly significant increase in listening
preference for this example. This could be attributed to the change in dynamics, the use of brass
and strings, and the moderately fast tempo. The highly significant increase could also be
attributed to what the subjects heard and saw during the actual performance at the concert hall. A
number of subjects interviewed stated that their favorite parts of the concert were during times
when there was interesting stage action. There was a significant increase in the listening
preference for boys for this particular Listening Example ($t = 2.07, p = 0.046$). Even though both
boys and girls showed an increase in preference for Listening Excerpt 3, boys showed a slightly
greater increase in preference. The boys’ difference between pre- and posttest scores was 0.57
while the girls’ difference between pre- and posttest scores was 0.39. The boys in the study may
have been more drawn to fast tempos and loud dynamics, more so than the girls. Girls rated
Listening Example 3 highly in the pre-test, leaving little room for an increase in listening
preference.

The subjects liked Listening Example 4 the least in the posttest. The general population
showed a decrease in preference scores for Listening Example 3. A number of subjects
commented that least favorite parts of the concert were slow music, boring stage action, or when
the music was too soft. The decrease in scores could be again attributed to what was perceived to
be uninteresting or frightening stage action, slow tempo, soft dynamics, or any combination
thereof. The title of the movement from which Listening Excerpt 4 was taken was “The Young
Prince and the Young Princess.” Any stage action seen during the performance of the concert
could have been interpreted as romantic, sentimental, or amorous by the male subjects, and therefore could have been considered as a scene that was appropriate for the girls from a male standpoint. According to Christenson and Peterson (1988), boys react differently to music than do girls. Boys may also react differently to visuals than do girls. Boys also had a larger negative difference (-0.31) than girls (-0.194) for Listening Example 4.

**Question Four**

Did the students feel that the pre-concert lessons were helpful or not helpful in preparation for the concert experience and why?

The majority of students felt that the pre-concert lessons were helpful in preparing them for the concert experience. Subject 6 said, “Yes, it was very helpful because it teaches me stuff about instruments and I get to, like, maybe be able to do some of those things, like play the bass or some other instruments.” Subject 8 agreed by saying:

> Yes, it was helpful to have the lessons and hear them in the symphony that we took from school and that we learned in class, and actually heard the music and the symphony and what kinds of instruments that we see …in the symphony. (Interview, Subject 8)

Subject 10 thought the lessons were helpful, “Because it is like good for you to understand and to know the sounds and make sounds when you are taking a lesson.” Subject 9 added: “Because you prepare yourself so when you get to the concert you know what they are doing on the stage and you saw all the instruments they used” (Interview, Subject 10).

However, Subject 4 claimed that the lessons were not helpful because he heard a lot of music in his house. When asked to describe the music heard at home, Subject 4 said that the music went fast and slow, and had singing and instruments. He did not name the instruments and could not identify the style when asked. Subject 2 said that the lessons were not helpful but could not state a reason why this was so. This could be attributed to lack of vocabulary to describe musical thoughts, inefficiency in communicating in English as a second language, simply not
knowing how to state that the lessons were not useful, or any combination thereof or lack of maturity.

**Teacher as Researcher**

The author had the first-hand opportunity to perform in the teacher as researcher role. The lessons were modified as was seen fit for the particular classes that were being taught. The researcher also had the opportunity to note the students’ reactions, observations, perceptions, as well as the opinions of the lessons and the culminating concert experience that were negative as well as positive. The subjects produced choreography, colored pictures of instruments, visually and aurally categorized the instruments according to their particular families, and wrote original stories that corresponded with a predetermined movement of *Scheherazade*. The majority of the students looked forward to the concert experience, learning about the various instruments of the symphony orchestra, as well as the story of *Scheherazade*. However, the researcher’s view of the concert lessons produced through the Master Teachers Collaborative of the New Jersey Symphony Orchestra is that there is too much emphasis in incorporating other subject areas into music lessons, almost to the extent of neglecting music in favor of teaching subjects such as math and science through a music lesson.

