AN INVESTIGATION OF THE PERCEIVED IMPACT OF THE INCLUSION OF STEEL PAN ENSEMBLES IN COLLEGIATE CURRICULA IN THE MIDWEST

by

BENJAMIN YANCEY

B.M., University of Central Florida, 2009

A THESIS

Submitted in partial fulfillment of the requirements for the degree

MASTER OF MUSIC

School of Music, Theatre and Dance College of Arts and Sciences

KANSAS STATE UNIVERSITY Manhattan, Kansas

2014

Approved by:

Major Professor Dr. Kurt Gartner

Abstract

The current study is an in depth look of the impact of steel pan ensemble within the college curriculum of the Midwest. The goal of the study is to further understand what perceived impacts steel pan ensemble might have on student learning through the perceptions of both instructors and students. The ensemble's impact on the students' senses of rhythm, ability to listen and balance in an ensemble, their understanding of voicing and harmony, and appreciation of world music were all investigated through both the perceptions of the students as well as the instructors. Other areas investigated were the role of the instructor to determine how their teaching methods and topics covered impacted the students' opinion of the ensemble. This includes, but is not limited to, time spent teaching improvisation, rote teaching versus Western notation, and adding historical context by teaching the students the history of the ensemble.

The Midwest region was chosen both for its high density of collegiate steel pan ensembles as well as its encompassing of some of the oldest pan ensembles in the U.S. The study used an explanatory mixed methodology employing two surveys, a student version and an instructor version, distributed to the collegiate steel pan ensembles of the Midwest via the internet.

The researcher intends for the current data to serve the music community in several ways: first, by determining exactly what the students and instructors value about the ensemble, we will better understand how an instrument created less than a century ago was able to infiltrate music programs all over the world. Second, giving instructors insight on the students' perspectives will also enable them to create a more effective and enjoyable curriculum. And lastly, with this information, instructors and program supervisors will be better suited to determine just how large of a role the ensemble should play in their students' education.

Acknowledgements

There are many people that need to be thanked for the completion of this project. First of all I would like to thank Dr. Kurt Gartner, professor of percussion at Kansas State University. I went through many changes in directions before arriving at the current topic and his guidance and support were instrumental to this research. Not to mention his patience and hours spent proofreading. Secondly I would like to thank Dr. Large, professor of flute at Kansas State University. I had the pleasure of studying world music with her and was here that I gained a true appreciation for the music of Trinidad. Her passion for all things music is infectious and it drove me to learn more. Lastly, but most certainly not least, I would like to thank Dr. Payne, professor of music education at Kansas State University. I would like to thank him for guiding me through the design of my research and the development of my survey, as well as for his patience with me while I asked him a seemingly endless list of questions. All these professors were patient, knowledgeable, and dedicated while working with me and were instrumental to this research.

I would also like to thank Dr. Frank Tracz, Director of Bands at Kansas State University. Although not directly involved in this study, I have learned many great things from him during my time at Kansas State. His drive, passion, and determination are awe inspiring and are attributes that not only helped me to complete this research, but are attributes that will stay with me throughout my career.

Lastly, I would like to think my wife Misty Yancey, not only for her love and support, but for her countless hours spent reading and proofing. She has always been nothing but supportive in all of my musical endeavors and has always been happy to help in whatever way possible. She is my inspiration, she drives me to do better, and she keeps me sane. Without her, this research, my musicianship, and myself as a person would not be what they are today.

Table of Contents

List of Tables vi
CHAPTER 1 - Introduction
Need for the Study
Research Questions
Operational Definitions
Limitations and Delimitations
CHAPTER 2 - History of the Steel Pan7
Trinidad Before the Steel Pan7
World War II
Towards Acceptance of Steel Pan15
The United States Navy Steel Band17
The Contributions of Pete Seeger
Ellie Mannette, Father of the Modern Steel Pan27
Steel Pan in the Midwest
CHADTED 2 Devices of Delevent Literature 27
CHAPTER 3 - Review of Relevant Literature
Qualitative research done on the impact of steel pan ensemble
Qualitative research done on the impact of steel pan ensemble
Qualitative research done on the impact of steel pan ensemble37Literature on the History of the Steel Pan
Qualitative research done on the impact of steel pan ensemble 37 Literature on the History of the Steel Pan
Qualitative research done on the impact of steel pan ensemble 37 Literature on the History of the Steel Pan
Qualitative research done on the impact of steel pan ensemble37Literature on the History of the Steel Pan44CHAPTER 4 - Methodology46Pilot Study46Setting and Participants48
Qualitative research done on the impact of steel pan ensemble37Literature on the History of the Steel Pan44CHAPTER 4 - Methodology46Pilot Study46Setting and Participants48Instrumentation48
Qualitative research done on the impact of steel pan ensemble37Literature on the History of the Steel Pan44CHAPTER 4 - Methodology46Pilot Study46Setting and Participants48Instrumentation48Procedure51
Qualitative research done on the impact of steel pan ensemble37Literature on the History of the Steel Pan.44CHAPTER 4 - Methodology46Pilot Study.46Setting and Participants48Instrumentation48Procedure51CHAPTER 5 - Results53
Qualitative research done on the impact of steel pan ensemble37Literature on the History of the Steel Pan44CHAPTER 4 - Methodology46Pilot Study46Setting and Participants48Instrumentation48Procedure51CHAPTER 5 - Results53Program Demographic Information53
Qualitative research done on the impact of steel pan ensemble37Literature on the History of the Steel Pan44CHAPTER 4 - Methodology46Pilot Study46Setting and Participants48Instrumentation48Procedure51CHAPTER 5 - Results53Program Demographic Information53Student and Teacher Enjoyment55

Importance of the Ensemble to Musical Development	
Question One	
Question Two	
Question Three	
CHAPTER 6 - Conclusions	
Research Question One	
Research Question Two	
Research Question Three	
Discussion	
Final Thoughts	
Bibliography	
Appendix A - Instructor Survey	
Appendix B - Student Survey	
Appendix C - Informed Consent Statement	
Appendix D - Additional Ensemble Demographics	
Appendix E - Companies, Colleges, and Other resources	

List of Tables

Table 4.1 Demographic Information Collected	
Table 4.2 Quantitative Information Collected	50
Table 4.3 Qualitative Information Collected	51
Table 5.1 Ensemble & Instructor Demographic Information	
Table 5.2 Instructor Demographic Information	55
Table 5.3 Participants Enjoyment Levels	
Table 5.4 Student Enjoyment - What Students Like Most	57
Table 5.5 Participants Knowledge Levels	59
Table 5.6 Ensemble Impacts on Musical Learning	60
Table 5.7 Amount of Time Spent on Improvisation - Student Responses	
Table 5.8 Question One Student Responses - Reasons for Answering Yes	64
Table 5.9 Question Two Student Responses - Reasons for Answering Yes	67
Table 5.10 Question Three Student Responses - Reasons for Answering Yes	69
Table 0.1 Ensemble Literature Types	
Table 0.2 Ensemble Literature Styles	
Table 0.3 Ensemble Methods of Instruction	
Table 0.4 Ensemble Concert Venues	
Table 0.5 Literature Companies	100
Table 0.6 Instrument, mallet, and hardware Companies	100
Table 0.7 University Steel bands Referenced to	100

CHAPTER 1 - Introduction

In 1981 there were only five university affiliated steel pan ensembles in the U.S. known to exist, all of which were found in the Midwest region of the United States. These universities were the University of Northern Illinois, the University of Illinois at Urbana, Eastern Illinois University, the American Conservatory of Music, and the University of Akron.¹ Since then we have seen an expansion of the ensemble throughout the U.S. with the ensemble reaching record numbers in the late 90s. Currently in the United States there are over 120 steel pan ensembles within collegiate programs alone.² When counting all bands, including primary schools and community groups, the estimated number is closer to 1,000.³ The ensemble has also spread across the globe and can be found in large numbers in Canada, France, Australia, and Japan.

Now that the instrument has become prominent in countries all over the world the question becomes how did this happen? How did an instrument created by the poor and repressed people of the small island of Trinidad become a standard in music education programs across the globe? How was this able to happen in only half a centuries' time? Why have music educators deemed it worthy of their curriculum and why do students deem it worthy of their time? Are their significant educational benefits or is it simply an enjoyable ensemble? These are but a few of the questions that will be investigated over the course of this study.

The current study was focused on the role of the ensemble within collegiate programs in the Midwest region of the United States and how students and teachers within the programs view the ensemble. Furthermore, the researcher investigated how the ensemble impacted student learning of musical concepts, as well as how the opinions and teaching methods of the instructor impacted the students' experiences within their respective ensembles. Additional areas investigated were the importance of the ensemble to those involved and whether the ensemble has any unique characteristics that set it apart from other collegiate ensembles. This research is

¹ G. Allan O'Connor, "A Brief Survey of Steel Drum Programs in North American Schools, *Percussive Notes* 19 (1981): 58-59.

² Brandon Haskett. "A Case Study on the Importance and Value of the Desert Winds Steelpan Programs," (D.M.A., Arizona State University, 2009), Appendix A.

³ Angela Smith, *Steel Drums and Steel Bands: A History* (Lanham: Scarecrow Press, 2012), pp. 115.

not meant to be in advocacy for steel pan ensembles; it is not meant to convince every program that they need a steel pan ensemble. Rather, it is meant to be a tool used by current and future ensemble directors. By obtaining a better understanding of the students' perspective, instructors should be able to run the ensemble in a more focused, efficient, and effective manner.

Need for the Study

Even though steel pan ensembles can be found throughout the United States at all different levels of education, very little research has been done on the educational impacts of the ensemble. A few articles and dissertations exist on the qualitative topic on why participants enjoy the ensemble,⁴ but the topic of musical educational benefits remains largely unexplored. There does exist a few articles that speak of the musical benefits of the ensemble and how best to run the ensemble,⁵ but these articles are almost entirely from the teacher's perspective. Although the perception of an experienced ensemble director is incredibly valuable, without the perceptions of the students we cannot benefit from the entire picture. By adding the perceptions of the students within the ensemble we will be able to further validate, or invalidate, the need for the ensemble. We will also be able to better evaluate the teaching methods being used within ensemble.

In order for steel pan ensembles to continue to grow and evolve, it is vitally important that steel pan ensembles create open channels of communication with one another. Currently, ensembles remain largely isolated without much communication and shared knowledge amongst one another. This lack of shared knowledge inhibits the ensemble's progress as instructors don't use the experiences of others to benefit their own group. On this topic Chris Tanner, director of the Miami University Steel Band, asks:

Where do steelband directors go to get information? How does somebody who wants to be a steelband director learn how to become one? How is information

⁴ Brandon Haskett, "A Case Study on the Importance and Value of the Desert Winds Steelpan Programs," D.M.A. dissertation, Arizona State University, 2009; Janine Tiffe, "Trinidadian Steel Drum (Pan) Bands in the Three Great Lakes States: A Study of Musical Migration," Master's Thesis, Kent State University, 2006.

⁵ Scott Harris, "Expanding the Role of the Steel Drum Band: It's Not Just Another Percussion Ensemble," *Percussive Notes* 46 (2008): 20-21; Kenyon Williams, "Steel Bands in American Schools: What They Are, What They Do, and Why They're Growing!" *Music Educators Journal* 46 (2008): 52-57.

being shared or disseminated among the steelband community? These are important questions that have not yet been effectively addressed by the community itself.⁶

The current investigation will serve in opening these channels of communication. By documenting the teaching methods and experiences of the students and teachers within the ensembles of the Midwest, other steel pan ensembles will be able to benefit from their knowledge and experience. This will lead to a more effective and standardized curriculum being taught in steel pan ensembles across the nation.

In her book *Steel Drums and Steelbands: A History*, Angela Smith states that "the typical university steelband today is started by a graduate percussion student with little or no experience playing pan."⁷ This scenario demonstrates a need to investigate how having an inexperienced director might impact the success of the ensemble. In his dissertation, Dr. Brandon Haskett states that "studies should be undertaken that examine the steel band director's role in the success of a steel band."⁸ By establishing how important an instructors experience, attitude, and demeanor is to the success of the ensemble, the steel pan community will gain a better understanding of the need for experienced and informed directors. This may also lead to validating, or invalidating, the need for more communication between ensembles so that inexperienced directors can gain knowledge more quickly.

One of the greatest strengths of the steel pan has always been the ease with which someone can learn the instrument.⁹ When the ensemble first started appearing in the Midwest, most leaders had no experience with the instrument and many weren't even percussionists. However, these early pan directors did have an advantage over modern day directors. When the steel pan ensembles were first forming in the 70s and 80s the groups were small, the students were inexperienced, and the directors were just as inexperienced as the students. Therefore, teachers and students were allowed to both learn simultaneously. Today, many ensembles are

⁷ Ibid.

⁶ Angela Smith, *Steel Drums and Steel Bands: A History* (Lanham: Scarecrow Press, 2012), pp. 131.

⁸ Brandon Haskett. "A Case Study on the Importance and Value of the Desert Winds Steelpan Programs," (D.M.A., Arizona State University, 2009), pp. 168.

⁹ Kenyon Williams, "Steel Bands in American Schools: What They Are, What They Do, and Why They're Growing!" *Music Educators Journal* 46 (2008): 52-57.

very large and often have members join already having steel pan experience. One can only imagine the monumental task of trying to take over a large, well established steel band whose former director had years of experience. This task becomes even more overwhelming for a new director who has little to no previous steel pan experience.

Although this scenario would be understandably intimidating, history has shown that steel bands have been successful even with the most inexperienced leaders. The task may not be easy, but with some real effort from these newly appointed directors these steel bands would continue to thrive. One focus of the current investigation is to provide a foundation that will ease the task that has been set upon these newly appointed steel pan ensemble directors while guiding them in the development of their steel pan curriculum. This investigation should also provide these directors with insight on why the previous professor might have found the ensemble worthy of their student's education, which might help to validate the extra time necessary to continue the ensemble. Ultimately, it is up to the discretion of the professor on how large of a role steel pan will play in their students' education. This study should provide these professors with the knowledge needed so that an informed decision can be made.

