2015

Voices of steel: a case study of a Pennsylvania high school steel band

Boyce, Derek S.

https://hdl.handle.net/2144/15202

Boston University
BOSTON UNIVERSITY
COLLEGE OF FINE ARTS

Dissertation

VOICES OF STEEL:
A CASE STUDY OF A PENNSYLVANIA HIGH SCHOOL STEEL BAND

by

DEREK S. BOYCE
B.M.E., The Ohio State University, 1997
M.Ed., Pennsylvania State University, 2003

Submitted in partial fulfillment of the
requirements for the degree of
Doctor of Musical Arts
2015
Approved by

First Reader
Brandon Hasket, D.M.A.
Assistant Professor of Music
Saginaw Valley State University

Second Reader
Andrew Goodrich, D.M.A.
Assistant Professor of Music, Music Education

Third Reader
Richard R. Bunbury, Ph.D.
Lecturer in Music, Music Education
Dedication

To Katelyn and Ryan:

Always strive for your goals, no matter how long they take!
Acknowledgements

This dissertation would not be possible without the assistance of several individuals. Dr. Brandon Haskett, has been invaluable for his insightful guidance and editing throughout the dissertation process and for providing the encouragement to see the project to completion. I also extend my thanks to Dr. Andrew Goodrich for taking my project on while I was on campus for residency and for your assistance in the long process of getting my study through the IRB approval process.

Dr. Michael Bump, who established the steel band during my undergraduate program at The Ohio State University, served as my inspiration for learning steelpan and the history of the instrument. During my time there, Dr. Bump had the foresight to bring in Cliff Alexis and Tom Miller to share the history and virtuosity of the steelpan.

I give my sincerest gratitude to Tom Reynolds, for assisting me in becoming a steelpan educator, and sharing his skills in tuning and steelpan building with me. He welcomed me into his family and encouraged my pursuit of this degree. His dedication to steel band education and musical skill are truly inspiring.

Lastly, I give my love and thanks to my wife Sheri for her all of her support and encouragement during my doctoral program. It is amazing how much life has changed since the beginning of the program. Our small children have grown into active middle schoolers but you never let me forget about the end goal. I love you.
VOICES OF STEEL:
A CASE STUDY OF A PENNSYLVANIA HIGH SCHOOL STEEL BAND

DEREK S. BOYCE

Boston University College of Fine Arts, 2015

Major Professor:  Brandon Haskett, D.M.A., Assistant Professor of Music, Saginaw Valley State University

ABSTRACT

Steel bands have become more prevalent in U.S. schools since the early 1980’s. Through discussions with several of the leading steelpan builders in the United States, it is now estimated that there are over 600 steel bands in U.S. schools and universities. An appealing aspect of these ensembles is that they attract a wide range of students, from accomplished instrumentalists to students with no musical background. Due to their uniqueness in school music programs, steel bands are often extra-curricular activities but are often highly sought after for performances.

This case study examines students’ motivations to play in steel band (non-traditional music ensembles) including informal music education and learning, pedagogy, curriculum, and repertoire. It was found that students are attracted to the ensemble due to the uniqueness of the instruments, the repertoire, and for the opportunity to be part of a close community. Students value the opportunity for learning music in an informal manner where they are able to have input on the instructional process and what material is performed.
CONTENTS

Acknowledgements .................................................................................................................... v

CHAPTER 1- Introduction ........................................................................................................... 1

CHAPTER 2: Trinidadian Culture and the Development of Steelpan ................................. 9

Origins of Carnival .................................................................................................................... 11
Tamboo-bamboo ....................................................................................................................... 13
Carnival in Trinidad and Tobago ........................................................................................... 15
Development of Calypso ........................................................................................................ 17
Steelpan Origins ...................................................................................................................... 20
Initial Pennsylvania School Steel Bands .............................................................................. 37

CHAPTER 3 - Rationale and Purpose of the Study ................................................................. 40

Rationale for the Study ............................................................................................................ 41
Purpose of the Study ................................................................................................................. 50
Research Questions ................................................................................................................ 50

CHAPTER 4: Review of Related Literature ............................................................................. 51

Motivations to Participate in Music Ensembles .................................................................. 51
Teacher Preparation in Teaching Multi-Cultural Music ......................................................... 62
Writings on Steelpan and Steel Bands .................................................................................. 68
Music and Culture, Culture and Music ................................................................................. 77
Multicultural Issues in Music Education ............................................................................... 79

CHAPTER 5: Design and Methodology .................................................................................. 87

Research Questions ................................................................................................................ 87
Design of Study ......................................................................................................................... 88
Site ........................................................................................................ 88
Participants .......................................................................................... 89
The Program .......................................................................................... 89
Data Collection ...................................................................................... 92
Interviews ............................................................................................. 92
Observations ......................................................................................... 95
Data Analysis and Trustworthiness ....................................................... 95
Data Coding ........................................................................................ 96
Peer Review .......................................................................................... 97
Member Checks .................................................................................... 98
Researcher Bias ................................................................................... 98
Qualifications of the Researcher ........................................................... 99

CHAPTER 6 - A High School Steel Band in South Central Pennsylvania: Perception of Students, Teacher and Community ........................................ 101

Teacher Background and Steel Band Instruction Methods ..................... 101
Initial Motivations and Attraction to Steel Bands .................................... 106
Repertoire .............................................................................................. 113
The Unique Nature of the Steel Band ..................................................... 120
Conveying Cultural Knowledge Through Steel Band ............................. 126
The Steel Band Community .................................................................... 132
Benefits of Participation in Steel Band ................................................... 138
The Steel Band in the School Community .............................................. 141

CHAPTER 7: Discussions, Reflections, and Recommendations ............... 148

Discussion ............................................................................................ 148
Conclusions ........................................................................................................ 159
Suggestions For The Field .................................................................................. 160
Appendix A – Steelpan Builders ........................................................................ 173
Appendix B – Steelpan Tuners ........................................................................... 177
Appendix C – Steelpan Instruments ................................................................... 180
  Single Tenor Lead ............................................................................................. 180
  Double Tenor .................................................................................................... 180
  Double Seconds ................................................................................................. 181
  Double Guitar .................................................................................................... 182
  Triple Guitars and Cellos ................................................................................... 182
  Quads ................................................................................................................ 183
  Tenor Bass ......................................................................................................... 183
  Bass .................................................................................................................... 184
Appendix D – Questions for the Director .............................................................. 185
Appendix E – Questions for the Student Participants .......................................... 187
Appendix F – Questions for Members of the Community ..................................... 188
Appendix G – Glossary of Terms ......................................................................... 189
Appendix H – Steel Band Music and Accessories ................................................. 191
Appendix I - Conventions, Workshops, and Festivals ........................................ 193
References ........................................................................................................... 194
Curriculum Vitae .................................................................................................. 204
LIST OF FIGURES

Figure 1. Tamboo-bamboo instruments.................................................................14
Figure 2. Jab Jab..................................................................................................16
Figure 3. 1957 - Navy Steel Band, Puerto Rico.....................................................29
Figure 4. April, 1964 - The U.S. Navy Steel Band at the Guantanamo Bay Naval Base..30
CHAPTER 1- Introduction

The steel band and related steel band movement began in Trinidad and Tobago in the 1940s. Steel bands have traditionally existed as community-based musical ensembles in Trinidad and Tobago. Individuals have learned the music and instrument through informal music learning techniques and perform popular music from their culture, while also serving as an avenue to explore and perform Western classical music. The informal instructional methods traditionally used in Trinidadian based steel bands differ from the formal teacher driven approaches typically used in U.S. school music ensembles, which focus on performing art music and occasionally explores popular music.

Since becoming established in U.S. schools in the late 1970s, steel bands have grown in number and flourished. During the past forty years, steel bands in educational institutions have increased in number throughout the United States from 13 in 1981 to over 600 today (O’Connor, 1981; Remy, 1990; Haskett, 2014). A current list of U.S. school and university steel bands is available from Haskett’s professional website http://blhaskett.wordpress.com/steelpan-research. (Steelpan Resources, Brandon Haskett’s Music Education Blog. No date.)

Students and educators alike are attracted to the unique sound of the steelpan, the use of many popular music styles, and the ability to easily learn to play the instrument at a basic level. For similar reasons, the instruments are also easy for skilled music educators to teach. Steel bands offer an opportunity to utilize informal music learning techniques within the ensemble, which often differs from formal approaches frequently
found in traditional Western music ensembles. Classical concerts are more formal affairs, whereas the steel band is less formal and players are able to move around, dance, and engage the audience. For students who prefer a less structured environment this difference allows steel bands to attract a diversity of students, from the high-achieving gifted music student to the at-risk student with no music background. Wind, string players, and vocalists liked being part of an “alternative” ensemble that plays something other than classical literature. Students who have previously never played an instrument or been in an music ensemble enjoy being able to participate in steel bands and found the experience fun and unintimidating (Smith, 2012).

The growth of steel bands in Trinidad can be traced to the struggle for survival, and the goal to build a common identity and new life for citizens during colonial rule which began in 1511 with the Spanish slave raids; changed hands between the French and Dutch, and lasted until obtaining independence from Great Britain in 1962 (Trotman, 1983). These traits have continued, as Chappell (1997) commented that unity among members, collective participation, and social interaction are primary principles of the steel band. Sealey and Malm (1982) responded that currently, in the Caribbean, steel bands signify membership in a community. The activity requires the collective effort and dedication of all members to achieve the musical goals.

Steel band, as with other activities requiring strong communal bonds, contributes to a cohesive force, which, like other music ensembles, often compels members to attend and achieve in school in order to maintain membership and the community spirit found within the ensemble. For some students, this bond cannot be obtained through sports or
other traditional music activities due to a lack of connection to the activities. Steel band provides an avenue for students to participate in a musical community due to the ability to quickly become proficient at the instrument. The timbre of the instruments is unique and repertoire is based on familiar chords and progressions that people of all ages have been drawn to the instruments (Bush, 1981). School music instruction must capitalize on opportunities to make aesthetic opportunities possible while also teaching students about the cultural contexts of the music. Steelpan music is a form of folk music that is quite accessible. Many pannists in Trinidad and Tobago do not read music notation, having received little formal training, but perform with great musical talent. Performers acquire skills by mimicking the motions of others during rehearsals, and then accepting an invitation to become an apprentice player (O’Connor, 1981). Beyond intrinsic motivation, there are no prerequisite skills needed by students of any age. The message that music is for ordinary people appears clearly contrasted to the traditional Western view that a student must acquire and develop special musical skills. The ability for all students to create music is one overarching goal of music education (Sealy & Malm, 1982).

Steel bands also serve as a socializing agent. Trotman (1983) stated that the steel band has been often used as a training ground for music and self-discipline for students labeled as “unproductive.” The opportunity to hear “undisciplined” students master an instrument and entertain audiences in a traditional music program creates an environment with positive energy (Trotman, 1983). Likewise, some steel bands have acted as a channel for productivity and socialization in the U.S. society as well. During an interview
with Snider (1986), the Narell brothers recalled their experiences on the lower east side of Manhattan with their father, Murray Narell, a social worker; Murray Narell enjoyed enormous success with “problem kids” at the local youth center by adopting steel bands as an alternative activity during a time of violent gang warfare.

The increased popularity of steel bands in American schools coincided with increased interest in music from other countries. Participants of the Yale Symposium in 1963 concluded that children did not receive an education in non-Western, popular, and folk music in American schools (Woodworth, 1963). The Tanglewood Symposium report of 1967, sponsored by the Music Educators National Conference (MENC), indicated that music of all periods, styles, forms, and cultures belongs in the classroom (Schmidt, 1999). After these symposia, many universities began establishing non-Western ensembles and ethnomusicology programs in their music schools. As a result, many future music educators began learning about non-Western music while in college but not how to teach it (Campbell, 2004). Wang and Humphreys (2009) confirmed this finding, and noted that music education majors focus 93 percent of their formal music study and performance time on music styles from the Western art music tradition. This reinforced Campbell’s assertion that pre-service teachers are poorly prepared to teach music from other cultures.

Music educators, particularly those with a percussion background, have begun to consider the steel band a viable option for teaching music from other cultures. Steel bands allow students to choose an alternative or additional ensemble experience. Hildebrand (1991) noted, “The most important outcome of any music program is the
acquisition of intrinsic worth and value. For students of the steel band their experiences created self-worth, accomplishment, and lasting value” (p. 19). Guess (1998) remarked, “The steel band shows cultural diversity and the students learn about music from another culture; it is also a great public relations tool, a great teaching tool, and a great motivational instrument” (p. 53).

Cultural diversity in U.S. schools is expanding at the fastest rate since the early twentieth century in terms of three major elements: transiency, racial and ethnic diversity, and poverty (Hodgkinson, 2002). In response to this issue, many music educators are concerned that students acquire context, artistic awareness, and understanding of other cultures’ music (Boyer-White, 1988). To achieve this goal, teachers must provide opportunities to encounter music and arts of other cultures so students may appreciate the diversity of artistic creation. Steel bands represent a unique musical form that embodies the spirit and culture of Trinidadian musical ideas. Adding a steel band into a school music program can contribute to multicultural education by providing performance experiences with music of another culture, as music from other cultures can only become meaningful to those who have personally experienced it (Klocko, 1998).

From its inception in Trinidad and Tobago, the steel band has been a place where members have made connections within their community and formed strong communal due to the collective effort of achieving musical goals. These traits have continued in U.S. steel bands, and provide students with a motivation to participate in steel band. The steel band, as a folk art form, has a unique sound with fewer formal rules for participation, and instruction is often less formal than traditional school ensembles.
Relying on one another for learning music and the instrument aids in students forming stronger communal bonds. The opportunity to learn about music from another culture, while actively participating in it, helps students gain not only an appreciation for the culture, but also an aesthetic experience as well. All of these items are motivating factors for students to participate in steel band.

**Summary**

The number of steel bands in American schools’ music programs has increased since the 1970s for numerous reasons, including increased interest in music from other cultures and increased performance experiences with music of another culture through instruments that are accessible to students with limited musical backgrounds. Students experience musical accomplishment, increased self-worth, and a sense of belonging through steel band participation that may not be available to the students through other traditional school ensembles or activities. Educators should also be instructed on how to instruct and utilize the non-traditional ensembles in schools.

**Orientation of the Study**

Each section in this dissertation is provided to aid the reader in better understanding the history and culture of steelpan in Trinidad and Tobago and the subsequent development of a unique musical culture in the United States through steel band ensembles.

Chapter 2 provides a brief history of the islands, and the development of the musical culture of Trinidad through the struggles of colonialism. These experiences directly influenced the creation of the steelpan and are needed to provide context for the
steel band in this study.

Chapter 3 provides the rational and purpose behind this study. Steel bands are still new ensembles in U.S. schools, and there are few academic writings on these ensembles and how they are utilized. This study examined student, teacher, and community perspectives of a high school steel band and how these perspectives manifest themselves within the ensemble.

Chapter 4 is a review of the related literature, which guided this study. Relevant writings, dissertations, and theses on steel bands and steelpan education are included, as well as writings on student motivations to participate in music ensembles. Studies on teacher preparation to teach multi-cultural music and how this affects music instruction are examined. Writings on the connections of music and culture, and how a culture influences music, and other writings on multicultural issues in music education are examined. All of these sections influence the experience a student will have in a school steel band.

Chapter 5 outlines the design, methodology, and research questions utilized in this study. A description of the participants and study site are presented, as well as a definition of my role as researcher. Descriptions of procedures for data collection, analysis, and ensuring data trustworthiness are included.

Chapter 6 is the data section of the study and provides perspectives of the students, teacher, and audience members on the teacher’s steel band background and instructional methods used in the ensemble. This topic is important as the instruction methodology impacts student learning and motivation to participate in the ensemble. The
initial attraction to steel bands is investigated; with a separate section provided for the repertoire of the band as the popular based music styles that are played is a primary difference between the steel band and traditional school ensembles. The effect of the informal learning strategies utilized is explored in the section on the unique nature of the steel band. Members’ perception on cultural knowledge, which is gained and transmitted through the ensemble, is presented, and sections are included for the benefits members perceive they obtain from participation and benefits they perceive the school community gains from the steel band. Student motivations to participate and continue to participate in the ensemble are intertwined in each of these subjects.

Chapter 7 is a discussion of the findings, connections between the findings and literature and recommendations as to how the data in Chapter 6 can be utilized by other music educators to further expand music instruction and research.
CHAPTER 2: Trinidadian Culture and the Development of Steelpan

As noted in chapter one, the steelpan is a musical instrument that is accessible to students who lack formal musical training. Students experience strong communal bonds through learning to play the steelpan together. Traditional steel band culture can be traced to the music making practices of the inhabitants of Trinidad and Tobago. These musical traditions are the basis of the steel band music and ensembles experienced today. The following section presents the historical background leading to the origination of these traditions.

Christopher Columbus claimed Trinidad and Tobago as a Spanish colony on his third voyage to the new world in 1498. Originally the Amerindian inhabitants called the islands Iere, or “Land of the Hummingbirds.” Columbus named the islands “La Trinidad” or “Trinity” after the three hills he observed while approaching the island (Mason, 1998). The Spanish colonists viewed the islands as an agricultural resource and soon brought African slaves to the colony to care for the cocoa, tobacco, and the abundant sugar crop (O’Connor, 1981). Concurrently, the native population of Amerindians quickly died off due to diseases brought from Europe. Due to the small population on the island, the Spanish monarchy offered free land grants to Catholic settlers starting in 1783 (Bartholomew, 1980). French Catholics were among the largest group of settlers to arrive to take advantage of this arrangement (Thomas, 1985). The Spanish handed over the islands to the British in 1797.

Within twenty-five years, the population on the islands doubled. New colonists arrived from various countries throughout Europe and the Americas, including England,
Scotland, Italy, Switzerland, Ireland, Scotland, and France (Hill, 1993). The British abolished slavery on the islands in 1807, and to fill the void created by the emancipation of slaves, plantation owners turned to indentured servants from the East Indies and China. Countless servants lost their employment as the sugar industry slowed, and, with no other place to go, many remained in Trinidad.

Indentured servants from India valued their heritage and resisted assimilating into the Trinidadian culture and re-created aspects of their Indian culture in their own homes and neighborhoods which were largely unchanged from those practiced in the subcontinent of India. Numerous Indians continued to maintain separate musical traditions, while an increasing number began playing in the music groups of Trinidad (Stuempfle, 1995).

Spanish colonists brought Africans, primarily decedents of the Yoruba ethnic group from the current areas in southwestern Nigeria and southern Benin in West Africa, and the Mandingo/Mandinka ethnic group from the area encompassing Gambia, Burkina Faso, Guinea, Mali, Sierra Leone, Côte d'Ivoire, Senegal, Niger, and Mauritania to the islands during the period of slavery from 1783 until 1807. The drumming traditions of these peoples came from the religion of Shango, the Lord of Thunder and Lightning. These rhythms, also known as Shango, possess a very sophisticated form of polyphony while being played on skin drums (Gibson, 1986). The Africans brought a rich heritage of making music with whatever items were available since music was a part of everyday life. Portuguese missionaries exposed these cultures to Western Christian hymns and religious music practices be more specific. The confluence of these two religions created
an environment where Africans found a welcoming place to drum during Christian worship (O’Connor, 1981).

African slaves were forbidden to drum or speak in native languages. Drumming was forbidden because owners feared that the rhythms being played were subversive messages; however, most slaves would stay up at night after their owners would go to bed so that they could drum and socialize (Jette, 1991). The prohibition on drumming did not suppress their ideas, traditions, and history, as these traditions were transmitted to later generations through their oral tradition in songs and folklore. The only official respite from the prohibition of drumming came during harvest and Carnival (Jette, 1991).

**Origins of Carnival**

Catholics from Italy in 1268 A.D. began the tradition of holding a wild costume festival immediately before the first day of Lent, known as Ash Wednesday. Because Catholics were required to abstain from meat during Lent, they called their festival, *carnevale*, which means, “to put away the meat,” or “farewell to the flesh” (Riggio, 2004, p. 29). Carnivals in Italy became quite famous, and the practice spread to France, Spain, and other European Catholic countries. The carnival tradition spread to the Western Hemisphere as the French, Spanish, and Portuguese colonized the Americas (Riggio, 2004).

French settlers began hosting Carnival celebrations around 1785, as an upper-class celebration. All the classes quickly adopted the celebration, and elaborate parties and dances were held. Plantation owners would wear masks, wigs, expensive clothing, and would celebrate into the early hours of the morning. The slaves found special
meaning in the use of masks, as masking is widely used in many African cultures rituals for the dead. As a result of the French ban on celebrations, the African slaves held their own carnivals using their own rituals and folklore, while also imitating the French behavior (Liverpool, 1991). For the African slaves, Carnival became a way to take a break from harsh plantation life, in addition to expressing their cultural traditions.

After slavery was abolished, freed slaves began hosting their own Carnival celebrations. These celebrations grew more elaborate than the French celebrations, and soon became more popular. Individuals would parade through the streets at all hours of the day and night playing their drums while also chanting and dancing (Novotney, 1991). Feathers were frequently used on masks and headdresses for carnival in the same fashion as their ancestors did in Africa. These are seen a symbol of the human ability to rise above their problems, pains, and illness (Riggio, 2004).

Other important aspects of the festival included the ancient traditions of parading and moving through villages in costumes and masks. The act of circling the perimeter of the village was believed to appease the spirits of angry relatives who had died and passed into the next world, which would bring good fortune to the participants (Manuel, 2006).

Upper-class European settlers began to withdraw from the public carnival celebration shortly after the emancipation of the slaves due to increasing physical violence. The British enacted laws based on strict color classifications to control the tensions in an ethnically divided society. Whites were considered first class citizens, and all others were relegated to second-class status (Hill, 1993). Newly freed slaves were resented for their dominance of Carnival. The people of Trinidad encountered social
tensions with the British government due to intensified drumming throughout the night. Masquerade bands comprised of rowdy men roamed the streets wearing masks. This practice enabled the members to play their drums loudly and loot the areas, taking whatever they wanted (Brown, 1996).

In order to address tensions on the islands and the civil unrest they created, the British government created new laws to make Carnival a more peaceful and lawful event. Policies to control Carnival known as the Peace Preservation Act of 1884 were initiated, which outlawed noise, torch processions, and, most importantly, drumming during Carnival (Novotney, 1993).

While the Peace Preservation Act prohibited drumming during Carnival, skinned drums remained on the island and were played only in private after the ban was enacted; drumming was virtually impossible to regulate (Manuel, 2006). The prohibition on drumming was a convenient means for the colonial government to address lawlessness and the anxiety that skin drums were being utilized to send messages in order to organize a coup without showing vulnerability to possible insurrection. (Gibson, 1986).

**Tamboo-bamboo**

Due to the ban on using skin drums, Trinidadians created another means to satisfy their musical desires by playing on whatever was available for Carnival including bottles, spoons, and brake drums. The biggest innovation was the use of the bamboo joints that lined the riverbanks. Bamboo would be taken and cut into various lengths and struck on the ground producing many different tones. *Tamboo* comes from *Tambour*, the French word for drum; therefore, *tamboo-bamboo* literally means bamboo drum.
The various lengths of bamboo possessed specific names. The longest, or bass bamboo, was named the “boom” due to the low bass sound produced. The middle lengths were called “fullers,” since they filled out the middle. Lastly, the high-end short sticks were called “cutters.” This form of interlocking, rhythmic music utilized rhythmic styles resembling the three part drumming traditions of West Africa (Novotney, 1993). As this style of music developed, bands began to incorporate more metal instruments, such as saltboxes, biscuit tins, olive oil containers, and frying pans, using essentially anything that could picked up from the refuse of the wealthy (Stuempfle, 1995).

Tamboo-bamboo bands encountered fierce territorial rivalries that developed as one group tried to outperform another (Gibson, 1986). Prominent groups included Alexander's Ragtime Band and the Saligator's Bad Behavior Sailor Band from Hell Yard. At one point the fighting became so intense that members of rival bands began to sharpen the ends of their bamboo shoots into spears to stab opponents (Gibson, 1986). This practice can be traced back to the kalinda, or stick dancing, a popular form of activity.
historically for male slaves. Blows had to be delivered with two hands on the stick, and the first fighter to draw blood was declared the winner. The champion from each band was brought to Carnival (Mason, 1998).

Noticing increased violence the colonial government began to fear it would soon be directed toward them. Simultaneously, the riverbanks on the island were being stripped bare of all of the bamboo trees causing environmental damage. To alleviate these problems, the government began placing restrictions on the music known as Tamboo-bamboo in 1934 (Gibson, 1986).

Tamboo-bamboo began to be replaced by metal instruments in 1935. That year, the Newtown Tamboo-bamboo band led by “Lord Humbugger” Carlton Forde discarded their bamboo sticks and replaced their instruments with metal containers including garbage cans, lids, biscuit tins, paint cans, brake drums, bottles and spoons for the commencement of Carnival. When played together, these newfound instruments created a novel sound and rhythm. Soon after, the band changed their name to Alexander's Ragtime Band and thrilled audiences with their fresh sound (Gibson, 1986).

**Carnival in Trinidad and Tobago**

The musical course of Trinidad and Tobago was beginning to change. By Carnival Monday evening, most of the Tamboo Bamboo bands had followed the lead of Alexander's Ragtime Band, and the streets resonated to the people chanting to clanging metallic sounds. Before discussing the development of the steel bands, an explanation of the Carnival celebration and calypso will help create the context for them.
Carnival's principal components are calypso, steelpan, and playing masquerade or mas. In the historic capital city of Port-of-Spain, Trinidad, these elements are harmoniously structured to form a five-day ritual pageant beginning with the King & Queen Contest (Friday) where a King and Queen of the J'ouvert are chosen. Individuals are chosen for these honors based on their visual representation of current political and social events. Panorama, the large steel band competition takes place on Saturday, Dimanche Gras on Sunday, J'Ouvert on Monday, and the Parade of Bands on Tuesday. Otherwise known as “Dirty Mas," J'Ouvert takes place before dawn on the Monday (known as Carnival Monday) before Ash Wednesday. It means "opening of the day." On this day, celebrants dress mainly in costumes which satirize current political and social issues. A common character to be seen at this time are "jab-jabs," which are devils painted blue, black or red with grease paint, complete with pitch fork, pointed horns and tails (Mason, 1998).

![Jab Jab](http://www.gotrinidadandtobago.com/resources/images/Carnival-under-1Trinidad-(Jouvert3).jpg)

**Fig 2. Jab Jab**

These events conclude with a quiet day of reflection, fasting and penitence known as Ash Wednesday, the first day of Lent (Hill, 1993).

Carnival in Trinidad and Tobago is the most anticipated early event of the year, and preparations occur year-round. Carnival reflects the identities of the immigrants who immigrated to the island from Europe, Africa, India, and China. African, Asian, and American Indian influences have also influenced music creations for Carnival (Scher, 2003). The genesis of this "world's greatest" Carnival has been attributed to the interaction of the many cultures of Trinidad.

Musical competitions are a highly anticipated aspect of Carnival. Groups practice for months trying to succeed at the competitions, which are shown live on television, with the competitors’ ultimate goal being named the Calypso Monarch, Soca Monarch, or Panorama Champions. Winners of these competitions receive enormous trophies, cars, prize money, and possible endorsement deals.

**Development of Calypso**

Calypso incorporates syncopated, interlocking rhythmic patterns, played to support a melody. These are historically found in West African traditional music, and were originally used as a manner of communication signifying words and instructions between slaves, in addition to being a form of entertainment. Calypso rhythms can be traced back to the arrival of African slaves in the West Indies in the 1600's. Brought to Trinidad to work on sugar plantations, slaves were stripped of all connections to their native land and family. They were also forbidden to communicate with each another outside of their assigned work areas.
Kaiso, a music containing subjects of self-praise and cleverly concealed political subtext that is generally improvised and narrative in form, was imported with the slaves from West Africa. This musical genre was used to mock plantation owners and to communicate with each other. *A griot* sang many early Kaisos in French Creole. The *griot* was originally a term referring to traveling musicians in West Africa. Later, they were referred to as a *chantuelle or chantwell*, a term meaning singer (Cowley, 1996).

During the period of tamboo-bamboo (1884-1935), *chantwells*, who acted as a singing cheerleader for the stick fighters, began to sing an exotic song form called *cariso*, a type of Trinidadian folk music with satirical and insulting lyrics, along with the traditional kalinda chants. The confluence of songs created a new song form called the calypso. As English became the primary language, words were adjusted and the chantwells became known as calypsonians (Liverpool, 1991).

There is dispute over how the term “calypso” developed. Some argue it came from *kaiso*, a Hausa word for “bravo;” others contend the word is from the French *carrousseaux*, a drinking party; the Spanish *calliso*, a tropical song; or the Carib *carieto*, also meaning a tropical song. (The Carib family of languages is indigenous to South America.) It developed to become both a dance and a cultural record of events (Cowley, 1996).

Daniel Crowley, a noted ethnomusicologist specializing in Trinidadian music, defined the calypso as follows:

The subjects are usually topical, about local events, or attitudes toward foreign events; derision, allusion, and double entendre are often employed. Calypsos may also function as tributes to famous people, as blackmail, as political electioneering, as commercials, and love songs. The words take precedence over
the music, and employ lower-class idioms, a Creole vocabulary, and an exaggeration of local stress patterns. Calypsos typically have four verses of eight lines each, except that the first verse is repeated. Verses are separated from one another by a four-line chorus with a simple rhyme scheme (Crowley, 1960, p. 57).

The means by which Calypsonians develop their song material is manifested in the colloquial names provided them including, “the people’s newspaper,” “instruments for change in society,” “a mirror of society and articulator of the feelings of the people,” and “poets, prophets, and social commentators” (Mason, 1998, p. 20).

When calypso first developed, Calypsonians formed groups and performed throughout Trinidad in a variety of locations during the months leading up to Carnival. These locations were temporary tent cities made with poles and covered with any material available that would provide shelter from the rain, usually palm tree branches, and were gone after Carnival. Calypsonians took on individual nicknames, and the tents were also named. The first calypso tent in Trinidad was the Railway Douglas Tent, which opened for business in Port-of-Spain in 1921, and shortly after was the Redhead Sailor Tent (Dudley, 2004).