**The New Jersey Symphony Orchestra and the Master Teachers Collaborative**

Marshell Jones Kumahar, the current Vice-President of Education and Community Engagement of the New Jersey Symphony Orchestra, stated that the last Master Teachers Collaborative occurred during the school year of 2008 – 2009 with only 10 participants (Personal communication, telephone interview, Oct. 29, 2010, Marshell Jones Kumahar). Only eight applicants showed interest for the 2010 – 2011 concert season, and so therefore, the Master Teachers Collaborative was cancelled. The last *Teachers’ Resource Book* that was produced
coincided with the 2009 – 2010 concert season. Originally, *The Teachers’ Resource Book* was designed so that it would be accessible for classroom teachers to present the preparatory lessons to their students as well as for the general music teacher. However, the reality is that classroom teachers rarely teach music lessons to their own students in New Jersey, as this is a role that has been filled by the general music teacher. It was found that teachers did not find the lessons useful and were looking for ideas as an alternative to the lessons through which to present the concert material. Two professional writers were hired to create learning ideas for both the fall and spring concerts of 2010 – 2011, yet one was released. The remaining writer created ideas for both the fall and spring concerts. The resultant ideas were not extensive lesson plans. While most professional orchestras hire professional writers to produce preparatory lesson, the New Jersey Symphony Orchestra was relying on the state’s teachers to design the lesson plans (Personal communication, telephone interview, Oct. 29, 2010, Marshell Jones Kumahar). The Education Department of the New Jersey Symphony Orchestra is currently searching for alternatives in an effort to revise the introduction of Western classical art music literature performed by a symphony orchestra.

This study was intended to generate further research in the area of listening preferences for Western art music, especially in the context of symphony orchestra performances. Studies of this kind can inform music educators and symphony orchestra education directors if this type of approach to improving children’s listening skills is indeed effective. Conclusions that were drawn from the study were as follows:

*The New Jersey Symphony Orchestra attempted to incorporate different learning styles into the teaching of music that were based on Howard Gardner’s Theory of Multiple Intelligences (1983). The NJSO might better focus and prioritize the art of music instead of*
producing lessons and ideas geared toward the presentation of art music through other subjects as the primary goal. Too much emphasis was placed on assuming the majority of students did not have the musical background necessary to understand the presentation Western classical art music presented in an orchestral context. Subjects such as math and science that exemplified the logical intelligences were stressed at the expense of musicality. These subjects could be possibly used to enhance the presentation and teaching of such Western art music, but should not be the focus nor overshadow Western art music. The Teachers Resource Book was designed so that any general classroom teacher would be able to use any lesson presented. However, the reality was that the responsibility of teaching these lessons more often than not fell on the general classroom music teacher.

The researcher concluded that the use of visual aids in presenting music is conducive for the teaching of orchestral music. Children need to have more than only the aural sense engaged while listening. The majority of the students identified with visual events more so than the aural when recalling certain events in the concert. One subject commented that he was frightened by the ogre. Such a visual aid might have been frightening when seen through a child’s perspective, yet no other subject claimed that any portion of the visuals was too alarming for them. Children should also be made familiar with the concert program before actually attending so that they know what to expect and what to listen for instead of attending without any preparation.

The statistical results of Listening Example 3 appear to confirm the findings that children appear to be drawn to fast tempos (LeBlanc, 1983) and loud dynamics (LeBlanc, 1982). The stage action and the use of a red dragon puppet to correspond with the tempo and dynamics appeared to remain in the subjects’ memories when taking the posttest upon returning to the research site. The implications for teaching is that music teachers should introduce and present
orchestral literature with fast tempos and loud dynamics prior to presenting orchestral literature with slower tempos and softer dynamics. Visual aids such as student drawings, pictures, video recordings, or student productions of the interpretation of orchestral pieces should also be considered when presenting symphonic literature.