As demands on college students increase, students and teachers may find it harder to validate the time and resources needed to participate in a steel pan ensemble. Therefore, in order to validate the need for the ensemble, some sort of educational benefit must exist. Researching the impact of steel pan ensemble on the education of the students should help us to better understand exactly what these educational benefits are, how to use them, and whether these benefits are strong enough to validate the time spent in the ensemble. Researching this topic should also allow for the creation of more effective and efficient curriculum, which will make better use of the students' limited time.

Research Questions

In order to better understand the impact steel pan ensemble has on college curriculum, I have chosen to focus on the collegiate steel pan ensembles of the Midwest. The following questions guided my study:

1. Are there any perceived impacts among teachers and students of the inclusion of steel pan ensemble within collegiate music programs?

2. Do the views and teaching methods of the teachers impact the students' musical learning and the students' opinions of the ensemble?

3. Do students and/or teachers feel that steel pan ensemble is an important part of a college curriculum? If so, why?

Operational Definitions

For the purpose of this study, the following definitions will be employed:

Collegiate steel pan ensemble - Any steel pan ensemble that is affiliated with a college, university, or community college.

Steel band - Steel band is another term for steel pan ensemble. Through my research I have yet to find any characteristics that might distinguish one from the other. Some schools prefer to list the group as a "steel pan ensemble," while others prefer "steel band." Often, steel band is also listed as "steelband."

Steel pan - Refers to the instrument invented in Trinidad in the 1940s that is manufactured by hammering a 55 gallon oil drum. Often referred to as a "steel drum." Both terms are generally acceptable, but there are some that find the term "steel pan" preferable. This is usually caused by the belief that the term "steel drum" is too closely related to the oil drum from which the instrument was made. Thus, some believe calling the instrument a "steel pan" is a sign of respect that designates the object as a legitimate instrument.

Limitations and Delimitations

For the purpose of the current study, only the collegiate steel pan ensembles of the Midwest region will be analyzed. This includes the states of North Dakota, South Dakota, Nebraska, Kansas, Missouri, Iowa, Minnesota, Wisconsin, Illinois, Indiana, Michigan, and Ohio. Only schools that offered steel pan ensemble as a course of study were used in this investigation. In locating these schools the database compiled by Dr. Brandon Haskett was used. This database is an on-going project of Dr. Haskett and was published with his dissertation in 2009. The database is extensive and accurate containing collegiate, primary school, and community based ensembles. The database can be found in Appendix A of Dr. Haskett's dissertation.¹⁰ Due to financial constraints, as well as time constraints, travel to all the various schools being studied was not an option. Therefore, the majority of this research was done on campus at Kansas State University

When investigating the effectiveness of concepts taught, the current study is limited to the concepts already being used by the ensembles. This study aims to observe, document, and analyze the ensembles of the Midwest as they are and it is therefore impossible to control the material covered. For the same reasons the study is unable control the methods used in the ensemble, such as the amount of music that is taught by rote or the use of improvisation. This study is therefore limited to the teaching strategies and materials already being used by the ensembles of the Midwest.

¹⁰ Brandon Haskett, "A Case Study on the Importance and Value of the Desert Winds Steelpan Programs," D.M.A. dissertation, Arizona State University, 2009.

CHAPTER 2 - History of the Steel Pan

In order to better understand the ensemble as it is today, it is important to have an understanding of the history of the instrument, both in the United States as well as in Trinidad. The instrument did not originate in the United States, yet steel bands can be found all over the U.S., and all over the world. Studying the history of the instrument and its key contributors will lend insight into why the early pan pioneers worked so hard to create a new instrument and why the instrument was so attractive to many Americans. Relative to other instruments, the steel pan is still in its infancy and many of the forefathers of the instrument are still teaching and building instruments today. Therefore, it is important that we also research and document their stories to provide future generations with a rich and well documented history of the instrument. Lastly, as stated in the purpose of study, a major point of discussion in this research is how having a working knowledge on the instrument's history impacts the student experience. In order to fully understand the study's findings, the analysts should have at least a basic understanding themselves.

This chapter will cover the history of the steel pan in its earlier years in Trinidad, before its migration to the United States. The chapter will then change its focus and cover primarily the instrument within the United States. Although this chapter will not cover the modern history of the instrument in Trinidad, the steel pan does remain an active part of Trinidadian culture and offers much to be studied. However, this topic is better suited for a separate study.

Trinidad Before the Steel Pan

The story of the steel pan begins on the Island of Trinidad which was discovered by Christopher Columbus on July 31, 1498, during his third transatlantic voyage. When the Spanish arrived to the island, it was already inhabited by the Amerindian tribe, with whom Columbus made contact on August 2 of the same year.¹¹ In his diary entries, Columbus wrote that "There are one-eyed men, and others, with the snouts of dogs, who ate men, and that as soon as one is

¹¹ Martin Munro, *Different Drummers: Rhythm and Race in the America* (Berkeley: University of California Press, 2010), pp. 79.

captured they cut his throat and drank his blood."¹² There is no archaeological evidence to substantiate these claims of cannibalism. It is likely that Columbus made such wild claims so that Spain would have justification, at least in their minds, to take land from and to enslave the Amerindians.¹³

Historians estimate that when Columbus arrived, there were 30,000 Amerindians on the island. However, due to Spaniard intrusion, their population had been reduced to a few thousand by 1612, barely one hundred years after Spain's arrival.¹⁴ When studying the music of Trinidad, it is important to keep this in mind because the original inhabitants of the island had very little, if any, influence on the island's music. It was rather the immigrants, slaves, and indentured servants that came from all over the world that developed the island's unique style.

Spain's original hope for the island was to find gold and other precious metals, but none were found. Given the lack of precious metals on the island, Spain issued a royal decree in the late 1770s inviting non-Spaniard Roman Catholics to settle in Trinidad and to establish sugar plantations.¹⁵ At this point, French planters immigrated to Trinidad on a massive scale, and by 1797 there were over 150 sugar plantations. With these plantation owners came large amounts of slaves, causing the slave population to reach over 20,000 by 1808.¹⁶

In 1797, England desired to take Trinidad from Spain and sent a fleet of ships to Trinidad. Upon England's arrival to the island the Spanish governor immediately surrendered power to British General Ralph Abercromby. Records state that the interchange between the two officials was "extremely polite" and "amicable to the highest degree."¹⁷ England had conquered Trinidad without any bloodshed and without firing a single weapon. The island would remain under England's rule until its independence in 1962, a rule that would oversee the vast majority of the steel pan's development.

During the period of slavery in Trinidad, the slaves were forbidden to practice their religions or to speak their native languages. Plantation owners also forbade slaves to practice

 ¹² Angela Smith, *Steel Drums and Steel Bands: A History* (Lanham: Scarecrow Press, 2012), pp. 5.
 ¹³ Ibid.

¹⁴ Martin Munro, *Different Drummers: Rhythm and Race in the America* (Berkeley: University of California Press, 2010), pp. 80.

¹⁵ Ibid., 81.

¹⁶ Ibid., 84.

¹⁷ Angela Smith, *Steel Drums and Steel Bands: A History* (Lanham: Scarecrow Press, 2012), pp. 10.

their customs of drumming and dance, the owners feared that these forms of expression might be used to send coded messages to organize revolt.¹⁸ During Christmas time, slaves were given more freedom to celebrate in a fashion of their choosing, but this freedom caused slave owners to become concerned of insurrection. Because of this, every Christmas martial law was put into place and all free men were required to temporarily enlist in the militia.¹⁹

During the Christmas season of 1805, there were rumors of a possible uprising on the Shand Estate in Carenage. Convinced of the authenticity of the rumor, the plantation owner and the governor had the conspirators tried in court. Slaves were not afforded the same rights during trial and a corrupt judicial system found them guilty. Four of the slaves were executed and most of the others were flogged and banished. It is believed today that there was no actual revolt being formed, but rather the guilty party had simply been planning a traditional dance.²⁰

The first Act of Emancipation for the slaves of Trinidad came in 1833 but it did not afford the slaves complete freedom. This act would outlaw slavery by labeling all slaves as apprentices instead. The act was mostly a change in title, as little changed in the slaves working conditions. The government had hoped that this would appease the slaves while still guaranteeing plantation owners free labor. This act did not last long and full emancipation was granted six years later in August of 1838.²¹

After slavery had been abolished, plantation owners had to find a new source of cheap labor. India, with its poverty-stricken millions, became a prime target.²² Indians were willing to sacrifice their freedom for a five-to seven-year period of indentured servitude in exchange for their own parcels of land for farming.²³ This opportunity caused a huge immigration of East Indians to Trinidad. By 1870, Indians made up approximately one quarter of Trinidad's population. Today roughly forty percent of Trinidadians are of Indian descent.²⁴

¹⁸ G. Allan O'Connor, "Pan: Heartbeat of a Nation," *Percussive Notes* 19 (1981): 54-55.

¹⁹ Stephen Stuempfle, *The Steelband Movement* (Philadelphia: University of Pennsylvania Press, 1995), pp. 15.

²⁰ Martin Munro, *Different Drummers: Rhythm and Race in the America* (Berkeley: University of California Press, 2010), pp. 85.

²¹ Ibid., 89.

²² G. Allan O'Connor, "Pan: Heartbeat of a Nation," *Percussive Notes* 19 (1981): 54-55.

²³ Angela Smith, Steel Drums and Steel Bands: A History (Lanham: Scarecrow Press, 2012), pp. 12.

²⁴ Martin Munro, *Different Drummers: Rhythm and Race in the America* (Berkeley: University of California Press, 2010), pp. 108.

The celebration of Carnival has been an important part of Trinidadian culture since it was first introduced to the island by the French plantation owners in the 1780s, but it was originally intended only for plantation owners and the upper class. As part of the ceremony, plantation owners would dress as slaves and parade through the streets drumming and dancing, mimicking the actions of their slaves. The Carnival participants felt these actions might anger the slaves and thus plantation owners forbade slaves from attending Carnival.²⁵ After receiving their freedom, the former slaves quickly took to Carnival and adapted it to make it their own. One way in which the former slaves celebrated Carnival was through their tradition of *kalinda*. *Kalinda* is a ceremony that was brought with the slaves from Africa where two men fight each other using sticks of bamboo. This ceremony is highly choreographed and is accompanied by music. The impoverished territories of Trinidad would frequently challenge each other to these stick fights that would often escalate into large scale violence, especially around Carnival celebrations.²⁶

In an attempt to both rid Carnival of the presence of former slaves and to lower the amount of violence, an ordinance was passed in 1837 banning the use of a drum, gong, tambour, bangee, or chac-chac (a type of shaker) in any house, outhouse, building or yard during the Carnival season.²⁷ The thought behind this legislation was that without the use of instruments the art of *kalinda* would be unable to continue, causing violence to subdue. This act had little effect, as the true reason for the violence was the high poverty level and the lack of work, not the art of *kalinda*. The act also didn't stop *kalinda* as the people of Trinidad continued their traditions, sometimes in secret and sometimes in open defiance of the law. The restrictions were expanded in 1849 with a new ordinance that would apply the same laws all year long.²⁸

In 1882, Henry Ludlow, a notoriously violent police official, proposed legislation that would not only ban the use of any drum or chac-chac, but would also ban the playing of piano after ten o'clock at night. The ordinance would also give police the power to enter any home thought to house law breakers. This ordinance failed to pass. However, due to the violence of the 1883 Carnival, the ordinance was passed the following year. Along with outlawing the use

²⁵ Angela Smith, *Steel Drums and Steel Bands: A History* (Lanham: Scarecrow Press, 2012), pp. 18.

²⁶Martin Munro, *Different Drummers: Rhythm and Race in the America* (Berkeley: University of California Press, 2010), pp. 100.

²⁷ Ibid., 90.

²⁸ Ibid., 94.

of any percussion instrument, this legislation also forbade the playing of European string or woodwind instruments.²⁹ Yet again, the lawmakers of Trinidad were refusing to address the actual issues of poverty and were trying to fix the situation by stripping away the rights of the people.

Former slaves were not the only ones to suffer at the hands of the unjust government, as the immigrants from India also faced severe repression. The indentured servants of India were interacting with the former slaves and law officials became wary of their possible allegiances. During this time, the Indian people of Trinidad were engaging in Carnival-like parades that would take them into the neighborhoods of the former slaves. In an attempt to prevent the interaction between these two groups, laws were passed forbidding these parades. In October of 1884, defiant Indians chose to parade in protest of the new law. When the Indian protestors refused to cease, the police fired upon the parading Indians killing twelve and injuring 104 in what is now referred to as the Hosein Massacre.³⁰

Because of the increasing severity of punishments, the *kalinda* groups turned to unconventional instrumentation as a means to continue their traditions without breaking any laws. The most common was the use of bamboo. By using different lengths of bamboo and striking them on the ground and with sticks, the *kalinda* groups were able to recreate the traditional drum parts. These groups, referred to as tamboo-bamboo, reached the height of their popularity in the late 1930s and were the precursor to the steel bands.³¹ These tamboo-bamboo groups met in scrap yards and began to experiment with metallic sounds in the ensemble such as biscuit tins and caustic soda barrels. Although it is rumored that groups incorporated metallic instruments in their ensemble as early as 1911, it wasn't until the 1930s that it became common practice.³² The banning of drums did not lower the level of violence as originally intended. These newly formed tamboo-bamboo groups were just as violent as their *kalinda* predecessors,

²⁹ Ibid., 105.

³⁰ Ibid., 109.

³¹G. Allan O'Connor, "Pan: Heartbeat of a Nation," *Percussive Notes* 19 (1981): 54-55.