Calypsonians were always open to new ideas, and in the 1930s, Calypso was strongly impacted by American popular songs and jazz music. Popular Calypso musicians included: Attila the Hun, Wilmoth Houdini, Mighty Growler, Lord Beginner, Lord Caresser, Lord Executor, Lord Invader, Roaring Lion, King Radio, Duke of Iron, Mighty Destroyer, Macbeth the Great, and Lord Kitchener, who was considered the "Grandmaster" of Calypso. The only other Calypsonian to achieve the same level of fame as Kitchener is the Mighty Sparrow. Steel bands in Trinidad and Tobago commonly perform both musicians’ works (Dudley, 2004). The musical form and development of
the Calypso would eventually be translated into much of the popular music that is played in steel bands.

**Steelpan Origins**

At the 1935 Carnival, members of existing bands found other methods to create music and parade. Metal containers had completely replaced bamboo as the primary source for the rhythmic music. Group members gathered garbage cans, grease barrels, paint tins, and created rhythm on whatever could be obtained. Players used different types of metal items to obtain desired tones, not purposefully tuning the metal to a pitch standard, to play the same traditional rhythms as tamboo-bamboo bands (Gibson, 1986). Some players accidentally discovered that as these metal objects were struck, different pitches resulted. This date is debated by Johnson (2011) who placed the date as February 20, 1939. Many legends exist to explain who the first individual was to conceive the idea of a steelpan with different notes. The following section includes plausible stories that have been passed down by various bands and cannot be established as fact.

Members of the Alexander's Ragtime Band group claim that one of its young members, Mando, produced a musical note from a pan. The Gonzales Band members claimed to create one spontaneously after one of their bass bamboo player's instruments broke. Needing to fill in a rhythmic gap an individual started to hit an empty gas tank from a car that was nearby (O’Connor, 1981).

The most accepted legend involves another famous member of a band by the name of Winston "Spree" Simon, a kettle drum player for the John John Band. According to legend, he lent a drum to Wilson "Thick Lip" Bartholomew. When Bartholomew
returned the pan, it was smashed and so bent out of shape that the drum lost all of its original tone. As the drum was being repaired Simon noticed the creation of many different musical notes. This led to his development of the first convex pan (Stuempfle, 1995). In 1940, using a standard biscuit tin, Simon made what became known as a melody pan. This instrument had the capacity of playing diatonic songs such as *Mary Had A Little Lamb* with the eight notes hammered into the steel. This drum is the predecessor to what would become the tenor pan (Novotney, 1993). Many pannists in Trinidad disagree with this legend due to Simon being of a very young age at the time and not having the physical strength to build the steelpan (Applewhite, E., personal communication, June 29, 2012). More individuals began experimenting with the idea of the new instrument, and more bands formed. The grumbler pan, the baylay, chu-fak, and many others were created through this experimentation. The goal behind all of the experimentation was to create louder instruments with expanded ranges (Novotney, 1993).

World War II led to the cancellation of the 1941 Carnival, and musicians used this time to experiment with the steel instruments. While Europe was consumed with despair and destruction in the early forties, underprivileged and unemployed young men were filled with hope and excitement in Trinidad. Builders soon realized that by pounding against the flat end of the oil drum left an indentation, changing the sound as well.

Word soon spread about the discovery and the possibility of making music with oil drums. Further experimentation followed. Inventors discovered that by changing the size and depth on the indentation that more notes could be produced. As the creativity of
individual builders took over, multiple pitches began to appear on a single drum. During this time, Ellie Mannette developed a concave steelpan containing nine notes. This drum was named the "Barracuda" and had been used while practicing with the band in preparation for the large celebration for V-J Day (Bump, 1995). Rival bands witnessed this new instrument and wanted it for themselves. Not long after the band left Woodbrook on the road to Port of Spain for the night’s celebration, a rival band called Marabuntas started a fight. At the beginning of the fight, Mannette had the Barracuda but dropped the pan and ran back home (Nurse, 2007, p. 355).

Upon the conclusion of World War II in 1945, Trinidadians spontaneously took to the streets in celebration, like most people around the world. At these celebrations, individuals could be seen carrying their new instruments and other metal objects. These celebrations technically became the first steel band (Bartholomew, 1980). While the new instruments made music, limitations existed, and a new larger instrument with a wider range was needed, and Mannette attempted to build a bigger instrument out of a 55-gallon drum. This was the first steelpan to resemble the modern steelpan. According to Nurse (2007):

With no pan to play and wanting to take part in the next year’s contest, I decided to build a big pan and told my friends so. Everyone said it couldn’t be done, and even if I did it would be too big and heavy to carry. But I’d decided that I wasn’t going to build the [ping pong] anymore. With the Barracuda gone I needed to build something else. There was a piece of old pan that was sitting around in my father’s backyard that was perfect for building the bigger pan…I bought a two-pound hammer and with a raw barrel went to the back of the Oval pavilion and under the big saman tree and under the bleachers and worked daily on the drum. No one except for the groundsmen, knew that I was actually building it for the Skinner’s Park contest. When it was time for the contest, I took the pan down to San Fernando, and the nation saw the big pan for the first time. This was in 1946 (Nurse, 2007, p. 356).
Mannette named this steelpan the Invader in honor of his band (Gibson, 1986). Soon after the creation of the Invader, many other steel bands started to make steelpans out of 55-gallon drums. Oil drums could easily be obtained, as thousands were stacked in storage on the U.S. Naval base at Chaguaramas, Trinidad due to World War II stockpiles.

The creation of the large steelpan is not without controversy. Neville Jules stated that Ellie Mannette saw a large steelpan made out of a 55-gallon drum at a competition that both of them had entered. According to Jules:

We were all backstage and when our name was called we went up on stage to play and sat with our pan positioned between our legs. When this guy named Snatcher was called. He came out with this huge pan, a 55-gallon drum and couldn’t sit the way we sat. He had to position the pan between his knees to play. The whole theatre laughed at the guy, because they saw this pan was so huge and it became a big joke to them. They couldn’t see what he probably saw… Within a few months, two to three, Ellie, I, and everyone else began using the big pan, the 55-gallon drum (Nurse, 2007, p.13).

As steelpans became more prolific, the number of bands increased, thus creating even more violent rivalries. Steel bands were made up of instruments such as the ping pong (now known as the tenor pan), double seconds, guitars, cellos, bass, and brake drum, also known as the iron. Updated lists of steelpan builders and tuners are available in Appendices A and B, and descriptions of each instrument in a modern steel band along with diagrams and range of the instrument can be found in Appendix C. The primary reason for the creation of most of these large bands was for the Carnival celebration. The British colonists, in an effort to curb disruptions and help the islanders appear more "civilized" and educated, introduced the classical literature to the steel bands. The members of the steel bands would stay up all hours of the night practicing their music in wide-open vacant lots called panyards, which also serve as local neighborhood gathering places.
In an attempt to contain the rivalries and violence, a festival called the Steelband Fiesta was established which coincided with Carnival. This was an open-air festival where steel bands would parade around the streets playing their music while being judged. Each judge would score the groups, and an eventual winner was named (Bump, 1995). Although the contest helped to silence some of the fights, arguments arose after the contest, which resulted in fighting and violence. The bands, comprised mainly of young unemployed black men from the same neighborhood, often found themselves in violent confrontation with other groups from other neighborhoods, similar to the gang warfare occurring in U.S. cities at the time. As a result, young men who should have been regarded as musical pioneers, were viewed as troublemakers by the middle and upper classes and regarded as social outcasts. (Dudley, 2008). The unruly actions gave the pannists and members of the steel bands a bad reputation and created the image of the players being vagabonds. Trinidadian citizens did not want to hear steelpan music due of the reputation of the players and the destruction they caused (Gibson, 1986).

British colonists, who were unaffected by the violence and fights among the steel bands, wanted to share the new instruments and music with the people of their homeland. Trinidad was invited to send a steel band to the Festival of Britain at the South Bank Exhibition in 1951, representing the first time that the steelpan was recognized globally as an accepted instrument. A group of the finest steelpan players from all over Trinidad formed the Trinidad All Star Percussion Orchestra (TASPO) for the festival and a subsequent tour of the western part of Europe (Chappell, 1997). The group consisted of
E. Mannette, A. Belgrave, A. Williams, G. Sealey, P. Davidson, S. Betancourt, A. DeLabastude [sic], D. Smith, and Winston "Spree" Simon (Grimes, 1951). This excursion almost did not happen, however, as Anthony Williams noted:

Before TASPO left, it looked uncertain. It looked like the band wouldn’t leave Trinidad and Tobago. But after the band gave a few performances, people started to hear the different sounds. They realized it was a different band and it was something that should be exported. So then they contributed… It was the Governor Sir Hubert Rance when he said TASPO must go to Britain. So the public contributed and so that became a reality (Stuempfle, 1995, p. 97).

The members of TASPO were local heroes, and a large crowd assembled to see the band off on their journey to Britain. John Grimes, a reporter with the Guardian, recorded the event and said:

It was a grand day for the steel bands. The story should be written in octaves, semi-quavers and the sharps of the sambas, rhumbas and calypsos. It is the all-time success story of Trinidad. From rags to riches; from the Dry-River to the Albert Hall; from intolerant non-entity to world-wide recognition (Stuempfle, p. 97).

This new form of music awed many audience members during the tour. The groups were already playing the traditional calypsos and reggae. Now they had begun to play music from Mozart and Bach as well (Stuempfle, 1995).

Steelpan arrangements of foreign tunes became known as “bomb tunes.” The “bomb” was a competition in the 1950’s and 1960’s where European classics were arranged for steelpan. By performing classical music, the steel bands sought to shed the identity as being ruffians and obtain a more favorable view of their music as being a legitimate art form. Beethoven’s “Minuet in G” is credited as being the first “bomb” tune, arranged by Neville Jules and performed by the All Starts in 1958 (Dudley, 2004). Bands began to practice secretly in order to surprise the crowds and upstage their rivals.
on the Monday street party during the first day of Carnival known as J’ouvert, a practice that has come to be known as “dropping the bomb” (Dudley, 2004). Bomb tunes now include a variety of music including jazz, show tunes, and rock songs, all set to a calypso rhythm.

In 1963, the Carnival Development Committee formed to organize the street festival into an even larger event and started the Panorama Competition. Each participating band would compete for recognition as the superior band. This competition, held in a large outdoor stadium and televised live in Trinidad, every band is required to play a 10-minute rendition of a calypso of choice. The winners and other participants are rewarded with monetary prizes and other perks, such as trips overseas and an increase in performance engagements at home (Mason, 1998). A competition that started as a street festival as an outgrowth of the original Steel Band Fiesta has now become a national event with the entire country embracing the music of steelpan.

Over time, the steelpan became socially legitimatized. In Trinidad, however, the music still had the reputation as being the music of ruffians. This outlook began to change when Ellie Mannette moved to the United States. Mannette left Trinidad due to a lack of respect for his work and to promote steelpan (George, 1990). Trinidadian pannists became outraged when they heard of how the instrument was flourishing in the United States. They could not believe that people of another country were embracing their music (Gibson, 1986).

As steel bands grew in popularity in the United States, the government of Trinidad began to sponsor initiatives to enhance the image of the pannists. Official
government involvement included the hiring of bands to perform at social and state functions (Dudley, 2004). Corporate sponsorships provided the bands with funds to purchase steelpans and pay for arrangers, tuners, and uniforms. Corporate-sponsored steel bands included the Pan Am North Stars (since disbanded), BP Renegades, Shell Invaders (now BWIA Invaders), Coca Cola Desperadoes (now West Indian Tobacco Company [WITCO] Desperadoes), and Canadian Imperial Bank of Commerce (CIBC) Starlift (now Petrotrin Starlift). The involvement of corporate citizens with steel bands helped to erase the negative view of the ensembles and brought acceptance by the larger community. Pannists are currently regarded as the cultural ambassadors of Trinidad, and the steelpan has been officially recognized as the national instrument (Dudley, 2004). Additionally, sponsors and bands have grown to respect each other's role in their mutual existence.

All parts of the steelpan tradition can find its roots in the traditions of the people of Africa. The rhythms played are directly linked to the polyrhythmic ones utilized by African cultures as well as playing on any available object to make music. One trait that is truly African is the inclusiveness of music participation (Dudley, 2004). The African tradition of inclusiveness lends itself well to establishing a new musical tradition in the United States.

**Steel Band in the United States**

Steel bands were brought to the United States shortly after their development in Trinidad and Tobago through the efforts of Admiral Dan Gallery, Franz Grissom and the Navy Steel Band, Murray Narell, Kim Loy Wong, Cliff Alexis, and Ellie Mannette. Each of these groups and individuals contributed to the growth of steelpan not only in the
United States, but in Trinidad as well.

The U.S. Navy Steel Band was established by Admiral Dan Gallery, commander of the U.S. Naval activities in the Caribbean, and was the first steel band in existence with all white personnel. It was responsible for widespread attention to calypso music the steelpan in the late 1950’s. During an inspection of the U.S. Naval Base on Trinidad in 1956, the Trinidadians government invited Gallery to observe the Carnival parade. Gallery became enchanted by the sound and spirit of the steel band and ordered the creation of the U.S. Navy Steel Band. Chief Musician Charlie Roeper, the bandleader for Navy bands based in San Juan, Puerto Rico, was charged with the task of getting a steel band established and performing (Grissom, 1993). Roeper informed Admiral Gallery that Navy musicians would not be able to learn the steelpan; however later that spring, Gallery sent the musicians to Trinidad to acquire instruments and learn to play them, not allowing their return to Puerto Rico until this occurred (Nurse, 2007). Ellie Mannette hosted the Navy Steel Band, built their instruments, and trained them while they were in Trinidad. Mannette’s first encounter with a U.S. Navy officer created a sense of fear and trepidation in the steelpan builder as the officer called Mannette out by name. Mannette’s fear was being sent to prison for pilfering steel barrels from their base. The fear of imprisonment dissipated upon being informed that the Admiral wanted a personal meeting about building steelpans for the Navy. Mannette, being an opportunist, thought this might be a good way to obtain a supply of steel barrels without stealing them (Nurse, 2007). Admiral Dan Gallery was telephoned at the naval base in Puerto Rico:

Gallery introduced himself, “Mannette, I am Dan Gallery, the commander of the western hemisphere fleet. I understand you’ve been stealing my drums. So, I want
you now to build me some steel drums…I will fly you out to Puerto Rico and you will build them here.” “Of course I agreed, what else could I do?” Mannette replied. (Nurse, 2007, 384)

A navy plane flew Mannette to Puerto Rico, where an invitation was extended for the builder to stay and live in the barracks long as he desired. Mannette stayed for almost a year because the American dollar was worth more than Trinidadian currency (Nurse, 2007, p. 385).

Fig 3. 1957 - Navy Steel Band, Puerto Rico
Courtesy of the Nimitz Library, United States Naval Academy, Annapolis, MD
Franz Grissom became the director of the steel band in 1957 and began arranging music for the new ensemble and transcribing music from bands in Trinidad and Tobago. The band accepted several high profile performances on the Ed Sullivan Show, the Bob Hope Show, the World’s Fair in Brussels, and a performance at the White House in 1958, which exposed the American public and people around the world to the sound of the steel band (Nurse, 2007).

The U.S. Navy Steel Band released seven full-length albums, which were recorded in a state-of-the-art recording studio at the base in Puerto Rico. This studio also was used in creating early recordings of several other steel bands from Trinidad and Tobago, including the Invaders. Many Trinidadians felt that the U.S. Navy was stealing from their culture and were jealous of the musical literacy that enabled the Americans to become so proficient at the steelpan. What would take the Trinidadian players weeks or
months to learn by rote, the Americans could learn in days (Smith, 2012). The U.S. Navy Steel Band was stationed in Puerto Rico until 1972, when they moved to New Orleans where it remained until being decommissioned in 1999.

The U.S. Navy Steel Band had a tremendous effect on the spreading of the steel band art form throughout the United States. These performances encouraged young individuals to explore the steelpan. Phil Solomon, originally of Guyana, and Tom Reynolds, originally from St. Croix, U.S. Virgin Islands, are two prominent steelpan builders who had their first steelpan experiences through exposure to the U.S. Navy Steel Band (Solomon, P., personal communication April 13, 2011), and (Reynolds, T., personal communication April 21, 2011).

While the U.S. Navy Steel Band was bringing the music of the steel band to the United States, other individuals came to the country to carve their own place in the development of the steel band. Rudolph Carter emigrated from Trinidad to New York City in 1949 under his mother’s name King (Nurse, 2007). King did not have a steelpan upon arrival in the United States and had to acquire one. Many problems were encountered when attempting to build an instrument, from finding barrels to the construction process. King said:

I was staying on Livonia Avenue with an aunt and decided to use the backyard. Those houses had a lot of windows. While I was sinking the drums, I made quite a lot of noise and somebody threw something out the window on me. I didn’t know if it was water or pee; I’m still not too sure . . . I went to the park at the corner of 123rd St, Morningside Park. I was fixing a fire to burn the drum and so concerned with that that I didn’t notice a police standing behind me . . . He said I looked like I didn’t know better and gave me a break (Nurse, 2007, p. 101).

King’s performances became the earliest known instance of steelpans in the
United States (Goddard, 1991). Problems for performing without a contract were encountered with the local musicians’ union in New York who were unfamiliar with the steelpan. King was taken to meet the president of the musicians’ union because “everyone was excited and saying, come see this thing this guy has! The president finally approved and I joined the union as a percussionist in 1950” (Nurse, 2007, p. 102).

After King performed at the Apollo in New York City, performances were scheduled with Massie Patterson on Calypso Carousel throughout the county. Producer Sam Manning booked King to perform at the Blue Angels club in Chicago for a two-week option. King’s performances were so popular that Manning scheduled eight additional weeks of performances (Nurse, 2007). While King brought his knowledge of the steelpan with him from Trinidad, others became interested in the instrument from its aspect as a folk instrument.

Pete Seeger, an American folk musician became fascinated with the steelpan and began experimenting with creating, tuning, and performing on the instrument. From 1955 to 1969, Seeger toured universities throughout the United States where lectures and instrument building workshops were conducted. Seeger was lecturing at this time due to the backlash experienced for expressing what were viewed to be un-American opinions. Seeger assisted in starting steel band ensembles at several institutions including U.C.L.A., Cornell University, and Michigan State University; however, all of these ensembles were short lived. The most important impact made by these early bands was made by The Bamboushay Steel Band, at Michigan State University, which produced a record, later released by Folkways (Bluestein, 1962).
At the same time Seeger was experimenting and touring with the steelpan, Murray Narell, a social worker based in New York City, was establishing youth steel bands with the assistance of Rupert Sterling and Kim Loy Wong. Sterling and Wong established the youth steel bands by cultural group, similar to the neighborhood groups found in Trinidad and Tobago (Nurse, 2007). Narell began employing Ellie Mannette to build steelpans for the New York steel bands during trips to Trinidad. Narell eventually convinced Mannette to move to New York in 1967 and provided assistance in setting up a steelpan workshop in Queens where Mannette began establishing school steel bands (Nurse, 2007).

As universities and communities were introduced to the music of the steel band, another individual was beginning to incorporate steel bands in yet another way. Many steel band artists and educators have noted Władziu Valentino Liberace as being instrumental in the developing popularity of the steelpan in the United States. Liberace, an American pianist who was widely popular in the United States for his flashy Vegas shows, was always looking for new music to incorporate into them. Hugh Borde was performing with a steel band at the Trinidad and Tobago pavilion at the Montreal Expo in 1967. Liberace saw the band and immediately booked them to perform at a concert in the Shrine Auditorium in Los Angeles. Liberace toured with Borde’s band for two years (Nurse, 2007, p. 53). During this two year span with Liberace, Borde’s steel band performed on The Ed Sullivan Show, The Mike Douglas Show, The Tonight Show, The Merv Griffin Show, and The David Frost Show, and toured extensively in the United States. The popularity of Borde’s band led Liberace to constantly find ways to include steelpan in shows (Nurse, 2007, p. 53).
As audiences began to become more familiar with steel bands, the members of the ensembles began to sense potential opportunities for making a living in the United States. Cliff Alexis, steelpan pioneer, first came to the United States with the National Steel Band of Trinidad in 1964 for a conference. Afterwards, the ensemble toured throughout the Southwest. Alexis moved to Brooklyn, New York, in the spring of 1965 under the assumption that there would be opportunities to play steelpan for money. Due to the small number of local paying opportunities, Alexis began to travel from city to city playing for money. This continued until 1970 when Alexis moved to St. Paul, Minnesota, permanently to live with family. Believing that steelpan music would do well in schools, Alexis’s wife, a teacher in the school system, was able to get into the schools in St. Paul. Alexis obtained a position at the Performing Arts Center, an arts magnet school, after discussions with the school district. During this time, Alexis built steelpans for other schools in Minnesota and tuned for the U.S. Navy Steel Band. It is through the connections with the U.S. Navy Steel Band that Alexis met Al O’Connor who wanted to begin a university steelpan program at Northern Illinois University in DeKalb, Illinois (Alexis, C., personal communication, July 22, 2011). This steelpan program is now one of the largest in the U.S.

Ellie Mannette, one of the primary individuals involved in creating the steelpan, has comparable story to Alexis and helped establish the foundation for American steel bands. Mannette has been connected with the steelpan in the United States beginning with the U.S. Navy Steel Band. Mannette credits the U.S. Navy Steel Band with providing the opportunity to emigrate to the U.S. to continue steelpan development.
Through travels with the U.S. Navy opportunities to meet high government officials, college presidents, and potential customers arose. Mannette’s shared vision of establishing steel bands in schools began in the late 1960’s and early 1970’s with Murray Narell and Franz Grissom from the U.S. Navy Band.

Mannette’s tuning technique was aided largely through the input of Jimmy Leyden in 1971. Leyden was the music teacher Horace Greeley High School in New Castle, New York and had purchased a set of steelpans for the music program. When the instruments arrived, they were not tuned to the traditional A-440 pitch standard, so he contacted the music store about tuning them. Since the instrument builder had moved, the store recommended that he see Ellie Mannette. Upon working together, Leyden noticed Mannette only tuned instruments by ear. Leyden introduced the chromatic strobe tuner, allowing the use of harmonic overtones to achieve a more perfect sounding note. Leyden and Ellie worked closely together for several years. In 1974, Leyden’s steel band was invited to perform at the MENC New York State Convention. This gained Ellie and the steelpan exposure among music educators and gradually orders began coming in for steelpans (Smith, 2012).

Mannette began working with Howard University in Washington D.C. and also traveled to many other college campuses to host workshops where attendees would learn to build, tune, and play steelpan (Nurse, 2007). These programs, perhaps more than anything else, helped spread steelpan and legitimize it as an instrument rather than a novelty.

One of the first steelpan workshops was offered each summer from 1983 to 1989
at Portland State University’s Haystack School of the Arts in Cannon Beach as a community outreach program. Jimmy Leyden was asked by the director to teach the workshop and he persuaded Mannette to join him; eventually Andy and Jeff Narell, two American steelpan performers, and Tom Miller were added as instructors due to their work spreading the art form in the United States. The workshop had three educational and performance “tracks”: contemporary steelpan playing with the Narell brothers, steelpan education with Jimmy Leyden, and a steelpan building/tuning led by Ellie Mannette. The summer workshop culminated in a public performance with all of the attendees along with the clinicians (Haskett, 2014). The program continued to grow until logistics of space, housing, and scheduling became complicated and the university removed funding for the program (Nurse, 2007).

West Virginia University (Morgantown) hired Mannette in 1992, and established the University Tuning Project, an apprenticeship program where a new generation of steelpan builders would be trained. With the assistance of WVU Research Corporation in May 2000, the University Tuning Project evolved into a for-profit business known as Mannette Steel Musical Instruments, which seeks to provide master craftsmen, instruments, and services for the steel band community (Personal communication, Sheeder, W., March 22, 2013).

The same year that the University Tuning Project began, the first annual Meet Me In Morgantown (MMIM) steel band workshop occurred, bringing the most prominent steelpan players together in one location to spread the love and knowledge of steelpan (Personal communication, Sheeder, W., December 12, 2013). This workshop was
discontinued in 2010 and was re-formed in 2012 as Ellie Mannette’s *Festival of Steel*.

Marc Svaline was the first instructor at MMIM. Svaline first met Mannette in 1984 while inquiring about the purchase of steelpans for Washington High School in Pennsylvania. The next section highlights the beginning of both the Washington and Chambersburg High School steel bands.

**Initial Pennsylvania School Steel Bands**

Marc Svaline, the past president of the now defunct North American Steel Band Association, established the second school steel band in the state of Pennsylvania at Washington High School near Pittsburgh. Svaline decided to start his own steel band during a trip with his band to Miami, where he had seen a steel band performing, and became fascinated with it. Upon looking at the steelpans and seeing the ease of learning the technique needed, he decided to start one for his students.

When I decided to start a steel band at Washington High, I called Ellie Mannette. He was not that easy to find at the time. I got his phone number from the band in Miami we saw while on our band trip and called. He was living in Georgia at the time, but I was not able to get ahold of him there. I finally found him while he was working in Phoenix, Arizona. I then ordered our first set of steelpans. The Washington High Steel Band had grown to one of the largest steel bands in the country at the time of my retirement. (Svaline, M., Personal communication December 11, 2013).

While Svaline has been an important figure in steel band education due to connections to Ellie Mannette, Svaline credits the advent of school steel bands to a superintendent in the Chambersburg (PA) Area School District for the foresight in seeing the educational benefits and creating school-based steel bands in the state. Dr. Robert Kochenour, the superintendent of the Chambersburg Area School District, first heard a steel band while on vacation in the Bahamas. The next year while attending an education
conference in New York, Kochenour heard the Trinidad-Tripoli Steel Band performing as an opening act for Liberace. During the conference, the benefits the advantages of multicultural education were addressed, and Kochenour believed that this type of music ensemble would be an asset to the school. Upon returning to school, the high school band director, Lynn Lerew, was summoned to Kochenour’s office and was instructed to obtain the instruments to begin a steel band. In the fall of 1971, Mikey Enoch and Larry Sutherland, both members of the Trinidad-Tripoli Steel Band, created the school’s first steelpans from barrels from a local food company during Thanksgiving vacation.

The whole process of beginning our steel band was a little overwhelming. I had no idea of what we were in store for. I also had no idea of how hard it was for the instruments to be created. I would often watch with amazement as Mikey would take his hammer and just start pounding on the barrel. He allowed some students to assist him with the sinking of some of the drums. We went to the local bowling alley and asked if they had any house balls they did not need. When I told them that we were building an instrument with them the manager looked perplexed. Never the less he gave us three balls, which we later returned, a little worse for the wear. From the time that I first contacted Mikey and Larry, and asked what we needed to start the steel band to our first performance was a little over one year. (Lerew, L., Personal communication December 22, 2013).

Both the Washington and Chambersburg High School steel bands are still in existence today after having experienced the retirement of their founding directors. The foresight of the directors of the steel bands established at these two schools has influenced many other schools in Pennsylvania to establish steel bands in their own schools.
Summary

The history of the steelpan and the larger steel band movement exemplifies the human desire to create music and share this passion in a communal setting, often overcoming many political and social setbacks. The music and culture that has evolved from these adversities have become an integral part of the steel band. Steel bands are becoming more prevalent in educational environments in the United States largely due to the accessibility of the instruments, increasing cultural awareness, and their ability to provide music performance opportunities for individuals disinterested in traditional school music instrument offerings. In the following chapter, I examine existing literature regarding steel bands, motivation for participation, multicultural education, and teacher preparation, in relation to the purpose and rationale for this study.
CHAPTER 3 - Rationale and Purpose of the Study

Students often have the opportunity to begin participating in school music ensembles between fourth and sixth grades. Students who miss this opportunity early in their schooling are often not motivated to join later. Lacking the necessary skills needed to be successful in later grades; many students never experience the benefits of participating in a school music ensemble. Students also may not associate with the structure or instruments of traditional ensembles or the Western art music performed by these groups. Steel bands are one avenue being utilized for motivating students to participate in music programs.

Steel bands do not require the same level of musical knowledge and proficiency as traditional ensembles and a large portion of the student body can be successful on the instruments quickly. Incorporating a steel band into a music curriculum augments the skills needed for performing in orchestras, bands, jazz combos, big bands and percussion ensembles (Brough, 1994).

The unique experience of performing in a steel band also stimulates multiple processes of learning by combining aural pitch recognition, visual elements of pattern identification, and kinesthetic memory through movement. Students are provided with a broader approach to understanding musical interpretation and understanding. Students are able to form strong relationships through this process, which assist in providing a well-rounded music education.
Rationale for the Study

Steel bands are unique musical ensembles that are increasing in number in educational settings in the United States. The steelpan does not require years of study for students to become technically proficient, and music can be learned by rote, music notation, or a combination of both. Students are drawn to the sound of the steel band, and several directors have used it to recruit members into traditional band programs, requiring membership in the traditional band to participate in steel band (Svaline, 1995). While not documented, numerous directors have found that steel band provides an opportunity for students to participate in a music ensemble that are not inclined to participate in traditional ensembles. Due to the widespread appeal of steel band some directors view the ensemble as a means of raising revenue for the music department (O’Connor, 1981). Other directors have viewed this ensemble as a means of providing a musical avenue for percussionists (Brough, 1994). Cliff Alexis agrees with this view, stating that steel bands bring melodic music to the percussionists (Chappell, 1997).

After introducing a steel band program in a school in Manitoba, Canada, Hildebrand (1991) noted improved self-confidence and self-image among her students, they responded with comments such as: “[Steel drums] are interesting and fun to use,” and “They keep me involved in music” (Hildebrand, 1991). Remy (1990) stated that steel bands exposed students to triple channel learning - visual, audio, kinesthetic - through ethnic and multicultural music Students develop self-pride, performance techniques, and increased awareness of harmony and melody in an atmosphere of cooperation in an ensemble. Steel bands are viewed as a practical way for students to apply their music
theory and aural skills, as well as a means for creating their own arrangements due to the ease of learning the instrument (Bump, 1995).