Recommendations for Further Research

Recommendations for further research are:

1. an investigation to study the effectiveness of the young person’s concert experience
2. an investigation with additional grade levels and a wider age range to compare reactions and perceptions between and/or among grade levels;
3. a comparison of control and treatment groups where the control group does not have preparatory lessons and the treatment group has preparatory lessons;
4. an investigation with a larger sample size of the same grade level from different schools within the same district;
5. an investigation with a larger sample size of the same grade level from different schools in neighboring districts; and
6. an investigation with a control group that uses only audio stimuli for the preparatory lessons compared with a group that uses audiovisual stimuli for the preparatory lessons.
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04/16/2008

Dear Joyce Richardson-Melech

I am pleased to inform you that you have successfully completed the Rutgers University Human Subjects Compliance Program. This educational program includes information on the regulations, history, policies, procedures and ethical practices pertaining to research involving human subjects, which will be helpful to you as you conduct your research.

Your approval date is 12/06/2002. Duration of approval will be based on federal requirements which are not yet determined. Well in advance of the expiration date of your approval period, you will be notified so that you may continue your education regarding the protection of human subjects.

Additional information will also be provided on the IRB list-serve and posted on the human subjects website: <http://orsp.rutgers.edu/humans/>.

Please retain this letter of certification. It will be required for submitting human subjects protocols, and continuing review forms. When submitting a funding request to NIH, the certification date will be required for inclusion on a different certification letter, which may be requested by contacting the Sponsored Programs Administrator, by email at <humansubjects@orsp.rutgers.edu> or by phone at (732) 932-0150 ext. 2104. Thank you for your cooperation.

Sincerely,

Karen M. Janes,
Associate Director
Research Integrity and Compliance

cc: M. Gibel
    L. Zizza
April 4, 2008

A. V. Ceres Elementary School
445 State Street
Perth Amboy, NJ 08861

Mrs. Mari Celi Sanchez, Assistant Superintendent of Schools
Perth Amboy Board of Education
178 Barracks Street
Perth Amboy, NJ 08861

Dear Mrs. Sanchez:

I am requesting permission to conduct a research study at the A. V. Ceres School that would involve the third grade population serving as subjects. The research design is a basic pretest, treatment, and posttest format. The pre-test and post-test will consist of Western classical orchestral music examples where the subject is to indicate preference by selecting an option from a pictorial Likert-scale. The pre-test of musical listening preferences will be given in November 2008. The treatment will consist of listening lessons designed to teach students how to listen to Western classical orchestral music with purpose, knowledge, and intent. The subjects will be taken to a live orchestral concert given by the New Jersey Symphony Orchestra in the spring of 2009. The post-test of musical listening preferences will be administered as soon as possible upon their return to the A. V. Ceres School.

Attached please find assent and consent forms that follow the Rutgers University guidelines to conduct research with human subjects.

Very truly yours,

[Signature]
Joyce S. Richardson-Melech

[Stamp] Approved 4/9/08
[Stamp] McAnulty.To it Hayfere
[Stamp] mid 08-09 testing schedule
May 12, 2008

To Whom It May Concern:

The Perth Amboy Public School District will be delighted to allow Ms. Joyce Richardson-Melech to conduct a research study at the Anthony V. Ceres School for the 2008-2009 school year.

Sincerely,

Mari Celi M. Sanchez
Assistant Superintendent for Learning/Educational Services

MCS/Imr
To: Mrs. Mariceli Sanchez  

From: Dr. Garcia  

Re: Research by Mrs. J. Richardson  

I have discussed Mrs. Richardson’s research for the year 2008 – 2009. With your approval, I don’t see any problems with her conducting this research. Fundraising will be used for allocating funds for the trip to the symphony.

Mission Statement
We, the Anthony V. Ceres School Staff, in partnership with the parents and community of Perth Amboy, dedicate ourselves to create a safe, nurturing environment conducive to learning for all of our students. Through the application of standard-based instruction, students will achieve the New Jersey Core Curriculum Content Standards through opportunities to develop independent learning skills, creative problem solving strategies, and a sense of responsibility while respecting the diversity of others. Instruction will be promoted, recognizing different learning modalities to foster individual success for all students to ensure that truly no child is left behind.
APPENDIX B

Consent Forms
Consent Form

Dear Parents,

I am conducting a research study at Rutgers University to find how and in what ways the students achieve and develop music listening preferences. A. V. Ceres School has allowed me to contact you to request permission for your child to participate in the study. I will briefly explain the study to the children who have returned this permission slip, and also ask for their agreement to participate.