³²Stephen Stuempfle, *The Steelband Movement* (Philadelphia: University of Pennsylvania Press, 1995), pp.

which is not surprising when considering that the instruments could now be used as weapons. Because of the increasing violence, tamboo-bamboo groups were also outlawed in 1934.³³

In true Trinidadian style, the tamboo-bamboo groups did not let this new law prevent them from continuing their tradition; rather, they simply focused more on the metallic objects that they were already incorporating into their groups. These dust bins and caustic soda cans were not technically drums or bamboo and were therefore not illegal. In these new instruments the Trinidadians had found another source for musical expression.

The true origin of the steel pan is shrouded in mystery as many different groups, wanting to claim the glory, have stories attributing the creation of steel pan to themselves. It is also difficult to define just when the pan was created since it was not created by one single person and it evolved over many years. The Majumba Band of George Street claim that they were the first to incorporate the beating of dustbins and other metallic instruments in their tamboo-bamboo groups and are responsible for the origin of the steel pan. The Alexander's Ragtime Band claim their member Mando was first to play a pitch on one of the dustbins and that they created the instrument.³⁴ Although there is much dispute over the start of metal in tamboo-bamboo, it is well documented that the first all metallic tamboo-bamboo group to perform for Carnival was Tanty Willie's band in 1936.³⁵ This was a major turning point for the steel pan as more and more tamboo-bamboo groups followed suit in the following years.

Notably, groups performing on all metallic instruments were not playing steel pans as we know them today. They didn't have multiple isolated pitches and generally weren't of a defined pitch. The instruments were usually tuned to the individual performer's preference, or were not tuned at all. The first pan to incorporate multiple pitches on the same instrument was made by Winston "Spree" Simon. The story goes that he had lent one of his kettle pans to Wilson Bartholomew and it was returned damaged and sounding irregular. Simon then beat the instrument with a rock in an attempt to knock the instrument back in shape and back in tune. It was then that he realized he was able to manipulate the instrument in such a way that multiple

³³ Angela Smith, Steel Drums and Steel Bands: A History (Lanham: Scarecrow Press, 2012), pp. 34.

³⁴ G. Allan O'Connor, "Pan: Heartbeat of a Nation," *Percussive Notes* 19 (1981): 54-55.

³⁵ Martin Munro, *Different Drummers: Rhythm and Race in the America* (Berkeley: University of California Press, 2010), pp. 128.

pitches could be created.³⁶ In 1940, Simon created the first melodic pan with eight different notes.³⁷ With this new invention pan players were able to perform simple melodies. Simon's invention caught on like wild fire and the other tamboo-bamboo groups, or perhaps now steel bands, followed Simon's lead and created pans of their own.

World War II

The years following Simon's creation of a multiple pitched steel pan were years filled with creativity and innovations for the instrument. These were also the years of World War II. During the war, Trinidad was still a British territory and Carnival was suspended in order to focus on the war effort. Due to the suspension of Carnival, the general public was not able to experience the full potential of the instrument. Because they had not yet seen an organized demonstration of the instrument, the majority of the public only saw the new instrument as a nuisance.

Even though the war kept the steel pan out of the public's view, it was still beneficial to the instrument in many ways. The greatest benefit of which was most likely the United States establishing their Naval base Chaguaramas on the island. Not only did this Naval base lead to the exposure of the instrument to the U.S., but it also supplied the Trinidadian's with a seemingly endless supply of 55 gallon oil drums.³⁸ It is not certain which pan maker was first to use a 55-gallon oil drum, but it quickly became the most popular material for making a steel pan. To this day the 55-gallon oil drum remains the most popular choice for manufacturing steel pans.

Before the start of the Second World War, Trinidad was experiencing a severe depression. The war helped Trinidad out of this depression, because along with the military base came many soldiers with expendable income. This led to a need for night clubs, movie theaters, restaurants, and other forms of entertainment. This meant many new businesses for Trinidad and many new jobs for the Trinidadians. The U.S. employed some Trinidadians to help build bases and roads. These were prized jobs, as the average pay for U.S. work was much higher than a

³⁶ Shannon Dudley, *Music from Behind the Bridge: Steelband Aesthetics and Politics in Trinidad and Tobago* (Oxford: Oxford University Press, 2007), pp. 38.

³⁷ G. Allan O'Connor, "Pan: Heartbeat of a Nation," *Percussive Notes* 19 (1981): 54-55.

³⁸ Angela Smith, Steel Drums and Steel Bands: A History (Lanham: Scarecrow Press, 2012), pp. 45.

typical job in Trinidad.³⁹ The American soldiers also took a liking to the instrument, which helped to prevent legislation banning the instrument like all of its earlier predecessors.⁴⁰

The American's presence in Trinidad wasn't all positive, however. The combination of sailors with expendable income and a high poverty level made prostitution a problem. There was also occasional tension between the American and Trinidadian men caused by the American's overly boisterous manner, racism, and their interest in local women. However, the Trinidadians were in desperate times and the Americans were quite frivolous with their money. Because of this, the Trinidadians would work to keep the peace and on occasions the two groups were even known to socialize.⁴¹

During this time, the youth of Trinidad fell in love with American cinema, most of all its war movies. The youth seemed to identify with the movies in that they showed the need for necessary force. Steel bands, which at the time were still very violent, began to view themselves as armies protecting their territory from intruders. Many steel bands even named themselves after these popular movies, such as *Casablanca*, *Destination Tokyo*, *Night Invaders*, and the *Desperados*.⁴²

At this point in time, the pan players were still not highly respected. The general public just viewed these "noise" makers as young men who lounged around all day banging on trash cans instead of getting a job. It also didn't help the reputation of the instrument that some steel pan artists were associated with prostitution rings and other crimes.⁴³ The reputation of the instrument didn't change overnight but it did take a step in the right direction on May 8, 1945, when Germany surrendered, causing a massive celebration in Trinidad.⁴⁴ During this celebration, the public saw for the first time the full potential of the instrument. It would take

⁴¹ Stephen Stuempfle, *The Steelband Movement* (Philadelphia: University of Pennsylvania Press, 1995), pp.

47.

47.

- ⁴² Angela Smith, *Steel Drums and Steel Bands: A History* (Lanham: Scarecrow Press, 2012), pp. 44.
- ⁴³ Stephen Stuempfle, *The Steelband Movement* (Philadelphia: University of Pennsylvania Press, 1995), pp.

³⁹ Stephen Stuempfle, *The Steelband Movement* (Philadelphia: University of Pennsylvania Press, 1995), pp.

⁴⁰ Borde, Percival, , "The Sounds of Trinidad: The Development of the Steel-Drum Bands," *The Black Perspective in Music* 1 (1973): 45-49; see pp. 49

⁴⁴Angela Smith, Steel Drums and Steel Bands: A History (Lanham: Scarecrow Press, 2012), pp. 49.

decades for performance on the instrument to be accepted as a worthwhile endeavor, but it was now moving in the right direction.

Towards Acceptance of Steel Pan

Over the following five years, there was much debate within the public over the legitimacy of the instrument. Many still believed it to just be a loud noise maker only suitable for Carnival-like celebrations. Public opinion was swayed greatly in 1950 when the steel band Casablanca steel band performed at White Hall in Port of Spain, a well-known concert venue for classical music and a venue where no steel band had not yet performed.⁴⁵ At this concert, the group performed a large variety of styles including calypsos, rumbas, popular dance tunes, and marches that showcased the versatility of the instrument.⁴⁶ Two weeks later, the group competed in the first island-wide steel band competition at the Guardian's Carnival Sunday Night Show where they captivated audience with their arrangement of Chopin's "Nocturne in E-Flat."⁴⁷ A spectator of the event recalls:

Someone started to clap - soon the whole audience broke into wild cheers. The sedate, the patronizing, the doubtful were convinced. All were shouting for More! More!! More!! Reveling in the glory of the minute, Russell Manning, the bandleader, lifted his arms. The crowd grew still. A slight movement of the fingers-the response of the band-and jaws fell open in amazement. People looked at one another in wonderment. For here in Trinidad, by musicians who knew not a single note of written music, was a most professional arrangement of Chopin's Nocturne in E Flat. The audience followed the nimble-fingered boys in rapt silence and attention. The steelbandsman was accepted as a musician.⁴⁸

As steel pan began to gain acceptance with the public, the government began to support the instrument as well, both in hosting the aforementioned steel band festival as well as with the formation of the Trinidadian All Stars Percussion Orchestra (TAPSO) in 1951. The group was created to perform in London at the Festival of Britain and was led by Barbadian Lieutenant

⁴⁵ Stephen Stuempfle, *The Steelband Movement* (Philadelphia: University of Pennsylvania Press, 1995), pp.

⁴⁶ Ibid.

85.

⁴⁷ Cy Grant, *Ring of Steel: Pan Sound and Symbol* (London: Macmillan Education, 1999), pp. 32.

⁴⁸ Stephen Stuempfle, *The Steelband Movement* (Philadelphia: University of Pennsylvania Press, 1995), pp.

Joseph Griffith.⁴⁹ At the time, Trinidad was still a British colony and the purpose of this festival was to mark the centenary of the Great Exhibition of 1851. The festival was to convey to the world that Britain was still a strong country and a world leader even after the war.⁵⁰ Although the focus of this festival was not on steel pan, the performance did play a major role in the instrument getting international exposure.

The TAPSO was made up of some of the best and most influential pan performers and makers of the day. The group included Ellie Mannette of the Invaders, Winston Spree Simon from Bar 20, Anthony Williams from the North Stars, Andrew "Pan" De La Bastide from Hill 60, Philmore 'Boots' Davidson from Casablanca (the only performer who could read music), Sterling Beancourt from Cross Fire, Theo Stephens from Southern All Stars, Belgrave Bonaparte from Southern Symphony, Dudley Smith from Rising Sun, and Orman 'Patsy' Haynes from Casablanca.⁵¹

Joseph Griffith, conductor and leader of TAPSO, had a clear vision and high expectations for the ensemble. He wanted the pans to be fully chromatic and tuned to concert pitch, something that had not yet been done. This vision-combined with a group of the most dedicated and talented musicians Trinidad had to offer-caused the creation of many new pans and tuning techniques that would make the instrument more applicable to Western music. Since most of the TAPSO group members couldn't read music, Griffith developed a system of notation involving numbers to expedite the learning process. By the end of their time with TAPSO, many of the members had learned to read standard Western notation.⁵²

After their initial performance, the group continued to tour Europe. The pan continued to captivate listeners, gaining popularity everywhere they went. The instrument continued to gain popularity in its own region as well. On the island of Antigua, the instrument was receiving even more recognition and appreciation than in its homeland, largely due to the support of Antiguan Governor Baldwin.⁵³ The TAPSO group exposed the instrument to the world and helped to

⁵² Stephen Stuempfle, *The Steelband Movement* (Philadelphia: University of Pennsylvania Press, 1995), pp.

⁴⁹ Cy Grant, *Ring of Steel: Pan Sound and Symbol* (London: Macmillan Education, 1999), pp. 32.

⁵⁰ Angela Smith, Steel Drums and Steel Bands: A History (Lanham: Scarecrow Press, 2012), pp. 94.

⁵¹ Cy Grant, *Ring of Steel: Pan Sound and Symbol* (London: Macmillan Education, 1999), pp. 32.

⁵³ Cy Grant, *Ring of Steel: Pan Sound and Symbol* (London: Macmillan Education, 1999), pp. 33.

legitimize the instrument in its homeland of Trinidad. The pan's popularity and success on a world scale undoubtedly influenced public opinion in Trinidad. The formation of TAPSO marked the first time in the island's history that the government supported the people's music rather than stifling it.

The United States Navy Steel Band

The introduction of steel pan to the United States, which led to the eventual migration of the instrument, was not caused by one person or event. However, many key figures early in the instrument's history contributed greatly to both the development of the instrument and to the exposure of the instrument on a global scale. One of the most influential of these early contributors was Admiral Daniel Gallery, founder of the United States Navy Steel Band (USNSB).

Founded in 1956, the USNSB was the first documented American steel pan ensemble. Based on a naval base in Puerto Rico, its proximity and funding from the U.S. government made it the perfect group to bring steel pan to the masses. Gallery was first exposed to the instrument during an inspection of the Chaguaramas Naval Base in Trinidad.⁵⁴ This inspection coincided with the island's Carnival celebrations, making it nearly impossible for the Admiral not to be exposed to the instrument. Gallery became intrigued by the instrument almost immediately, and decided that once he returned to his base in Puerto Rico, he would start a band of his own.

Upon his return to Puerto Rico, Gallery approached chief musician Charlie Roeper and asked if he thought starting such an ensemble was possible. Roeper was skeptical but Gallery was persistent on the matter. Gallery used his connections to help fund the group and in the spring of 1956, less than one year later, the group was formed and headed to Trinidad to study steel pan.⁵⁵ The original members of the ensemble had no experience with the instrument and the majority of them were not percussionists. However, all were trained musicians and gained facility on the instrument very quickly.⁵⁶ Roeper, like Gallery, became quite interested in the instrument and contributed greatly to the quick success of the ensemble. However, his time with

⁵⁵ Ibid., 11.

⁵⁴Janine Tiffe, "The Arrival of Steel Pan in the United States," *Percussive Notes* 45 (2007): 10-17; see pp. 11.