The Tanglewood II declaration from 2007 stated that one of the major purposes of music education is to validate the many forms of music making found in local communities and to prepare students to be able to fully integrate into a global society. Music teachers must be prepared to meet these needs by assisting their students to perform, compose, arrange, improvise, and understand a broad array of repertoires and expressions. Quality musical experiences are the result of developing skills infused with creativity, critical thinking, imagination, artistic sensibility, and passion. These experiences should be engaging and personally relevant to the student.

All persons are entitled to musical instruction, and music educators at all levels should work toward such equity and access. This is important because cultural meanings and values are embedded in every aspect of the teaching/learning process. For students to thrive in a global community they need the opportunities provided through the music curriculum which should evolve to meet community and student needs, and should reflect a balance between established traditions and innovation.

Unfortunately, many teachers entering service in schools are inadequately prepared to teach non-Western music. Wang and Humphreys (2009) studied music education majors at a music school in the southwestern United States and found students spent almost 93 percent of their formal music study and performance time on music styles from the Western art tradition. Montague (1988) found music educators do not implement multicultural education to the same degree as general education teachers.
Seventy-five percent of educators interviewed in a study by Moore (1993) believed in the inclusion of world music in the classroom, and most stated that their training did not prepare them for incorporating it into classroom instruction, and that they felt they did not have the knowledge necessary to teach world music (Moore, 1993).

Steel bands are still a relatively new musical endeavor compared to traditional school ensembles. The implementation of steel bands until now has functioned as a small-time grassroots movement (Tanner, 2007). O’Connor (1981) found that there were only thirteen steel bands in North America - six being university ensembles, five high school groups, and one each at the middle and elementary school levels. A follow-up study by Remy (1990) found that the number of university steel bands alone had increased to thirty-five with high school ensembles increasing to twenty-one and elementary and middle schools to sixteen. Ellie Mannette feels colleges have aided in the legitimization of steelpan in the world of conventional instruments, leading to wider acceptance (George, 1990). Since the O’Connor survey (1981) there has been an enormous growth in the amount of school steel bands in the United States, graduates of established university steel bands account for many of these programs (Williams, 2008). Percussion professors throughout American universities began to incorporate steelpans into their curriculum after seeing the possibilities of the created with the instrument. A new generation of music educators has since entered schools with this background (Parks, 1988). Haskett’s (2012) work showed over 500 school and university steel bands in the U.S.

Steel band music is typically associated with calypsos and socas of the Caribbean;
other music can be performed on the steelpan. Popular music from the United States including reggae, pop, and R&B are favorites due to being well known by students. Latin jazz is a popular genre and offers students the opportunity to develop improvisation skills. Classical music is also important to explore, as it is both historically significant to both the culture of Trinidad and the United States. The flexibility of the steelpan allows students to learn and perform music not typically associated with traditional band and orchestra instruments (Perea, J. personal communication January 8, 2013).

My students really enjoy playing in steel band because they are familiar with the chord progressions and harmonies used in many of the compositions. While they may not be readily familiar with a bossa nova, or a samba, they inevitably have encountered one at one point, whether in a movie or an elevator. I have been able to add a vocalist in on some charts because of how versatile the ensemble is. This is not always easy to incorporate into a concert band setting, or orchestra. The other aspect that I see as being really cool is that there is a connection between American jazz and calypso music. Students are able to see how music is shaped and used by different cultures. (Perea, J. personal communication February 12, 2005)

Harris (2008) noted that, while a percussion-only instrumentation is typical in steel bands today, there is room for directors to incorporate non-percussion instruments to enhance the sound. By adding new voices to the steel band the tone expands, as well as the potential literature choices. It also provides additional performance opportunities for other musicians who play wind instruments, guitars, and vocals.

The steel band is unlike the majority of school music programs, as they have not been in existence as long as traditional band, choir, and orchestra programs have. Steps must be taken to justify the expense of the offering. A steel band is an expensive endeavor as a single steelpan can cost between $1,000 and $3,500, and yearly maintenance costs are around $200 per instrument. With this amount of capital outlay,
many funding options are typically employed including funding from booster groups and performance gratuities.

Many of the school steel band programs established in the 1980’s have since seen their establishing teacher retire or leave the school. Haskett (2012) found in a sample of two hundred sixteen respondents, 29.6% of steel band directors had no pre-college, college, post-college, Carnival, or current experience playing in a steel band. Many music educators are establishing steel bands, or obtaining employment in schools with steel bands and have little experience with the steelpan, playing technique, or repertoire. They approach steel band instruction as any other ensemble they have directed (Tanner, 2007), and this approach has led to fundamental differences between the Trinidadian and U.S. steel bands. Nevertheless, American steel bands maintain some of the practices employed in Trinidadian steel bands such as repertoire selection, basic instrumentation, and certain rehearsal techniques. They have become, by and large, an extension of formal Western musical traditions rather than the musical traditions of the Caribbean (Williams, 2005). It is important that the students and teachers in the North American school steel band studying the Trinidadian calypso tradition grasp the significance of the rhythm that defines this entire genre. Often the written history of the steel band makes only passing reference to African-derived rhythms, and their use in the music providing its distinctive and unique quality (Moses, 2008). One of the most distinguishing features of the North American steel band, in comparison to the Trinidadian steel band, is the lack of strong rhythmic roots in their performance. Musicians from African traditions often have a more cohesive, tight rhythmic base than those who have learned from sheet music (Moses,
2008). The melodic and harmonic development of the steel band has been heard, transcribed, and performed by many North American school groups. Most of these groups give a melodically and harmonically satisfying performance of the great works coming out of the Panorama competition. The rhythms that authenticate these works, however, are the least comprehended aspect of the composition. It is in the best educational interest of the teachers and students to be inspired and taught to put forth the effort to learn the rhythmic interpretation upon which the melodic and harmonic progression depends. The disconnect from the rhythmic approach by teachers and students and the lack of trained teachers in the oral/aural tradition are two of the main reasons for the rhythmic instability present in some of the North American school steel band performance (Moses, 2008).

If you listen to someone who reads play versus one who walks up and plays from memory, like “Boogsie” Sharpe, you hear something different. A lot of people have been trying to figure out what that element of difference is. The ethnomusicologist has come up with the terms used by the person who plays from the inside-out and the outside-in; meaning, one who performs within a particular music culture as opposed to someone who comes from the outside and tries to learn that music culture through written notation (Nurse, 2007).

Many school steel bands evolved from the marching band, concert band or classical percussion tradition; however, these are not the only traditions of steel bands in the U.S. The traditional ways of approaching rhythm are cognitively, conceptually, and physiologically different. The manner in which time and space is felt is reflected in a way that effects the overall rhythmic experience. For example, an African hand drummer is often singing and dancing while performing, whereas the snare drummer is not required to be a singer or dancer though bodily movement is involved. The multi-dimensional
approach versus the more technical focus approach is felt and expressed differently in rhythm and/or movement. A second difference is that Trinidadian steel band pedagogy is mostly oral/aural in its learning and teaching, except in some cases, where few musicians read music. In many instances, the North American school steel band pedagogy is taught and learned according to the written music tradition using rote learning and mirroring to augment the learning process. These two approaches of learning and teaching are felt and reflected differently in rhythm, and or movement (Moses, 2008). With so many music educators having little experience with steelpan and even more who are uncomfortable or unprepared to teach multicultural music, how qualified are the replacement teachers?

Music educators have many reasons for establishing steel bands in U.S. schools. These range from primary educational benefits to secondary utilitarian benefits. Educators seeking reinforcement of the importance of the inclusion of the steel band in educational settings need to look no further than the final declaration of the 1967 Tanglewood symposium which stated, "Music of all periods, styles, forms, and cultures belong[s] in the curriculum . . . including avant-garde music, American folk music, and the music of other cultures," as a rationale for steel bands (Choate, 1967, p. 54). At the conclusion of the 2007 Tanglewood II Symposium, attendees issued a new declaration calling for all stake holders in music education to critically assess current practice and develop appropriate action plans to effect necessary changes, which would engage all children as musicians. The principles from the declaration statement and were intended to stimulate dialogue and, assist in the process of charting a new, dynamic and challenging path for music in the 21st century. The committee stated, humans are inherently musical,
and music serves to connect people to one another. Without musical engagement, the development of intellectual, emotional, and spiritual aspects of life will be greatly impoverished. Music is a powerful means of human expression from which cultural, social and individual meanings are created.

Currently, no national level steelpan advocacy organizations exist, and only a few states, including Florida, Arizona, and Indiana, have state level organizations that provide educational support for the scholastic steel band. Steel bands have taken on a variety of identities and purposes in many schools due in part to the lack of advocacy and educational resources. There have been two previous organizations, the North American Steel Band Association and the International Association of Pan Enthusiasts; however, currently the only means of communicating information regarding steelpan education is through various internet blogs such as The Pan Page, Pan on the Net, and the Steel Band Directors Facebook group. (See Appendix D for a complete list.) There are few method and technique books in publication to aid in the instruction of steelpan, and often these are only available from steelpan-specific vendors. The Steel Band by Rote by Jerry Lopatin is available from Panyard, Inc. So You Want to Start a Steel Pan Band: How to Start Maintain, and Grow, with a Steel Pan Program by Char Lusk is available from Sticks and Stands Publishing. Tom Reynolds’s Steel Drums is available directly from the author. Other titles, which are more readily available from online sources, include Beginning Steel Drum by Molineaux and Best’s Pan Steel Drum Made Easy: Basics for Beginners. Both of these books are designed for an individual to learn how to play the tenor steelpan and come complete with a play-a-long compact disk. Another, which is
designed more for the individual beginning a steel band, is Tanner’s *The Steel Band Game Plan*.

Through presenting at numerous clinics I have discovered that several directors of beginning steel bands find themselves at a loss at how to effectively teach and find appropriate music for their new ensembles. Gaining information on teaching traditional school ensembles is easy and taught well in collegiate music education programs; however, this is not the case with steel bands.

There has been little research conducted on established U.S. school steel bands and whether they function as curricular or non-curricular offerings in their respective schools. Most of the articles written on steel bands and steelpan are concerned with justification of the establishment of the ensemble, and the small body of extant scholarly research has focused on the culture of steelpan and the art of arranging music for the Panorama competition in Trinidad and Tobago. Academic writings on steelpan and steel bands are beginning to examine the history of the ensemble through first-hand accounts of the individuals who have aided in creating the art. Documentation of these stories is important because they explain the culture that created the art form. The culture of the original musicians spread with the migration of the instrument throughout the United States and has become a motivating factor for student participation, and instruction of the instrument.

With steel band being a unique, non-traditional music ensemble versus the multitude of extra-curricular offerings in schools, it is important to examine student
motivation for participation in these ensembles and how the ensembles are perceived in their school and local community. This case study will address this gap in the literature.

**Purpose of the Study**

The purpose of this case study was to investigate a high school steel band in Pennsylvania to discover the motivation for students to participate in the ensemble, why students chose to play in steel band, how they viewed the activity, and how other students in the school and parents viewed the steel band. Teacher preparation to teach and lead non-traditional, multicultural music ensembles was also investigated as this can influence student motivation for participation.

**Research Questions**

The following research questions guided this study:

1. Why did the participants join steel band?
   a. Why do participants continue to participate?
   b. What benefits do participants perceive as the result of participation in the steel band?
2. What are the participants’ perspectives as to the role of the steel band in their school community?

In the following section, I reviewed literature related to the importance and value of steel bands in schools. The studies on motivations for participating in music ensembles, steel bands, teacher preparation, multi-cultural education, and informal music education are of particular interest.
CHAPTER 4: Review of Related Literature

Steel Bands have a rich tradition that has evolved from the culture and experiences of the Trinidadian people. This tradition has influenced all aspects of the art, from the instrument creation, repertoire, to the instruction of the instrument. Understanding this tradition and how it is incorporated into the ensemble is paramount for non-native teachers to the steelpan in providing the best culturally sensitive instruction possible.

The literature in this chapter is organized into the following categories: motivations to participate in music ensembles, studies on steel bands, studies of multicultural issues in music education, and studies on teacher preparation. The sources cited in this review of literature are intended to build support and context for the study.

Motivations to Participate in Music Ensembles

Steel bands are relatively new musical ensembles within the school environment and little research has been conducted on them; however, many of the issues dealing with motivations for ensemble participation are similar to other school music ensembles. The following studies address these motivations.

Adderley, et al. (2003) interviewed sixty students with an equal number from the traditional school ensembles of band, choir, and orchestra to examine why students join the ensembles, the perceived value, and group image from participation, and the perception of the ensembles by the members peers and others in the school, and the social climate of the music classroom. Adderley found many factors led to student participation in school music programs. Family and parent encouragement were a major factor in
students participating in school music programs. Many parents encouraged their students to participate due to either their positive experience in musical ensembles while in school, or their lament for a lack of participation. Older siblings were also influential factors for students choosing to participate in school music ensembles.

The musical aspects that students stated as being factors for their participation were an overall enjoyment of music, the sounds created by the instruments, early experiences through media, compulsory participation in early education fostering a desire to continue participating, and the desire for a potential career. Many students perceived being in music ensembles as a way to escape the rigidity and stress of school, enabled them to have an aesthetic experience, and allowed them to become better adults by having a wealth of experiences. Socialization was perceived as being an important influence on student participation in music ensembles. Students enjoyed being part of a group, and creating relationships that may not have occurred in other classes.

Students in music ensembles often formed a bond, which they feel separate from the larger school community. Members of the music ensemble worked hard and took pride in their performances. Overall, the general population of the school respected the talents of the student musicians; however they did not completely understand and appreciate the work and effort put into the ensembles. This disconnect appeared to develop because it was easier to comprehend sporting results.

Not being at the top of the school’s preferred activity list helped create tight bonds among the members helping to create an environment where they felt welcomed and valued. These bonds were further strengthened due to perceived under appreciation by
the school community as a whole. Among music ensembles, the concert band, orchestra, and choir were more widely accepted by their peers than marching band, mainly because of the concert groups being graded classes. Student perceptions of how peers outside of music view musicians improved as they matured, and become more educated about the arts. Students found value in making and performing music. Through the activity of performing music students believed they had become more responsible and committed to their ensembles, assisting them in learning important skills in discipline and perseverance which will enable them to be successful in life.

This article is representative of many of the same issues experienced within the steel band in regards to student motivations for participation, and the camaraderie and pride experienced amongst the members. With the steel band, perception among the school community is different due to the general population having more exposure and experience with the music performed by the ensemble compared to traditional art music.

Similarly, Cusiak (1973) spent six months attending a “representative” high school, going through a daily class schedule and activities in order to describe the way students behaved in high schools and explain the manner in which this behavior affects themselves, teachers, administrators, and the general school environment. Students in the school were willing to accept Cusiak into their environment due to positive interactions with and toward the students. Students did not care what accomplishments were garnered before meeting them. Cusiak identified the "music-drama" clique as one of several closely knit circles in the institution he studied (p. 144). Important characteristics Cusiak made of the clique were that members were among the highest achievers in the school,
and most had known each other since elementary school. Unlike some other groups in the school, the music-drama clique members, while together before, during, and shortly after school, did not seem to do much together outside of school. Cusiak found that members of the group tended to adhere to school rules individually and not as a group; however, when the group was together they all tended to behave as well as the most respected and behaved member. Students in this group were able to put aside differences in academic achievement, and other outside activities in order to focus on the collective goal of creating great musical and dramatic productions.

Focusing only on students in high school band programs Mills (1988) studied the experience of students and the reasons students listed for participation and enjoyment of the activity. Using an original survey instrument, Mills surveyed 1140 high school band members in Florida. Mills identified ten different dimensions of meaning from the responses: group accomplishment, social enrichment, music performance, recreation, musical aesthetics, self-improvement, school identity, interpersonal skills, musical achievement, and musical development. Mills found that students who participated in non-marching band ensembles had higher values of musical aesthetics, group accomplishment, musical growth and self-achievement than those in marching band. These values were rated higher for students that had teachers that discussed the importance of them. Students also perceived the non-musical experiences and social interactions within the music ensemble as being as important as musical aspects. The findings in this study are important to the current study due to the value of the social, and group aspects of music groups in finding meaning in the ensembles, and the importance
of the teacher’s role in emphasizing the important musical aspects within the music to students to enable them in understanding and valuing the experience more.

Morrison (2001) also found that students who participate in school music ensembles form close-knit circles and suggested, "school ensembles are not just classes or performance groups, but guardians of their own specific culture, a culture that informs and enriches the lives of their members" (p. 24). Students learned their place within the social structure by interacting with the veteran students. Many times there the structure is created through mutual respect, and not through formal arrangements. Students often do not participate in music after high school due to the loss of the familiar and reinforcing social structure found within the ensemble. This social structure was an important aspect of creating a unique culture and a good learning environment.

The social structure and culture in peer-directed and group learning were important aspects of informal music education and both assist in creating a trusting environment for learning. Green (2008) stated peer-directed learning occurs through direct interaction and teaching of one with friends, siblings, and other peers is a significant practice in music learning. This often involved a certain amount of leadership by one or more members of the group. This leadership may be from a collectively elected position as in a section or squad leader, or in a rotating role that is shared in an informal rotating position occupied for a few moments by one person then another (Green, 2009). An outgrowth of peer-directed learning is group learning, which is learning that occurs in a group setting but without any direct instruction and can occur separately from music making activities or during rehearsals. Both of these learning styles can occur
simultaneously during a rehearsal as one member of the band may be showing a technique to another, another member may be learning by just listening to another. Students felt comfortable in learning environments such as this because they were able to learn at their own pace, and were able to forge a trusting connection with other members. This connection based on trust with other members is an important aspect in the way music is learned in the steel band investigated, and the way music is learned in an informal fashion.

Informal learning in music places a central emphasis on group activity. Green (2008) suggested that in informal learning the learning takes place while participating in the group’s activities. There is no formal instruction from a teacher that occurs in this activity. Students learn music in this fashion through group discussions on musical style, rhythms, harmonies, and what each member will play in the piece. This method of group learning depends on the trust and respect of the individual members. Learning often occurs through listening, as musical ideas are often played for each other instead of being notated. Green (2008) further stated that although learning takes place in this environment, the opportunity for music making was the primary goal of the group. Green noted that not only is learning from a peer effective but there is evidence that the act of teaching enhances learning for the teacher as well.

An unexpected outcome of Green’s (2008) work was the importance of the students’ enjoying the presence of their friends, and understanding how to cooperate with each other in the informal learning environment. Students in teacher-selected groups did not achieve the same results due to conflicting opinions. Students referred to the
importance of building trust, sticking together, and being aware of the make-up of the personnel in their group and who would fit in best, not which other friends they wanted to include, or their musical tastes, but how other individuals work ethic, and abilities complimented the rest of the group (Green, 2008).

As described above, students joined music ensembles for many reasons. Having a voice in how the ensemble was run and the music selected enabled students to become invested in the organization, and created ownership. Allsup (2003) expanded on this and investigated democracy and community in instrumental music education through the music composition process. This provided many useful insights to using non-traditional means for students to learn music.

Using two small ensembles, Allsup gave students specific parameters, and had them compose their own music. One group chose to create music in a garage band setting with electric guitar, bass, synthesizer, and drum set. The second group chose to create music using their primary band instruments. Choosing a genre, and working with the multiple transpositions among the instruments seemed to be the largest determinant of a group's culture. The group members noted that classical music was unproductive for group composing because of the rigid compositional tradition. Composing in a jazz or popular style was conceived of as fun, self-directed, and personally meaningful because of the looseness of the composition. Allsup observed in settings like these, there was an emphasis on interpersonal relationships, peer learning and peer critique, as well as an expectation that members will take care of each other. The teacher became more of an instructional guide, and not the center of the educational setting.
Davis (2011) agreed with the notion of students having a “musical say” in rehearsals, as she commented, “Students’ ability to have a say in the formal setting of a school ensemble is agentive in nature if teachers foster active engagement and hand over decision-making experiences to the students” (p. 278). Being able to understand and implement students’ informal music-making processes helps nurture student investment in the classroom and provides opportunities for greater teacher facilitation. Davis also believed there was room for more creative space in traditional band programs, with students having the ability to engage in processes of music-making, through creating music, performing music, and having a voice in the expression and creation of music.

Similar to Davis, Green (2008) suggested that students learned music largely without adult supervision or guidance through two informal music-learning practices. The first was learning music aurally, experimenting with the instrument capabilities, and copying and imitating sounds from recordings and other students. The other practice took place in groups and involved conscious peer direction and unconscious learning through peer observation, and imitation. All of the activities involved music in which students strongly identified and in which they were thoroughly enculturated. Examples of both of these learning practices were experienced by students in the steel band in learning rhythmic grooves by rote and in learning music by mirroring the stick movements of a peer. These methods of learning created a bond among the members of the steel band and enabled students to place more emphasis on musicality or "feel." Most significantly, students learned to respect a wide range of music and display high levels of motivation, commitment, and enjoyment in music making. Green (2008, p. 23) stated that informal
music education differed from formal music education teaching and learning strategies in the following manners:

- Learning based on personal choice, enjoyment, identification, and familiarity with the music, as distinct from being introduced to new and often unfamiliar music.
- Recorded music as the principal, aural means of musical transmission and skill acquisition, as distinct from notated or other written or verbal instructions and exercises.
- Self-teaching and peer-directed learning, as distinct from learning with adult supervision and guidance, curricula, syllabi, or external assessment.
- Assimilating skills and knowledge in haphazard ways according to musical preferences, rather than following a progression from simple to complex.
- Integration of listening, performing, improvising, and composing throughout the learning process, as distinct from their increasing differentiation.

Woody (2007) shared the same opinion as Green, commenting that educators may be able to educate all students more effectively and better prepare them for a lifetime of participatory musicianship by including popular music in the curriculum. American music has evolved over the last several decades, and many people question the place of popular music in schools. He believed this is mainly due to the manner in which popular music integration had been attempted previously. Teaching popular music in an authentic manner requires a music appreciation model in which the teacher accompanies listening examples. He also stated that the teacher’s role must shift from being the central figure in the classroom to acting as guides or facilitators of their students’ music making. Students should be given opportunities to make important musical decisions for themselves.

Educational practices such as musical exploration and discovery learning that work well in early childhood education also have great potential with older students. This style of learning is important in steel bands as many steelpan musicians have no formal music
training and learn through apprentice-type environments with older more experienced players.

Learning in an environment where having fun, relaxed, playful attitudes is an advantage of the informal learning process. The absence of definable goals from an instructor lead to the students being in control of what they want to learn (Jenkins, 2011). Being in control of the exploration and discovery process empowers students to learn as much as they desire. One of the disadvantages of informal learning is that the lack of structure can lead to a narrowing of the material students will encounter, with no one to prompt the student to explore music outside of their already existing preferences. Good music education should bring about a fundamental change in the student’s self-identity and foster the ability to make critical decisions both about music and about life. Jenkins noted that students learn best through a series of activities, goals, and motivations, rather than passively rehearsing a collection of actions. Adding a focus to informal learning to music ensembles will assist in creation of the student’s self-identity (Jenkins, 2011).

Performing popular music without conductors may allow students to gain a greater sense of independence and ownership within the program, in turn creating a healthy atmosphere in which inhibitions may be lowered, leadership qualities are cultivated and strong relationships are often formed. Feagans and Bartsch (1968) asserted that being a member of a close-knit youth group may help in making the bridge from childhood to adolescence an easier one was suggestive of the important role that a steel band may play in students’ lives.

The opportunity to participate in extracurricular music can be an important step in
acquiring or affirming a sense that music is “for them” (Pitts, 2011). Extra-curricular music activities provide an opportunity for students to experiment with music, recognizing that this inclination would not be equally distributed through the school community but having such opportunities was a valuable part of school life, even for non-participants. Those most at risk of musical disaffection were the young people who had failed an audition, and the life histories study illustrated that the memories and effects of this could be long lasting.

Students who experiment with, and learn music in informal fashions often have a poor opinion of school based music programs (Green, 2004). In general, most students studied stated that school music was boring, slow and had no bearing in their lives. Many also felt alienated by teachers who looked disparagingly on their music preferences, and did not fully understand their passion for music making and musical accomplishments outside of school.

Teachers balance the aims of different extracurricular activities, ensuring that a focus on achieving a high musical standard on specific occasions is matched by the chance for all comers to participate in other events. Clear pathways back in to music making are needed for those who do not engage musically at the start of their school careers. This can be difficult as an entrenchment of attitudes between the ages of eleven and fifteen, which could make it harder to encourage the exploration of new musical activities in later adolescence. Extracurricular involvement at school can offer a life changing opportunity to experiment with an identity as musician and to have this affirmed by teachers, peers, and audience members. In some schools, this still occurs
through the staging of large-scale musical works, while in others, student-led improvisation groups or technology-based workshops have become central to musical life beyond the classroom (Green, 2004). Students are motivated to participate in music ensembles in school for many reasons - from the joy of creating music, to the pure social aspect of having a strong group of friends. All of these motivations are important to understand to create environments in which students want to connect and learn. Understanding student motivations also will aid in providing students with an opportunity to have a quality music performance and education.

Teacher Preparation in Teaching Multi-Cultural Music

One of the most unique and important benefits associated with steel bands in schools is the ability to promote multicultural education and reach a wider range of students. Unfortunately, this benefit is often overlooked due to inadequate teacher preparation. Montague (1988) found music educators were not implementing multicultural education to the same degree as general education teachers. The Tanglewood Music Education Symposium participants of 1967 endorsed greater emphasis on world music in American classrooms; however, in the forty-five years since little has changed. A survey conducted by Moore (1993) found that seventy-five percent of educators interviewed believed the inclusion of world music in the classroom to be important. Most stated that their training was insufficient for incorporating world music into their instruction, and felt they did not have the knowledge necessary to teach them (Moore, 1993). Volk (2002) conducted research on the confidence levels of educators in teaching world music after a workshop experience. The results of this study show these
activities were helpful in assisting the educator in being more confident in providing culturally accurate instruction.

One instance of providing culturally accurate instruction involves music selection and programming in a manner that accurately represents the culture that steelpan evolved from. Remy (1990) stated that, while pleasing the audience is important due to the financial support, it is important to educate the audience and performers about Trinidad’s musical contributions. The debate on whether steelpan ensembles are authentic world music performing ensembles versus a new ensemble created as a Westernized music education tool has been present since they were first established in American schools (Guess, 1998). Most steel band directors incorporated a balance of both approaches using rote music learning and printed sheet music. Guess (1998) noted that it is important to present the steelpan in a manner that teaches students about musical tradition of the instruments and their function in the Trinidadian society.

Since native culture is important in steel band education, Williams (2005) described that today’s steelpan educators comprise a second generation of teacher that studied with a Trinidadian in a university setting. A third generation of steelpan educator has arisen that may have had no direct contact with a native Trinidadian or the culture. This new generation of steel band directors who have had little to no connection to the Trinidad and Tobago “re-invented” the ensemble, changing it from a Trinidadian folk ensemble into a neo-Western pop ensemble. In doing so, Williams argues that the North American steel band has become a unique entity (Williams, 2005). This opinion of steel bands being “re-invented” might be reconsidered because steel bands in Trinidad
typically play “popular” music from their own culture, particularly soca and Calypso music, in addition to the “bomb” tunes. U.S. steel bands play many of the same traditional styles of soca and Calypso but also play many popular songs from our own culture. Playing popular music is part of the Trinidadian culture of steelpan; therefore, there is nothing unique about this practice in the United States.

There are several ways that music teachers in the U.S. can acquaint themselves with performance practices and music of other cultures. Initially, this should begin with pre-service education in college. When looking at preparation for teaching multicultural education, Goodwin (1994) surveyed one hundred twenty pre-service teachers to find out how they conceive of multicultural education. Seventy-one percent discussed it as therapy for racial disharmony; another 16 percent defined it as a means of addressing individual differences among children. Overall, the majority of teachers defined multicultural education as "primarily procedural or technical, requiring knowing and doing something" to adapt the regular curriculum to one's own students (Goodwin, 1994, p. 121).

Curtis (1988) voiced strong opinions regarding teacher training and stated, "Educators cannot teach what they themselves do not understand. Higher education must make multicultural music education a part of the training of teachers in order to prepare them to deal with the black aesthetic experience along with other cultural experiences” (p. 23). Klocko (1989) proposed an integrated approach including music history and literature to provide a better overall understanding of multicultural perspectives than a single course of study in multicultural perspectives in music. According to Klocko, “The
Eurocentric world view is outdated; a more global perspective must replace it” (p. 39). In a study of music education majors at a music school in the southwestern United States, Wang and Humphreys (2009), found that students spent almost 93 percent of their formal music study and performance time on music styles from the European tradition. Despite numerous calls for multicultural music teacher education in recent decades including the Tanglewood Symposium, this study found that Western art music continues to be the major area of study students in American music teacher education programs received.

Music from cultures with relatively large and growing populations in the United States, Latin/Caribbean, African, Asian, and Native American music occupied only one half of one percent (.50%) of the students’ composite work hours. American Popular music fared little better than non-Western and other non-art styles (other than jazz), occupying only a little more than one half of one percent (.54%) of curriculum time. Against this backdrop of statistical findings, it is unlikely that students who graduate from these programs would be adequately prepared to teach multicultural or popular music. The authors felt music education students needed more exposure to multicultural and popular music preparation in their core music courses to enable them to teach successfully in accordance with many district, state and national policies, and the national music standards. While this study was only undertaken at one university, the fact that the university was a member of the National Association of Schools of Music led Wang and Humphreys to surmise that the results would be similar at other institutions.

Universities and colleges preparing teachers for the teaching profession are ethnocentric in their orientation and will likely remain so for the foreseeable future.
Currently these institutions are unable to provide role models in multicultural music education for prospective and career teachers (Gonzo, 1993). Lectures are an informative method of learning facts about other cultures; they often do not lead to practical action. The only means to truly learn how to teach in a multicultural mindset is to actually participate. There must be opportunities for all musicians and especially music teachers to be immersed in the music of other cultures as part of their everyday training (Dodds, 1983). Anderson (1992) stated that music education programs and curricula should include vocal and instrumental music experiences, and the creation of broad based performance programs with a variety of musical genres. This is important for giving students hands on experiences with music making, which is considered to be one of the best ways to learn about non-western music. Additionally, teacher education programs need to include elective performance opportunities in such areas as African, African-American, Asian, and Latin American music.