Children who participate in the study will be given two brief questionnaires that will ask them about their experiences with music before attending a symphony orchestra concert and after attending a symphony orchestra concert. Their names will not be written on the questionnaires, but I will ask them for their age, grade, and gender. Both questionnaires will take about 15 minutes each to complete, and will be given during the time that the students are doing work at their desks in music class, so they will not miss any instructional time. If the child indicates at any time that they want to stop filling out the questionnaire, they will be thanked for the participation, and will return to their seatwork.

There are no known risks to your child for participating in this study, and your child will not benefit directly from participation. Their grades will not be affected in any way, whether or not they participate in the study. However, the data collected may lead to increased understanding of the factors that contribute to the development of students’ music listening preferences. If you would like to have a report of the study when it is completed, please indicate this at the bottom of this form.

If you have any questions about the research, my contact information is:
Joyce Richardson-Melech
A. V. Ceres School
445 State Street
Perth Amboy, NJ 08861
Tel: 732-376-6020 ext. 22617
Email: joycrichardson@paps.net

If you would like to contact my faculty advisor at Rutgers, the information is:
Dr. William L. Berz
Rutgers, The State University Of New Jersey
Marryott Music Building, Rm. 115
81 George Street
New Brunswick, NJ 08901
Tel: 732-932-8781
Email: wberz@roci.rutgers.edu

If you have any questions about your child’s rights as a research subject, you may contact the IRB Administrator at Rutgers University at:
Rutgers University, the State University of New Jersey
Institutional Review Board for the Protection of Human Subjects
Office of Research and Sponsored Programs
3 Rutgers Plaza
New Brunswick, NJ 08901-8559
Tel: 732-932-9150 ext. 2104
Email: humansubjects@orsp.rutgers.edu

Sincerely,

Joyce Richardson-Melech

__________________________
(Child’s name) has my permission to participate in the
(Child’s name) research study, “Students’ perceptions and experiences of the New Jersey Symphony Orchestra,” that will be conducted by Joyce Richardson-Melech.

Signature of Parent or Guardian ___________________________ Date __________
Carta De Permiso

Queridos Padres,

Estoy conduciendo un estudio de investigación musical en la Universidad de Rutgers sobre la forma en que los estudiantes logran desarrollar sus destrezas para escuchar. Esta investigación se relaciona aun concierto musical de la orquesta sinfónica a la cual los estudiantes asistirán el día (no determinado) La Escuela A. V. Ceres me permitió comunicarme con ustedes para pedirles su consentimiento a que su niño o niña participe en este estudio de investigación.

Los niños que participen en esta investigación llenarán dos breves cuestionarios sobre sus experiencias a la música antes y después de asistir al concierto musical de la orquesta sinfónica. Los nombres de los niños no aparecerán en el cuestionario solamente les preguntaremos su edad, el grado y si son niños o niñas. Ambos cuestionarios tomarán 15 minutos cada uno en responder. Contestarán el cuestionario durante su horario de clase en sus salones de clase y en sus escritorios, ellos no perderán tiempo de clase educacional, si su niño expresa que no desean seguir contestando el cuestionario, le daremos las gracias por su participación y regresará a su rutina de clase.

No hay ningún riesgo a que su niño participe en este estudio de investigación, su niño no recibe ningún beneficio directo al participar. Sus calificaciones no serán afectadas en ninguna forma. La información recolectada será usada para tener un mejor conocimiento de cómo los niños reaccionan a la música y como la escuchan.

Si usted tiene cualesquier preguntas sobre la investigación mi información de contacto es:
Joyce Richardson-Melech
A. V. Ceres School
445 State Street
Perth Amboy, NJ 08861
Tel: 732-376-6020 ext. 22617
Email: joycrichardson@paps.net

Si usted quisiera entrar en contacto con mi consejero de la facultad en Rutgers, la información es:
Dr. William L. Berz
Rutgers, The State University Of New Jersey
Marriott Music Building, Rm. 115
81 George Street
New Brunswick, NJ 08901
Tel: 732-932-8781
Email: wberz@rci.rutgers.edu