⁵⁶ Andrew Richard Martin. "Pan-America: Calypso, Exotica, and the Development of Steel Pan in the United States," Ph.D. Dissertation, University of Minnesota, 2011, pp. 155.

the USNSB was short lived due to a case of malaria that prompted his discharge from service in 1957. Franz Grissom, a navy percussionist with no steel pan experience, became the new director of the ensemble and would remain with the group until 1964.⁵⁷

Grissom assumed the monumental task of taking the group to the next level and getting the group ready to perform for the public. When Grissom took over the ensemble, the group had moderate training, but Grissom had none. Grissom spent countless hours in Trinidad, working with the Invaders Steel Band and Ellie Mannette, learning the instrument and studying the music.⁵⁸ Ellie Mannette, who is discussed in greater detail in the next section, would prove to be an invaluable contributor to the ensemble. Although the USNSB lived on the Chaguaramas base while visiting Trinidad, they spent almost all of their time in Ellie Mannette's backyard, learning from Mannette while he manufactured their instruments.⁵⁹ In typical Mannette fashion, the young builder would work feverishly during the group's visits, logging in twelve to eighteen hours a day for weeks at a time.⁶⁰

Mannette always stood apart from other pan makers of the day, as his passion for advancing the instrument led him to selflessly share his manufacturing process with others who shared his vision. Most other pan makers thought that this process should be kept secret. Although his official agreement with the Navy was to build pans in exchange for oil drums, it is likely that his desire to further develop the instrument, a passion that was shared with Gallery and Grissom, played a major role in his decision to help the USNSB. Mannette and other pan makers of the time were severely limited in the quality of material available to make the instruments. With Gallery's navy connections, however, Mannette had access to a wide variety of fine materials. To Mannette, working with the USNSB meant the opportunity to experiment and build instruments uninhibited by fiscal limitations.⁶¹

While Mannette enjoyed and welcomed the group's presence in Trinidad, not all Trinidadians shared Mannette's feelings. In fact, many Trinidadians didn't like the American

⁵⁷ Ibid., 319.

⁵⁸ Ibid., 167.

⁵⁹ Janine Tiffe, "The Arrival of Steel Pan in the United States," *Percussive Notes* 45 (2007): 10-17; see pp.11.

⁶⁰ Andrew Richard Martin. "Pan-America: Calypso, Exotica, and the Development of Steel Pan in the United States," Ph.D. Dissertation, University of Minnesota, 2011, pp. 158.

⁶¹ Ibid., 205.

soldiers learning their instrument. The navy men were trained musicians and were able to learn the instruments very quickly, much quicker than most Trinidadians who generally didn't read music. The following statement from Gallery in a letter to Pete Seeger provides some insight on the early success of the group.

I am having a whale of a time with this band. My sailors have taken to it like natives. They want to raffle off their regular instrument and play nothing but steel drums now. I swear, I think they're better than any band in Trinidad right now after only two months experience.⁶²

Some Trinidadians saw the quick success of the USNSB and their ability transcribe and perform traditional Trinidadian songs as a threat to their culture.⁶³ It is understandable that the Trinidadians got upset when a group of foreigners came in and made easy work out of something they had worked towards for decades. However, it would be this very ease and accessibility that would help make the instrument so popular and appealing in the following years.

After only a few months of study, the group had become quite comfortable with the instrument. However, they were still ill-prepared to perform due to their lack of literature. Grissom assumed the task of creating a book of arrangements for the group to perform. Grissom, using the knowledge he obtained while studying in Trinidad, created a book of over 200 tunes that included calypsos, folk tunes, classical arrangements, and armed forces melodies.⁶⁴ The band used a lead sheet system of notation in which the higher voices carried the melody and the lower voices played chords and the bass line. This book made the USNSB the first steel pan ensemble known to write, read, and perform works specifically for steel bands.⁶⁵

1957 would prove to be a very busy and successful year for the group. Admiral Gallery and Grissom now had a well-trained pan ensemble and they began to tour extensively. Admiral Gallery, who was personal friends with President Eisenhower, used his connections to bring the group to the White House. The admiral viewed this performance as an historical event marking

⁶² Andrew R. Martin, "Words of Steel: Pete Seeger and the U.S. Navy Steel Band," *The Journal of New York Folklore* 34 (2008): 20-28; see pp. 25.

⁶³ Andrew Richard Martin. "Pan-America: Calypso, Exotica, and the Development of Steel Pan in the United States," Ph.D. Dissertation, University of Minnesota, 2011, pp. 160.

⁶⁴ Ibid.

⁶⁵ Angela Smith, Steel Drums and Steel Bands: A History (Lanham: Scarecrow Press, 2012), pp. 111.

the arrival of steel pan to the United States.⁶⁶ The group would also have its European première the same year at the Brussels World Fair and would record its first album *Pandemonia*.⁶⁷

The group continued to tour, becoming increasingly more popular with every performance. This popularity was due in part to their training and high standards, as well as the instrument's unique sound. 1960 was a particularly productive year for the group, which presented over 265 performances. The group also embarked on a three-week South American tour the same year that included performances in twelve different countries.⁶⁸ On this tour, the group gave forty performances, one of which was their performance in Bototá, Columbia with an audience of approximately 12,000. On this South American tour the group performed for an estimated 44,000 spectators.⁶⁹ That number does not include the 1.5 million viewers of their television broadcast in Argentina.⁷⁰

In 1964, Murray Narell met Roeper and the USNSB at the New York World's Fair. Murray also brought his sons Jeff and Andy, who are both now prominent pan artists, to see the steel band.⁷¹ The Narell family and the USNSB would prove to be integral factors in the history of the steel pan. Therefore, it is important to note the interaction between the two forces early in their careers. On a tour in the late 70s, the group visited Wichita, Kansas. There, they introduced the instrument to modern pannist Gary Gibson. Gibson, a child at the time, was amazed at what he heard and upon returning home, set to attempting to make a steel pan out of his metal disk sled. Later, Gibson studied the instrument at Wichita State University and subsequently became one of the leading performers in the United States. It is safe to assume that the Narell family and Gary Gibson were inspired at some level by the performances of the USNSB, further demonstrating the lasting impact the USNSB had on the instrument.

⁶⁶ Andrew Richard Martin. "Pan-America: Calypso, Exotica, and the Development of Steel Pan in the United States," Ph.D. Dissertation, University of Minnesota, 2011, pp. 175.

⁶⁷ Janine Tiffe, "The Arrival of Steel Pan in the United States," *Percussive Notes* 45 (2007): 10-17; see pp. 11.

⁶⁸ Andrew Richard Martin. "Pan-America: Calypso, Exotica, and the Development of Steel Pan in the United States," Ph.D. Dissertation, University of Minnesota, 2011, pp. 179.

⁶⁹ Ibid., 180.

⁷⁰ Ibid., 183.

⁷¹ Janine Tiffe, "The Arrival of Steel Pan in the United States," *Percussive Notes* 45 (2007): 10-17; see pp.
11.

In the early days of the instrument, the recordings of steel pans were notoriously poor. Sound engineers had a very hard time recording the instrument without it sounding very bright and thin and the recordings didn't accurately portray the instrument's sound. The USNSB was determined to improve upon this in recording for their albums. To do this, a recording studio was constructed in Puerto Rico for the sole purpose of recording steel pan. With some experimentation in this new studio, the engineers were able vastly improve upon recording methods. The group was able to record a total of seven albums, six of which were produced before 1972. The recording studio would also become the prime recording site for others groups such as the Invaders, the Virgin Island Steel Band, and the Brute Force Steel Band from Antigua.⁷²

On top of the group's audio recordings, the group also dabbled in television and film. The group would star in two films, *Eighteen on Steel* and *Admiral Dan's Pandemoniacs*.⁷³ The first of these films, *Eighteen on Steel*, was an attempt to keep the relationship between the U.S. and Trinidad strong after Trinidad gained independence in 1962. America's lease agreement for the base in Trinidad was through Britain and most Trinidadians felt it was no longer valid. The film features the USNSB as well as the Invaders and Sundowners from Trinidad. Ellie Mannette would be a key figure in this film and was used as a symbol of unity because of his work with both the USNSB and the Invaders Steel Band.⁷⁴ The group would also make many appearances on American television shows such as the Ed Sullivan Show, the Bob Hope Show, and the Today Show.⁷⁵ These television appearances were instrumental to the exposure of the instrument to the U.S.

The groups continued to tour and perform all over the world until it was disbanded in 1999. The official reason for disbanding the group, as stated by the Navy, was the lack of demand for the group. Many others claim that there was, in fact, plenty of demand for the group and blame the lack of performances on poor leadership.⁷⁶ Whatever the case may be, the

⁷² Angela Smith, *Steel Drums and Steel Bands: A History* (Lanham: Scarecrow Press, 2012), pp. 112.

⁷³ Andrew Richard Martin. "Pan-America: Calypso, Exotica, and the Development of Steel Pan in the United States," Ph.D. Dissertation, University of Minnesota, 2011, pp. 198.

⁷⁴ Angela Smith, *Steel Drums and Steel Bands: A History* (Lanham: Scarecrow Press, 2012), pp. 113.

⁷⁵ Janine Tiffe, "The Arrival of Steel Pan in the United States," *Percussive Notes* 45 (2007): 10-17; see pp. 11.

⁷⁶ Angela Smith, Steel Drums and Steel Bands: A History (Lanham: Scarecrow Press, 2012), pp. 114.

USNSB had made a huge impact on the musical world and had played an essential role in bringing the steel pan to the rest of the world. As stated before, there is no one group or person solely responsible for popularizing the steel pan on a global scale, but the contributions of the USNSB should not be underappreciated. Admiral Gallery saw the potential of the instrument and was able to create a group that spent forty-two years touring the world. Without the contributions of the USNSB, the steel pan landscape would look vastly different than it does today.

The Contributions of Pete Seeger

During the early years of the USNSB there was another American artist making great headway in exposing the steel pan to the U.S. Pete Seeger, a well-known musician and activist, believed firmly in the potential of the instrument and devoted many years of his life to researching, documenting, and sharing his knowledge of the steel pan. Well known for his strong beliefs and convictions, Seeger would put forth his full effort to support the causes that he deemed worthy. During the McCarthy era of the late 40s, this conviction would get him blacklisted from performance venues for ties to the American Communist Party.⁷⁷ Political agenda aside, Seeger made many great contributions during the early development of the steel pan and the steel pan community is very fortunate to have had him on its side.

Seeger's love for the steel pan stemmed from his interest in the calypso music of Trinidad. Seeger, whose father was a well-known musicologist and ethnomusicologist, discovered calypso music in the early 1940s and took to the genre immediately. As a social activist, Seeger was drawn to the political nature of the typical calypso. By the late 1940s, Seeger had become one of America's leading activists by using the power of song and the calypso style had become a standard in his repertoire.⁷⁸

It is believed that Seeger experienced steel pan for the first time in 1954 while attending a Broadway musical done in the Caribbean style titled *House of Flowers*, which had in its band a

⁷⁷ Andrew R. Martin, "Words of Steel: Pete Seeger and the U.S. Navy Steel Band," *The Journal of New York Folklore* 34 (2008): 20-28; see pp. 24.

⁷⁸Andrew R. Martin, "A Voice of Steel through the Iron Curtain: Pete Seeger's Contributions to the Development of Steel Band in the United States," *American Music* 29 (2011): 353-380; see pp. 360-362.

steel pan trio.⁷⁹ After being introduced to the instrument, Seeger received his first steel pan in 1955 from Englishman and Calypso scholar Dr. Andrew Pearse.⁸⁰ Along with the instrument came a moderate amount of instruction from Dr. Pearse on the manufacturing process. Seeger became convinced of the instrument's potential and began to make plans to further expose the instrument to the public. This was also the time period in Seeger's life where he found himself blacklisted from many venues due to his political ties and Senator McCarthy's anticommunist crusade. It was becoming difficult for Seeger to find performance opportunities, thus helping him to focus on his steel pan efforts.

Seeger traveled to Trinidad in 1956 to document the pan making process as well the music of the island and would publish his findings in *Steel Drums, How to Make and Play Them: An Instructional Manual.*⁸¹ This manual includes the step-by-step process in which to make steel pans of various voicings, as well as cutouts to be used when sinking the pan and laying notes on the instrument. The pamphlet also includes many arrangements of steel band tunes as well as tips for writing arrangements. It is also one of the earliest examples of steel pan pedagogy. During America's university steel band movement of the 1970s, the manual would prove invaluable to many self-starting steel bands.⁸²

Steel Drums, How to Make and Play Them: An Instructional Manual would also serve as a valuable resource for the United State Navy Steel Band. Seeger first learned of the USNSB from an article written by Admiral Gallery in the *Chicago Tribune* written in 1957. After learning of the group, Seeger sent a letter and a copy of his manual to the admiral in the hope that it might aid the ensemble.⁸³ The admiral was already quite familiar with the manual and had used it extensively when forming the group, but was appreciative of the gesture all the same. It is no surprise that the group would find this manual helpful in their endeavors, but what is more

⁷⁹ Andrew Richard Martin. "Pan-America: Calypso, Exotica, and the Development of Steel Pan in the United States," Ph.D. Dissertation, University of Minnesota, 2011, pp. 39.

⁸⁰ Andrew R. Martin, "A Voice of Steel through the Iron Curtain: Pete Seeger's Contributions to the Development of Steel Band in the United States," *American Music* 29 (2011): 353-380; see pp. 363.

⁸¹ Pete Seeger, *Steel Drums, How to Make and Play Them: An Instruction Manual* (New York: Oak Publications, 1964).

⁸² Andrew R. Martin, "A Voice of Steel through the Iron Curtain: Pete Seeger's Contributions to the Development of Steel Band in the United States," *American Music* 29 (2011): 353-380; see pp. 360.

⁸³ Andrew R. Martin, "Words of Steel: Pete Seeger and the U.S. Navy Steel Band," *The Journal of New York Folklore* 34 (2008): 20-28; see pp. 25.

surprising is the business relationship that would form between Admiral Gallery and Pete Seeger. This is especially surprising when considering their widely opposing political views. Gallery was friends with President Eisenhower and a supporter of McCarthy's anticommunist crusade, the same crusade that got Seeger blacklisted from performance venues. Despite their opposing political views, the two men were able to share in their passion for steel pan, and Seeger would act as a consultant for the USNSB in its early years. As unlikely as the duo was, the two men corresponded via letters for the next four years. The content of these letters was not limited to business only; one might even assume that a friendship was born.⁸⁴ The contributions of the USNSB are vast and well documented. Seeger's role in their endeavors is yet another example of the important role he played in the history of the instrument.