Feichas (2010) commented there is a gap between the way music is conceived and taught within the university and the reality students will have to face outside the university. Traditional teaching approaches for music in higher education are possibly inadequate for educating university students from varied music learning backgrounds. Feichas proposed informal music learning practices would assist in the integration of students from different backgrounds, and enabling them to bridge the gap between their own musical practices and those they are expected to learn. Informal music learning worked well according to Feichas, because the students are autonomous and the teacher becomes a facilitator. This process is the equivalent to the process used in the steel band
in this study. Students took responsibility to make sure younger members were able play their instruments, and often made suggestions for repertoire selection.

Steel bands can be viewed as being their own musical genre and can also be viewed as being an historical representation of another culture. Morford (2007) investigated pedagogical practices in selected collegiate West African ensembles and steel bands in the United States to explore the relationship of current pedagogical practices in collegiate non-Western music ensembles in the United States to the pedagogical practices found in the cultures from which the music originates in order to obtain information that will be useful for teacher training. Using Campbell’s concept of “world music pedagogy” and that the directors of non-Western music can be understood as practicing with modified manifestations of either conservationist or expressionist philosophies, Morford found the teaching practices of the West African ensembles to be conservationist and a reflection of the directors’ own experiences and training rather than an intention on providing an authentic learning environment. They focused their pedagogy toward the representation of traditional African musical cultures, yet they included some non-traditional teaching strategies and performance practices.

Within the steel bands studied, there was almost no relationship in the pedagogy used in teaching American steel bands compared to that of the panyards of Trinidad. The directors of the American steel bands were interested in innovation, progression, and growth, of the steelpan art form as primary aspects of their ensembles. Many acknowledged some use of traditional repertoire, as well as the desire to facilitate the development of historical and cultural knowledge and understanding in their students.
Campbell’s concept of “world music pedagogy” was found to be unusable as a pedagogical framework. This was due to the numerous perspectives, and varying backgrounds of the directors and the various ways in which music is taught and learned in their traditional cultures that are not well understood by members outside the culture.

Having a well-conceived understanding of the role Trinidadian culture and history should play in steel bands in the United States will affect how the steel band is viewed by members of the ensemble and their audience. If instructional practices are adopted that are similar to traditional school music ensembles are utilized students will not be able to encounter the unique nature of the culture from which the steelpan has traditionally been taught and learned. These informal practices are appealing to students and can be motivating factors for them to participate in steel bands.

Academic writings on steelpan and steel bands while growing are still few compared to other musical traditions. Included in the following section are dissertations, theses, and books that specifically address steelpan.

**Writings on Steelpan and Steel Bands**

Thomas' (1985) dissertation is one of the first academic documents to focus on the art of steelpan and its history. Thomas traced the history of the social, racial and political events through the 1800’s. Thomas also discussed the musical practices and ensemble predecessors that ultimately led to the creation of the steel band, the steelpan governing body, and emerging status of the steelpan within Trinidadian culture. He provided a plethora of informative appendices of steelpan note layouts, steel band festivals, and steel bands, steel band sponsors, and performance histories. Due to the shortfall of
contemporary academic writings on this subject at the time of his writing, Thomas gathered data through archival work, local newspapers, interviews, and his own observations in Trinidad while performing with steel bands. This was groundbreaking work on steel bands and is very thorough; however, there are many aspects of the culture that may have been omitted or misunderstood due to Thomas being a cultural outsider from the United States.

Beyond Thomas’ historical study, there are two master’s theses that are multiple case studies. Guess’ (1998) master’s thesis examined three Ohio steel bands from three different educational levels, the rationale behind their creation, and their function. Through interviews, observations, and surveys, Guess found that the ensembles were being used to exhibit cultural diversity, provide a means of teaching history of another culture, and as a public relations tool. All three directors viewed the steel band as a manner to extend music curriculum offerings at their respective institutions.

Guess's student survey results showed a majority of the participants in the three steel bands were males. Reasons stated for joining the steel bands varied widely among the ensembles studied. Seventy-three percent of middle school members joined because they enjoyed playing steelpan, while sixty-seven percent of high school members stated a desire to learn new things as their primary reason for joining. Seventy-four percent of the collegiate ensemble responded that their motivation was to earn academic credit. Survey responses indicated that the majority of students in all three of the steel bands were taught using Western music pedagogy, while small populations in all three ensembles also learned by rote and mirroring.
Similar to Guess (1998), Tiffe's (2006) multiple case study investigated the appeal of the steelpan and the migration of steelpan to the Midwest. Steel bands at a Michigan high school, a university in Illinois, and a university in Ohio were examined in order to emphasize the participants' descriptions of why they are drawn to the steelpan and its music. Tiffe found the uniqueness of the instrument, its adaptability, and the concept of community made the steelpan attractive to Midwesterners, and stated these findings would likely not be exclusive to the Midwest.

While the previous two studies took a broad look at multiple programs, Haskett’s (2009) study took an in-depth look at student motivation in his examination of the Desert Winds steel band. This program began at Desert Winds Elementary School in Phoenix, Arizona, in 1978. This study documented the development of the program during the past 30 years, including both the elementary school steel band and the adult community band. Haskett examined steel band curriculum and pedagogy as well as the influence of children on adult musical activities.

This study provided insight to the pedagogical approach and leadership of Lopatin with both student and adult learners. The historical chronology of the program at Desert Winds Elementary and the adult program is valuable and pertinent in the current educational environment, and can be used as a model in other schools.

Observations of the ensemble and general music classes, and participation in the adult ensemble, were important aspects in this study. Interviews with alumni of both adult and student ensembles, the director and other school personnel were conducted, and an open-ended questionnaire was also utilized to obtain data from current students. Of
particular importance to researchers were recommendations for future steelpan research.

An important aspect of this study is the examination of the value and importance of participation in steel band for each of the members, and the recognition of socialization as an important aspect of membership. The ability to achieve quick success on the steelpan, and being part of a team were also noted as important factors to members for their participation and were examined. Adult participants in the study articulated manners, which the ensemble affected their well being, and assisted them to enhance their self-esteem, and widen their worldview.

Lopatin has been involved with the steel band activity for many years and has developed a curriculum that is based on traditional aural learning practices in Trinidad specifically for children and adults with little-to-no music experience. This learning style is similar to the study of the Pennsylvania steel band in that all members of the ensemble have never played the steelpan before. Many students learned the instruments by imitation and listening. Where the ensembles differ is in the current study the musicians have been selected from the concert band program, allowing them to use prior learning and previous musical experience to aid in learning the steelpan. The teacher had little to no interaction with the steel band activity before being hired. This limited interaction required the students to rely on peer assistance in learning the instruments.

The next few works examined the history and growth of the steel band and the culture surrounding it within the United States and Trinidad. Stuempfle’s book (1995) is the first major work which traced the history of the steel band from the earliest musical traditions in Trinidad, to a Carnival street music, and finally to the widely known music
of Trinidad and Tobago today. Stuempfle paid close attention to the struggles and achievements of the pannists in overcoming oppression and creating new musical opportunities through the steelpan, and how their problems relate to the changing society in Trinidad and Tobago since the island’s independence from Britain in 1962.

This book is arranged into chapters by decade, exploring chronologically the important events in the creation of the steel band movement, and ending with the current creative identity of Trinidadians. Throughout, Stuempfle suggests that the steel band has developed as a grass roots effort out of shared beliefs and agreements between various minority ethnic groups, and socioeconomic classes in opposition to colonial rule. While this work is dated, Stuempfle’s book is important to steelpan research due to the amount of firsthand interviews with different generations of pannists, and field observations. Stuempfle was able to provide an historical voice to persons who may never have had their story told before their passing.

Nurse (2007) adds to the history of the steel band movement through a compilation of narratives by leaders of the steel band movement. Nurse interviews and provides vignettes from many steelpan pioneers including:

- Neville Jules
- Hugh Borde
- Albert Jones
- Rudy King
- Desmond Bravo
- Randolph Babb
- Shirlane Hendrickson Thomas
- Vincent Hernandez
- Jeff Narell
- Franz Grissom
• James Leyden
• Cliff Alexis
• G. Allan O’Connor
• Philbert Soloman
• Othello Molineaux
• Leroy Ali Williams
• Trevor Stubbs
• Terrance Cameron
• Lennard Moses
• Robert Greenidge
• Ellie Mannette

Nurse devoted a chapter to each of the aforementioned individuals, and also explores the women who have become involved in steelpan as well including Ruth Cameron, and Dr. Dawn Batson-Borel.

Nurse’s work is an appropriate compliment to Stuempfle’s work, as it further examines the stories of so many prominent steelpan musicians. Since Nurse organizes each chapter by individual, finding common topics and subject matter is difficult. It is also important to note that there are many situations and opinions presented in the book that conflict with other interviewees. These disagreements are not explained, but presented just as the interviewee responded, providing a unique record of the various views of steelpan history.

While Stuempfle and Nurse examined the history of the steel band from the individual perspective, Dudley (2008) narrated the steel band story from the musicians’ perspective, many of whom had overcame poverty and prejudice to create the national instrument of Trinidad and Tobago. Throughout this book Dudley examined the transformation of the steel band from loosely organized junk bands to the large steel
orchestra. He explored the process of arranging and preparing music for the formally adjudicated annual Panorama competition, and the conflict between popular culture and nationalism.

Throughout each of the chapters Dudley traced specific aspects of the transformation of the steel band, specifically how the Afro-Trinidadian aspects evolved. Each chapter examined the political and social aspects of the steelpan and presented many insights from his time as an apprentice to Cliff Alexis. A summary is presented at the conclusion of each chapter to link his supporting evidence together into an easily understandable package.

A major exportation of Trinidadian culture occurred at the festival of Britain in 1951 with the performance of the Trinidad All-Steel Percussion Orchestra (TASPO), Johnson (2011), examined the early history of the steel band movement from its early beginnings with metal bands, culminating with the Trinidad All-Steel Percussion Orchestra. Throughout this book Johnson examined the cultural and political environments that created the environment leading to the creation of steelpan as a musical instrument and art movement and the various means by which individuals satisfied their aesthetic needs. Johnson stated the importance of TASPO was that it broke through the social barriers that excluded the steel band and the lower class members and established them as cultural equals. An extensive chapter at the end of the book investigated the “creolization” that occurred by hybridizing the African musical practices and Western harmonization and musical practices that led to steelpan music becoming attractive to audiences.
Smith (2012) investigated the events that leading to the creation of the steel drum through an examination of Trinidad’s history. In-depth historical descriptions of slavery, French settlement and Spanish and British colonialism provided the backdrop establishing the social climate for the creation of the steelpan. Narratives of musical developments during colonialism period included in the book described, talking drums, kalinda stick fights, tamboo bamboo bands, iron bands, and the development of calypso.

The second section of this book provided an inspection of the expansion of steel bands throughout the world. Chapters were devoted to the history of U.S. Navy Steel Band and the accounts of the bands popularity throughout the early 1950’s through 1970’s, expansion of the steel band movement, and most importantly to steel band educators, a chapter devoted to the steelpan in schools. This chapter examined the history of school steel bands since 1980 and the influence of the Northern Illinois University Steel Band, Cliff Alexis, Ellie Mannette, Eugene Novotney, Jeannine Remy, Liam Teague, Jimmy Leyden and Trinidadian influences in American school steel bands.

The most important aspects of Smith’s work are descriptions of her experiences from over seven years of research trips to Trinidad, and the firsthand accounts of steelpan history. These firsthand accounts are provided through extensive interviews with Ellie Mannette, Cliff Alexis, Bertie Marshall, Len “Boogsie” Sharpe, and Robert Greenidge who are viewed as some of the pioneers and innovators of the steelpan. In addition to these steelpan pioneers, an entire chapter of the book is devoted to the work of Andy Narell, who is considered by many to be the first American pan virtuoso.

While most of these works focused on the development of the steelpan primarily
in Trinidad and Tobago, Martin’s (2011) dissertation examined the migration and development of steelpan in the United States. His work is separated into sections that include an analysis of early steel band influences within Cold War American popular music, the Calypso craze, the New York Carnival scene, Pete Seeger and steelpan as American folk music, the United States Navy Steel Band, early examples of steel band success in academia, the attempt in finding a place within American popular/commercial music, and an extensive narrative on Andy Narell, who was the first American born steelpan virtuoso.

Martin also discussed current trends in the United States involving steelpan repertoire incorporating jazz and popular music, and opportunities for those skilled in steelpan to earn a living as performers and educators. He discussed the Carnival circuit that includes Trinidad, Toronto, New York, and London and how it has become a global phenomenon.

The steelpan and band are becoming an entirely new and independent genre, increasingly different in style and character from its roots partly due to the lack of a unifying movement or national pride that is apparent in Trinidad. Martin explored the development of steelpan as an art movement in America and potential causes behind the sociological and artistic motives of steel band migration in the United States. While Martin stated that the steel band is becoming an entirely new and independent genre, it can also be seen that these ensembles are only extensions of the steel band culture in Trinidad and Tobago. These steel bands have been playing popular music from their culture since the inception of the instrument. In the United States the same trend is
continuing, creating not necessarily a new genre, but an expansion of the one already created in Trinidad.

**Music and Culture, Culture and Music**

Music is created as a means of expression, and groups of people can begin to associate with the music through shared experiences. Conversely, expectations of the individual’s culture can directly influence their musical choices and creations. Both of these factors contribute to the decision students make to participate in steel bands. To educate students in the steel bands effectively, it is important to understand the reciprocal relationship between culture and music.

Swanwick (1994) asserted music is culture. “We do not understand the context and relationship among those things as we are cultural outsiders” (p. 222). Swanwick advocated for direct experiences with music through accurate performances and ensembles that articulate the culture and history of the creators, as well as the perceived feelings and actions of the culture. Learning about others’ music involves meaningful discourse, consisting of knowledge gained and discussed by students. This is different than reading a book or hearing the teacher talk about a music culture. According to Swanwick, “Understanding music is more like knowing a person than knowing a fact, it is knowledge by direct acquaintance; knowledge of rather than knowledge about” (p. 225). Swanwick encouraged teachers to take advantage of the richness outside of school walls as well as bringing this richness to the students in the classroom.

Learning to understand a culture through their music led Campbell (1992) to present important questions concerning which cultures and values should be included in
the teaching of world music traditions. Campbell believed that rather than focusing on non-musical goals such as prejudice reduction, the development of intercultural understanding, and the enhancement of self-esteem, which are often offshoots of teaching music from other cultures, teachers should concentrate on the musical sounds and their contexts.

These contexts include information about the music-makers such as where they live, how they dress, and their thoughts about the music they perform. The goal of multicultural curricula in music education, according to Campbell, is to understand musical expression more fully. Teaching music with a multiethnic focus requires that music from several ethnic groups be selected to gain the maximum understanding of music to our students, and in assisting them to realize the depth and breadth of human expression through music (Campbell, 1992).

Hearing the different musical sounds that various cultures use to express similar events can highlight the uniqueness of each musical culture as well as indicate the significance of cultural uses of music and the role of theory in helping our understanding, as well as determining the nature, of musical expression (Walker, 1990).

An awareness of the wide variety of world music not only enriches one's musical and intellectual life but also improves the ability to hear music of our own culture (Malm, 1995). Nakazawa (1988) found that Japanese children raised in the United States developed a greater interest in and a greater appreciation for Japanese music and other world musical styles (African, Indonesian, Persian, and Hispanic) than Japanese children raised in Japan. Fung (1994) observed social/cultural attitudes play a role in world music
preference. To fully obtain the values of multicultural music education, close cooperation with ethnomusicologists is important so that authentic resources are being used and the music is not diluted. One of the most valuable contributions that ethnomusicologists can make is to help bring about an understanding of the culture from which a specific music comes from (Dodds, 1983).

There is a connection between the culture one lives in and the music that is created in the culture with each influencing one another. It is not possible to fully understand the music of a culture without examining the context in which it is created. Understanding and appreciating the context which music is created assists in the listener to make connections to events in their own culture and music. In steel bands, understanding the culture of the people who created the steelpan aids in understanding the music they created and how the instrument and music is learned. In the following section, studies examining multi-cultural issues in music education will be investigated.

**Multicultural Issues in Music Education**

Multiple studies have been conducted which investigate student interaction with music from other cultures. Hebert (2005) investigated a school band in Japan. His research used analysis and interpretation of field notes, interviews, videotaped observations, documents, sound recordings, and an open-ended questionnaire in his research. The observations occurred three times a week over a period of nine months.

The sense of community exhibited by the students was of particular interest in this study. Students typically did not take instruments home to practice, but practiced in school in small group sectionals. Recordings were used to compare the students’ work
with professional ensembles. Only top students entered and remained in the band due to the amount of dedication and discipline involved, and they were motivated to join by their peers, and the music. Cooperation was a fundamental theme; committees of student leaders assigned instrument parts based on the needs of the whole. Students learned the background of the music being played, and the histories of bands and composers.

Woods (2009) examined students’ perceptions of multicultural education in a suburban high school setting by the grade and gender of the students. A cross-sectional sample of high school students from all grade levels was examined in this study to gain their perspectives of multiculturalism in their school and community. Generally, all students within the sample agreed that teachers should be from different ethnic groups in order to maximize the understanding of multiculturalism in the school. They also agreed that by celebrating holidays and special events of different ethnic groups, and potentially focusing on a different one each month schools could increase awareness of the similarities among ethnic groups. Students in the study typically had interactions with students from different ethnic groups in a variety of manners, from being in the same classes and extracurricular activities to social events. A majority of students’ responded they had invited friends from different cultures to their homes, worked on a school or community project with students of other ethnic groups, and were willing to help students of a different cultural group with homework or tutoring. Most respondents indicated that different ethnic groups were represented among academic honorees, athletic teams, clubs, leadership positions within the school and members of school music ensembles. Discussions of ethnicity most likely occurred in English and social studies classes where
they discussed different cultural groups with advisors, teachers.

Overall, students in this study were positive about multicultural education. Woods believed these positive experiences possibly were the result of having teachers who exhibited sensitivity to their ethnic differences. Special programs within the school encouraging student participation, and living in a diverse community helped teach students to respect each other and their ethnic differences.

Schaus (2007) examined the benefits of implementing multicultural music education into a school’s music curriculum. Conducted in a region with a culturally diverse student population, the study surveyed student perception of multicultural music education using Chinese music. Analyses of student responses indicated that students were interested in both Chinese instruments and culture. Students were excited to discover that popular music genres were similar to Western popular music. Focus was placed upon understanding the similarities and differences between Chinese and Western culture. Understanding similarities assisted students in relating to unfamiliar material; students expressed feelings of connection when learning about the similarities between cultures. Students learned that it was not necessary to restrict their enjoyment of music to their own culture, and that it was interesting to explore other cultures’ music. Students in the study were more apt to enjoy music of other cultures if their friends expressed positive feelings as well.

Volk (1998) detailed philosophical perspectives, historical context, and contemporary implications of multicultural music education. This work summarized four primary views of multicultural education: those of Grant and Sleeter, Gibson, Banks, and
Pratte. Volk also outlined and discussed the multicultural music education perspectives of Williams and Elliott. The historical background of multicultural education and music education in the United States from 1900 to the 1990s is presented with attention paid to the events and trends which impacted music education, from both World Wars, immigration laws, the space race, desegregation, jazz education, ethnomusicology, MENC initiatives, ISME (International Society of Music Educators), the Julliard Repertory Project, the Tanglewood Symposium, the Bilingual Education Act, and Goals 2000. Volk discusses multiculturalism outside of the United States, devoting several pages to Great Britain, Australia, Canada, and Germany.

Volk presented implications of multiculturalism for the music education profession. She noted that lack of training in world music during music teacher education, a lack of materials, materials that are not authentic in their cultural representation, and varying teaching methodologies were among the many concerns. She noted that multicultural music education had become a concern not only in the United States, but also in many other countries with high immigrant populations and increasingly diverse music.

Three overarching categories emerged from the data Peters (2007) collected: preservation, the function of music, and identity. Employing a qualitative, interpretive research paradigm, Peters created a rich, contextualized, multi-voiced account of students using the tools of inquiry of cultural ethnographers. A purposeful sample of thirteen students, ages 15-17, was selected from a larger, upper-level music performance class. The data revealed the value of traditional music for a local Italian community of practice.
The students described how music preserves culture, and enhances ethnic identity. Additionally, students described their positioning as insiders and outsiders in relation to a local Italian community. Students struggled with different issues related to their own ethnic identity, and felt that the learning environment allowed them to learn by themselves as well as in collaboration with others.

Students in this study were asked to examine the distinctive characteristics of a local music culture and describe the shared beliefs and values of members of a culture as exemplified by its musical practices. Students clearly stated that family was the most important value for this particular local Italian community. The family was an environment within which members could connect to their roots. It unified and provided stability for the community. This in turn encouraged the preservation of cultural practices such as religion, music, art, and food.

Understanding other cultures and their music does not guarantee that educators are instructed in how to adequately teach these subjects in schools. Petersen (2005) observed a disconnect between training in multicultural education, and the practice in the classroom. Peterson stated that undergraduate teacher education programs must find ways to incorporate these practices in the curriculum. Developing and employing a multicultural resource center in school districts could also be used to better prepare teachers that are currently in the classroom.

This study used a variety of survey instruments including The Personal Multicultural Assessment: The Music Specialist’s Multicultural Music Education Strategy, a demographic report sheet to measure teacher’s attitudes and practices.
regarding multicultural music education. These items were mailed to all general music educators in the state of Arizona ($N = 651$).

The results of the survey indicated that Arizona elementary general music teachers are functioning at varying levels of multicultural competency. The teachers’ *Personal Multicultural Assessment* mean scores ranked at the third level of the Multicultural Personae in the areas of Personal Behavior, Professional Behavior, and on the Composite score. The areas of Life Experience and Personal Attitude ranked at the second level of the Multicultural Personae.

Statistically significant relationships were found between the population of the teachers’ hometown and the Life Experience subscale score and the composite score. The undergraduate institution from which the teacher graduated was positively related to the Personal Behavior subscale score and the composite score. Though the majority of Arizona elementary general music teachers felt inadequately prepared for teaching multicultural music education or have ethnic instruments, they reported utilizing the majority of regional-specific world music.

Life experience was a significant factor in determining music teachers’ utilization of multicultural music education. This study demonstrated that Arizona elementary general music teachers’ personal attitudes and behaviors might not have affected their utilization of multicultural music education, and professional behaviors regarding multiculturalism (Petersen, 2005).

The confidence a teacher had in presenting the material affected the students’ desire to learn about multicultural music. Meidinger (2002) found a high consistency
between positive student responses to multicultural music education when taught by an expert music teacher. The expert teachers believed students should learn music from other cultures regardless of the ethnicity of the students in the classroom, and the music teacher’s play had an influential role in the musical preferences of their students.

Teachers should be provided opportunities to learn techniques on teaching musical concepts from traditions outside of the Western art tradition. Being comfortable teaching these concepts will transfer to the students improving their interaction with the music. Meidinger stated that interview responses indicated that music education programs should be broadened to include additional training in multicultural music, and this should be required for all music education majors. In the following section studies implementing related methodology is examined to enhance knowledge of case study methodology in music and education.

**Summary**

The literature in this chapter examined the motivations for performing in musical ensembles by the participants, which were found to be both musical and social. Participants enjoyed the communal bonds that were created through the process of creating music, and the pride garnered through performance. Studies investigating informal music learning were presented and indicated that this style of learning worked well in establishing strong bonds amongst the participants, and created a sense of ownership of the ensemble and music created. Research indicated students could learn and understand cultures that were not their own through multicultural music education and through this understanding they better understood their own culture. Students were
more open to learning about new cultures and music when their peers were supportive, and this understanding created a strong bond and sense of belonging. A sense of belonging could be cultivated in students by teachers who are comfortable utilizing non-traditional educational methods; furthermore, students stated that they enjoyed the experience more.

The history and culture of the steel band in Trinidad and Tobago have shaped how the ensemble has continued to grow in popularity around the world. By performing music that is popular in nature, and having an instrument that is accessible to the masses without needing years of study, the steel band has grown into a musical ensemble that young and old participants alike are able to gain a music performance experience that is closely related to the original practices in Trinidad and Tobago.
CHAPTER 5: Design and Methodology

The purpose of this study was to investigate a high school steel band in Pennsylvania. Of particular interest were students’ motivations for participation and the perception of the ensemble by the students. To understand these issues, a case study methodology was employed. Qualitative research is an inquiry-based process of understanding that explores a social or human problem, in order to build a complex, holistic picture. Qualitative researchers attempt to explore people’s beliefs and attitudes, feelings, and perceptions regarding an experience or a phenomenon. They are more interested in the real world than in artificial laboratory conditions, thus their studies occur in uncontrolled, natural settings (Creswell, 1998). This study seeks to understand the motivational factors that lead students to participate in the steel band, the importance and value of the selected steel band to the members of the ensemble, and their school as a whole.

In this chapter, I will define the research design of this study, provide a description of the participants and site for study, define my role as researcher, describe procedures for data collection and analysis, and describe the procedures established to ensure trustworthiness.

Research Questions

The following research questions guided this study:

1. Why did the participants join steel band?
   a. Why do participants continue to participate?
   b. What benefits do participants perceive as the result of participation in the steel band?
2. What are the participants’ perspectives as to the role the steel band in the school community?

Design of Study

A case study design was used for this research. In case studies one issue or concern is selected, and studied in depth at a selected site (Yin, 2003). A case study provides insight into the accounts of individuals or groups in the context of a natural setting (Glesne, 2006). Case studies illuminate issues by allowing the researcher to become a participant observer while conducting an in-depth analysis of a system utilizing a variety of data (Yin, 2003). Further, a case study design allowed me to answer the “how and why” questions in the investigation of phenomena, populations, and generalizations (Glesne, 2006).

Merriam (1988) stated that case studies needed to be focused and holistic. Merriam wrote, “Case studies concentrate attention on the way particular groups of people confront specific problems, taking a holistic view of the situation” (Merriam, 1988, p. 36). I used this methodology to seek an understanding of an individual unit, which may be a person, organization, setting or event (Creswell, 1998). The individual unit being studied in this research is the South Central High School Steel Band. Data were collected through interviews, observations, and examination of artifacts.

Site

The high school steel band being studied in this project a high school steel band, which is located in a Mid-Atlantic state. The town is thirteen miles north of Maryland and is the county seat. The United States Census Bureau estimates the population within the borough limits as of July 1, 2008 as 18,302 with an economy still largely based on
agriculture. When combined with the surrounding townships the population of the area, which makes up the school district is 52,273. There are 1,400 students in grades 9–12 with 90 percent of the population being Caucasian, and the other 10 percent being split evenly between African Americans and Hispanics. The school was built in 1958 and was renovated in 2010. The band room is a large open, one level room, and has tile floors. There are sound panels on the walls and windows on the back wall. The music classes offered are Band, Jazz Band, Orchestra, Chorus, Music Technology, Music History, and Steel Band.

**Participants**

The participants in this study were students from the school steel band, administrators who oversaw the music department, the ensemble’s director, and selected members of the community who agreed to be interviewed at performances. Adult members of the community interviewed ranged in age from 18 to 70. All students in the steel band were invited to participate in the study regardless of the amount of experience with the ensemble or the length of time of their participation in the ensemble. Community members were invited to participate in the study before and after performances by the steel band.

**The Program**

The program was established in 1971 after the school superintendent, returned from an education conference in Saratoga, New York where he heard the Trinidad-Tripoli Steel Band, which performed as an opening act for Liberace at the conference. During the conference the benefits the advantages of multicultural education were
addressed, and believed that this type of music ensemble would be an asset to the school. Upon returning the high school band director, was instructed to obtain the instruments. After weeks of research, the director was able to contact Hugh Borde, the director of the Trinidad-Tripoli steel band and inquired about acquiring steelpans. The director was able to meet Borde in person a few weeks later as the band was performing thirty miles away at Shippensburg State College.

Borde sent Mikey Enoch and Larry Sutherland, both members of the Trinidad-Tripoli Steel Band, to create the school’s first steelpans from thirty barrels donated by a local potato chip company over eight days during Thanksgiving vacation. They worked twelve-hour days, from 6:00 A.M. to 6:00 P.M. in the school’s basement. Enoch and Sutherland were paid $2,200 in addition to their travel expenses and food to create five tenor steelpans, three double seconds, two cellos, and two sets of bass steelpans. Once the instruments were built, Enoch and Sutherland began the process of teaching the instrument to the director and students.

The whole process of beginning our steel band was a little overwhelming. I had no idea of what we were in store for. I also had no idea of how hard it was for the instruments to be created. I would often watch with amazement as Mikey would take his hammer and just start pounding on the barrel. He allowed some students to assist him with the sinking of some of the drums. We went to the local bowling alley and asked if they had any house balls they didn’t need. When I told them that we were building an instrument with them the manager looked perplexed. Never the less he gave us three balls, which we later returned, a little worse for the wear (Lerew, L., personal communication May 6, 2013).

The director decided to select the best musicians and brightest academic students out of the band program to be in the first steel band. He attempted to keep an even number of girls and boys, and an equal number from each of the three grades in the
school. Students learned the instruments by watching Enoch and Sutherland, and learned the music by rote. As new members joined they would learn to play in the same manner. The goal was to play with a nice musical touch and not pound the instruments. After the first year the band began to add written music to their repertoire in order to add diversity to the concerts. Typical concerts would include calypso, and soca music, jazz, classical and popular music. The director stated that the concerts were to be entertainment for audiences, and tried to program a little something for everyone (Lerew, L., personal communication, May 6, 2013).

Hugh Borde observed the band after their first year of playing and was fascinated that white children could learn to play the steelpan, and enjoy the instrument as much as Trinidadians. Borde was so impressed that an invitation was extended to have the steel band play during carnival in Trinidad. This trip never came to fruition as the State Department strongly suggested that the trip would not be safe for the girls in the band. While this performance opportunity did not occur, the band was very active in performing through the 1970s. The band traveled throughout the United States performing at conferences and conventions including the state music convention, and MENC Eastern Division convention. The band was performing so often that the new superintendent asked that the steel band begin to curtail the amount of their performances due to the amount of classes the band was missing.