Si usted tiene cualesquier preguntas sobre los derechos de su niño como tema de la investigación, usted puede entrar en contacto con la Administrador de IRB en la Universidad de Rutgers en:
Rutgers University, the State University of New Jersey
Institutional Review Board for the Protection of Human Subjects
Office of Research and Sponsored Programs
3 Rutgers Plaza
Tel: 732-932-0150 ext.2104
Email: humansubjects@orsp.rutgers.edu

Sinceramente,

Joyce Richardson-Melech

______________________________, tiene mi permiso para participar en el (Nombre del estudiante) estudio de investigación, acerca de las percepciones y experiencias de la Oquesta Sinfónica de New Jersey que será conducida por Joyce Richardson-Melech.

Firma de los Padres___________________________ Fecha_________________
Rutgers, The State University of New Jersey  
Letter of Consent for Audiotaping

Date: __________________________

Dear _______________________________________________________,

I am conducting a research study at Rutgers University to find how and in what ways the students achieve and develop listening preferences and acquire a greater understanding and appreciation of orchestral literature through participation in lessons designed by the Master Teachers’ Collaborative of the New Jersey Symphony Orchestra. I am requesting your participation by having your interview audiotaped.

Your participation in this study is voluntary. By participating, you will help me to gain a greater understanding of this topic.

I will be willing to provide a copy of the results if you so desire.
If you have any questions concerning this study, please call (732) 932-0150.

Sincerely,
Joyce Richardson-Melech
Rutgers, The State University of New Jersey University
Mason Gross School of the Arts

I hereby give consent to have the interview audiotaped.

_____________________________________________  __________________________
Name (Print) Date

________________________________________________________________________
Name (Signature)
Carta de Consentimiento para la Grabación de Audio

Fecha: ___________________________

Querido ______________________________________________________,

Estoy realizando un estudio de la investigación en la Universidad de Rutgers para encontrar como y de qué maneras los estudiantes alcanzar y desarrollar las preferencias de escuchar y adquirir una mayor comprensión y aprecio de la literatura orquestal a través de la participación en las clases diseñadas por el Maestro de Maestros de colaboración de la New Jersey Symphony Orchestra. Estoy pidiendo su participación por tener su entrevista audiotaped.

Su participación en este estudio es voluntaria. Al participar, usted me ayudará a ganar una mayor comprensión de este tema.

Estaré dispuesta a ofrecer una copia de los resultados si usted desea. Si usted tiene cualesquier preguntas referentes a este estudio, llame por favor al (732) 932-0150.

Sinceramente,

Joyce Richardson-Melech
Rutgers, The State University of New Jersey University
Mason Gross School of the Arts

Yo doy consentimiento para que haga la entrevista en grabación de audio

__________________________________________________________________________  _____________________________
Nombre del Estudiante Fecha

__________________________________________________________________________  _____________________________
Firma del Estudiante Fecha

__________________________________________________________________________  _____________________________
Nombre del Padre Fecha

__________________________________________________________________________  _____________________________
Firma del Padre Fecha
Assent Form

You are invited to take part in a research study about students’ experiences and perceptions while preparing to listen to a concert given by the New Jersey Symphony Orchestra. Joyce Richardson-Melech, who is a student at Rutgers University, is conducting this study. She is doing the study to complete requirements for an advanced degree.

If you agree to participate, you will be asked to fill out two questionnaires that will take about 15 minutes. One questionnaire will be given before the concert, and the other will be given after the concert. Your name will not be on the questionnaire, but you will be asked to write your age, grade, and gender (whether you are a boy or a girl) on the form. It will not be possible to link your name with your questionnaire.

Your grades will not be affected in any way by your decision to participate or not participate in the study. You will not receive any benefits from taking part in this study: however, your answers may increase understanding of the factors that contribute to students’ music listening preferences.

You may skip any questions that you are not comfortable with, and you may decide to stop participating at any time. One of your parents or guardians will also be required to provide permission for you to participate in the study, and they will be given a phone number for Ms. Richardson-Melech, in case you or your parents have any questions about the research. They will also have a phone number for the Office of Research and Sponsored Programs at Rutgers University, in case there are any questions about your rights as a research subject. You will be given a copy of this form to keep.