Along with his musical career, Seeger always had an interest in film making, and he used this medium to help in his steel pan efforts. In January of 1956, Seeger and his wife Toshi traveled to Port of Spain, Trinidad to record the film *Music from Oil Drums*, a seventeen-minute documentary on the steel pan and the island of Trinidad.⁸⁵ This was the trip during which he gathered the information needed to write the aforementioned manual. In the film, Seeger documented the entire manufacturing process as well as many performance demonstrations from himself, Kim Loy Wong, and the Trinidadian Steel Band The Highlanders. Kim Loy Wong, leader of the Highlanders and builder of Seeger's pans in the video, was discovered by Seeger purely by chance. This spontaneous meeting would blossom into a long and fruitful friendship between the two men. During the film Wong states his desire to come to the United States. Seeger is unable to grant this request at that time but replies "someday, someday, we will work towards it."⁸⁶ Seeger fulfilled this promise years later.

In his film, Seeger strived to accurately represent the country of Trinidad and its music. Although Seeger was not technically an ethnomusicologist, his film was done very well in that style, likely through his father's examples. Seeger strived to make his film very accurate, educational, and entertaining. He hoped that the film would transcend the world of academia

⁸⁴ Angela Smith, Steel Drums and Steel Bands: A History (Lanham: Scarecrow Press, 2012), pp. 109.

⁸⁵ Andrew R. Martin, "Words of Steel: Pete Seeger and the U.S. Navy Steel Band," *The Journal of New York Folklore* 34 (2008): 20-28; see pp. 23.

⁸⁶ Pete Seeger, *Music From Oil Drums*, directed/performed by Pete Seeger and Toshi Seeger (Ridgefield N.J.: CCM Films, 1956.), Film.

and reach the mainstream, further exposing the instrument to the general public.⁸⁷ The film received many great reviews including a high praise from Daniel Crowley in the Journal *Ethnomusicology*:

Although the camera techniques are inexpert, and some of the brilliant tonal effects of the steel bands [are] obscured in the recording, this is a superior film. At a time when such commercial moves as "Fire Down Below" and "Island in the Sun" are seriously misrepresenting West Indian music and dance forms, Seeger promises the steel bandsmen that he will use their instruments to "tell the true story of Trinidad, as true as I can tell it, wherever I go." Those who have seen his engaging stage presentation of the steel drum and its music know how well he has kept his word.⁸⁸

Although the film was very successful and was a huge stepping stone for the instrument, the film never reached the fame that Seeger envisioned, especially outside of the academic world.

About four years later, in 1959, Seeger kept his promise made in the film and Wong found himself in the U.S. Seeger brought Wong to the United States to start steel bands in some of the lower income areas of New York City. It was Seeger's hope that these steel bands would catch on with the at-risk youth in these areas and that the steel pan would give these youth something productive to do; Seeger was right. When Wong first arrived, he stayed Seeger's home and established the first documented community band at the University Settlement in New York City. Also, Wong established the first known school band at Wiltwick School, which is no longer active today. Seeger was a staunch supporter of Wong's efforts and was instrumental in Wong starting over a dozen steel band programs in low-income areas with at-risk children. Steel pan proved to be a great and productive activity for the youth, causing it to become very popular. The Wiltwick band was so successful that it was featured in the 1961 Smithsonian Folkways recording *The Steel Drums of Kim Loy Wong*.⁸⁹

In 2001, Wong would be honored by the Smithsonian Center for Folklife and Cultural Heritage for his contributions to American and world music. Wong was very direct in giving

⁸⁷ Andrew R. Martin, "A Voice of Steel through the Iron Curtain: Pete Seeger's Contributions to the Development of Steel Band in the United States," *American Music* 29 (2011): 353-380; see pp. 365.

⁸⁸ Daniel J. Crowley, "Music from Oil Drums by Pete Seeger," *Ethnomusicolgy* 3 (1959): 33-34; see pp. 34.

⁸⁹ Angela Smith, Steel Drums and Steel Bands: A History (Lanham: Scarecrow Press, 2012), pp. 98-103.

credit to Pete Seeger, for without his help none of Wong's work would of have been possible. Wong stated that "he did all the work to get me here. If it wasn't for him, I would never have been able to accomplish what I did."⁹⁰ Seeger was very selfless in helping Wong and in introducing pan to the U.S. He stood very little to personally gain in helping the Trinidadian, yet he worked hard for the cause. The American steel pan community benefited greatly from the collaboration between Wong and Seeger, and this friendship marked a major turning point in American pan history.

In 1965, Seeger was still facing political opposition and blacklisting, severely limiting his performance opportunities. Needing work and wanting to further pursue his filmmaking career, Seeger leapt at the opportunity to create a folk music program to be aired on public television. Seeger, along with Moe Asch and Sholom Rubinstein, set to work in the studios of WNJU in Newark, New Jersey to record the series *Rainbow Quest*.⁹¹ Seeger had close ties and friendships in the musical community and would use these ties to bring in such artists as Judy Collins, the Stanley Brothers, and Johnny Cash. This show, which was a mixture of talk show segments and musical performances, would be used by Seeger to further expose the steel pan to the American people.

Rainbow Quest would air a total of thirty eight episodes over a two year period. In episode 37 Seeger featured the Hi-Landers Steel Orchestra and their leader Kim Loy Wong. The group performed a variety of tunes including "Mary Ann," "Love, Love, Love Alone," "Yellow Bird," and "When the Saints Go Marching In."⁹² By performing the American folk song "When the Saints Go Marching In" the group had demonstrated the flexibility and adaptability of the instrument, an important step in bringing the instrument to the U.S. Seeger also used this episode as a chance to show a segment of his aforementioned film *Music from Oil Drums*. The show would only air one more episode after its steel pan feature but was nonetheless another important milestone for the exposure of the instrument in the United States.

Seeger was a jack of all trades and would often refer to himself as a master of none. He wanted not to master the steel pan but to bring the instrument to the America's youth to inspire

⁹⁰ Ibid., 103.

⁹¹ Andrew R. Martin, "A Voice of Steel through the Iron Curtain: Pete Seeger's Contributions to the Development of Steel Band in the United States," *American Music* 29 (2011): 353-380; see pp. 370.

⁹² Ibid., 370.

them. He devoted many years of his life traveling the country going from town to town and college to college performing a wide variety of music, often on the steel pan. He is noted for helping start steel bands at universities such as Cornell, The University of California Los Angeles, and Michigan State University.⁹³ Seeger's contributions to the steel pan were just a small portion of what the man achieved for the world as a whole. Although Seeger died on January 27, 2014, we will continue to reap the benefits of his hard work for years to come.

Ellie Mannette, Father of the Modern Steel Pan

Another Trinidadian that made great contributions to the exposure of the steel pan in the U.S. was Ellie Mannette. As mentioned before, he was a very influential part to the success of both TAPSO and the USNSB; but he also made many innovations for the steel pan itself. A true visionary, Mannette has never been content with the instrument's design. At eighty-seven years of age, he still strives to improve upon the instrument, its manufacturing, and its performance practices. He has dedicated his life to the steel pan and has influenced countless pan players along the way. It is safe to say that without his contributions the steel pan as we know it today would be a vastly different instrument.

Elliot "Ellie" Mannette was born in San Souci, Trinidad in 1927. He showed a very strong interest in music at a very young age and was fascinated by the iron bands as they began to form in the mid 1930s. Although he was too young at the time to perform with the groups, it wasn't but a few years later at the age of ten when he was parading up and down the streets with these newly formed bands.⁹⁴

Although Mannette had seven brothers and sisters and belonged to a poor family, he was able to attend the Bishop Anstey High School on a scholarship. After having a falling out with his teachers, he dropped out of school and began working with a friend, Mr. Robinson, at his machine shop. His employment there lasted for about a year before his parents found out he had

⁹³ Ibid., 364.

⁹⁴Angela Smith, Steel Drums and Steel Bands: A History (Lanham: Scarecrow Press, 2012), pp. 167.

been kicked out of school and Mr. Robinson fired him for lying to his parents. With no schooling and no work Mannette focused his full attention on the steel pan.⁹⁵

Although Mannette was extremely passionate about the steel pan, his family did not share in his enthusiasm. Mannette's family didn't think highly of the people who sat around banging on trash cans all day and wanted him to have nothing to do with them.⁹⁶ Mannette states in an interview with Angela Smith that "they kept saying 'leave the trash cans alone.' I was harassed, accused of having no ambition, and encountered every kind of slander. There were roadblocks, red tape, and hurdles—but every time something came up, I worked that much harder."⁹⁷ Over time, Mannette's family realized his passion and dedication to the instrument and allowed him to choose his own path.⁹⁸

Mannette had a strong passion for music and a clear vision of the possibilities of the steel pan. In referring to his young days as a pan maker he states that "I loved opera and Strauss waltzes. I wanted to create the sounds, the voices, I heard coming from the different instruments of the orchestra. I didn't have the funds to buy a violin or flute so I wanted to create my own instrument. I was obsessed with creating something new."⁹⁹ During these early days of steel pan, Mannette was not the only pan maker as he worked alongside of, and sometimes in competition with, Winston Simon and Neville Jules.¹⁰⁰

One of Mannette's earliest and biggest contributions to the pan was the sinking process and the creation the first concave pan in the early 1940s, which allowed for more notes to fit on the pan.¹⁰¹ Mannette was also the first to put rubber on the mallets when, in 1943, he began to use old bicycle inner tubes to wrap the mallets giving the instrument a completely new and more

⁹⁵ Shannon Dudley, *Music from Behind the Bridge: Steelband Aesthetics and Politics in Trinidad and Tobago*)Oxford: Oxford University Press, 2007), pp. 64.

⁹⁶J. Marc Svaline, "Ellie Mannette: Master of the Steel Drum," *Teaching Music* 8 (2001): 46-49; see pp. 48.

⁹⁷ Angela Smith, Steel Drums and Steel Bands: A History (Lanham: Scarecrow Press, 2012), pp. 158.

⁹⁸ J. Marc Svaline, "Ellie Mannette: Master of the Steel Drum," *Teaching Music* 8 (2001): 46-49; see pp.
48.

⁹⁹ Angela Smith, Steel Drums and Steel Bands: A History (Lanham: Scarecrow Press, 2012), pp. 158.

¹⁰⁰ Martin Munro, *Different Drummers: Rhythm and Race in the America* (Berkeley: University of California Press, 2010), pp. 128.

¹⁰¹ Ibid., 129.

mellow sound.¹⁰² There is some dispute to whether or not Mannette was the first to use a fifty-five gallon oil drum to create a steel pan but he claims, and it is generally accepted, that he created the first fifty-five gallon steel drum in 1946.¹⁰³ All these innovations were ground breaking at the time, setting the standards by which we still abide today. It is clear that Mannette was an integral part of the early development of the pan and helped usher the instrument into the modern era.

From around 1939 to 1941, Mannette performed with the Oval Boys Steel Band. The Oval Boys were so called because of their rehearsal space that was adjacent to the Oval Sports Pavilion; the Oval Boys would later become known as the Invaders.¹⁰⁴ What set Ellie Mannette apart from other pan makers of the time was his willingness to share his ideas with others. While other pan makers were being secretive and only made instruments for one group, Mannette worked with several groups, including the Desperadoes and Starland, and would openly share his techniques with others.¹⁰⁵ Due to the Invaders rehearsals being open to the public and his involvement with several ensembles, Mannette became the most renowned and sought after pan tuner in Trinidad by 1950.¹⁰⁶ Mannette became so busy tuning and arranging for the early Steel Bands that he gave up performing with the Invaders on steel pan. However, he continued to play iron for them on the road during Carnival.¹⁰⁷

In 1951, when the government of Trinidad formed the steel pan ensemble TASPO, Mannette was an easy choice for the ensemble. The leader of the ensemble, former police officer Lieutenant Joseph Griffith, required the makers of the ensemble create fully chromatic pans; thus, Mannette expanded on the design of his low tenor to create the first fully chromatic pan known as the Invader pan. He named this pan after the ensemble to which he worked with most closely. This pan is still manufactured today by Mannette and remains a popular design for the

¹⁰² Stephen Stuempfle, *The Steelband Movement* (Philadelphia: University of Pennsylvania Press, 1995), pp. 41.

¹⁰³ Kaethe George, "Ellie Mannette: A Golden Celebration," *Percussive Notes* 34 (1996): 32.

¹⁰⁴ Lisa Rogers, "Elliott 'Ellie' Mannette," *Percussive Arts Society*, http://www.pas.org/experience/halloffame/MannetteElliot.aspx (accessed October 22, 2012).

¹⁰⁵ Shannon Dudley, *Music from Behind the Bridge: Steelband Aesthetics and Politics in Trinidad and Tobago* (Oxford: Oxford University Press, 2007), pp. 65.

¹⁰⁶ Ibid., 66.

¹⁰⁷ Ibid., 65.

tenor pan.¹⁰⁸ In subsequent years, Mannette continued to create several pan designs still used to this day, such as the double seconds (1952), double guitars (1954), triple cellos (1956) and tenor basses (1960).¹⁰⁹ These new voices for pan vastly expanded the voices of the ensemble and created new possibilities for the steel band repertoire.