Out of all of the performances the steel band had during the 1970s, one of particular interest of was the performance at the 1977 Blossom Festival in upstate New York. This festival included a steel band festival including fourteen high school steel
bands. Of the fourteen bands in attendance the only steel band that the director remembered was Washington (PA) High School. The director knew that there were other school steel bands in existence at the time, but did not know how many or where they were located until the festival (Lerew, L., personal communication, May 6, 2013).

The steel band played the original set of steelpans until 1979 when Ellie Mannette was contracted to build a new set of steelpans for the band. The original set of steelpans was sold to a youth center in New York City for approximately $700. Unfortunately, the director is unable to recall exactly where the center is located and who the teacher was at the time.

The originating director was with the band was until 1989. Since then, there have been three other directors. At the time of this study there were twenty-two members of the ensemble. The steel band is a non-curricular ensemble that rehearses for two hours on Wednesday evenings after the conclusion of the marching band season in the middle of November. Membership is open to any student in the band program.

Data Collection

Data were collected for this study through direct observations of the ensemble and interviews conducted with members of the steel band, the director, and individuals at concerts. Observations began in the fall of 2010 and concluded in the spring of 2012. Interviews were conducted from March to May of 2011.

Interviews

Interviews with student members of a high school steel band in Pennsylvania occurred from March 2011 to May 2011, in a practice area adjacent to the main band
room before, during, and after regularly scheduled rehearsals. Students signed up for times that fit their schedule, or came by when time permitted. Sixteen of the eighteen members of the steel band were interviewed. One student desired to participate, but, after several attempts, was unable to remember to bring in the assent form and was excluded from the study. The remaining student was on homebound instruction for the remainder of the school year and was not interviewed.

An interview is a form of conversation designed for a researcher to gather specific data that addressed the purpose of the study and the research questions. Participants interviewed in this study included selected students from the steel band, administrators who oversaw the music department, the directors, and selected members of the communities at performances of the steel bands. Purposeful sampling was employed in this study to find participants who contributed to an information-rich study (Creswell, 1998). Criteria for selection of student participants included membership in the steel band ensemble regardless of the length of time they have played in the ensemble.

Interviews represent a qualitative research method that is directly interactive, and yields results that are easy to analyze (Patten, 2001). Interview techniques also vary in how they may be classified. For example, Bernard (1988) described interview techniques as being structured or unstructured, describing the most informal type of interviewing, followed by unstructured interviewing that has some focus. Semi-structured and structured were mentioned involving an interview schedule, which is also known as interview questions, or scripts. Fontana and Frey (1994) expanded this classification scheme by noting that interviews may be conducted individually or in groups. Each
member of the steel band was interviewed in addition to the director, the music supervisor, and other administrators who oversaw the music program.

Guidelines for conducting interviews are relatively straightforward considering that both myself, as the data-gathering instrument, and the respondents are human beings that have various strengths and weaknesses in communication. The objective was to be certain that I listened to respondents and recorded what they said, rather than listen to my perceptions or interpretations. It was best to maintain the integrity of raw data, using respondents' words, including quotes liberally. Bogdan and Biklen (1992) stated that good interviews were those in which the subjects were at ease and talked freely about their points of view and produce rich data filled with words that reveal the respondents' perspectives.

Interviews in this study were recorded using a digital recorder. All interviews were transcribed, and printed out in Word 2007. Due to multiple word meanings, several sections of the transcription needed to be aurally verified and corrected. Notes were then presented to the interviewee for verification, nevertheless, none of the interviewees made any corrections or clarifications.

Types of questions asked in interviews were also categorized in a multitude of ways (see Appendices D, E, and F). Goetz and LeCompte (1984) describe these as experience, opinion, feeling questions, hypothetical questions, and propositional questions. Spradley (1972) provides one of the more extensive discussions of questions, indicating that they may be descriptive, structural, or contrast questions.

Only one high school steel band was selected for this investigation. The primary
reason for this is that at this level students have choice over elective courses and extra-curricular activities, and the target ensembles and directors are easier to locate. Faulkner (1992) presented principles for preparing an interview which were taken into account:

- Set out the information required, this should link to the research focus.
- Structure the information into a logical sequence. Place related questions together.
- Phrase the questions. The sentence formulation will largely determine the answer received.
- Use a combination of open-ended and closed questions. Questions should be formulated in which only one aspect is addressed per question.
- Consult someone. Try questions out on someone to examine whether the answers received are the type desired.
- Select the target group.

**Observations**

Observations were made in person as a participant-observer in this case study during the 2010-2012 school years, with special attention given to the times students were beginning to learn new music and the steelpan, and when the ensemble was preparing for major concerts. The class observations began in November and continued into January for a total of ten rehearsals. Observations resumed again in March and went through May. During these observations only field notes were taken as the students are not in the practice of having rehearsals recorded, and I wanted to eliminate any potential confidentiality breeches.

**Data Analysis and Trustworthiness**

To ensure the data provided an accurate representation of the events observed and the content of interviews conducted, several processes were utilized: data coding, member checks, peer and external reviews, and a self-reflection of potential bias. These
Data Coding

Field notes of the interviews and observations once transcribed were assigned a two to four letter code (e.g., SB-steel bands, MC-multicultural, etc.) based on the synthesis of the obtained data. First, I summarized and packaged the data. This included reconstruction of interviews and focus groups as written notes and trying out/synthesizing-coding categories to find a set that fits. At this first level the coding of data was established concurrently with the writing of analytical notes on linkages to various frameworks of interpretation. Second, I repackaged and aggregated the data in which themes/trends in the overall data defined. In this step I looked for relationships in the data record and wrote additional analytical memos (e.g. the pattern coding). A key element of this was to find out how the case definition is proceeding and then fill gaps in the data. Third, I developed and tested propositions in order to construct a descriptive framework for the collective case. Crosschecking of tentative findings and matrix analysis of major themes in the data were conducted to the extent possible given the research case design (Miles & Huberman, 1994). The field notes were completed as close to the date of the field experiences to keep the events fresh in my memory. Coding helped in the organizing and arranging of the data into categories to better compare between categories (Maxwell, 2004). As notes were reviewed, new themes or items of interest occurred, and were assigned a corresponding code.
I looked at the data through the analytical lens of informal music education as discussed by Lucy Green and related literature. Steel bands historically have been communal organizations in which the members typically learn music by rote, or mimicking other players. This provided a unique environment compared to the traditional school music ensemble in which the members are given sheet music, and rely on the director to provide feedback. The steel band investigated is also an extra-curricular activity that students chose to participate in after school. This, combined with the uniqueness of the steel band activity, made the informal lens appropriate.

**Peer Review**

In an attempt to minimize bias, I used peer reviews consisting of my colleagues in the music departments of Messiah and Gettysburg Colleges and my colleagues in the online doctoral program at Boston University. Peer review involved additional qualified researchers who were not directly involved in the research who acted as consultants to examine whether the hypotheses emerging from the data were reasonable in light of contents of the transcripts of the interviews, researcher notes, and memos (Orcher, 2005).

**External Review**

I consulted a qualitative researcher, my dissertation supervisor, as an external auditor to help verify my findings. The external review, or audit, was used to certify the appropriateness of the research methods, and interpretation of results. Orcher (2005) stated this person acts in a similar fashion to an outside financial auditor for a corporation.
Member Checks

I conducted member checks with the interview subjects to ensure that the notes that were taken accurately reflected the statements provided through the interview. Member checks allowed participants to critically analyze the findings and comment on them, either affirming that the summaries reflect their views, feelings, and experiences, or noting inaccuracies. Lincoln and Guba (1985) state this is the most crucial technique for establishing credibility.

Researcher Bias

Several threats to the reliability of the data collected can occur during a study when a researcher imposes their own perspectives and beliefs (Maxwell, 2004). As noted previously, the data for this study was derived from various sources including observation, field notes, interview questions (open or closed), and documents from reports/meetings/records (Creswell, 1998). A key element of external validity in a qualitative study is that data must be systematically and reliably collected to enable inferences to be made; this was built into the study method and organization. In this context validity refers to the approximate certainty of truth of an inference or knowledge claim, where inference is taken in a broad sense so as to encompass interpretations and generalizations (Pattan, 2001). Miles and Huberman (1994) suggested that the most useful generalizations from qualitative studies are analytic, not sample to population. Therefore, considerations associated with the reliability of the methodological approach and data validity are critical as is elimination of bias of the researcher. I attempted to suspend personal judgments, focused on what occurred in the situation, and constantly
tested for personal bias. I took steps to consciously/intentionally suspend the influence of prior knowledge, and remind myself that there should be no commitment to proving the phenomena actually exists or is as it appears to concerned parties, participants, or me. To assist with the reporting of bias, I used researcher memos to maintain a record of any potential biases that I have. I periodically reviewed the memos to help remain abreast of the biases that I report.

Bias is an issue in this dissertation because I have held preconceptions and underlying assumptions regarding steel bands. I have been involved with steel bands since 1993 as a performer, arranger, and clinician. I am also a high school band director and currently direct a steel band in the same region of Pennsylvania.

**Qualifications of the Researcher**

I am currently the director of bands at Bermudian Springs High School in York Springs, Pennsylvania where I direct the Wind Ensemble, Concert Band, Jazz Band, and the Steel Bands. Additionally, I teach World Music and Sound Engineering classes. Prior to my appointment at Bermudian Springs, I taught at Cumberland Valley High School, serving as the district percussion specialist and elementary band director.

I earned a Bachelor of Music Education from The Ohio State University and a Master of Education with Music Education emphasis from the Pennsylvania State University. I previously performed with the world music ensemble, Zorzal, (which specializes in the music of South America), the Gettysburg Festival Brass, and the Bermudian Steel Groove Pan Ensemble. I have been associated with the steelpan as a performer and director since 1993, making several trips to Trinidad and Tobago to study
steelpan building, tuning, and culture, and am a clinician for Tropical Hammer Steel Drum Crafters. I have presented numerous sessions on steel band and their uses in schools around the country, including the Pennsylvania Music Educators Association Conference in April 2006.
CHAPTER 6- A High School Steel Band in South Central Pennsylvania: Perception of Students, Teacher and Community

There are numerous reasons students choose to participate in any activity, whether school affiliated or non-school affiliated, curricular, or extra-curricular. Participation in any activity indicates an investment of time and the best means of discovering the reasons for participating is to listen to the students who participate in the activity and those who are closely associated with it. Individuals in this study have all found an appreciation for at least one aspect of the steel band that encourages continued participation. Some of the prominent themes derived from interviews involved the initial motivations and attraction to the steel band, the sense of belonging, musical achievement, and learning an appreciation for a different culture.

Teacher Background and Steel Band Instruction Methods

Ms. Jones has been teaching in the school district for eight years. She primarily teaches elementary band and assists with the high school band in addition to being the director of the steel band. When hired at her school the steel band had been in existence for over thirty years, and was being overseen by the high school band director. With a background in woodwinds, she was hesitant to take on such a unique ensemble such as a steel band:

When I was hired I was asked if I would take on the steel band as one of my ensembles. The department chair thought that being a new teacher I would welcome the extra income that came with the stipend for the after school ensemble. He told me that the instrument was easy to learn and that the students would help me along with the instrument technique. All I needed to do was look over the large picture of keeping the ensemble running. The first year was really hard. I had only heard steel drum music on recordings and occasionally on
television. I had no idea what the instruments were called, why there was a car part in the percussion section, and even if the rhythm section was playing the correct way. Fortunately, the students were very gracious and walked me through the process. The most difficult part for me was learning how to hold the sticks in order to get a good tone from the instrument. Not having a percussion background I found that I was hammering the drum, or not hitting hard enough. The kids were helpful with this though. (Personal communication, March 1, 2011)

Having no steelpan instruction during her college experience, Ms. Jones attended a summer clinic at Villanova University during the next summer:

I was very excited to see that I was not the only student in the course who had no previous steel drum experience. There were around twelve of us in the class, and I was the only one there who was the director of a steel band. Everyone else was there to learn about the steel drum, how to start a band, and various other reasons. I wish that there had been more opportunities during my undergraduate program to encounter multi-cultural music and how it should be performed. The instructor that year was Marc Svaline, who I later found out was the director of the steel band at Washington (PA) High School. He welcomed my questions, and was very encouraging. During my time at the time at the clinic I discovered that we shared the same tuner as Marc, and had other connections between our schools. I was amazed at how small the steel band community is. (Personal communication, March 1, 2011)

Ms. Jones commented the steel band is a point of pride in their community, and they are not able to honor all of the requests for the band to perform. Members of the community enjoy the upbeat and lively sound, and the music selections of the band:

We were facing extreme budget cuts a few years ago, and the school board placed all extra-curricular activities in the music program on the chopping block. Members of the community flooded the board members with letters and emails describing how much of an asset the steel band was to the community, and the recognition our school gets from having a steel band. Due in part to the respect the steel band has in the community the school board found the funds to keep everything intact. The band receives approximately five thousand dollars a year for maintenance, the rest of the budget is made up of money obtained through performances. (Personal communication, March 1, 2011)

The steel band has had the privilege of bringing in guest clinicians from time to time. The fees for clinicians are often provided through grants from the local arts council.
or from other charitable organizations. Jones recalled they have had Ellie Mannette in previously, and the students were in awe of being around him. More recently, she was able to turn a regularly scheduled tuning session with their tuner into a clinic. “Allowing the students to see the process of tuning really changed how they played the instrument. They take a much more delicate approach now.”

Since the steel band meets as an after school activity and not subject to certain enrollment requirements, she has the ability to be somewhat selective. It has been the past practice that students desiring to participate in the steel band must be members of the concert band as well. This practice has been in place as long as anyone can remember. Jones stated:

I would love to be able to open the ensemble up to more students. However, we do not have the instruments, storage facility or rehearsal time to make it happen. The membership structure has been in place for so long that some students begin playing a band instrument just to have the opportunity to play in steel band. I often am saddened that there are more students who would like to play than we have room for. Especially those who are musically inclined but not participants in the band program. I wish that the steel band could be a class that meets during the school day like another steel band in our area is. They have over sixty students in their steel band because it meets during the school day (Personal communication, March 1, 2011).

When asked further about how students become members, Jones described that since her ensemble is an extra-curricular she attracts students who are highly motivated to learn the instrument. She looks first for the students who exhibit good musicianship, and humble personalities, due to the need for students to work closely and cooperatively with one another. Rarely has anyone been turned away who has wanted to play because the expectations have been around for so long. The most difficult spots for her to fill are the drum set and engine room positions:
I have to be very selective with my drummers. Since the band does not have a conductor, I seek out percussionists that have a strong sense of rhythm. Even for the iron and cowbell. I know that many new drummers are unfamiliar with the calypso groove, but the good ones catch on very quickly. Some kids think that anyone can play the cowbell; it is interesting for them to see how difficult it can be for them (Personal communication, March 1, 2011).

Students join the steel band partly for the musical fulfillment but also due to the camaraderie and community exhibited within the band. There have been many instances where siblings and family members have created a tradition of participation in the steel band:

The steel band is where many students find their best friends. The band in my time here has always been welcoming of new members and they thrive on maintaining the tradition that has developed. While there are many students who join the steel band because of the music we play and the sound, others join for the friendships and the bond of the group. (Personal communication, March 1, 2011)

Unlike other music groups in the school, the steel band does not have a reputation as being “geeks” or “nerds”:

The school really appreciates the music we present partly because they understand it. Unlike concert band, and orchestral music that is more artistic the students just ‘get it’ because the sound is so familiar. There are also not as many around so you do not have the traditional stereotypes portrayed about marching band members. This openness is attractive to members of the steel band, especially the ones who often more introverted (Personal communication, March 1, 2011).

The steel band plays a wide range of musical selections including traditional calypso and soca music, panorama transcriptions, reggae, and branching out to American popular music. The band even has a few praise and worship songs in their repertoire from when they were asked to play at a church picnic. The goal of the steel band has been to always have music for any occasion and audience:

While we play a wide selection of music, we try and maintain the feel and integrity of the steel band. Students have a great time listening to pan radio, and
hearing what many of the steel bands in New York are performing. This has sparked interest in many of the members arranging music for the steel band. The difficult part for the students is remembering the range of the instruments and choosing a key that the melody is not split between two instruments in the middle of a phrase. Our younger audiences enjoy hearing songs that are currently popular, and the members of the band play with more understanding of the groove than they often do with the calypso and socas…While the band loves playing popular music, at the heart of the book is the calypso and soca (Personal communication, March 1, 2011).

The audience demographics at performances typically are based on where the band is performing. Jones noted that the band plays many concerts at age specific events in schools, nursing homes, retirement events, etc. When the band plays concerts that are open to the public the audience demographics encompass all ages. I was particularly impressed with the performances I attended that the audience not only included parents and family members, but students from neighboring school districts as well. Ms. Jones noted that the older audiences are partial to the traditional steel band music consisting of soca and calypso music, while the younger members prefer the popular influenced selections:

The students often tire of playing calypso music from the 1950’s. I try to remind them that when their grandparents were their age this was the unique and popular music on the radio. My own father loves it when the band plays “Rum and Coca Cola” and “Sugar Bum.” They get tired of me telling them that in fifty years the high school students will think their music is boring (Personal communication, March 1, 2011).

While Jones was not involved with establishing the steel band, she believes that the band is successful in their community because of the good feelings that are evoked through the music. Audience members are attracted not only to the intriguing sound of the steelpan, but of the popular based music the band plays:
I think that the steel band is so successful because our audiences “get” the music we perform. Many marching bands play popular music on Friday nights, however, the arrangements are usually poor, and the rhythms are not exactly what the original artist performed. The steel band is able to emulate many of the rhythms and grooves in the music because the band listens to recordings in order to accurately replicate the sound, instead of only relying on notation. The authentic nature of the music appeals to the audiences. I have seen pretty nice crowds at band and orchestra concerts, but the audiences are mostly family members of the performers. Our ensembles play very well, but art music just does not resonate with wide audiences (Personal communication, March 1, 2011).

Jones believed that steel bands would be successful in other schools and communities just as they are in her school. This is due to the unique sound that draws attention and efforts in many schools to be inclusive of other cultures:

Having a steel band has enabled our school to provide cultural encounters for our entire student population which otherwise would not have happened. A couple of years ago we invited Eustace Applewhite in when he was visiting another school. To see the looks on the faces of the general student body when he walked in was amazing. Many have never seen a large black man with dreadlocks in person before. He really was personable and engaged the students, answering many questions they had. We also attempt to educate our audiences about the history of steel bands, and how the instrument developed (Personal communication, March 1, 2011).

Jones mentioned she is lucky to have been offered the opportunity to teach the steel band because of the many items she has learned through the process. While never seeing herself as culturally insensitive, through learning about the steel band she was able to see the struggles that underprivileged and oppressed individuals encounter. She noted that this has made her more grateful for the opportunities that she has, and the desire to help her students and community be more understanding as well.

**Initial Motivations and Attraction to Steel Bands**

Many students enjoyed the uniqueness of the sound, the non-traditional instrumentation, and others found membership in a tight community. Amelia, a senior,
joined the steel band during her sophomore year. She always enjoyed listening to music and had participated in other musical ensembles. She did not enjoy chorus or enjoy playing in a band instrument; however, she still wanted to be involved in a music ensemble. Many of her friends were steel band members, and she said, “I was really attracted to the steel band because I really enjoyed the music and the camaraderie of the members.” Amelia always loved the sound of the steelpan and believes that the first time she first heard the instrument on her parents’ Jimmy Buffett recordings (Personal communication, March 16, 2011).

Lauren joined steel band as a freshman because she had seen how much fun her brother was having playing steelpan in the concerts. She wanted a place to acclimate to high school, and her brother told her she would make friends with many upper-classmen in the steel band:

I never knew that learning the steelpan could be so rewarding. I thought that all of the kids in the band were all much more talented than I was, and every one in my section went out of their way to let me know that they were new to the instrument in the last year or two. This made me feel confident I could learn as well. She first saw a steel band when she was in elementary and thought that the sound was “cool and fun!” (Personal communication, March 30, 2011)

Katelyn, a sophomore, indicated that she originally wanted to join as a freshman, but scheduling conflicts prohibited her participation. She was drawn to the ensemble by the “amazing, unique sound, and the way it that the members were having fun while making music.” Katelyn loves the challenge of learning new instruments, and proudly boasts that she has made district band on two different instruments, and district orchestra on cello. “I live for music, and the steel band just seemed to fit my personality.”
Katelyn’s first encounter with a steel band was the Washington (PA) High School Steel Band, when she was in fifth grade, while on a weeklong visit to her grandparents:

I remember that performance so well because the music was really cool, and was more interesting than the music I was playing in band and orchestra at school. I also loved how the audience reacted to the performance because they were as into the music as the band! (Personal communication, March 16, 2011)

Katelyn moved to the school when she started eighth grade, and felt like an outsider until she joined the steel band. She then mentioned that:

The members of the steel band didn’t care where I was from or what my parents did; they were only interested in my desire to play steelpan. It was the first time since I moved to South Central that I felt as if I had any friends. This group, due to its size became my favorite place to be because they cared about me. It also didn’t hurt that it was so much fun to play as well! (Personal communication, March 16, 2011)

Zack is a very quiet, introverted freshman. He noted how he joined the steel band:

I didn’t want to be in the steel band, but my mother made me. She felt that the steel band gave me an opportunity to meet some “safe” friends that get good grades, and stayed out of trouble like his other friends (Personal communication, April 13, 2011).

His first encounter with steel band music was on a family trip to Walt Disney World when he was five and on Sesame Street.

I saw this small group playing steelpans outside the Pirates of the Caribbean ride. It was really cool to listen to and I liked how the performers were having a lot of fun interacting with the audience that stopped by to listen. I had only seen this instrument on Sesame Street before then. (Personal communication, April 13, 2011)

Zoe a junior described herself as eccentric with a passion for unusual things. She first saw a steel band when the Chambersburg Area Steel Band visited her elementary school:
I knew I couldn’t wait to get to high school to play in that band! The sound was very unique, and not something that can be heard every day. This type of ensemble really fit with who I am! (Personal communication, March 23, 2011).

After seeing the steel band, Zoe stated that she “spent months banging on any coffee can or metal trash can I could find.” Unfortunately, she became disappointed in her inability to recreate the cool sounds she heard and only wound up upsetting her parents with all of the noise she was making. She was overjoyed when her grandparents purchased her an 18-inch steel drum for her when they went on a cruise to the Bahamas. “I played that pan so much that after a couple of months the whole pitch of the pan had risen by a 2nd!” (Personal communication, March 23, 2011)

Connor is a senior member of the ensemble and the top tenor player and was a member since his freshman year. He lamented about no longer playing in the steel band after graduation. He noted that his father is a contractor for the Navy and occasionally will take him along on trips when he goes to Norfolk:

One trip when we went down we went to Virginia Beach, and there was a steel band festival going on. I was in 6th grade, and had seen a steel band before when it came to our elementary school, but I had never experienced a concert experience like that. I decided then that I wanted to learn to play the steel drum as soon as I could in high school (Personal communication, March 23, 2011).

Connor started playing the saxophone and guitar in 7th grade in part to give him a head start in learning how to read music:

I was told by many older kids that the only way to get in the steel band in high school was to be in regular band. I really didn’t care to join band, because that did not seem as much fun, but my mother told me that I had to in order to be able to join the steel band. I really did learn a lot about learning to read music through playing the sax though (Personal communication, April 27, 2011).

John, a freshman, is learning the ropes in the engine room, which is the rhythm
section of the steel band containing the drum set, iron, cowbell, and hand drums. John shared his reason for joining, stating:

While I have played in band since 5th grade as a percussionist, I have always felt more like a drummer. I love playing set, and there are not any opportunities to play drum set in school except in jazz band and steel band. I’m not into jazz…it is too weird when they don’t play the song and just make stuff up. I prefer rock and music like that so I joined steel band (Personal communication, March 16, 2011).

John’s initial experience in the steel band setting did not go as smoothly as he anticipated:

It hasn’t been as easy as I thought. I ain’t played calypso style grooves before. I’m learning though. Justin, the other drummer, has helped me out a lot. I am getting better at it but I like to play the rock and reggae songs better. I often get bored playing cowbell and iron, but I know that I ain’t playing more drum set until he is solid with calypsos. Luckily I still have another year to perfect it before I have to be the man because Justin is only a junior (Personal communication, March 16, 2011).

He was surprised at how important the cowbell and iron were in keeping the band together. “In regular band, those parts suck. Those parts are not as cool as snare, but in steel band, it is the most important to help keep the tempo together because there ain’t a director.” Other factors also enticed him to join steel band:

The band just sounds cool! There is nothing around like it. I mean not every school has one of them. So I figured it would be neat to be part of a unique group. I always looked forward to seeing the steel band on their yearly tour growing up, but never thought that he would be able to join. Now I try to find kids like me and tell them that there is a cool group for them as well (Personal communication, March 16, 2011).

Meghan, a junior double second player, first remembered seeing a steel band while on vacation at Walt Disney World and being excited when the band played “Under the Sea” from The Little Mermaid. “I was captivated by the sound of the steel drums, and being a huge ‘Little Mermaid’ fan, was completely mesmerized by the song.” Later, she
remembers the steel band coming to Grandview Elementary School and thought she would like to learn to play the steelpans when she was older. She eventually joined when she was a sophomore because, “so many people were telling me how much fun I could have, and I would meet new people. I already knew I loved the sound. I couldn’t wait!” (Personal communication, March 23, 2011)

Gabe, a senior cello steelpan player, played in the steel band since starting high school. He noted that he was attracted to the steel band because:

My father is originally from Port-of-Spain, Trinidad, and he loves pan music. He never learned how to play the instrument because his mother forbade him from associating with steel band members because she thought that they were trouble (Personal communication, April 20, 2011).

He noted that his father moved to the United States for college, and has since become a citizen, but always loved the sound of steelpans. Gabe feels he connected to his own culture by playing in the steel band:

I just think that even though I have never personally been to Trinidad and Tobago I feel connected to the culture through stories Dad has told me, especially about sneaking out of his room to go hear some of the bands preparing for Panorama (Personal communication, April 20, 2011).

Justin is a member of the steel band’s engine room (see appendix G) and has enjoyed being a mentor to John, the new member of the engine room. Last year, he was the new member learning the ropes of playing drum set in the steel band. Justin was motivated to join because he loves playing drum set, and there are very few opportunities for drum set players to play in school ensembles. “It’s not like we’re Bermudian Springs that has a rock band available during school for drummers to play in. I joined only because I wanted to drum, man!”
He noted that he worked hard in junior high to be seen as good enough of a percussionist so he would be permitted to play in the steel band:

Ms. J has some standards that she sets to make sure that just any person can’t get in to play set in steel band. She demands that they be musical and musicians, not just a head pounder! (Personal communication, May 4, 2011).

Justin knew of several drummers in school that would love to have the opportunity he had, but he lamented that, “They have never proved that they can be musical. Part of this is coming up through the band program” (Personal communication, May 4, 2011).

Sean, a sophomore double second player, joined the steel band as a 9th grader after the ensemble visited his junior high school. He recalled enjoying the sound of the steelpan and the unique sound of the band:

I enjoy playing instruments, and so when I heard our high school steel drum band I decided to give it a try. My parents were very supportive of this because they think I have a hard time making new friends and this would be another place for me to meet new people (Personal communication, March 30, 2011).

Sean also recalled seeing a steel band playing near the mall in Washington, D.C. when his 5th grade class went there for a field trip. “My teacher had to drag me away to go to the museums” (Personal communication, March 30, 2011).

Sam commented:

I started steel band just this year. I decided to become involved with it because I thought it would be cool to learn a different instrument and about different types of music. My brother was in it when he was in school, and we used to come to the concerts. I thought it was cool that the metal things made such cool noises (Personal communication, May 16, 2011).

She recalled that the first band she ever remembers hearing at her school was the steel band. “My brother is almost ten years older than me, so we were going to concerts
as long as I could remember. I think it is cool that I am playing the same set of pans that he did” (Personal communication, May 16, 2011).

While individual students all stated various reasons as to why they were attracted to the steel band and wanting to play, there are a few common themes: unique sound and popular style music, the desire to play “non-traditional” musical instruments, the desire to be in a community, and the attraction to a less formal school music experience. In many instances, a student’s desire to join the steel band was due to a combination of these factors.

**Repertoire**

One aspect of the steel band that was attractive to students and audience members was the varied repertoire of the band. Steel band literature often consists of calypsos, socas, and other upbeat, popular music, which is a major contrast to many other large performance ensembles.

Drawn to the steel band by the repertoire, Amelia said the group plays traditional music from Trinidad and Tobago, including calypso and soca music. She takes pride in the fact that her steel band has played transcriptions of Panorama favorites like “Dus’ in De Face,” “Birthday Party,” and “Fire Down Below.” Amelia enjoyed the Panorama selections because they remind her of the islands. They typically will play one of these songs annually to challenge the members. While the band attempts to play Panorama transcriptions note for note like the large Panorama bands, they often omit some difficult passages in order to sound good.

Amelia mentioned that she really enjoyed playing “bomb” style tunes, which are
foreign art or popular musical selections played in a calypso style. She especially enjoyed playing musical arrangements that members of the band created. Playing original arrangements was an aspect of the steel band Amelia found attractive, and something that she believed made this group different from other ensembles. “The arrangements by students in the band really are what make this experience personal” (Personal communication, March 23, 2011).

Amelia described, “The band has more energy and enthusiasm to play ‘pop’ tunes, and the audience really responds when we play the songs well. It is a great feeling to know that people enjoy the music we play and seeing them get up and dance” (Personal communication, March 23, 2011). She felt Ms. Jones does a great job choosing music that enables the band to learn more about the culture of Trinidad and Tobago, while keeping the music relevant to the students and audiences in Pennsylvania.