If you agree to participate in the study, please sign below:

_________________________________________________________________________ Date __________________
(Student signature)

_________________________________________________________________________ Date __________________
(Student name, printed)

_________________________________________________________________________ Date __________________
(Investigator signature)
APPENDIX C

Pre- and Posttest Forms
Pre- and Post Test Listening Examples

*Scheherazade – Nickolay Rimsky-Korsakov: Listening Test Order*

<table>
<thead>
<tr>
<th>Example Number</th>
<th>Track Number</th>
<th>Time on Prepared CD</th>
<th>Seconds Lapsed</th>
<th>Selection</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1</td>
<td>04:28 – 05:16</td>
<td>48</td>
<td>The Sea and Sinbad’s Ship</td>
</tr>
<tr>
<td>2</td>
<td>2</td>
<td>09:00 – 09:47</td>
<td>47</td>
<td>The Story of the Kalendar Prince</td>
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<td>3</td>
<td>3</td>
<td>05:17 – 06:00</td>
<td>43</td>
<td>Festival at Baghdad – The Sea - Shipwreck</td>
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<tr>
<td>4</td>
<td>4</td>
<td>04:10 – 04:55</td>
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<td>The Young Prince and the Young Princess</td>
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</tbody>
</table>

Prepared CD made from Nickolay Rimsky-Korsakov, *Scheherazade/Capriccio espagnol*. Recorded by The Boston Symphony on Deutsche Grammophon CD# 289 469 659-2
Listening Directions for Pre- and Post Tests

Please put at the top of your page your gender, meaning if you are a boy or a girl, your age, and your grade.

You are about to hear some music that is played by an orchestra. You are to mark on your answer sheet how much you liked or disliked the music. Circle the face and the words below that go with the face. If you really liked the music, circle the first face with the words. If you liked it, circle the second face and the words. If you don’t know, circle the third face and the words. If you don’t like it, circle the fourth face and the words, and if you really didn’t like it, circle the fifth face and the words. Wait until you hear the entire example and you hear me say, “Circle your answer,” before you decide. Do you have any questions before we begin?
<table>
<thead>
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<td><img src="image2" alt="Smiley" /></td>
<td><img src="image3" alt="Smiley" /></td>
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<tr>
<td>1. Really like it</td>
<td>Like it</td>
<td>Don’t know</td>
</tr>
<tr>
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<td><img src="image5" alt="Smiley" /></td>
<td><img src="image6" alt="Smiley" /></td>
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<tr>
<td>2. Really like it</td>
<td>Like it</td>
<td>Don’t know</td>
</tr>
<tr>
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<td>3. Really like it</td>
<td>Like it</td>
<td>Don’t know</td>
</tr>
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<td><img src="image16" alt="Smiley" /></td>
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<tr>
<td>4. Really like it</td>
<td>Like it</td>
<td>Don’t know</td>
</tr>
</tbody>
</table>
anova scorepre excerpt ss, repeated(excerpt)

Number of obs = 284  R-squared = 0.4620  
Root MSE = 0.947215  Adj R-squared = 0.2750

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<tr>
<th>Source</th>
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<th>MS</th>
<th>F</th>
<th>Prob &gt; F</th>
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</thead>
<tbody>
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<td>2.21671812</td>
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<tr>
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</table>

Between-subjects error term: ss  
Levels: 71  (70 df)  
Lowest b.s.e. variable: ss

Repeated variable: excerpt  
Huynh-Feldt epsilon = 0.9198  
Greenhouse-Geisser epsilon = 0.8820  
Box's conservative epsilon = 0.3333

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<th>Regular</th>
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anova scorepost excerpt ss, repeated(excerpt)

Number of obs = 284  R-squared = 0.6226  
Root MSE = 0.678747  Adj R-squared = 0.4914

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153
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Total | 256.348592 | 283 | .905825412

Between-subjects error term: ss
Levels: 71 (70 df)
Lowest b.s.e. variable: ss

Repeated variable: excerpt

Huynh-Feldt epsilon = 0.8070
Greenhouse-Geisser epsilon = 0.7785
Box's conservative epsilon = 0.3333