During this time Ellie Mannette was still very poor and his creativity in pan building was limited due to his lack of materials. In order to obtain more barrels with which to build, Mannette and his friends would sneak onto the local U.S. Navy Base in order to steal used oil barrels. This made for an interesting interaction when the United States Navy arrived at Mannette's doorstep to ask for his help. Thinking that he was about to be arrested for trespassing, Mannette ran when he saw the navy van. Once the Navy caught up with him and explained the real reason for the visit, Mannette quickly agreed to help the USNSB.¹¹⁰ Mannette's work with the USNSB brought him to the United States for the first time in 1961. Because of the racism he experienced, he soon became disenchanted with the country and returned to Trinidad.¹¹¹

Ellie Mannette permanently relocated to the United States in 1967 when Murray Narell, a social worker, brought him to New York City to start steel drum ensembles for underprivileged youth.¹¹² After having such a negative experience in the U.S. on his first visit, Mannette never wanted to return again. Due to Narell's persuasion, however, Mannette was convinced to give the U.S. a second chance.¹¹³ Because of Narell's close involvement with Mannette both of his sons, Jeff and Andy, were introduced to pan at an early age and were highly influenced by Mannette. Both of the Narell brothers grew up to become prominent figures in the pan community.

When Mannette first arrived in New York City there were only a few steel drum ensembles started by fellow pan men Kim Loy Wong and Pete Seeger. Over the next five years,

¹¹² **Ibid.**, 67.

¹⁰⁸ Ibid., 66.

¹⁰⁹ Lisa Rogers, "Elliott 'Ellie' Mannette," *Percussive Arts Society*, http://www.pas.org/experience/halloffame/MannetteElliot.aspx (accessed October 22, 2012).

¹¹⁰ Angela Smith, Steel Drums and Steel Bands: A History (Lanham: Scarecrow Press, 2012), pp. 159.

¹¹¹ Shannon Dudley, *Music from Behind the Bridge: Steelband Aesthetics and Politics in Trinidad and Tobago* (Oxford: Oxford University Press, 2007), pp. 67.

¹¹³ Kaethe George, "Interview with Ellie Mannette," *Percussive Notes* 43 (1990): 34-38; see pp. 34.

Mannette started approximately fifteen ensembles in New York City.¹¹⁴ Over time, Mannette began to work in the New York Public School System. It was here, in 1971, that he met Jimmy Leyden, a High School Teacher in Westchester County.¹¹⁵ Up until this point, Mannette had tuned all of his instruments by ear, but when Leyden introduced Mannette to the concept of using a stroboscopic tuner to obtain a concert pitch of A440, Mannette began to tune his instruments to concert pitch. Leyden also explained to Mannette the overtone series, which Mannette began to tune in order to create a fuller sounding instrument.¹¹⁶

In the early 1970s prominent pan makers such as Ellie Mannette, Loy Wong, Vincent Taylor, Ansell Joseph, Vincent Hernandez, Rudy King, and Rudolph Charles came together to work in the basement of a building in New York City to collaborate with one another on the pan building process. This group became known as the University Settlement. Although the pan makers were able to create and learn from one another, no one could agree on patterns, tuning techniques, or ranges for the instrument.¹¹⁷ Mannette's general feeling towards the pan makers of the day was that they cared more about quantity than quality. The faster the pan makers could make the pans, the more money they could make, but Mannette felt that this mindset caused inferior instruments.¹¹⁸

Mannette dedicated many years of his life to traveling the United States, working with steel bands, and starting bands in Boston, New York, Washington, D.C., Baltimore, Montreal, and Toronto.¹¹⁹ In recent years, Mannette has focused his efforts on training the next generation of pan makers, so that they may continue to grow and expand upon his techniques. He was appointed Artist in Residence at West Virginia University in 1992, where he started the University Tuning Project, a program offered through the College of Creative Arts where

¹¹⁴ Janine Tiffe, "The Arrival of Steel Pan in the United States," *Percussive Notes* 45 (2007): 10-17; see pp.12.

¹¹⁵ Shannon Dudley, *Music from Behind the Bridge: Steelband Aesthetics and Politics in Trinidad and Tobago* (Oxford: Oxford University Press, 2007), pp. 67.

¹¹⁶ Janine Tiffe, "The Arrival of Steel Pan in the United States," *Percussive Notes* 45 (2007): 10-17; see pp.
13.

¹¹⁷ Ibid.

¹¹⁸ Kaethe George, "Ellie Mannette: Training Tomorrow's Steel Band Tuners," *Percussive Notes* 32 (1994): 31-32; see pp. 31.

¹¹⁹ Angela Smith, Steel Drums and Steel Bands: A History (Lanham: Scarecrow Press, 2012), pp. 160.

students master the art of pan making.¹²⁰ This program also works with other departments at the university to study the physics, chemistry, and metallurgy behind the instrument so that we may better understand the physical makeup of the instrument.¹²¹ Mannette continued his work at West Virginia University until his retirement in 2007.

Ellie Mannette has received many awards for his life's work including the National Endowment for the Arts Heritage Fellowship Award in 1999.¹²² In 2000, he visited Trinidad for the first time since 1967 to receive an honorary doctorate from the University of the West Indies and the Chaconia Silver Medal from the government of Trinidad.¹²³ Ellie Mannette was also inducted into the Percussive Arts Society Hall of Fame in 2003 and his pans have been on display at the Smithsonian Institute, the Metropolitan Museum of Art, and the Contemporary Art Gallery.¹²⁴

Few would argue that any one person has done more for the development of the steel pan than Ellie Mannette. Through his technical advancements and passion for education, he has played vital role in the development of what many refer to as the only completely new instrument of the twentieth century.

Steel Pan in the Midwest

Getting steel bands exposure in the U.S. was only half of the battle for the instrument's success in the United States. In order for the instrument to reach the height of its popularity, music educators would need hands-on training with the instrument. Therefore, it was crucial for the instrument to be taught in universities. Despite the efforts of early pioneers such as Mannette, Seeger, and Wong, steel pan was not an instant success in the university school systems. As mentioned previously, Seeger helped create steel bands at colleges such as Cornell,

¹²⁰ Kaethe George, "Ellie Mannette: Training Tomorrow's Steel Band Tuners," *Percussive Notes* 32 (1994): 31-32; see pp. 31.

¹²¹ J. Marc Svaline, "Ellie Mannette: Master of the Steel Drum," *Teaching Music* 8 (2001): 46-49; see pp.
49.

¹²² Ibid., 49.

¹²³ Shannon Dudley, *Music from Behind the Bridge: Steelband Aesthetics and Politics in Trinidad and Tobago* (Oxford: Oxford University Press, 2007), pp. 68.

¹²⁴ Lisa Rogers, "Elliott 'Ellie' Mannette," *Percussive Arts Society*, http://www.pas.org/experience/halloffame/MannetteElliot.aspx (accessed October 22, 2012).

UCLA, and Michigan State. However, these bands were short lived. The University of Colorado at Boulder also established a steel band in 1972, but the group was unable to take hold and was also disbanded.¹²⁵

By 1981, there were only five collegiate steel bands known to exist in the U.S., all of which were found within the Midwest region. They were the University of Northern Illinois (est. 1973), The University of Akron Ohio (est. 1980), Eastern Illinois University (est. 1980), The American Conservatory of Music in Chicago (est. 1980) , and the University of Illinois (est. 1977).¹²⁶ The University of Northern Illinois Steel Band is still active today, making it the oldest collegiate steel band in the United States. One of the oldest, and possibly the oldest, American high school Steel Band can also be found in the Midwest and was formed in 1967 at Roberto Clemente High School in Chicago.¹²⁷

Upon its arrival to the Midwest, the Steel Band movement was finally able to take hold in the U.S. It is not known for certain how many Steel Bands exist in the U.S. today, but in her book in her book *Steel Drums and Steelbands: A History* Angela Smith quotes that "the number of steelband education programs is rapidly approaching the thousands, if not already there."¹²⁸ Thanks to the schools of the Midwest, steel bands were able to take hold and it is no longer unusual to find a steel band in a school's curriculum.

It is uncertain how the steel pan was introduced to the Midwest, but many speculate that Rudy King first brought the instrument into the region. This might of been during Rudy King's four-week long engagement at the Blue Angels club in Chicago, only about sixty-five miles away from the University of Northern Illinois¹²⁹ As stated previously, the University of Northern Illinois would be the first university of the region to establish its steel band. The program director, G. Allan O'Connor, would obtain the school's first set of instruments from Aruba through a student who had traveled to the country. After hearing the pans of maker Cliff

¹²⁵ Angela Smith, Steel Drums and Steel Bands: A History (Lanham: Scarecrow Press, 2012), pp. 118.

¹²⁶ G. Allan O'Connor, "A Brief Survey of Steel Drum Programs in North American Schools, *Percussive Notes* 19 (1981): 58-59.

¹²⁷ Brandon Haskett. "A Case Study on the Importance and Value of the Desert Winds Steelpan Programs," (D.M.A., Arizona State University, 2009), pp. 17.

¹²⁸ Angela Smith, Steel Drums and Steel Bands: A History (Lanham: Scarecrow Press, 2012), pp. 115.

¹²⁹ Janine Tiffe, "The Arrival of Steel Pan in the United States," *Percussive Notes* 45 (2007): 10-17; see pp. 14.

Alexis, who at the time was the tuner for the USNSB, O'Connor would quickly realize that his pans were inferior to those of the Trinidadian pan maker. Alexis would eventually join the NIU faculty in 1985 as the school's builder, tuner, arranger, and co-director of the steel band. Two years later, in 1987, the school would also create a curriculum where students could major in music with steel pan being their primary instrument.¹³⁰ This was the first program of its kind in the U.S.

The University of Northern Illinois has since had a hand in grooming some of the most influential steel pan performers and educators. Pan virtuoso Liam Teague, now a faculty member of the program, first met O'Connor and Alexis during their visit to Trinidad in 1989. Teague was a sixteen year-old self-taught pannist who was competing in the Trinidad's School Steelband Festival. Two years later, Teague came to the U.S. to study at the University of Northern Illinois where he obtained both his bachelor's and master's degree in music. After obtaining his degrees, Teague returned home to Trinidad briefly before returning to the University of Northern Illinois in 2001 to join their faculty.¹³¹ Today, Teague spends his time training the next generation of pan performers and traveling the world, giving clinics and performing both with major orchestras and as a soloist. Teague states that "my goal is to consistently promote the steel pan's profundity and continue to highlight its versatility, beauty, and uniqueness."¹³² Teague is yet another individual in a line of pioneers who is taking the instrument to new heights. One can't help but wonder if he would have been able to accomplish so much if it weren't for the help of the University of Northern Illinois program, yet another example of the lasting impact the program has had on the pan community.

Another NIU graduate that has made a lasting impact on the pan community is Jeannine Remy. Remy first learned of the steel pan during a two-week long camp at which O'Connor taught. After the camp, Remy transferred to NIU and obtained both her bachelor's and master's degrees in percussion performance. Upon graduation, she bought a full set of steel pans from Alexis to take to the University of Arizona. There, she established a steel band and obtained her doctoral degree. Remy now teaches at the

¹³⁰ Ibid

 ¹³¹ Angela Smith, *Steel Drums and Steel Bands: A History* (Lanham: Scarecrow Press, 2012), pp. 123.
 ¹³² Ibid, 125.

University of West Indies in Trinidad and was the first foreign woman to arrange for a large conventional steel band in Trinidad.¹³³

The impact the University of Northern Illinois has had on the pan community is vast and strong. In addition to the programs started within the United States, graduates from NIU have gone on to start steel band programs in Taiwan, New Zealand, and Singapore.¹³⁴ On the topic Teague states that "Al [O'Connor] is responsible for beginning the steel band movement in American Universities."¹³⁵ Whether or not this is indeed the case is impossible to prove, but clearly, O'Connor, Alexis, and Teague have had a lasting and profound impact on steel pan, both in the United States and throughout the world.

Cliff Alexis's work with university steel bands was not limited to the University of Northern Illinois. To the contrary, he became one of the most sought after builders and tuners in the U.S. Another one of America's oldest university steel bands that Alexis helped create can be found at the University of Akron in Ohio. The program's creator, Dr. Larry Snider, first sought Alexis's help in the late 70s but Alexis wasn't quick to agree. Worried about the instrument becoming a novelty for music programs, Alexis was very selective with who he would work with. Over several phone calls, Snider was able to convince Alexis that the band would not be a gimmick and that he wanted nothing more than to do the instrument the justice it deserved. Convinced of Snider's good intentions, Alexis agreed to build the pans the school needed and the steel band was formed in 1980. Alexis has maintained an active relationship with the program ever since and has been to every concert except one, due to illness.¹³⁶

The steel band at the University of Akron has been a huge success over the years and graduates of the program have gone on to start many other steel bands. One of the graduates, Tom Miller, established a band and teaches at Denver's Lamont School of Music. Miller is also

14.

¹³³ Ibid, 122.

¹³⁴ Ibid, 119.

¹³⁵ Janine Tiffe, "The Arrival of Steel Pan in the United States," *Percussive Notes* 45 (2007): 10-17; see pp.

¹³⁶ Angela Smith, Steel Drums and Steel Bands: A History (Lanham: Scarecrow Press, 2012), pp. 120.

a very sought after performer and clinician and founder of Pan Ramajay, one of the world's foremost publishers of steel pan literature.¹³⁷

Alexis also tuned pans for the University of Illinois, where he met a graduate student by the name of Eugene Novotney. After interacting with Alexis and observing his passion and care while tuning the instruments, Novotney gained a great respect for the instrument. Upon accepting a job at Humboldt State University, Novotney knew he wanted to start a steel band at the university and he financed the band by selling his car. Alexis built the pans for the group and has remained their tuner ever since.¹³⁸ This steel pan ensemble was the first of its kind in the California State School System and remains today one of the universities most popular ensembles.

The early steel bands of the Midwest led to a generation of music educators who were trained on steel pan. These educators went on to teach their own ensembles, causing a rapid growth in steel bands across the U.S. in the 80s and 90s. There were many events and key figures that led to the success of the steel pan and, thanks to the hard work of these visionaries, the steel pan now has found a home in the United States school systems.