Lauren stated, “We play island types of music . . . [like] calypso, reggae, and socas!” She especially likes playing reggae, because of her love of Jamaica:

I am glad that I have learned to play steelpan because I was able to jam with a group at our resort on my last trip to Jamaica. They were amazed that a girl from the U.S. was able to play steelpan (Personal communication, March 30, 2011).

She recalled Ms. Jones frequently informs her that the steelpan is from Trinidad; however, Lauren was introduced to steel bands during vacations to Negril, Jamaica. Additionally, she noted that the steel band also plays music that is currently popular, and especially likes to play “Dynamite” and “Billie Jean.” She likes performing music that gets the audience involved and “pumped” about the music. Lauren mentioned seeing a band from Trinidad playing classical music on YouTube, and thought it would be a fun way to learn to play classical music, but was unsure if the other members or audience
would share the enthusiasm.

When asked about the band’s repertoire Katelyn commented that the ensemble played “some traditional, some modern, but the music is always fun!” (Personal communication, March 16, 2011). Continuing on to the types of traditional music the band plays and she answers with a vague “island music, and rock.” She then sheepishly confessed that she knows that Ms. Jones talked about the styles of music that the band plays and the meaning, but she is always too caught up in looking at her music and waiting to play instead of listening. Katelyn stated the music the steel band plays was the main reason for her wanting to join the ensemble because of how different the sound and rhythm is from other school bands (Personal communication, March 16, 2011).

Zack was unsure of how to talk about their repertoire. He did not understand the definition of repertoire and responded, “We play steel band music!” He noted the repertoire consisted of “The Hammer” “Matilda” and “some piece we play a lot that is about fire:”

I think one is called a soccer song, but I am not sure. I really don’t pay attention to that stuff. I wish we didn’t play none of them. I wish we played more music that is heard on the radio like Fire Burnin’ (Personal communication, April 13, 2011).

Zoe enjoyed talking about the band’s repertoire, especially how she loved playing “Fire Down Below:”

This is the most challenging piece of music that I have ever played. I love the chromaticism and the key changes. It is a marvel to listen to, and so much fun to play in on top of that. To think that many of these compositions are created by arrangers that do not have a formal music education like band and orchestra arrangers have blow my mind! The steelpan was very easy to learn, and the music is so much fun. This combination is what led me to want to play (Personal communication, March 23, 2011).
The band attempts to learn one difficult piece a year, and last year they performed “Dus’ In Deh Face.” In addition to these Panorama transcriptions, she mentioned that the steel band has several traditional calypso and soca tunes. “Many people in our audiences request [Yellowbird]; however, the band has avoided playing the piece since a Trinidadian clinician worked with the band twelve or so years ago. He stated the song was offensive, and it was blacklisted.” When asked about favorite songs she noted:

One of my favorite songs that we play is a transcription of “Billie Jean” that a director of another steel band gave us. He heard I think it was Phase II on Pan Radio, and liked it, so he wrote it for his band and ours. It is so cool hearing that kind of music on pan! We also play other traditional songs like “Matilda” and “Marianne” (Personal communication, March 23, 2011).

Regarding the repertoire, Connor told of a really neat arrangement of “My Girl” which they learned from Ellie Mannette during a clinic:

We had always played several calypsos and socas, but this was the first time that I had ever seen a piece of music taught completely without any music. Ellie was amazing! He just told and showed each section what to play and amazingly it worked out the first time. We typically are a little note-bound in the steel band when learning new pieces (Personal communication, March 16, 2011).

Connor enjoyed playing without sheet music more than using it because he feels that he is able to “groove and move” better with the band without it. The movement and enjoyment the performers were having while playing was a major reason he joined. He notes, “We have everything under the sun in our book, from calypsos, to praise and worship music, reggae to Michael Jackson. Ms. Jones attempts to have music available that will be appealing to any audience that we have” (Personal communication, April 27, 2011).

Meghan indicated that the repertoire of the steel band includes traditional calypso
music, soca, and reggae music. Additionally, she commented that the band plays several newer “rock” tunes including “Viva La Vida.” “I really liked the diverse musical styles the steel band plays. It feels as if there is a song that everyone will like.” She mentioned the desire to learn other pieces. “This is the only band that I know of where you can play something right from the radio.” The accessibility of playing popular music was very enticing to her (Personal communication, March 23, 2011).

Gabe described specific parts of the repertoire he enjoys, for example, Panorama transcriptions:

I really wish we would play “Under the Sea!” I also think it would be cool to learn and play some classical music, because Ms. Jones tells us that the bands in Trinidad also play classical music. I am just unsure how the audience would respond to hearing the steel band play that. We are known for being upbeat and fun. These charts are by far my favorite because I love to see my dad dancing when we play them. He says that these songs bring back so many memories of his youth and seeing the bands practicing in the panyards. This has provided a unique bonding experience for my dad and me (Personal communication, April 20, 2011).

Gabe commented that the repertoire “consists of a lot more soca music than calypsos, however, many people, including Ms. Jones, don’t really get the difference.” He believed that many people get the two genres mixed up because the engine room uses similar drum patterns. “Unless you can hear the words [my] dad tells me there indeed is little difference.” Gabe preferred the music that is representative of Trinidadian culture, and while he enjoys the band’s rock style songs, he wished that they would stay with the “island” music:

I know that my special connection to Trinidad affects the way I feel about what we play, but my dad believes that all of the music we play is good and as long as we acknowledge that the instrument is a product of the culture of Trinidad first
and foremost then any music on pan is good (Personal communication, April 20, 2011).

Justin affirmed that the steel band plays rock, reggae, calypso, and soca music is why he wanted to play in the band since there are not many other places in school to play those types of music. He enjoyed playing the rock style of music at first, but has started really enjoying socas. He stated that:

The soca groove is not easy to learn, especially if you have never played it before, nor have ever played anything with a 16th note groove in the high hat. I can now play it in my sleep. I am having fun helping John learn how to do it. I had to learn by myself, and I don’t want him to have to learn by himself (Personal communication, May 4, 2011).

Justin mentioned that he does not know what the other player’s favorite songs are because he is “usually too into the drum part to know. I know that they all listen to me to stay together so I do my best not to become distracted.”

Sean recalled the wide variety of musical genres in the group’s repertoire. “We play all kinds of music ranging from rock to hip hop and to the classic calypso style. This is partly to appeal to the audience and partly to pay tribute to the history of the steelpan and Trinidad and Tobago.” He enjoyed some songs more than others. “While I like all of the music we play, I really enjoy the traditional music like ‘Matilda,’ ‘Marianne,’ and ‘Bahia Girl’ the best because it really feels like we are playing island music.” He acknowledged that “Birthday Party” is another piece from Trinidad, but that “I don’t like it as well because it is really freaking hard to play!” Overall though, Sean likes the response audiences have to all of the music the steel band plays. He mentioned that the audience is constantly “smiling and bopping along with the music we play.” (Personal communication, May 4, 2011).
Sam noted that the band plays, “just regular island music and some cool rock songs. I still haven’t learned too much about the styles because I’m just trying to play the drums.” She mentioned that the music they play is picked specifically for given audiences. “We have praise and worship songs I really like; there is some music that old people like; like some Parrot Head music [Jimmy Buffett], whatever that is, and music that young people really like. The band has about everything but country” (Personal communication, May 16, 2011).

This steel band selects repertoire and learns to perform it through a process that is different than traditional school music ensembles. Students came into the rehearsal room and Samantha quickly stated that she knows the next new song the band should play, and mentioned the song “Sey Hey (I Love You)” by Michael Franti. Many members seemed to be unfamiliar with the song until Samantha played a recording of it. After listening for a few minutes, members of the band began discussing how well the song would sound with the steel band and the parts different instruments should play. This led to a couple of students beginning to experiment with the melody and attempting to play the chords. Over the next couple of weeks parts were written down, and the band began to rehearse this new chart.

Seeing this process in action was impressive, and the end product was something the band took pride in. Amazingly, the director did not assist in the arranging process at all. When the students felt that the song was ready for rehearsal they informed the director that they had a new tune that they would like to try, the teacher, after looking over the parts provided, agreed, played the MP3 of the original song and the band began
to use light dead strokes to figure out their parts.

The repertoire of the steel band is diverse and included traditional steel band selections, and a diverse selection of other songs that included transcriptions, popular “island” music, and popular music arranged by the students. The selections and style of music played by the steel band is an attraction that leads students to join the ensemble. Students also like the ability to arrange music for the ensemble, and see the response of the audience to the arrangements of their peers. In the following section I will examine the unique nature of the steel band.

**The Unique Nature of the Steel Band**

There are many musical ensembles available to students in this school, but none are as unique as the steel band. There are numerous music-making opportunities in U.S. schools and most are traditional ensembles (band, orchestra, and choir), which use formal teacher centered instruction. This steel band provides a unique approach to music education that does not solely rely on the students’ note-reading ability or having practiced the instrument for many years to obtain proficiency. In the steel band investigated, I noticed that the director took on a facilitator role. This was noticeable especially when students learned new songs as students would work in small groups to master the sections and the teacher would listen to make sure the parts fit together appropriately. If students suggested a tempo adjustment in a section, the band made the change without being mandated from the director. The director worked to keep the members of the band on task and acted as a time-keeper in order to stay on schedule. When she felt that students were finished discussing musical items she had the band
come back together to work on a section. This collective approach to the ensemble appeared to be enjoyable to the students.

Amelia commented, “[I] enjoyed the hands-on aspect” of participating in steel band. She felt that chorus was too structured and did not present music in a manner that actively engaged students and applied their skills, noting that many of the students know the form and harmonic structure of popular songs. She felt this enabled the steel band to learn music more quickly than in chorus. She finally learned how to read music through steel band participation, and, while she always learned music by rote before, being able to read notation has opened up new opportunities that would not have been available, like learning to play piano and marimba (Personal communication, March 23, 2011).

Lauren indicated that the steel band is more enjoyable than other ensembles because of the relaxed atmosphere; the director is not the central figure in the steel band like in concert band:

In concert band we follow the conductor, and do what he says when he says to do it. Rehearsals are quiet, and while productive, I feel like the band is more about the conductor than the students (Personal communication, March 30, 2011).

She noted that the steel band is about the ensemble and cooperation in learning their parts; Ms. Jones just makes sure everything gets put together.

Katelyn stated that steel band is “a lot more fun because there are not as many people as band and orchestra. All of the members are able to really get to know each other.” She enjoyed the feeling of community in steel band, and the how the music performance depended on each member keeping everything going, especially in the absence of a conductor. She also enjoyed the steelpan coaching and mentoring provided
during rehearsals. “Ms. Jones is able to come around to work with all of us to help make us sound the best we can. This is way different than traditional ensembles where the director never leaves the front of the room” (Personal communication, March 23, 2011).

Zack stated that he enjoys steel band more than concert band because “we are able to work on sections quietly while Ms. Jones is working with other sections. In band we have to sit quietly and wait until the director is done working with other sections. This is really boring.” He enjoyed playing the six-bass because “I like the opportunity to move when I play. I feel like I am in gym class sometimes because I can work up a sweat. It is awesome not being in a chair.” Zack enjoys how easily the steelpans are to learn. “I really like not having to practice at home. I can usually get all of my parts down while I am at practice” (Personal communication, April 4, 2011).

Zoe described the relaxed environment as a difference between steel band and other ensembles she participates in:

Steel band is a little more informal with room for personal expression. Fun and freedom is a very important aspect of the steel band. It creates an environment that feels very safe. It is always hard to go to marching band practice after steel band. Marching band is a complete 180 culture-wise because everything is so precise and regimental (Personal communication, March 23, 2011).

She liked how most members of the steel band are encouraged to improvise solos in a few of their songs. “In ‘Limbo Rock’ we open up a few choruses for everyone who wants to solo. It is an easy chord progression to play over. I especially like playing a bass solo every now and then. It’s different.” She enjoys the student-centered environment, noting, “We all rely on each other to keep the music tight. Ms. Jones will point out items as we play, but it is the engine room that keeps us together. This makes all of us feel as if
we have ownership of the ensemble” (Personal communication, March 23, 2011).

Connor commented he had played in all of the available bands at his including marching, concert, and jazz bands, but noted, “The steel band is much smaller than any of the bands I have been in. While the steel band is only a fraction of the size of what the marching band is, the following and crowds that come out for this group is amazing. People really look for us.” He affirmed, “I love not having a conductor with the steel band. All of the players have to listen and depend on each other. We all get to share in the glory and applause, unlike concert band where I feel that we are just the conductor’s instrument, and he gets all the attention.” He loved that the steel band is about the kids and the music, and not as much about the conductor or drum major. Connor mentioned that jazz band has a similar feel as the steel band; however he does not have the same attachment to the group:

I enjoy jazz, but I am terrible at improvising on my sax. I feel like I do not fit in as well as the other guys who are just ‘smokin’ when they solo. I just have never gotten the hang of it. However, I can improvise well on the tenor pan. I can see the chords and the notes that I want to play much better (Personal communication, April 27, 2011).

Overall, he felt the steel band feels safer for exposing his weaknesses because, “we all have been only playing pans for no longer than three years.”

Meghan stated that she plays flute in band, and violin in orchestra, and that the steel band experience is completely different than playing in either of these ensembles. She noted, “The steel band is structured differently than other ‘traditional’ ensembles because everyone is able to learn at their own pace and with the group.” She noted that each new student is paired up with a veteran player, and they learn some songs simply by
watching their partner and mimicking them:

This way [of] learn[ing] an instrument is so much more fun and enjoyable way than learning a regular instrument because you are actively working with another person, and can hear music at the same time. I really do not like to practice flute and violin because I have to do it alone, and we are not supposed to learn music in those rehearsals (Personal communication, March 23, 2011).

To get a better understanding of her last comment when asked if the directors of the band and orchestra have ever told the students they were not to practice with a friend. Meghan contemplated this question, and then in a regretful tone says, “You know, neither Mr. B. nor Ms. Swartz have ever told us we couldn’t do that. I think that it is just a habit from when we started playing instruments.” I suggested that possibly she might find more enjoyment practicing flute and violin if she plays with other people. She stated, “Well, steel band is different because we can’t take the instruments home . . . the music is also cooler, too” (Personal communication, March 23, 2011).

Gabe is very passionate about the steel band, and what it means to his family. He noted, “The steel band is so much more laid back. We all work with each other to get the sound right; we all enjoy being with each other.” Gabe enjoys playing in concert band because the experience is completely the opposite of the loose nature of steel band. “I feel really weird because I also really enjoy the quiet nature of concert band rehearsals and hearing how all of the different colors blend together to create a musical tapestry.” Gabe enjoyed the different expectations and structure of each ensemble. “The concert band is about order, and following the orders and baton of the conductor, the steel band is about all of us bringing our collective talents together without the need of the ‘authority’ figure.
Just listen to the iron and everything stays together” (Personal communication, April 20, 2011).

Justin described playing in steel band was similar to playing in his garage band, Play Rough:

There are four of us in the band: me, Colin, Nick, and Ryan. We all are out trying to find places to play, and when we practice any of us can stop the piece to make corrections. It is pretty cool how it works, but sometimes Ryan gets really moody when we ask him to sing differently (Personal communication, May 4, 2011).

Justin noted that one or two people in steel band resent their mistakes being pointed out, but did not want to say who they were because he did not want to embarrass them. He appreciated the way the members in each band took responsibility for the product. “We are only going to sound as good as we want to. If we do a bad job of fixing mistakes in Play Rough or steel band we will sound really bad.” He liked how steel band does not feel like a “school” band, noting that:

Other bands at school are overly structured, and the kids don’t need to fix too many things because we are told when we mess up. Steel band is different. Ms. Jones lets us work on rehearsals and fixing items among ourselves. She will step in and tell us if we aren’t getting something, but rarely does she need to do that (Personal communication, May 4, 2011).

Sean noted, “It’s a lot of fun when we perform. People really like it because most of them have never heard steel drums before; I also like it because its upbeat and it’s something that I’ve never done before.” He then stated that the only other band that has a similar laid-back feel to the steel band would be jazz band. “I love being able to solo in jazz band, so when we started opening up some choruses in some of the traditional songs for solos I was stoked! That combined two of my favorite elements of music in one.” He mentioned that he liked the close-knit feeling in both the jazz and steel bands because:
There are just enough people to have a great sound, but not too many that you don’t know everyone. I like playing in marching band and going to football games, but I think I only know a third of the band. It does not feel as special as jazz and steel [band] (Personal communication, March 30, 2011).

Asked if jazz and steel bands are special because he really likes to solo, Sean replied, “Sure. Not everyone can do it well.” He then added, “I like how there is no conductor in front of the band. It really feels as if this is a band that the students are truly able to own” (Personal communication, March 30, 2011).

Sam enjoyed the responsibility given to the students. “It is cool that there is really no set director. I mean, the drum set player keeps the tempo that Ms. Jones sets, and sometimes she may kind of conduct a hard section, but it is all on us.” She stated that she really likes not having to tune like a wind instrument and worry about that part of playing in steel band. “I am terrible at hearing if my instrument is out of tune! It is nice not having to worry about it. That is what Billy [Sheeder], our steelpan tuner, is for” (Personal communication, May 16, 2011).

The members of the steel band all have differing thoughts on what is unique about the steel band, but all comment on the tightness of the community within the band as being a factor in the ensembles difference. The students enjoy the lack of a conductor in front of the ensemble, and also the ease of learning to play the steelpan as being a unique factor of the band. In the next section, I examine community and parent thoughts on the unique nature of the steel band.

**Conveying Cultural Knowledge Through Steel Band**

Amelia liked the idea that through playing in steel band, she is learning about other cultures. She felt “able to catch a glimpse into the trials and tribulations of another
people” through playing the steelpan (Personal communication, March 23, 2011). She felt as if by playing the steelpan, she is celebrating the genius and creativity of a relatively unknown culture.

Lauren has enjoyed learning more about other cultures through steel band. When she first started playing in steel band she thought that she was joining another musical ensemble. She stated that it was amazing how much the culture and history of Trinidad affects how she views the instrument. Lauren clarified this saying:

The steelpan is the first instrument that I have really ever been told the history and evolution of. When Mr. Mannette came to visit our steel band, it was like seeing the most important person in the world! (Personal communication, March 30, 2011).

This physical connection to the history of steelpan only heightened her desire to play and learn. Lauren visited Jamaica, and she felt as if knowing about the hardships encountered by the Trinidadians enabled her to understand the economically disadvantaged people in Jamaica.

Katelyn had learned many things about other cultures through being in steel band. She noted that “other cultures like the same music as we do, and popular music in Trinidad and Tobago, Jamaica, and the Virgin Islands are all about the same subjects as popular music here: Sex, love, and having a good time!” Katelyn is also drawn to the historical connection between popular music in the United States and Trinidad, and slavery. “I think that the music of both of these cultures embody oppression of the slaves and the poor conditions after slavery really well. It is amazing how the masses are drawn to the music of the minorities” (Personal communication, March 23, 2011).

Zack noted that he “has learned that the culture of the cool kids in school is a lot
different than the culture of my other friends. They don’t get into trouble, and people like
them.” He also noted that he knows they play music from Jamaica, and some reggae
music. “I think the people who started playing in steel bands were a lot like me. I have
heard that originally the members were like gangs and got into a lot of fights and stuff.
That feels like me. I don’t try to get in trouble, it just finds me” (Personal
communication, April 20, 2011).

Zoe explained every year they learn a little more about Trinidad and Tobago, and
especially the ensembles that originally played their “Panorama” tunes. “We always talk
about the “Renegades,” “Phase II Pan Groove,” and the “All Stars.” She is proud that
their steelpan tuner is a graduate of her school and has traveled to Trinidad every year for
the last five years to tune for some of the medium size bands. She could not remember
which bands he tuned for, but she was amazed at the stories he told about the preparation
for the competition. “He tells us of how much the people in Trinidad don’t have
compared to what we do. I think he said that the average income is around $8000 U.S.
dollars a year! I can’t imagine trying to live on that.” Zoe mentioned she is amazed how
“laid back” people are:

When I was a freshman we had a guy named Eustace come by to show us how the
instruments were built. I was amazed at how calm he was, and was never in a
hurry to finish. He kept saying that things will get done. It was crazy how we
finished everything just before he had to catch the bus to go to Daytona Beach,
but he saw no problem! (Personal communication, March 23, 2011).

Connor believed the steel band helped bring attention to cultures other than the
typical “white” culture of his community. “Our community and school are primarily
white; we present music that is really engaging, and also background information about
the culture of the steel drum.” Connor continued by mentioning that his own father, who was a self-described “redneck,” has really become more open to music of other cultures from his playing in steel band:

Dad used to never listen to anything but country music. After attending a few of our concerts, he started to listen to many other styles. It might not seem like a big deal, but in our house that was huge. Dad also took Eustace [Applewhite] the pan builder out for dinner one night while he was here at school. Talk about amazing! (Personal communication, April 27, 2011).

Connor has learned that people in other cultures expressed the same issues in their music as the music he listened to. “When we talk about calypso music we talk about how the calypso was known as ‘the newspaper to the people,’ and that many songs talk about controversial or political themes of the time. It really feels like old sixties music!” He then mentioned, “I really like soca music because of how they artfully discuss [sexuality]. It is so much more fun than pop music in the U.S. [where the lyrics can be more obscene.]” (Personal communication, April 27, 2011).

Connor was amazed at how overworked and stressed Americans are compared to people in the island cultures. “We seem to be driven by the clock and are stressed out because of it. The guys from the islands I have met are so laid back. They seem to enjoy life more than Americans. I guess that could be one reason they have so little money.” He continued stating “I would love to be able to live in a culture that is not ruled by the clock!” (Personal communication, April 27, 2011).

Meghan did not learn much new cultural information from the steel band due to her previous experiences:

Unfortunately, I don’t think that I have learned anything about other cultures that I didn’t already know. I have done several mission trips to Jamaica, Haiti, and
Trinidad since I was in 6th grade with my youth pastor at church. I know that all of these areas were subjected to horrible conditions due to being ruled by European powers for so long. It is neat to see how the people who live there have been able to combine elements of their own culture with that of the English and French. In all of the countries I have visited, there was always a mix of African and European cultures. I see it in how music is created by the rhythms, and the importance of drums. Everyone seems to be able to contribute something to the music. I learned in an enrichment class that this is an important item in music and cultures in Africa (Personal communication, March 23, 2011).

The steel band assisted Gabe in learning about Trinidadian culture. “Since my grandmother forbid dad from playing in a steel band we both have enjoyed learning about the history of the steelpan together. We especially liked spending time with Mr. Mannette when he came to see the band. My dad was so excited that he almost seemed like a kid at Christmas time!” Additionally, he noted that even though his dad never learned to play the steelpan, he knew of Mannette’s importance and what he had done with steelpans to bring recognition to Trinidad (Personal communication, April 20, 2011).

Gabe liked hearing the differences between stories relayed in books about Carnival and his father’s own experiences at Carnival while growing up. “I am really thankful that many of the authors have written accurate accounts about Carnival, Panorama, and Trinidad, in general. I have been able to fill in many pieces along with my dad about a culture that is very important to him” (Personal communication, April 20, 2011).

Steel band has increased Justin’s knowledge of soca:

I started Googling “soca music” when I was trying to learn to play it. I heard a lot of original soca music with lyrics on-line and just really began to dig the stories in the music. It is so much like rock, but with a different groove (Personal communication, May 4, 2011).

When asked if he learned anything else about other cultures, and he gives a non-
committal shrug mentioning, “I don’t think I have learned too much” (Personal communication, May 4, 2011).

Sean has learned much about Trinidadian culture through playing in steel band. “I am amazed that they can make do with the resources they have and still make music and have fun. I don’t think that people in the United States would be able to do what the Trinidadians had to do. It is really inspiring!” He then explains that he spends many afternoons hanging out at Gabe’s house after school because he lives next door. “Gabe’s dad loves to tell stories about how life in Trinidad growing up was so different than we have it. It is cool having a musical connection to his homeland!”

Sean stated that many people request the steel band for personal events and gatherings. He commented, “It also attracts a lot of kids that have never played instruments before and they end up joining band or orchestra because of hearing how much fun playing music is.” He believed the steel band is a great way for people to become aware of other cultures:

People love to hear us, and we have never played a concert where someone has not come by afterwards and asked more about the steel drums, and where they are from. I’m not sure how much their lives are changed by hearing the band, but they are reminded that there are other people in the world who may not be as fortunate as they are (Personal communication, March 30, 2011).

Sam recalled, “I have learned that the Trinidadians and Jamaicans are very lively people and make awesome music. They also do not have much money and make do with whatever they have.” She also noted, “Billy . . . goes to Trinidad every year to tune drums. He brings in pictures and video clips to show us. He told us this spring that when he goes down that he doesn’t stay in a hotel but in houses of various people. I would
never want to not stay in a hotel. That would be too weird.” After reflecting on this question, Sam recalls hearing something about stick fighting, “but I am not exactly sure what it has to do with steel band. I think it was connected to something like Tamboo Bamboo” (Personal communication, May 20, 2011).

Learning about the history and culture of the steelpan was meaningful to many of the students, and several commented on the ability for the Trinidadians to persevere through bad situations. However, it became apparent that not all of the students found equal value in being presented this information. In the next section I will investigate adult views on the cultural information of the steel band.

The Steel Band Community

As members of the steel band began to arrive for rehearsal it was immediately apparent that the steel band rehearsal is a time that the members anticipate all week. Students could be seen happily greeting one another and inquiring about how one another did on a difficult test. In another corner of the room a couple of boys were consoling another member of the band who was having relationship troubles. As each member of the band arrived each member was greeted like a family member who had been away for a long trip. The members of the band genuinely appeared to like to be together and care about one another outside of the ensemble. In addition to each other many students recognized the importance of the steel band to the school community.

Lauren described that playing in the steel band strengthens her feeling or sense of community. “I knew some of the members of the steel band because they were my brother’s friends. This made me very comfortable to begin with, but soon after I began to
make my own place and friends in the steel band. It has become my family!” When asked if she has ever belonged to a close-knit group like this in the past, the only other group she felt came close was being on the soccer team. “Unfortunately, I never quite felt as if all of the other girls on the soccer team had my best interests in mind because they wanted more playing time.” She mentioned that steel band was different because, “while we all wanted to win the soccer game, for many on the team they wanted to play more than anything. In the steel band it is all about the music. We all win when we play well!”

Brian, father of Justin, enjoyed seeing how involved the members of the steel band are with one another and the camaraderie exhibited by the members of the steel band:

I was worried about how my son would handle the transition to high school. He did not have many close friends, and this school is large and can be intimidating. The steel band has been the best thing to happen for him. All of the members are so close, and they are welcoming of their new members. This is not always the case with other music groups here. I attribute this to the way the ensemble operates, and the uniqueness of the instruments. Students have to rely on one another (Personal communication, May 29, 2011).

Zack enjoyed the sense of community he experiences within the steel band:

The steel band is the first place I have ever been where I have been treated with respect from the first day. Too many other people have heard about my ‘problems’ and begin to hold certain stereotypes about me. I guess I have been tryin’ to live up to what they expect. The guys in the steel band don’t ever pay attention to that. They treat me like everyone else in the band. This has become one of the most important places for me. It is home. If anyone disrespects us I’ll kick their butts (Personal communication, April 13, 2011).

Amelia believed that membership in the steel band has strengthened her feeling of community within the ensemble. She pointed to members helping one another learn new music in rehearsals, and taking the time to help others fix an incorrect passage. She stated
that the band takes pride in enabling Ms. Jones to be more of a coach, and the band took more ownership in the end product through this cooperation. Amelia believed that she has made many more lasting friendships in steel band than she would have in chorus due to the way the ensemble learns music, the support system, and the laid back environment:

Zoe feels a great sense of community among members of the steel band. The steel band is a very tight knit family; it is my favorite place to be. Through the music, we are all able to work together and create an awesome musical experience. I have especially liked how the band reaches out to the new members. For many of the new members the steel band is the first opportunity to meet people in our large school. We try to watch out for each other and eat lunch with one another as well (Personal communication, March 23, 2011).

Connor noted that the steel band is a very tight group, both socially, and musically. “We are always doing things together, hanging out on weekends, eating with each other at lunch, whatever. It is hard to believe that very few of us knew each other before joining the band. I think this tightness comes from having to rely on each other musically.” When asked how they respond to conflict and disagreements he stated: “We have several opinionated members in the band, which often leads to some ‘sibling-like’ arguing, but we always get over it. We all have days where we are a little ‘edgy’ but know that we have people to fall back on.” Asked if there were any “unwritten” rules in the steel band to maintain the tight community, Connor stated:

We do not date other members of the steel band. The risk that there will be a break-up and rift amongst the members is too high. There are enough other girls in the school that we don’t need to hit on girls in the band. Personally, I think that would feel like dating my sister! (Personal communication, April 27, 2011).

John commented that the steel band has strengthened his sense of community:

I am always in a better mood when I am at steel band. The music makes me feel good, and the other players help make me feel better when I’m grumping. I can
come and have a good time. It is unbelievable that I am allowed to have this much fun in school! (Personal communication, March 16, 2011).

Meghan believed that the steel band’s “great sense of community” is influenced by Ms. Jones allowing the members to work together to learn new music and instruments. She enjoyed that many members hang out with each other outside of practice. Meghan clarified that she does not hang out outside of practice, “[It’s] not because I do not want to, but I do not have enough time in the day to take care of all of my class work, my swimming practice, and my boyfriend who goes to another school.” She felt equally at home in all of her musical ensembles and swim club, and felt blessed that she has so many great communities to help her grow. “I know that the steel band is tight, and if I ever needed anything that my friends there would be with me no matter what, however, I try to go all in with everything I do which has provided me with many circles in which I am comfortable” (Personal communication, March 23, 2011).

Gabe noted that the steel band strengthens his personal sense of community:

While I take a lot of pride in performing with concert band, I have a much greater sense of satisfaction and community in the steel band due to how it is organized. I think that it would be very easy to make the steel band feel like any other music ensemble by how rehearsals are run. I love being able to have time to help my friends learn new songs and instruments. This typically does not happen in concert band because the director has everything planned out and there is no time for it. In steel band we utilize the experience of all the members to make the group work (Personal communication, April 20, 2011).