¹³⁷ Ibid, 121.

¹³⁸ Ibid.

CHAPTER 3 - Review of Relevant Literature

The purpose of the current study is to investigate the perceived impacts of steel pan ensemble on collegiate curricula from the perspectives of the students and teachers. This section will review the pieces of literature that are most closely related to this topic. For this chapter the literature has been separated into two categories, those categories being qualitative research done on the impact of steel pan ensemble and literature on the history of the steel pan.

Qualitative research done on the impact of steel pan ensemble

This category of literature is most closely related to the current study. It incorporates two doctoral dissertations, one master's thesis, and a few articles all dealing with steel pan ensemble in school curriculum. The current study is unique in that it employs both a focus on collegiate steel pan ensembles as well as a mixed methods approach. Although the focus and methodology are different, the overall desired outcomes are analogous with previous investigations. All of these studies, including the current study, aim to better understand the impacts of steel pan ensemble in school curriculum.

The first piece of literature is the master's thesis of Janine Tiffe's *Trinidadian Steel Drum (Pan) Band in the Three Great Lakes States: A Study of Musical Migration.*¹³⁹ This multiple case study is the most relevant piece of literature to the current study. This is due to its focus on three collegiate steel pan ensembles within the Midwest. The purpose of this study was to explain how and why the steel pan ensemble has been able to create roots in the American Midwest. Other world music ensembles, such as taiko drumming and gamelan, have been established in the U.S. but started in areas where there were large groups of immigrants from the instruments homeland. Pan, on the other hand, started in the U.S. in areas where the Trinidadian population was minimal. This study sought to explain this phenomenon.

For this study, Tiffe choose to research the programs of Oberlin College of Ohio, Northern Illinois University, and Mott Middle College High School and Community College of Michigan. The author traveled to the three collegiate programs and distributed surveys and conducted interviews with the directors, administrators, and a few randomly selected students.

¹³⁹ Janine Tiffe, "Trinidadian Steel Drum (Pan) Bands in the Three Great Lakes States: A Study of Musical Migration," Master's Thesis, Kent State University, 2006.

The author's primary goal was to discover what it was about the steel pan that people of the Midwest valued so highly. The research showed that the most common reasons for enjoying pan was for its uniqueness, its adaptability, and its sense of community.¹⁴⁰ This research is important to the current study as it provides some insight on some of the ensembles within the Midwest that will be researched. It also helps to validate the use of the Midwest as a sample of steel pan ensembles.

The second piece of literature that is highly relevant to the current study is the doctoral dissertation of Dr. Brandon Haskett entitled *A Case Study of the Importance and value of the Desert Winds Steelpan Programs*.¹⁴¹ For this dissertation, both the Desert Winds Steel Orchestra (DWSO) and the Desert Winds Steel Community Orchestra (DWSCO) were studied. Both orchestras are housed at Desert Winds Elementary in Phoenix, AZ and are taught by director Jerry Lopatin. At the time of the study, the Desert Winds Steel Orchestra had been in existence for 30 years and had always been under the direction of the same director.

For the DWSO portion of this study, Dr. Haskett was able to observe five rehearsals from the 2007-2008 school year. Unfortunately, Dr. Haskett was unable to interview current students or record rehearsals due to district restrictions. He was, however, able to find and interview former students who are now adults and ask them about their experiences in the ensemble as a child. Dr. Haskett found that the DWSO students enjoyed the ensemble because they were able to achieve quick success on the instrument, which helped increase their self-esteem and self worth. The students also enjoyed the exclusivity of the group and working as a team.¹⁴² Similar methods were used in researching the DWSCO with the exception that Haskett was able to interview current members. Haskett was also a member of the DWSCO ensemble making him a participant observer for this portion of the study. Haskett found that adult members of the DWSCO valued the social aspect of steel pan ensemble. They also valued how the ensemble has helped their well-being through enhancement of self-esteem, inner peace, physical and mental activity, and a widened world-view.¹⁴³

¹⁴⁰ Ibid. 92.

¹⁴¹ Brandon Haskett. "A Case Study on the Importance and Value of the Desert Winds Steelpan Programs," (D.M.A., Arizona State University, 2009).

¹⁴² Ibid. 125-129.

¹⁴³ Ibid. 141-144.

Although Haskett's research was not done in the same region or for the same age group as the current study, his research still helps to validate the need for the current study. Haskett's research found that the steel pan ensemble had proven itself to be an important part of the school's curriculum among students, teachers, and administrators. To help understand the success of this program Haskett researches the teaching methods of Jerry Lopatin in great detail. The current study will do the same, but in broader detail. Lastly, Haskett's research will allow us to investigate if college age students and college teachers value steel pan ensemble for the same reasons as the elementary and community groups studied in his research.

The final dissertation for this portion of the literature review is the dissertation of Herminio Diaz Cruz titled *A Descriptive Study of the Music Programs in Roberto Clemente High School and Selected Feeder School as they Relate to Bilingual-Bicultural Education.*¹⁴⁴ This study was done in 1979, a time when America's education system was going through many changes as it tried to adapt to its increasing numbers of bilingual students. During this time period, many schools put a heavier emphasis on the importance of its bilingual students taking remedial English courses. In doing so, the schools would severely limit the students ability to enroll in music and other elective classes. This study was a case study done on Roberto Clemente High School, a school that not only continued to allow its bilingual students to enroll in music courses, but also created a customized curriculum in an effort to appeal to its bilingual students.

At the time of the study 56% of the school's students were enrolled in music courses and of these students 63% were enrolled in one of the school's steel pan ensembles.¹⁴⁵ The author interviewed and surveyed many students, administrators, and teachers and found that almost all of them felt that music was an important part of their students education. Steel pan ensemble played an important role in this school's curriculum as there were six different sections of the ensemble offered which involved a total of 159 students. In addition to the students who were

¹⁴⁴ Herminio Diaz Cruz, "A Descriptive Study of the Music Programs in Roberto Clemente High School and Selected Feeder Schools as They Relate to Bilingual-Bicultural Education," (Ph.D., University of Illinois at Urbana-Champaign, 1979).

¹⁴⁵ Ibid., 72.

enrolled in the steel pan ensemble, there were more than 200 additional students who had interest in enrolling but could not be accommodated.¹⁴⁶

The ensemble was started and directed by Thomas Henry, the previous choral director for the school. This is an example of someone with no previous experience with the instrument starting an ensemble that would end up being quite successful. This very similar to how many of the college ensembles of the Midwest were started. This study is a great resource for the current study as it provides insight into the early steel pan ensembles of the Midwest and helps to bridge the gap between world music, alternative music offerings, and music enrollment. It also adds historical context to the Midwest region as Roberto Clemente High School's (now Tuley High school) steel pan ensemble is one of the oldest (likely the oldest) school-affiliated steel pan ensembles in the U.S. today.

In the article *Expanding the Role of the Steel Drum Band: It's not just another percussion ensemble*,¹⁴⁷ author Scott Harris expresses his opinions on the educational merit of steel pan ensemble. He explains that too often the steel pan ensemble is viewed as an extension of the percussion ensemble rather than its own entity. Harris believes that the ensemble can be used for teaching and reinforcing musical skills for all musicians, not just percussionists. At the time this article was written, Harris was director of percussion studies at Stephen F. Austin State University. Although his article is largely based off of his experiences as a collegiate professor, his theories can be applied to both collegiate and primary school level steel bands.

One of Harris's main focuses in this article, as the title suggests, is that the ensemble shouldn't be reserved for just percussionists. Harris believes that because of the accessibility of the instrument, the ensemble should be open to all musicians at all levels of study, not just percussionists. Harris believes that students are able to achieve basic proficiency very quickly, at least when compared to other conventional Western instruments. He also argues that other instruments such as brass, woodwinds, strings, and vocalists can also be easily added to the ensemble. He believes that incorporating these other instruments can be used as a way to change and add variety to the general tone of the group.

¹⁴⁶ Ibid., 78.

¹⁴⁷ Scott Harris, "Expanding the Role of the Steel Drum Band: It's Not Just Another Percussion Ensemble," *Percussive Notes* 46 (2008): 20-21.

Harris also comments on the practicality of applying theory skills within steel band. Harris believes that too often students view music theory as something "learned in a separate classroom with a pencil and paper, not something dealt with every day in large and chamber performance ensembles."¹⁴⁸ Harris argues that steel pan ensemble can be used to help students apply their theory training in a practical performance environment. He states that "steel band literature is such that you can discuss and apply both basic music theory and aural skills in your regular rehearsal, and ultimately in a practical performance setting."¹⁴⁹ He also believes that steel band is a great opportunity for students to get practice arranging. The simplicity of the music combined with the relatively simple voicing's of the ensemble make it a great chance for students to create their own usable arrangements.

The article also highlights the ensembles ability to work on a student's inherent musicianship. Because the ensemble is able to incorporate American pop tunes, students are generally familiar with and excited about the music played in the ensemble. Also, generally speaking, pop tunes have a very basic chord structure, which allows students to easily hear the chord progression. Harris argues that this benefit is amplified when the music is taught by rote. By teaching the music by rote students are forced to take their eyes off the music and rely on their ears to hear the chords, helping them apply their ear training. Along the same lines, Harris believes that steel band is a great ensemble for students to learn to improvise. He believes that often students are afraid to improvise because they are afraid of sounding bad. This fear is increased when trying to improvise on songs with complicated harmonies and chord structures. Because steel bands often play pop tunes with simple harmonies it becomes easier for students to sound "good" while improvising, which lessens their fear. Harris also states that after students have had a few successful attempts at improvising they want more, showing that steel band can not only teach improvisation but get students excited about it.

Lastly, Harris discusses how the ensemble offers students a different performance experience, both in quantity of performances as well as in the general atmosphere of the performance. He argues that because the ensemble is appropriate for so many different concert settings and most people tend to enjoy the music, groups will have ample opportunities to

¹⁴⁸ Ibid., 20.

¹⁴⁹ Ibid., 20.

perform. So many opportunities in fact that it is likely that some performances will have to be turned down. The physical nature of the ensembles also tends to be a new experience for students. Students are encouraged to dance, smile, and otherwise visibly enjoy the music making process even while performing for an audience. Physical expression isn't exclusive to steel band, but the way in which it is acceptable to do so in a steel band is generally quite different than other ensembles. Harris believes that all this, combined with the low-stress atmosphere of the ensemble, can create a fun environment for students to learn a new instrument and to work on their musicianship.

As stated previously, the majority of Harris's arguments came from his experiences as a college steel band director. His opinions are extremely relevant and important to the current study because they demonstrate the existence of steel pan ensemble impacting student learning from the director's perception. This is, however, almost entirely from the professor's experience. Undoubtedly some of the Harris's comments came from feedback from students, but there still exists a need to hear the students perspective firsthand.

Kenyon Williams' article *Steel bands in American Schools: What They Are, What They Do, and Why They're Growing!*¹⁵⁰ could really fit in either category of this chapter. The article incorporates the educational benefits of the ensemble as well as the history of the steel pan. This is largely due to the author's beliefs that knowing the history of the instrument is an important part of the ensemble. Part of this history includes the expansion of steel bands in the public school systems in the 1970s. Schools of the time were wanting to incorporate more world music courses but struggled with the means to do so. While studies found that 75 percent of educators believed in the importance of exposing students to world music, the majority of these educators felt they lacked the training to do so.¹⁵¹ Steel band helped to alleviate this problem with its accessibility to both teachers and students, as well as its adaptability to other styles of music.

Williams discusses in his article the instrument and what about it makes it so accessible to students. He believes that young students are able to achieve quick success on the instrument because they don't have to worry about the breath support that is needed on other instruments.

¹⁵⁰ Kenyon Williams, "Steel Bands in American Schools: What They Are, What They Do, and Why They're Growing!" *Music Educators Journal* 46 (2008): 52-57.

¹⁵¹ Ibid., pp. 52.

Also, students that struggle with recorder and other wind instruments due to small hands are often less inhibited on steel pan. Because of this, students are able to achieve quick success on the instrument despite their young age or lack of extensive training.

One of the unique aspects of this article is that it covers specific programs at all education levels, except for college. This includes rehearsal strategies, funding options, and qualitative quotes from directors of elementary schools, middle schools, and high schools. This is helpful because it shows the success of the ensemble with students of a wide range of age and musical expertise. For students who are less experienced, rote teaching was expressed as an easy way to get students involved in music. For students who already have musical training, it can be a good way to expand their techniques and expose them to new styles of music. From this article it is evident that many primary school music programs have successfully incorporated steel bands into their curriculum. As it becomes more popular to have steel band offered in primary schools, it becomes important that we train our future music educators about the instrument while they are in college.

The most relevant portion of this article to the current research is in regards to how having a working knowledge on the history of the steel pan impacts the ensemble. Three different and prominent steel band directors, David Knapp, Jeannine Remy, and Marc Svaline, all stated that having knowledge on the history of the steel pan is important for both students and teachers. Although these opinions are very valuable, they are still only the perspectives of a few steel band directors. This validates the need for the current study to further explore the topic, both from the students perspective and from a more scientific approach.

Lastly, the article discusses considerations that need to be made when starting and running a steel band. There is debate within the pan community as to how much music of the ensemble should be traditional Trinidadian calypsos or socas, American popular music, classical arrangements, or other world music styles. Williams argues that just as learning the history of the instrument is important, it is also important to learn the traditional music and styles of Trinidad. Williams also addresses where to find quality arrangements. The author points out that it has become much easier over the last 20 years to find quality steel band arrangements and provides a lists of publishers for the reader to use.

43

Literature on the History of the Steel Pan

The next category of literature covered in this chapter is literature on the history of the steel pan. Studying the history of the instrument will help the reader to better understand how the instrument came to the United States and how the ensemble functions within the U.S. It will also add context to the findings of this research, which might help to explain many of the results found. In this research, I intend to explore how having knowledge on the history of the instrument impacts the student's experience. Therefore, it is important that this chapter include literature on the history of the instrument.