He mentioned that this communal work brings a lot of pride to all of the members, “especially since we all play together without a conductor for concerts.”

He then spoke on his family’s traditional community in Trinidad. “By playing in steel band I feel so much more connected to my family’s culture. Trinidad is not that big
of a country; to have such an amazing instrument become so popular throughout the world makes me proud.” He mentioned how playing in steel band has strengthened his connection to his family and their community in Trinidad as well:

I am so sure that my grandmother, if she were still alive, would be so proud to see me playing in a steel band, especially one that is seen to be a positive aspect in our community. She probably would not have liked the thought of it at first, but our town isn’t Port-of-Spain. Dad says that she was amazed that a school in the U.S. thought that steel drums were important enough to have in school (Personal communication, April 20, 2011).

Gabe commented that this really changed her mind about the instrument, and it has brought him much closer to his father as well. “I am hoping to go visit some cousins in the next year to experience more about my family, Trinidad, and pan!” (Personal communication, May 4, 2011).

Justin described that student-to-student mentorship helps build community in the group:

I typically do not have many close friends other than the members in my rock band; however, working with John and having him soak up everything I tell him has really made us tight. I look forward to going to steel band so we can hang out afterwards. It is really odd that I like hangin’ with a freshie, but he is different (Personal communication, May 4, 2011).

Justin then recalled the students that mentored him:

I guess it was Tom and Chad who befriended me when I was a freshman and taught me tons of stuff. They showed me what being a steel band drummer is about. It’s my job to keep up the tradition and pass it on as well. The steel band overall adheres to the pay it forward philosophy. There is no way to pay back the people who helped us, so we must make sure to help new members . . . I guess I really do feel a strong sense of community in the steel band. I just never have thought about my friends as a community before. Thanks for helping me learn something and feel smarter! (Personal communication, May 4, 2011).

Sean noted that the steel band really provided him with another group of friends that he was able to get to know to make the transition to high school easier. “I already
knew many people through being in marching band and junior high band so I wasn’t worried about not knowing anyone. I was more concerned that I would meet a group of people who would become a great group of friends. The guys in steel band are good at making everyone feel welcome.” He continued, “I would have been OK in school without steel band, but I would not have that one thing I truly look forward to” (Personal communication, May 4, 2011).

Sam recalled steel band strengthens her feeling of community because:

It has given me opportunities to make new friends and have fun with the friends I already had. We work really well together encouraging each other and helping one another learn the music. I spend most of my spare time with steel band members (Personal communication, May 16, 2011). Members of the steel band find a closeness and identity within the larger school community due to the small environment and cooperative nature of learning the steelpan. This cooperation lends to lasting friendships, but more importantly, a band that plays extremely well because of not wanting to let their friends down. The next section investigates adult thoughts on the community identity of the steel band.

Jane described that before and after the concert that there were not any loners among the group members. She thought that all of the members genuinely enjoyed being with each other and could tell that this interaction has a positive effect on the music as well. Ryan agreed with Jane’s observation and added that he works in a local restaurant and sees members of the group together often. He is amazed at how older members of the steel band do not ridicule the younger members (Personal communication, May 29, 2011).

The respondents reported that they were able to see a tight community among the
members of the steel band and a welcoming nature exhibited to new members. Other audience members that were not interviewed discussed how much fun the band members were having with each other. The next section examines how the students view the benefits of participation in steel band.

**Benefits of Participation in Steel Band**

There are many musical and non-musical benefits students gain by their participation in this steel band. Katelyn referred to the sense of community she experienced when joining the ensemble. “Joining the steel band was the best thing that ever happened to me,” she states, “because until then I wanted to go move in with my Aunt in Indianapolis where I used to live to be with my friends. The steel band was the place I first experienced friendship and camaraderie here.”

The steel band has exposed Amelia to new music, and allowed her to enjoy creating music in school. “It is one of the reasons I look forward to going to school.” She also conveyed that steel band has reinforced her knowledge and ability to read and play music. She looked forward to hopefully purchasing her own steelpan.

After thorough reflection, Lauren noted that her main benefit from playing steelpan was “pretty lame” because it really had nothing to do with the steelpan at all, and states that she felt like a better human being through being a part of the steel band. “It really is not about the pan at all, but about being connected to so many other people in the ensemble, and having a better understanding of other cultures that make me feel like I can make a difference” (Personal communication, March 23, 2011).

“I feel like I have found a way to break my bad habits of doing dumb things.
These guys give me a reason to be good and do the right thing,” noted Zack. He stated he felt like he is an important part of the music by playing the six bass. “In band, I play sax. Many times I get lost and just sit there. Nobody seems to know I ain’t playin’. If I don’t get the bass part right, half of the sound is gone and I let my friends down” (Personal communication, May 4, 2011).

Zoe felt that she had become a better musician, and more knowledgeable about music styles and improvisation. To Zoe, however, the best benefit from steel band is “being part of a group that loves music and each other as much as I do!”

Connor believed that he had become a better musician as well:

I’ve learned to use my ears more. Since there is not a conductor I have to listen to the engine room, and the other members of the ensemble to make sure we are together. When I play sax in other bands I do not listen to others as well because I can always find out where we are by watching the conductor. Another way I have benefitted is that I have found a group of people that I feel like are my best friends. We have a very large school. There are not many ways to make strong lasting friendships like we have in steel band (Personal communication, April 27, 2011).

John enjoyed being able to create music that he is familiar with, in an ensemble at school. He also liked the use of non-traditional concert band instruments. As a drummer, having the opportunity to learn how to play musically within an ensemble and receive constructive criticism from the teacher is something many students like himself are unable to obtain in school.

Meghan mentioned several benefits from by playing steelpan. She enjoyed knowing that she had been able to participate in a musical group that is uncommon, and that she may never be able to have this experience again after graduation:
Just being able to play such an unusual and cool sounding instrument has been a huge benefit, but knowing how the instrument came about through struggles and perseverance has made this more than just another music group. It has become a visual and aural representation of overcoming problems (Personal communication, March 23, 2011).

While discussing the benefits of steel band Justin replied, “[I] feel really selfish, because I started playing in steel band just because I wanted to play drum set in school.” He then stated that he truly has benefitted by “learning that I really like helping people learn. I think I may want to become a teacher or something like that after I graduate. It is so awesome when someone takes what you have helped them learn and become successful!”

Sean recounted there are many ways playing in steel band had changed his world outlook. “I have learned to play a different kind of instrument that is fairly unusual and not local. I have also learned more about a cool culture other than my own.” He proceeded to discuss how he is slightly embarrassed about the over-consumerism he experiences in the United States and that he cannot wait to visit Trinidad with Gabe and his family. Most of all he noted, “I really feel that the greatest benefit is being able to give back to the school and community by doing something that I love, playing music.”

Sam added:

I have benefited by learning a different instrument, making new friends, and being able to socialize with the friends I already had. This is such a fun and safe environment to try and learn new things. I mess up often, and am never made fun of. Everyone helps me to do my best, and I am learning that my playing ability improves almost weekly because of the help of my friends (Personal communication, May 16, 2011).

Every student interviewed identified ways in which they have personally benefitted from playing in steel band beyond just learning a new instrument. Many
believed that they have been able to look at other cultures differently, which enhanced their other relationships. Concurrently, other members focus on the musical benefits of enhanced listening skills. The one aspect that is clear is that all students benefited in both musical and non-musical manners from participating in steel band.

**The Steel Band in the School Community**

Amelia recounted the reaction to the steel band within her community stating that the steel band had sparked the interest, and enjoyment of the school community. She noted that students actively came into the band room and asked about when their performance dates were, and that audience members “move and dance” in their seats and aisles. She recalled that, through the bands performances at the elementary schools students became educated about the history of the steelpan, and are introduced to music that was different from what they heard every day on the radio or television.

The community really responded to the ensemble, and Amelia believed that many in the audience members had a new appreciation for minority cultures after hearing the steel band. She stated, “We have a large Hispanic population in our community, and many people tend to look down at them as if they are lesser people than whites. Near the middle of our concert we typically introduce the instruments and give a mini-history lesson about the musical culture of Trinidad that led to the creation of the pan, including the laws that banned skin drums and tamboo-bamboo.” She claimed that many audience members came up to the band after performances to thank them not only for their playing but also for helping to learn about other cultures. She had witnessed several parents and community members going out to see mariachi bands and other “native” performances
that many would not have gone out to see before (Personal communication, March 23, 2011).

Lauren felt the steel band had affected her local and school community in many positive ways. She affirmed the steel band concerts were some of the most anticipated concerts of the school year. “On average we will play ten or more public concerts a year in addition to private engagements. For every concert we play that there are two to three concert requests that the band is not able to handle.” She mentioned that students frequently hang around the band room doors while the band is rehearsing, and many wish that they could participate in the ensemble. She believed the band has a high level of respect and support from her peers. Lauren mentioned that, “the fact that steelpan music is uncommon in schools in this area of Pennsylvania makes the ensemble a unique educational entity in the community” (Personal communication, March 30, 2011).

Katelyn believed that the steel band affected the community and school in a positive way and mentioned the steel band usually gave a brief history of the steel band and the music of the islands at each concert. While she thought the audience learned something from this, she believed, “They really just want the band to continue to jam!” She did recall that after each performance everyone loved to come up to view the steelpans and asked about their construction. She believed the steel band had a much greater impact on the community, noting that the steel band had assisted with the Interact Club’s “Forgotten Voices” project, over the last two years. This project helped draw attention to children in Africa and other impoverished countries including Jamaica and Haiti and raised money for food, clothing, and education. Members of the steel band
played at some of the assemblies and tried to draw connections between the forgotten voices from the music and connect them to the children.

Meghan noted that the steel band has affected her community and school in many ways. The steel band had partnered with the Interact club at school to work on the “Forgotten Voices” project. She thought the steel band members were a perfect fit for this project because they were “actively participating in an art from another culture and they seek to represent that culture well.” She also mentioned that the band not only sought to provide great entertainment for the audiences, but history about the steelpans as well. “I am always amazed at how the British rulers were so cruel to the natives by banning drumming. I would hate being told that I had to forget a part of my heritage.” She noted that in many instances, audience members thank the players afterwards for educating them as well as entertaining them.

Zack also believed the steel band has impacted his school and community in a positive manner:

The steel band has to have a positive effect on the school and community because everyone is always askin’ when and where we’re playing. When we do play everyone starts grooving and dancing. I guess that would be a good description of what affect we have (Personal communication, April 13, 2011).

Zoe felt that many people in the community who had the opportunity to hear their concerts walk away from them with a better understanding and appreciation for other cultures. She commented:

We have several ‘regulars’ that attend every show. One man in particular was so taken by the story of pan and its creation that he has volunteered to go to Trinidad on mission’s trips to help make a difference in other people’s lives. Mr. Jones has gone down during Panorama time to just serve water and food to members of the steel bands. I think that is so cool (Personal communication, March 23, 2011).
Gabe believed, especially in school, the steel band affected how students viewed music of other cultures:

I have many friends who like to hear the band because it is very unique. They then eventually begin to understand how the instruments are part of a larger community. It feels like a bait and switch gimmick at a store. People come by to hear the really cool music not looking to learn anything about other cultures; they leave knowing something new about either the instrument, or the culture it came from or both (Personal communication, April 20, 2011).

Gabe noted the steel band also affected the school by creating a positive atmosphere:

There are about 1800 students in our school. The steel band represents about 1% of the student body, but is one of the organizations in the school that many people mention as having a positive impact because of the quality of the members, and how we all are always working together. We also typically perform during lunch periods right before midterms and finals to lighten the mood of the school. This creates many positive attitudes within the school (Personal communication, April 20, 2011).

Sean stated, “[The steel band] also attracts a lot of kids that have never played instruments before and they end up joining band or orchestra because of hearing how much fun playing music is.” He felt that the steel band is a great way for people to become aware of other cultures. “People love to hear us, and we have never played a concert where someone has not come by afterwards and asked more about the steel drums, and where they are from. I’m not sure how much their lives are changed by hearing the band, but they are reminded that there are other people in the world who may not be as fortunate as they are.”

Sean discussed the favorable community response to the steel band. “Every year we go to a festival called the Apple Harvest Festival, and the auditorium we play in is completely packed for all three of our performances. Everybody just listens and has a
good time. The festival organizers have told us that attendance is double what it normally is on a day when the steel band isn’t there. We are definitely a fixture [that] people look forward to” (Personal communication, March 30, 2011).

Brenda, an audience member, feels the steel band makes her community feel more welcoming and open. As a life-long resident, she remembered when the steel band started and thought that it would be a fad:

I remember first seeing the kids pounding on these barrels back in the seventies. It was the most obnoxious sound! I thought that there would be no way this would be around for more than a couple of years. Here we are almost thirty years later! I think that they have done an awesome job growing the band, and sharing their love of the instrument and culture from which it developed. I have seen many people over the years who have been more appreciative of not only the Trinidadian culture, but of the various cultures around town. The music is what draws people in; they enjoy themselves, and leave thinking that the world is a smaller place than they thought before (Personal communication, May 29, 2011).

Sam mentioned, “The band has affected my school community by giving many people new friends. But it hasn’t really affected my local community.” When asked about how the audience responds at performances she rattles off a list of nine performances, and mentioned about how one woman mentioned she had been to three performances of the band that year. Sam realized that all of the music that they were playing and the “boring” history chat did have an effect on the community.

Students appeared to be mixed in their opinions of what impact the steel band had on the community. This could be due to the diverseness of what community was considered to be. Many students did comment that the steel band worked together to raise money for the “Forgotten Voices” project as a positive impact, while a few question the impact the historical information has.
Joan, an audience member, was appreciative of the number of events the band played at in the community, especially for charitable events. She commented on how people are drawn to the sound of the music, and this helped out the charities involved (Personal communication, May 29, 2011). Bob commented that he was proud of the work the steel band did for the “Forgotten Voices” projects. “These kids have a heart not only for their music and the culture of the steel band, but for other disadvantaged children as well. I really think that understanding the culture has affected the kids in this positive way.

Members of the steel band have identified several reasons up to this point about why they enjoyed participating in steel band and the differences of the steel band compared to other ensembles. Students have commented previously on how the music, sound, and accessibility were an enticement to join.

**Summary**

This steel band has been important to the identity of the members through the commitment each member puts into the ensemble and the effort in creating a quality musical performance. The strong friendships among the members of the band and their commitment to the ensemble are easily observed by individuals in the school community. Through the use of informal music learning practices members of the ensemble are comfortable providing their ideas and input on rehearsal matters, song arranging, repertoire selection, and soloing, and has provided an important link to another culture’s history and music for both the members of the ensemble and school community. This steel band also provided an example of informal music education in action in an extra-
curricular setting within a school. In the final chapter, I will be discussing how this ensemble compares to previous research, and provide suggestions for further research.
CHAPTER 7: Discussions, Reflections, and Recommendations

In this study I investigated students’ motivations for participating in a high school steel band in Pennsylvania, the importance of the ensemble to educating students and the community to another culture of the world, and how a sense of community was developed within the ensemble. In this chapter, I reflect on the importance and value of the high school steel band in Pennsylvania for the participants and the role the ensemble has in the community. At the conclusion of this chapter, I provide recommendations for steel bands and music education derived from this study.

Discussion

For my first research question I wanted to explore why the participants joined the steel band, and two sub-questions: why do students continue participating in this steel band, and what benefits do participants perceive as the result of participation in the steel band? Green (2008) found that students who had a familiarity and an identity with the music they were working with enjoyed the process more and create a musical “celebration.” Teachers should build off of the experiences students have with music outside of school and avoid intervening unnecessarily providing goals, structure, and assessments. These activities, in Green’s (2008) opinion interrupt the enjoyment, and learning of music. An unstructured and informal approach to music making has been a traditional part of the steel band since the activity’s inception, and is an important factor in the enjoyment of the participants in this study.

For many members of this steel band, their first exposure to a steel band was of the investigated ensemble. Students were able to experience the steel band through
numerous performances throughout the community and lunchtime concerts at elementary schools in the school district. Others recall first encountering a steel band through siblings or family friends participating in the ensemble. These early interactions (while students were at the primary level) was an important motivator for students to join the steel band in later grades, and provided the impetus for the study of traditional band instruments in order to join the steel band.

The timbre and uniqueness of the sound and music are stated as the main reason many students gave for being attracted to participation in the steel band, and several respondents mentioned that witnessing the enjoyment of the performers while playing the music was important in their desire to play the steelpan. This motivator aligns with informal music education as described by Green (2009); students are learning based on personal choice, enjoyment, identification, and familiarity with the music. Green (2008) also asserted that students’ musical enculturation is a large part of informal music education. Students are able to hear the harmonics and chord structures of music similar to the popular music they listen to easier than of classical selections which they are not as familiar. Students utilized a great deal of self-teaching and peer-directed learning, and ensemble members used different methods in learning the ensemble’s music. While the music may be unfamiliar to the students at first, they are familiar with the chord structure and rhythms in steel band music, which uses similar structures to pop music. This learning takes place in a student-centered environment where students are free to experiment and encourage one another. Students participated by acting independently from the teacher, and, upon their own initiative, selected and arranged music for the
ensemble. Students integrated the musical skills of listening, composing, performing, and improvisation, along with communication, and verbal skills through the arranging process in order to create the final arrangement.

This steel band utilized a wide range of repertoire including calypso and soca songs traditionally associated with the steel band to reggae, Jimmy Buffett, Praise choruses, and the occasional pop song to satisfy audience’s preferences and event requirements. Annually, the band works on a transcription of a Panorama song. Panorama songs are popular calypso songs from Trinidad and Tobago, which are embellished with difficult chromatic passages to exhibit the virtuosity of the performers. These arrangements are typically purchased through Panyard or a similar vendor. The arrangements are pretty true to the original, though the expanded chromatic sections are often omitted. Additionally, students are able to arrange their own charts, which is a unique aspect of the steel band. Students have recently arranged hits such as “Bad,” “Dynamite,” and “Break Your Heart” for their performance book. The opportunity to arrange music for the band gives members a sense of ownership that is not experienced in traditional school ensembles. While these songs would not be considered to be “authentic” selections in the Trinidadian culture due to not being their popular music of calypsos and socas, they are authentic in nature when considering that these songs represent popular music styles in the United States.

Morrison (2001) found that music ensembles formed close-knit circles and, further suggested, "school ensembles are not just classes or performance groups, but guardians of a culture that informs and enriches the lives of their members" (p. 24). This
close-knit community is evident in the steel band studied. All of the students mention this “community” as a reason they enjoy ensemble participation. Students are able to form bonds and friendships that differ from those in a typical classroom because of the ensemble being an extra-curricular activity. Mrs. Jones, paid close attention to the personalities and work ethic of students who desire to participate in the steel band in order to maintaining the tight knit “community” experienced by members of the band. Students often suggested members to fill anticipated openings within the band. This practice coincides with Green (2009) who noted student references to the importance of building trust, sticking together, and awareness of the personnel’s characteristics in their group. Other criteria include, who would contribute with regard to work ethic, and how their abilities complimented the rest of the steel band.

Adderley (2003) found that students joined ensembles for musical, social, academic, and family reasons. Students addressed at least one of these categories as a reason for their desire in joining the steel band. Students felt that the steel band helped balance the school curriculum and become more "well-rounded.” The pride that the members exhibited is a visual indication that all members work to ensure each member could play to the best of their ability to produce phenomenal concerts, which not only entertained their audiences but also drew positive comments from other students in their school.

The pride and comfort among members of the steel band created an environment in which peer-directed learning and group learning occurred on a consistent basis. The ensemble rehearsals were set up to maximize these learning styles with strong and
experienced players being teamed with new players on the same instrument. I continually observed students assisting one another during rehearsals, and on a couple occasions one student would suggest a new rhythm or chord progression to the band by simply playing it for the rest of the band. During this instruction, other members could be seen dead stroking the notes along with the leader. Often, I would see a newer member just watching his or her partner in order to grasp the music that was being performed. Once the newer member became comfortable with the passage, they began to attempt to play it as well. This process shows that Green’s (2009) assertion that informal learning often will have a certain amount of leadership by one or more members of the group. In this case, the leaders are not elected, but members of the section who have more knowledge are deferred to. Rotating leadership was witnessed as students provided comments about chord structure, groove, and dynamics. At no time did the director intervene in the teaching and learning that was transpiring within the ensemble through her own lectures, but rather she stood by and simply observed the process. If she observed incorrect teaching or mis-information during her observations she would step in and gently correct the student who was incorrect.

Many of the reasons stated for joining and continuing to participate in steel band are jointly listed as benefits students gain from participation. Students acknowledge becoming better musicians, learning skills in music arranging, and soloing, and how to work together in a close group. All of these skills are recognized in other literature as being benefits of participating in other music ensembles; however, one aspect this steel band focuses on is unique in the benefits listed by students. This benefit is gaining an in
depth knowledge and interaction with another culture.

Remy’s (1990) desire that the performers and audience members be educated about Trinidad’s musical contributions to the world are upheld by this high school steel band and their director. This is accomplished through the clinicians that are brought into the school, and the presentations of steel band history and Trinidadian culture that the band often includes at intermissions of their performances. The band does please their audiences, but they do not do it at the expense of the steel band heritage. Swanwick (1994) advocated for direct experiences with music through accurate performances and ensembles that articulate the culture and history of the creators. Ms. Jones and previous directors of this steel band have done a good job in establishing connections with the culture of Trinidad, and the students have a good understanding of the culture. Volk (1998) noted that authentic examples of multicultural music are necessary to educate the public. While this steel band will often play selections that are not traditionally from Trinidad and Tobago, the instruments and intent behind the performance are the same. Ms. Jones is also adapt at informing the audience of the differences between the authentic arrangements and those which are not.

Learning about others’ music involves meaningful discourse, consisting of knowledge gained and discussed by students. Students in this steel band participate in this discourse and understand that their steel band does not attempt to be an authentic Trinidadian steel band. The experiences they have had as primarily middle-class, white Americans prohibit them from truly experiencing the emotion of the Trinidadian. There are many aspects of this steel band that pay homage to the Trinidadian heritage; however,
with many of the popular music selections which are arranged by the students, the steel band is more of a Westernized music education tool, much as Guess (1998) noted. The debate on whether steelpan ensembles are authentic world music performing ensembles versus their use as a Westernized music education tool has been debated since first introduced into American classrooms in the 1950s and 1960s.

Green (2008) noted that students’ musical enculturation and music they actively listen to is a large part of informal music education. Students are able to grasp the harmonics and chord structures of music similar to the popular music they listen to more easily than the classical music with which they are not as familiar. This familiarity, with both the styles of music and instruments involved, are primary reasons students choose to participate in the steel band. Students also are drawn to the steel band due to the informal nature of the ensemble compared to traditional school ensembles.

Musical communication is an important aspect in the steel band. Through playing in steel band, students in this study were provided the opportunity to gain a deeper understanding of harmony, rhythm, and musical structure through communicating in informal manners. Engine room members typically play music in more of an informal fashion, and prefer to learn musicaurally and not from printed notation. This causes the steelpan players who learn by reading to expand their comfort zone by trusting their ears instead of only relying on the chart.

Through observations of the band it was noted that students often used recordings of the original song being performed to ensure that the music is as close to the original as possible. Listening to the recordings also enables the band to accurately play the rhythms
accurately, especially in instances where the written notation does not provide as accurate representation of what is being played. Utilizing recordings as the primary method of learning music, while using written notation as a guide, is an additional example of informal music education according to Green (2008). Listening and learning music through recordings and performances assist in creating a communal learning environment, where every ensemble member, regardless of their ability to read notation, is able to make a connection with the music, thus enabling students to become more confident in attempting new music and instruments. As Green (2008) points out, communal learning has always been the main means of learning in all folk and traditional music. Providing an opportunity to practice communal music learning in an educational environment enables students with a desire to learn the steelpan the chance to be successful. Communal music learning assists student’s ability to make critical decisions about music, and continually observe their own progress as new students join.

Jenkins (2011) stated good music instruction should bring about a fundamental change in the student’s self-identity; foster the ability to make critical decisions both about music and about life, and are to assist in the creation of the student’s self-identity. Through the informal instruction methods utilized in this steel band students actively made musical decisions that not only affect the enjoyment and education of the audience, but how each member of the band identified with the ensemble and with each other. Knowing that each member had an important voice in the ensemble provided encouragement for each individual to learn and understand as much as possible about the culture and music in order to have the most valid opinion possible. In my observation of
the steel band I noticed that the membership generally was accepting of relevant suggestions and opinions regardless of the amount of time the individual was involved in the ensemble. Suggestions that were completely inappropriate were dismissed, and one or two members would speak to the commenter privately in order to understand their comment. This practice established a safe environment where every member sought to learn.

An important aspect of informal music education used in this steel band and other popular music ensembles is playing music by ear. Traditionally, reading and writing music notation is viewed as being an important aspect of playing an instrument, however, in many popular ensembles, many participants are unable read music yet this does not diminish their enjoyment of participating in music making. Green (2002) noted that understanding and reading music is one skill that most popular musicians desired to be better at. By learning music in the manner of the steel band in regular ensembles, more students would be successful in achieving this goal.

Students used recordings in many different manners during the time I visited. Many times they would listen to specific sections to ensure that they were interpreting and playing a passage correctly. They would slow the recording down at times to be able to play along with the recording note for note. This was specifically done in chromatic sections. All of the members of the ensemble have sheet music for the songs that are being performed; however, they often only use this as a guide and play more from the feel they hear on the recording. This use of recordings is identical to the use of recordings in informal music education by Green (2002). Other times, I noted members were
listening to recordings in order to find other songs to arrange for the band. Once the song was selected and arranging began students listened to the recording to ensure that the arrangement stayed true to the original. While recordings were listened to during this process the recordings were being used in a fashion that differed from the music learning described by Green (2002). Students in this instance were using the recording not to learn to play the song, but in order to make certain their arrangement lined up.

Throughout the informal learning process musicians integrate listening, performing, and composing/arranging. Students in the steel band regularly engage in all of these practices. Students in the engine room specifically utilize recordings to learn their parts while leaving room for personal creativity and interpretation. The important aspect in this process is that Mrs. Jones allowed the engine room to figure the grooves out amongst themselves, which assisted them in creating a tight cohesive sound.

With the second research question I wanted to explore the participants’ perspectives as to the role the steel band plays in their school community. Students in this steel band provided varied responses as to the role the steel band has in their community. Several state that they audience members have obtained a new appreciation for minority cultures through attending steel band concerts and listening to their steelpan history lectures which also assist with understanding what the music is about. This newfound appreciation also affects the performers as well. Meidinger (2002) found a high consistency between positive student responses to multicultural music education when taught by an expert music teacher. Through public concerts and mid concert lectures this steel band is taking on the role of an expert music teacher, creating an excitement and
receiving positive reactions from the community. Having positive experiences with multicultural music according to Woods (2009) help teach students to respect each other and their ethnic differences. Learning about ethnic differences and the contributions that Trinidadians have made to music through the steel band is important for communities. Remy (1990) stated that, while pleasing the audience is important due to the financial support, it is important to educate the audience and performers about Trinidad’s musical contributions. While all of the aforementioned studies examined student reactions to multicultural music education, it is not unrealistic to expect the same results with adults.

Many students felt the uniqueness of the ensemble and sound created a positive atmosphere where the audience is ready to listen and interact with the band. Audience members became regular attendees due to the unique sound and atmosphere. The sound is unique, and the structure of the music is familiar to audience members, instantly creating a connection. This attraction brought students, who desired to play in the steel band into the music program enabling them to receive a music education. These results concur with Schaus (2007) who found students expressed feelings of connection when learning about the similarities between cultures, and it was not necessary to restrict their enjoyment of music to their own culture. These students often would not be attracted to traditional school ensembles. Adult learners can also be included into this group of students. Haskett (2009) found the ease of learning the steelpan, and the social nature of adult steel bands provided an entry, or re-entry point for music making and music education.

A unique way that participants believed the steel band had affected their school community was through the collaboration on the “forgotten voices” project. This project
built upon the closeness of the steel band and their passion for other cultures to raise funds and awareness for impoverished countries. Participants enjoyed having another outlet to make their world a better place. These responses affirmed Jenkins (2011) statement that informal learning in music ensembles assisted in creation of the student’s self-identity through a series of activities, goals, and motivations. Green (2004) also noted that extracurricular involvement at school can offer a life changing opportunity to experiment with an identity as musician and to have this affirmed by teachers, peers, and audience members. Through positive interactions in the steel band students are not only becoming better musicians, but acquiring a close group of friends which, according to Feagans and Bartsch (1968) being a member of a close-knit youth group may help in making the bridge from childhood to adolescence an easier one. This close-knit group exemplifies benefits described by Green (2008) who found an important connection of the students’ enjoying the presence of their friends, and understanding how to cooperate with each other.

While not specifically stated by any of the participants, through observing concerts and conversing with the audience it is evident that the school community as a whole takes pride in the steel band. Students can be observed hanging around listening to rehearsals, and the sheer number of “regulars” at concerts is an indication of a positive interaction.

Conclusions

The steel band of a particular high school in Pennsylvania exemplifies how a non-traditional music ensemble can utilize informal music learning procedures to provide
valuable music education opportunities for the participants. The steelpan is an easily accessible instrument that does not require years of training to become proficient, enabling participants to find musical success quickly. Since the ensemble uses music that utilizes known popular music structures and chord progressions, participants are better able to know where the music is “going” aiding in musical success.

The ensemble has a dedicated and passionate base of performers who take pride in maintaining the ensembles positive history. While most music ensembles have similar passions, this steel band is unique because of how members collaborate using many techniques enabling experienced players to teach novice players. Having a direct voice in the arranging and programming of music for performances is also vastly different from traditional school ensembles. The processes in which the participants learn their instrument, and arrange music create an environment in which each member feels valued. This sense of being valued developed from this student-centered method of instruction and provides a tighter bond than any I have noticed within other music ensembles.

**Suggestions For The Field**

The investigated school steel band is a prime example of the shifting teacher role in the music classroom toward being a guide or facilitator of their students' music making (Woody, 2007). Students in the steel band are provided opportunity to suggest selections and even are encouraged to arrange selections, and make important musical decisions for the ensemble by themselves. Musical exploration and discovery learning, so well accepted in early childhood education, also have great potential with older students.

Having a voice in how the ensemble is run and the music selected enables
students to become invested in the organization, and creates ownership. Allsup’s (2003) findings on democracy and community in instrumental music education are exhibited in this steel band through the rehearsal and music arranging process. The rehearsal structure and the social climate of the rehearsal room were key to ensemble success. While observing rehearsals I observed the teacher was not the focal point of the ensemble. She often acted as more of a facilitator than a traditional director. Students relied on each other to master sections of music by mirroring and listening to each other, and mentoring by the older members. Each student learned the music in his or her own way. Several played from notation, while others played only by rote, and by watching the more accomplished members.

In my teaching experience I have seen many beginning instrumental music students become frustrated with learning to play their instrument, because of their inability to read the notation. These same students are able to make appropriate sounds on their instruments, and are able to play songs by ear well, but quickly become frustrated if only allowed to play what is “in the book.” This steel band is successful because of the various manners students are able to learn the music and instruments. We would never teach a child to speak by placing a novel in front of them and expecting them to read it in order to speak. Why then, have music educators typically used notation to teach an instrument? Suzuki, Orff, and Kodaly are all well-known music pedagogy, which advocate, “sound preceding symbol,” however band directors do not often utilize these practices. By allowing students to become familiar with their instrument, before introducing the written notation, many students are able to be more successful in both
tasks of learning the instrument and notation, better understand the importance of reading music.

Students taking ownership of the product and operation of the ensemble is a key tenet of Allsup (2003). Students were making educated musical decisions in order to make a better performance. Knowing that each individual’s opinion mattered, the members respectfully listened to each other. The teacher was always present, teaching proper terminology when needed and keeping the band on task, but while learning new music the democratic setting was the norm.

This method was quite different than in a traditional wind band setting. In the traditional high school band setting students already have a mastery of the instrument and are only working on the music. The traditional ensemble setting places the teacher in the center of the learning environment and all teaching comes solely from the teacher. This is opposed to the democratic ideal espoused by Allsup. With the ensemble investigated, there are novice players assimilating into the performance group while learning the music. The range of abilities is a primary reason for the apparent hands-off approach from the teacher. It is easier for students to learn how to play by actually playing the instrument in small groups than from a lecture from the podium.

Green (2009) stated that this style of teaching can be uncomfortable, but should be considered by educators because their training is mainly in a teacher to student hegemony rather than espousing democratic processes. Freire advocated a similar philosophy in writings against the “banking” style of education, noting that attempting to control thinking and action inhibited an individual’s creativity, and sought to give
students and citizens a voice in fighting oppression (Freire, 1970). Incorporating aspects of informal music education within the steel band allows the teacher to utilize the knowledge students possess, in order to not only allow students to learn from each other, but to also allow the teacher to learn new material alongside the students. This model is especially useful for teachers who are placed in a steel band environment who may have limited, or no previous knowledge of playing a steelpan.

While informal music learning has been viewed as beneficial in many settings there are instances in which the results are not beneficial. If the teacher does not monitor the rehearsal environment and the information students are teaching each other, students can easily learn bad performance habits and incorrect information. Students also may easily get off task if left completely unsupervised, as close friends will find other items outside of the given assignment to discuss. Informal learning will not be as effective in a class with students who are overly introverted, or extroverted, and some students do not like the lack of structure. It is important that the teacher using informal learning techniques plan ahead as to how he or she will monitor time, and handle off-task student behavior. This information must be disseminated to the students before using these techniques.

Traditionally, student musicians participate in a high school ensemble for three to four years. Once the formal learning of the technical terms, and music forms utilized in rehearsals are acquired, often before arriving in high school, students often solely focus on replicating the music on the page. By incorporating aspects of informal music education, and encouraging students to use their knowledge of composers, styles, and
music standards to assist in programming literature teachers are better able to see how well their students have learned these concepts. Students also develop an increased connection with the literature being performed, and enabling the ensemble to play with more emotion. To effectively make this transition work teachers must actively explain why literature is selected, explain the historical or compositional significance, and discuss the musical style and composer so students may participate. Teachers often omit this portion of music education in school band settings concentrating more on replicating a good sound.

Listening to quality recordings in a concert band setting can assist students with understanding how their individual part fits in with the ensemble, and decipher potentially complicated rhythms. Since school band directors, by nature, are generalists in the aspect of teaching the instruments of the ensemble, and unable to specialize in all, using recordings in class or small group lessons allow students to hear the correct and representative sound for the style of music being performed. In many instances, listening to recordings in large ensembles can assist students comprehend complex rhythmic patterns, allowing students to understand what they are hearing before seeing the written notation. Listening and copying recordings can also enable students to become critical listeners, which will assist in the student becoming a more proficient musician.

Green (2008) stated that formal music education and informal music education have co-existed for centuries, but have not both been utilized in the music classroom. Many large ensemble directors will often preview new selections by having the ensemble listen to recordings. What I believe Green has suggested is the purpose for which
recordings are used. In informal music education students used the recording as the primary method of learning the music, as opposed to reading written notation. However, listening and watching a more advanced player has the same effect in the rehearsal environment and does not interfere with the flow of the rehearsal.

The ability to grasp harmonics and chord progressions of steelpan music easily due to the familiarity with the style is supported by Woody (2007). Woody stated educators are able educate students more effectively and better prepare them for a lifetime of participatory musicianship by including popular music in the curriculum. Teaching popular music in an authentic manner requires a music appreciation model in which the teacher accompanies listening examples.

Students are able to make better musical judgments and opinions in the steel band because they have been enculturated in the sounds and chord progressions of popular music. While students may not know the technical terms for what they hear, they understand it nonetheless through daily interaction with similar styles. This style of learning is akin to how young children learn to speak. Children imitate the language, and dialects they hear in the home way before entering the educational system. It is when they enter school that children begin to learn the technicalities of language. The same applies to music. If we desire students to understand chord progressions, and the “feel” of music why not begin with material they already know and understand?

The steel bands Haskett (2009) investigated involved adults and elementary students with little or no previous music performance experience. The director, Jerry Lopatin, developed a curriculum for these ensembles that is based on traditional
Trinidadian aural learning practices in which many students learned the instruments by imitation and listening. Learning to play the steelpan through listening and imitation is an example of informal music learning; however the instruction was controlled more by the instructor. This approach works well with students who have not played music before. The students in the steel band investigated in this study differ from the bands investigated in Haskett (2009) because all of the members were drawn from the concert band program. Students used their prior knowledge to learn the steelpan faster, and the director allowed students to learn in a less structured environment.

The steel band investigated in this study is an extra-curricular activity with members choosing to participate after the regular school day. Instructional techniques including informal music education methods used in this ensemble easily be incorporated into use with traditional school ensembles enhancing student learning, desire to participate, and overall musical satisfaction. By incorporating aspects of informal music education into the structure of the ensemble, whether knowingly or unknowingly, the steel band is able to better represent the culture and music traditionally played on the steelpan. Often, many non-traditional bands relying solely on written notation are criticized for not replicating popular music with the same “feel” as the original. Relying on recordings, and aural skills, students not only gain the ability to play music with more feeling, but also to work together as a group in the process. This process is an example of what Allsup (2003) and Goetze (2011) describe as being “democracy in the music classroom.” Students are permitted in this environment to have a voice in how music is performed and the sound, coming to the final product through collective agreement.
Students are also encouraged to arrange music for the ensemble, further aiding to the democratic ideal in the classroom.

The director is typical of many teachers who are asked to teach non-traditional multi-cultural music classes and ensembles. Discussions with her support the findings of both Moore (1993) and Volk (2002), which indicated that more instruction is needed for music teachers to adequately incorporate world music into their instruction, and confidence increased after workshops and classes. The Tanglewood II (2007) symposium also lists teacher preparation in the proclamation statement as an area that must be addressed. Ms. Jones shows through her steel band program that a teacher that is placed in a steel band/world music classroom with the adequate resources can be successful. While Meidinger (2002) found a high consistency between positive student responses to multicultural music education when taught by an expert music teacher, one cannot diminish the efforts of a novice teacher who has a passion to bring this diverse material to students. Novice teachers, if provided a well-rounded music education program, will be able to succeed. Novice teachers should also be exposed to various learning styles while in teacher preparation courses including both formal and informal music learning situations is advocated by Feichas (2010) and will better prepare teachers to understand the diverse learning methods of today’s music students and assist in engaging students in a manner which will provide them with a quality music education experience.

Through the steel band students who are informal musicians have a place where they feel connected to the school music program where their achievements and talents can be recognized. Incorporating steel bands in schools provide the opportunity for
students in both the ensemble and school community to learn of the history and cultures of Trinidad and other areas of the Caribbean, and the many varieties of popular music that began in these areas. Audio and video recordings can be used to provide examples of authentic Trinidadian steel bands in order to possibly emulate the performance style of these performers. It is important to remember that while students are performing music and instruments from Trinidad and Tobago, educators in the United States teaching steel bands do so from a post-colonial perspective. The meaning embedded in the music and the creation of the instruments in Trinidad is vastly different for those who are from that culture compared to how individuals outside the culture. While appreciating and acknowledging the Trinidadian culture is important in steel bands, it is important to remember that our experience will not be identical to that of the native Trinidadian.

Ensembles like the steel band help music educators in providing additional manners in meeting the national standards for music education, and assist in providing a modern creative activity for students. During a three-week period while observing the ensemble students completed an arrangement for the steel band. From the decision of which song to arrange to the first rehearsal students were actively completing six of the nine National Standards for Music. Students were not aware that they were meeting these standards, and it was not apparent whether the director saw this purpose either, however, the arranging process exemplified the combination of peer and group learning that Green (2002) discussed as an important aspect of informal music education. Being aware of how to use informal learning processes can enable students to meet state and national requirements without any added preparation.
Incorporating aspects of informal music education and popular styles of music into school-based ensembles is one manner in which music educators can begin to affect the change that Wang and Humphreys (2009) noted is still not occurring in music education programs. Providing opportunities for students to engage with music that they are familiar with will enable students to better engage with state and national standards, and better understand the concepts educators want students to understand. The steel band investigated accomplished all of these educational goals, and allowed students to perform popular music not only from their culture but of Trinidad and Tobago as well.

**Recommendations for Future Research**

Informal music education practices are still not widely understood by many educators and therefore not used in mainstream music education according to Green. The informal practices utilized by the steel band investigated indicate that the addition of informal music education practices could be very beneficial in other ensembles and music classes in schools. Students are able to demonstrate their musical knowledge through their interactions with each other and are easily observable by the teacher for assessment purposes. Future studies should be conducted using experimental methods comparing student musical learning utilizing both traditional and informal methods to observe the differences in learning and the benefits of each method.

Music teachers have used recordings in rehearsals and in the classroom for many years. These are utilized often to provide an introduction to music that will be performed. Studies should be conducted comparing how students learn new music passages only with written notation compared with using recordings to reinforce the written notation.
This would be beneficial for the students who possibly learn better aurally versus visually. The added reinforcement of the recording could influence student musicality through utilizing recordings.

Students in traditional school music ensembles spend several years learning how to play an instrument in order to participate. Students often are able to learn to play the steelpan faster and achieve musical success earlier than traditional instruments. I recommend that studies be conducted investigating the depth of musical knowledge achieved by musicians who learned music only on steelpan, versus through traditional instruments, and whether students who learn instruments at a faster rate find as much value in the ensemble due to the ease of learning.

Wang and Humphreys (2009) indicate that college music students spend only approximately seven percent of their collegiate time studying and performing music that is not considered Western art music. Students in steel bands perform popular music from other cultures and often interact with the product of these cultures through the performance of the music. Research should be conducted examining whether students who play steelpan are any more prepared to interact with music of other cultures than students who only interact with western art music.

Malm (1995) noted that an awareness of a wide variety of world music not only enriches one's musical and intellectual life but also improves the ability to hear music of our own culture. Studies that determine whether the converse is true with members of steel bands would enrich the field. Students in steel band spend a great deal of time preparing and performing music that is based on popular music styles that are common
throughout the western hemisphere. Does having an in depth working relationship with common chord progressions improve or hinder a musician’s ability to interact and perform music from Asian and African cultures?

There is little to no research existing examining how steel bands are integrated into school music programs and whether they operate as graded classes, extra-curricular activities, or as a part of the general music class. It has been observed that unlike the majority of school music ensembles, steel bands are often fit in to the program wherever time and space permits. Studies in varied settings would provide further insight into student motivation for participation and rehearsal techniques. The age, and school setting steel bands are most successful should also be examined. Further investigations comparing music aptitude and knowledge between steel bands and traditional school ensembles examining differences in the standards based knowledge between the ensembles would further enhance the field.

Historical studies on the steel bands at Chambersburg and Washington (PA) High schools are important to undertake. These are two of the earliest school steel bands in both Pennsylvania and the United States. Both of these ensembles have been in existence for more than thirty years, and have undergone director changes since being established. Looking at the history of these ensembles will enable new ensembles to have a successful model to potentially replicate.

A historical study of the 1977 Blossom festival in upstate New York should be undertaken to determine what other high school bands were in attendance in order to obtain a better understanding of how diverse steel bands were in the late 1970’s. This
study would add much needed information on school steel bands in the early days.

Studies of the lineage of steel band director’s should be conducted in order to examine where their knowledge is coming from, what collegiate programs, etc. This can be used to note differences or similarities between steel bands where the director’s instruction and steelpan histories came from Mannette, Alexis, or other textbook sources.

Steel bands, while increasing in number in schools and academic institutions in the United States, are still not as prevalent as other scholastic ensembles, and still are working to find their place in the school music department. This provides many unique opportunities for future research, from examining whether steel bands are being used as a means to offer “authentic” Caribbean music experiences, provide musical entertainment outlets, to being a unique means in providing music performance opportunities to non-traditional instrumental students. Investigations into other school steel bands will provide additional insight to how steel bands can be implemented in other American schools.
APPENDIX A

Steelpan Builders

**Barracuda Steel Drums**
Emily Lemmerman and Darren Dyke
1202 Frontera Lane
Austin, TX 78741
(512) 921-7003
www.baracudasteeldrums.com

**Coyle Steel Drums**
8800 Sharon Lane
Pensacola, FL 32534
(866) 355-3786
www.coyledrums.com

**Definite Pitch Steel Pan**
Ancliff “Ansel” Joseph
8217 S. 132nd Ave
Goodyear, AZ 85338
(623) 848-0660
www.definitepitchsteelpans.com

**Kyle Dunleavy Steel Drums**
Philadelphia, PA
(215) 300-9849
www.kdsteeldrums.com

**Gill’s Pan Shop**
63 Eastern Main Road
Curepe, Trinidad W.I.
(868) 662-0214
www.gillspanshop.com

**Key Largo Steel Drums**
Keith Kropf
97920 Overseas Highway
Key Largo, FL 33037 USA
(305) 852-9804
www.keylargosteeldrums.com
Steve Lawrie  
PanTuner.com  
2445 Thurmont Road  
Akron OH 44313  
(330) 835-4611  
www.pantuner.com

Maccabee Panworks  
PO Box 18  
Conway, NH 03818  
(603) 447-5107  
www.ajajamusic.com

Mannette Steel Drums, Ltd.  
166 Dents Run Rd  
Morgantown, WV 26501  
(866) 237-3786  
www.mannettesteeldrums.com

New York City Steelpan Network  
130 Maple Street  
Brooklyn, NY 11225  
(718) 856-7010

Panyard, Inc.  
1216 California Ave  
Akron, OH 44314  
(800) 377-0202  
www.panyard.com

Rhythmical Steel  
3908 NE 397th Circle  
La Center, WA 98629  
(360) 263-3141  
www.rsteel.com

Shields Musical Steel  
2625 Lyndale Ave S #3  
Minneapolis MN 55408  
(612) 331-2673  
www.shieldsmusicalsteel.com
Smarty Pans Music  
4115 Los Coyotes Diagonal  
Lakewood, CA 90713  
(562) 706-2237  
www.steeldrumshop.com

Solomon Steel Pan Co.  
1060 Saw Mill Run Blvd  
Pittsburgh, PA 15216  
(412) 431-6030  
www.solomonsteelpan.com

Steel Drum Shop  
1508 E. 33rd St  
Signal Hill, CA 90755  
(562) 426-8400  
www.steeldrumshop.com

Steel Island  
14103 Panorama Drive  
Austin, TX 78732  
(800) 525-6896  
www.steelisland.com

Steel of the Night  
12747 S Betty Pt  
Floral City, FL 34436  
(866) STL-PANS  
www.steelofthenight.com

The Steelpan Store  
4205 Sherwood Dr.  
Crystal Lake, IL 60012  
(815) 893-9PAN  
www.steelpanstore.com

Trinidad North Steel Drums  
839 Surrey Lane  
Media, PA 19063  
(610) 627-1679  
www.trinidadnorth.com
Tropical Hammer Steel Drum Crafters
900 Country Club Dr.
Sanford, FL 32773
(407) 323-7070
www.tropicalhammer.com

VistaPan Steel Instruments
200 Whitetail Court
Ballston Spa, NY 12020
1-800-335-8647
www.vistapan.net
APPENDIX B

Steelpan Tuners

Hugo Bailey
Box 2005
Ketchum, ID 83340
(208) 726-8893

Tony Cezair
165 North St.
Daytona Beach, FL 32114
(904) 255-2834

Alan Coyle
8800 Sharon Lane
Pensacola, FL 32534
(866) 355-3786
www.coyledrums.com

Rob Davis
Mannette Steel Drums, Ltd.
166 Dents Run Rd
Morgantown, WV 26501
(866) 237-3786

Eric Fountain
Mannette Steel Drums, Ltd.
166 Dents Run Rd
Morgantown, WV 26501
(866) 237-3786

Kevin Grant
44480 Flores St.
Mendocino, CA 95460
(707) 937-0611
kmutepan@sbcglobal.net
www.kevingrantsteeldrums.com
Learie Harrigin
Brooklyn, NY
panlab1@aol.com

Michael G. Kernahan
Miami, FL
(305) 238-9769
kernahan@bellsouth.net

Jesse Kuczynski
Monopan Music
31390 Section Road
Mukwonago, WI 53149
(262) 363-4260
jesse@monopanmusic.com

Steve Lawrie
PanTuner.com
2445 Thurmont Road
Akron, OH 44313
(330) 835-4611
www.pantuner.com

Emily Lemmerman
1202 Frontera Lane
Austin, TX 78741
(512) 921-7003

Oliver D. Pross
368 South Atlantic Ave. Apt. G
Pittsburgh, PA 15224
(412) 361-1810
opsteel@yahoo.com

Glenn Rowsey
198 Foundry St,
Morgantown, WV 26505
(304) 216-8416
panrowsey@gmail.com
Billy Sheeder  
PO Box 694  
Granville, WV 26534  
(304) 319-3210  
panbilly@hotmail.com

Leroy "Ali" Williams  
New World Standard Steel Drums  
306 1/2 Pacheco Ave.  
Santa Clara, CA 95062  
(831) 425-3367
APPENDIX C

Steelpan Instruments

Single Tenor Lead

The single tenor lead comes typically in two styles: the high tenor, which has the lowest note as D below the staff, and the low tenor, which has a lowest note at middle C. These instruments are also called the Melody Pan or Soprano. Either instrument may be used in a steel band either exclusively or in combination. There are a few low A single tenor leads being constructed out of eighty-five gallon barrels which are utilized more for solo work, and are not common in steel bands.

Double Tenor
The double tenor will play the harmony, counter melody and extend the range of the single tenor steelpan. This instrument has 30 notes starting from either A, or F below middle C. The A double tenor is considered to be the older, narrower version. The F Double Tenor has a wider range than the A.

**Double Seconds**

This double second steelpan, (sometimes called an Alto Pan) has many functions in the steel band from playing the melody on a lower register against the single tenor pan, playing counter melodies, harmonies, and accompaniment chords. This instrument has more of a mellow tone compared to the single tenor Pan. This steelpan has 28 notes starting from E below middle C. The skirt on each steelpan is about 9 inches long.
Double Guitar

This steelpans will play the harmony chords to accompany the melody, often in a strumming rhythm like a Guitar. This is where its name originates. This instrument has 18 notes starting from E below middle C. The skirt of each instrument is one third of the length of the barrel.

Triple Guitars and Cellos

The triple guitar / cellos is the equivalent to the tenor voice in a choir. This instrument will play low harmony chords but also low melodic lines. This set of 3 steelpans has 30 notes starting C one whole octave below middle C. The primary difference between these instruments is the length of the skirt. The triple guitar is one third of the length of the barrel while the cello is half of the length of the barrel.
Quads

The quads are an extended version of the triple cello, and are also considered equivalent to the tenor voice in a choir. The extended range enables melodic lines to be more easily played. The instrument will also play low harmony chords. This set of 4 steelpans has 36 notes starting at A on the first space of the bass clef.

Tenor Bass

This instrument is sometimes called high bass or 4 bass, and will play the higher notes in the bass range, often an octave higher than the low bass. Each instrument has skirts that are two-thirds of the original length of the barrel. This instrument is common in Trinidadian steel bands; however, they are not as common among steel bands in the United States.
Bass

This instrument is sometimes called the six bass or low bass. This steelpan consist of 18 notes starting from Bb or C, 2 octaves below middle C. Each steelpan is one whole barrel.
APPENDIX D

Questions for the Director

1. When how and why did you decide to become involved with steel bands? What attracted you to them?
2. How and when did you obtain your steelpans?
3. What training did you have to teach steelpan?
4. What costs for the ensemble are not funded by the school and have to be made up by other means?
5. How do students become members?
6. Why do students play in steel band?
7. What is your repertory like? (What musical styles does your group play?) Why?
8. What kind of educational goals do steelpans achieve?
9. What is the goal of your group? What is your personal goal in/for the group?
10. Is there any type of reputation, stigma, or label commonly attached to the members of your steel band? Have you ever received any resistance from others? (peers, administrators, audience members, friends or family, etc.)
11. Why this town?
12. Why do you feel this art form is successful in this town?
13. How is the group perceived within the community?
14. What is the demographic nature of your audience? What kinds of people come to your performances? What do they find appealing about steel band?
15. Has being involved with the steel band provided any insight to the culture of Trinidad?

16. Have there been any graduates of the program go on to study steel bands, or Trinidadian culture?

17. Do you ever bring in guest artists or clinicians?
APPENDIX E

Questions for the Student Participants

1. When, how, and why did you decide to become involved with steel bands? What attracted you to them?

2. What is your repertory like? (What musical styles does your group play?) Why?

3. How does playing in a steel band compare to other bands that you have been in?

4. What have you learned about other cultures through playing in the steel band?

5. Has your steel band affected your community, meaning both school community and local community?

6. Does playing in steel band strengthen your feeling or sense of community?

7. How do you benefit from playing steelpans?
APPENDIX F

Questions for the Members of the Community

1. Why do you attend the steel band concerts?

2. Have you learned anything about other cultures through attending steel band concerts?

3. Has your school steel band affected your local community?

4. Why do you feel that the steel band was established in this school?
APPENDIX G

Glossary of Terms

**Brake Drum**: a metallic portion of an automobile brake system that is usually struck with either metal or wood beaters; also called “iron”; used as a rhythmic instrument in the steel band rhythm section.

**Calypso**: a popular song form in Trinidad typically composed of lyrics that contain some type of social commentary. Often referred to as “the people’s newspaper.”

**Carnival**: an annual event held in Trinidad that occurs immediately prior to the Lenten season and is known for its colorful costumes, energetic music, and exuberant celebrations.

**Congas**: barrel shaped Afro-Cuban drums used in the engine room of a steel band.

**Engine Room**: the rhythm section of a steel band, usually consisting of drumset, congas, brake drum (iron), cowbells, scratchers, timbales, and a variety of other percussion instruments. Occasionally some engine rooms now include bass guitar. The name engine room developed from the rhythm of the iron and drums "driving" the music.

**Groove**: the underlying rhythm or feel of the music; the feeling of steady pulse and rhythmic cohesion in a piece of music.

**Panorama**: A nationwide steel band competition in Trinidad. It is usually held the weekend before Carnival.

**Roll**: producing a sustained sound on the steelpan using a rapid succession of strokes.
Skirt: the side of the raw barrel, which is cut to different lengths depending on the type of steelpan being created.

Soca: a style of popular music in Trinidad combining elements of Soul and Calypso.

Strumming: A pair of notes played in a repeating rhythmic pattern for accompaniment. This is similar to a guitar sound.
APPENDIX H

Steel Band Music and Accessories

2 Cool Percussion
3539 County Road 700
Riceville, TN 37370
(423) 462-2059
www.2coolpercussion.com

Drop6 Media
P.O. Box 81
Denton, TX. 76202
Fax: (413) 638-7564
www.drop6.com

Engine Room Publishing Inc.
PO Box 1316
Tallahassee, FL 32302
(646) 246-9133
www.engineroompublishing.com

Hillbridge Music
164 Hickory Hts. Dr
Bridgeville, PA 15017
(412) 221-0678
www.hillbridge.com

Kakesa
P. O. Box 29542
Oakland, CA 94604
Phone: (510) 222-1123
www.kakesa.com

Mau Mau Music
www.maumaumusic.com

Pan Press, Inc.
Box 1126
Elgin, IL 60121
(630) 587-3473
www.panpress.com
Pan Ramajay Productions
P.O. Box 101922
Denver, CO 80250
(303) 777-5852
www.ramajay.com

Panyard
1216 California Ave
Akron, OH 44314
(800) 377-0202
www.panyard.com

Potts & Pans Publishing
(815) 893-9726
matt@pottsandpans.org
www.pottsandpanspublishing.com

Steel Planet Music
P.O. Box 90108
Tucson, AZ 85752
(520) 744-7723
steelplanet@theriver.com

Tropical Shores Productions
Brad Shores
www.tropicalshores.net
APPENDIX I

Conventions, Workshops, and Festivals

Angel Pan Camps
Angel Lawrie
2445 Thurmont Road
Akron, OH 44313
(330) 835-4611
http://angelpancamps.com/

University of Delaware Steel Band Festival
Chris Hanning
Amy DuPont Music Building
Newark, DE 19716
(302) 831-2578

Ellie Mannette’s Festival of Steel
Mannette Musical Instruments
PO Box 4250
Morgantown, WV 26504
(304) 241-5691
http://festivalofsteel.org/

PANoroma Caribbean Music Fest
Beach Street USA
302 22nd Street
Virginia Beach, VA 23451
(757) 491-7866
http://www.beachstreetusa.com/festivals/panorama-caribbean-music-fest

Pan Ramajay Summer Steel Drum Festival
P.O. Box 101922
Denver, CO 80250
(303) 777-5852
http://ramajaypanfest.com

Percussive Arts Society International Convention
Percussive Arts Society
110 W. Washington St, Suite A
Indianapolis, IN 46204
www.pas.org
REFERENCES


CURRICULUM VITAE

Derek S. Boyce
127 Old York Road
Dillsburg, PA 17019
(717) 502-6958

EDUCATION:

2006-2015 Boston University
Doctor of Musical Arts
Music Education
Dissertation: *Voices of Steel: A Case Study of a Pennsylvania High School Steel Band*

2005 University of Maryland, College Park
Post Graduate Work in Wind Conducting

2003 The Pennsylvania State University
Master of Education
Teaching and Curriculum, Music Education
Thesis: *Are State Music Standards Being Assessed?*

1997 The Ohio State University
Bachelor of Music Education

TEACHING EXPERIENCE:

2000-Present Director of Bands
Bermudian Springs School District, York Springs, PA
Chair of Music Department
High School Wind Ensemble, Concert, Jazz, Marching, and Steel Bands, Elementary Band Program, Advanced Music Theory, Student Composition and Conducting Projects, Sound Engineering, World Music, and 7th and 8th Grade Bands.

1999-2000 Music Specialist
Cumberland Valley School District, Mechanicsburg, PA
Elementary Bands, District Percussion Specialist, High School Guitar

1997-1999 Director of Bands
Amanda-Clearcreek Local School District, Amanda, OH
Elementary, Junior High and High School Bands, Jazz Band Music Theory, Music History, High School Choir
1993-1997 Percussion Instructor
Zanesville High School, Zanesville, OH

1993-1995 Percussion Instructor
Fort Frye Local Schools, Beverly, OH

PERFORMANCE EXPERIENCE:

Gettysburg Festival Brass
Hershey Symphony
Worthington Civic Orchestra
Zanesville Memorial Concert Band
West Shore Evangelical Free Church Worship Team
Cumberland Valley Church Worship Team
Tommy Rey’s Steel Groove, Sanford Florida
Freelance percussionist

PRESENTATIONS:


2011 OMEA Dist. 9 In-Service, Zanesville, OH. “Steel Bands and Other Non-Traditional Ensembles in Public Schools”

2006 PMEA Conference, Valley Forge. “Establishing a Steel Band In Your School”

GRANTS

2007 Robert C. Hoffman Charitable Endowment Grant- Sound Engineering and World Music Equipment

2002 Adams County Arts Council Star Grant

2001 Robert C. Hoffman Charitable Endowment Grant-Establishing Steel Drum Band

2001 Pennsylvania Partner’s for the Arts Grant- Steel Band Clinicians

1999 Pine Grove Host Grant- Purchase of Timpani and Percussion Equipment

1998 Pine Grove Host Grant- Purchase Tubas and Baritones
AWARDS/HONORS:

2006  School Band and Orchestra Magazine Director who Makes a difference for the state of Pennsylvania

2006  BSHS Wind Ensemble selected to perform at PMEA Conference

INSTITUTIONAL ACTIVITIES AND SERVICE:

2010-Present  H.A.C.C. Music Industry Advisory Council

2006-Present  Adams County Music Educators Association, President

2006-Present  Bermudian Springs School District Curriculum Committee

2004-2006  PMEA District 7 Percussion Committee

MEMBERSHIPS:

Pennsylvania Music Education Association
NAfME- National Association for Music Education
National Band Association
Adams County Music Education Association
Percussive Arts Society
Phi Mu Alpha Sinfonia