The first book to be covered in this section is Angela Smith's book *Steel Drums and Steelbands: A History*.¹⁵² Not only is this book one of the most up-to-date references on the history of steel pan, it is also extremely concise. The author organizes the book so that it follows the timeline of the instrument all the way from pre-colonial Trinidad to modern day pan in America. The book is separated into two large sections, the first section covering the instrument's history in Trinidad and the second the instrument's history in America. The book also includes a very useful index including a timeline of the instrument, a list of pan pioneers, and a selected discography.

One of the main focuses of this book is to document the evolution of the pan. This is important to the current study for two reasons. Firstly, a large portion of innovations to the instrument happened in the United States. Secondly, many of the pioneers that created these innovations are still alive and working with pan programs in the United States. This gave the author the opportunity to interview pioneers and document their story. Many of these pioneers were involved in the early days of steel pan in the Midwest, which adds historical context to the region and helps to document the history of the early collegiate steel pan ensembles.

The second source in this section is Stephen Stuemplfe's *The Steelband Movement*.¹⁵³ Much like Angela Smith's book, this source covers the evolution of the steel pan from the early days of the instrument. It does not, however, cover the history of Trinidad before the invention of the steel pan. Although this book covers a more narrow timeline, it is still extremely

¹⁵² Angela Smith, Steel Drums and Steel Bands: A History (Lanham: The Scarecrow Press, 2012).

¹⁵³ Stephen Stuempfle, *The Steelband Movement: The Forging of a National Art in Trinidad and Tobago* (Philadelphia: University of Pennsylvania Press, 1995).

insightful as it tends to be very in-depth on the topics it covers. It is also one of the very first substantial books done on the history of the instrument.

In general the book studies mostly the evolution of the instrument in Trinidad and not in the United States. The book also includes the history of a few pan pioneers that grew up in Trinidad and later moved to the United States. Because most pan pioneers were already adults by the time they came to the United States, this book is a great resource for researching the history of these pioneers during their younger years. The book was also written in 1996, when steel pan ensemble was at its popularity peak in collegiate programs. Because of this, the book provides the reader with some insights on the general atmosphere of the time period. This is important to the current study because many ensembles of the Midwest were created during this time.

The last source to be covered in this section is Shannon Dudley's book *Carnival Music in Trinidad.*¹⁵⁴ This book is part of the *Global Music Series* by the Oxford University Press. The book focuses only on the music of Trinidad and does not study at all the steel pan's involvement in the U.S. It does, however, briefly cover steel pan's history in Trinidad. The book is also not limited to just the music of steel pan. Rather, it also includes the music of the *Fêtes* festival, soca, chutney soca, and rapso.

This information is helpful to the current study largely because its information on the music of Trinidad in the early 70s-90s, when the instrument was being introduced to America on a large scale. It also gives us insights on the current music of Trinidad, something most other sources do not include. Lastly, since this one of the few resources that covers Trinidadian music as a whole, it provides the reader with a better understanding of the culture of Trinidad. Trinidad has an immensely diverse culture and this source helps to provide the reader with an understanding of the cultural context behind the steel pan.

¹⁵⁴ Shannon Dudley. *Carnival Music in Trinidad* (New York: Oxford University Press, 2004).

CHAPTER 4 - Methodology

The purpose of the current study is to investigate any perceived impacts of offering steel pan ensemble in collegiate curriculum from the perceptions of the teachers and students within the ensemble. The primary focus of this research is to deepen our understanding of the potential musical benefits of the ensemble, which could help instructors create more effective curricula. Furthermore, revealing any perceived impacts could also help in explaining why the ensemble is appealing to instructors and students and how the ensemble was able to become so popular in the United States. In order to research this topic the following research questions have been asked.

1. Are there any perceived impacts among teachers and students of the inclusion of steel pan ensemble within collegiate music programs?

2. Do the views and teaching methods of the teachers impact the students' musical learning and the students' opinions of the ensemble?

3. Do students and/or teachers feel that steel pan ensemble is an important part of a college curriculum? If so, why?

In this chapter I will (1) share the results of the pilot testing, (2) discuss the setting and participants of the study, (3) describe the instrumentation used in the research, and (4) explain the procedures used in the research.

Pilot Study

Pilot testing for the research was done in the fall of 2013 with two universities from outside of the Midwest region. These schools were purposely chosen because of their location outside of the Midwest, as well as the researcher's previous knowledge of the programs. Furthermore, their willingness to pilot the survey ensured a chance to test face validity and garner invaluable feedback to improve the data collection instrument. Participation in the pilot testing was voluntary for both teachers and students at both universities.

The function of a pilot test is not to collect data in order to answer the research questions. Rather, it is a trial run of the data collection process that tests the accuracy and functionality of the research design.¹⁵⁵ Overall the pilot test was quite successful; however, it was revealed that a few areas needed to be adjusted. Many students did not respond to one of the questions. Upon closer examination I found that the question was not necessary for the research and the question was subsequently removed. When trying to apply the findings to the research it was also found that there were a few minor gaps. This was solved by adding two demographic questions to the survey for the primary study.

Through pilot testing, the researcher also discovered a few flaws in the distribution strategy of the survey. Student responses needed to be comparable to that of their instructors while still maintaining confidentiality. Due to the submission of surveys with incomplete or with incorrect information, several student responses couldn't be linked their instructors. To solve this issue, a new delivery system was created that would use Qualtrics, the internet software used to develop the survey, to keep the responses of students and instructors linked to one another.

The last question of the survey asked for feedback of the respondents in regards to how the survey could be improved. Students who took the survey either left positive feedback for this question or didn't respond at all. By the time of the pilot testing the survey had already been extensively reviewed and revised by both my research committee and my peers. This led to a well developed survey that was understandable and easy to take, as made evident by the responses of the students. However, a few instructors did comment on the length of the survey being too long. The instructor survey was significantly longer than the student survey, largely due to the demographic information obtained through their responses. As a result of the teacher responses, fewer questions were included in the teacher survey to more efficiently answer the research questions. This also shortened the time needed to complete the survey.

Another issue found during the pilot testing was that getting a high number of student responses may be difficult. With a sample so relatively small it was important to get as many students to respond as possible. The student feedback didn't show evidence of the survey being too long or complicated. It was therefore determined that the low response rate was due to a general lack of interest. In order to entice more students to participate in the primary study students were given a chance to win one of ten iTunes gift cards that would be given out at random. Students were entered into the drawing upon completion of the survey.

¹⁵⁵ Ibid, 238.

Setting and Participants

Participants of this study (n = 55) were the teachers and students of collegiate steel pan ensembles in the Midwest. Surveys were distributed to the entire population of collegiate steel pan ensembles in the Midwest, as listed in the appendix of Dr. Brandon Haskett's dissertation.¹⁵⁶ Participants then responded on a voluntary basis. In this appendix the programs are listed by state, not by region. In order to compile the list of pan ensembles of the Midwest the appendix was manually sorted through, state by state, to determine what collegiate ensembles existed. This included the states of North Dakota, South Dakota, Nebraska, Kansas, Missouri, Iowa, Minnesota, Wisconsin, Illinois, Indiana, Michigan, and Ohio. The Midwest region was chosen for this study because of its high concentration of collegiate steel pan ensembles. These ensembles vary greatly both in size and in age, and many are some of the oldest ensembles in the U.S. This makes the Midwest the most likely choice for yielding relevant and useable data. For more information on the history of the ensembles in the Midwest refer to the last section of chapter 2 of this paper.

There was found to be a total of 33 schools in the Midwest that offered steel pan ensemble. Of these 33 schools only 30 were used for this study due to two schools not offering the ensemble during the spring semester and one other school's ensemble being student led. Instructors of these schools were sent the survey first and upon completion were sent a second survey to forward to their students. This meant that not all students enrolled in steel pan ensembles in the Midwest received the survey, just those whose instructors chose to participate and forwarded the student survey.

Instrumentation

Two surveys were created, piloted, and distributed online using the internet based software Qualtrics. One survey was designed for the instructors of the ensemble, the other for the students. The surveys consisted of a mix of both Likert-type scale questions and open-ended questions. This was done in order to collect both quantitative and qualitative data. The following is a brief overview of the questions asked and the information collected. A copy of both surveys are included in appendix A and B of this paper.

¹⁵⁶ Brandon Haskett, "A Case Study on the Importance and Value of the Desert Winds Steelpan Programs," D.M.A. dissertation, Arizona State University, 2009.

The first portion of both surveys dealt with the demographics of the ensembles and the individual participants. Students and teachers alike were asked a series of questions about their history and level of experience with the ensemble. In addition to providing information on themselves, instructors were also asked to provide demographic information on the ensemble. Table 4.1 provides an overview of the demographic information collected.

Table 4.1 Demographic Information Collected

Instructor Information

Student Information

Official job title	Student's major
• Years of experience playing steel pan	• Student's primary and secondary
• Years of experience teaching steel pan	instruments
• Whether or not they were exposed to steel pan while in college	• Number of semesters enrolled in the ensemble
• Whether or not they are the founding director of the ensemble	 Amount of experience with the instrument before college Which pan(s) the student plays
	• Other world music ensembles the student has participated in

Ensemble Information (Collected from Instructor Survey)

- Number of different steel pan ensembles offered at the university
- Number of members in each ensemble
- Year the ensemble(s) were established
- Hours a week the ensemble(s) rehearse
- Other ensembles offered by the university
- Whether or not students are required to take steel pan ensemble
- Average number of performances within a year

As stated previously, the survey was used to collect both quantitative and qualitative data. A seven point Likert-type scale was chosen for the surveys because of its ability to let participants give negative, neutral, or positive responses. In addition to the seven point scale descriptors were used, such as slightly, moderately, and greatly, to convey the points on the Likert-type scale. In instances when negative responses were applicable, the descriptors for positive responses matched that of the negative responses. This was to ensure that the survey remain impartial. See Table 4.2 below for a list of quantitative data collected from the surveys.

Table 4.2 Quantitative Information Collected

Instructor Survey

- Self assessment of their knowledge of the history of the instrument
- Rating of comfort level playing with and teaching the ensemble
- Rating of their enjoyment level of playing with and teaching the ensemble
- Rating of instructors perception of the impact of the ensemble on their students' sense of rhythm, their ability to blend and balance in an ensemble, their understanding of voicing and harmony, their melodic development, and their appreciation of world music.
- The percentage of their literature that comes from self made arrangements, purchased publications, or commissioned works.
- The percentage of their literature that comes from the styles of calypso/soca, pop, classical, or other world music ensembles.
- The amount of rote teaching used in the ensemble versus reading of Western notation.
- The amount of time spent on improvisation

Student Survey

- Self assessment of their knowledge of the history of the instrument
- Rating of their enjoyment of the ensemble
- Rating of students perception of the impact the ensemble has on their sense of rhythm, their ability to blend and balance in an ensemble, their understanding of voicing and harmony, their melodic development, and their appreciation of world music.
- Amount of music they have arranged for the ensemble
- Students perception of whether more, less, or the same amount of time should be spent on improvisation

Qualitative data from the surveys was collected primarily through a series of open ended questions. Participants were allowed to respond to these questions with as long or as short of a response as they felt necessary. In instances where qualitative and quantitative questions were directly related to one another, the two questions can be found in the surveys grouped together. Other general qualitative questions about the participants' experience in the ensemble were included at the end of the surveys. See Table 4.3 below for a list of qualitative data collected using the survey.

Table 4.3 Qualitative Information Collected

Instructor Survey

- What aspects they like or dislike most about the ensemble
- What aspects they believe their students like or dislike most about the ensemble
- Rationale for time spent on improvisation
- Whether or not they feel steel pan ensemble has been an important part of their students' musical development and why
- Whether or not they find that steel pan ensemble offers their students anything they don't get or don't get as much of from other ensembles
- Whether or not they feel that steel pan ensemble is an important part of a complete college program and why

Student Survey

- What aspects they like or dislike most about the ensemble
- Whether or not they feel steel pan ensemble has been an important part of their musical development and why
- Whether or not they find that steel pan ensemble offers them anything they don't get or don't get as much of from other ensembles
- Whether or not they feel that steel pan ensemble is an important part of a complete college program and why

Procedure

The first round of surveys were sent on December 13th, 2013 and included only the instructor surveys. Surveys were sent to instructors via email after compiling a list of contact information for the collegiate steel pan ensembles of the Midwest. In his appendix, Dr. Haskett includes the name of the ensemble, the city, the state, and the name of the director for each group. The contact information for each director was found using their school's website. In a few cases, the director listed on the schools website did not match the director listed in Dr. Haskett's appendix, this was generally caused by the appointment of a new director. In these cases the newly appointed director, as listed on the school's website, was contacted. In the cases where more than one person was listed as an instructor of the ensemble, surveys were sent to both instructors.

For distribution of the survey, Qualtrics's built in delivery system was used. By creating a "panel" within Qualtrics, all surveys were delivered simultaneously. The informed consent

form (see Appendix C) was included in this email with a link to access the survey. Using the panel feature in Qualtrics, I was also able to keep track of respondents which allowed me to keep track of which schools responded and which schools did not. This information would be needed for distribution of the student surveys. Participants were able to respond to the survey using any personal or shared computer available to them and was done at whatever location they chose. Instructors were given thirty days to complete the survey.

Distribution of the student survey would prove more difficult than the instructor survey, mainly because obtaining the contact information for each individual student was not feasible. To circumvent this issue, the instructor of each program would be relied on to forward the student survey. After the instructors completed their survey, an email was sent to them thanking them for the participation and asking them to help with distribution of the student survey. A second email was then sent containing an informed consent statement and survey link for students. A separate survey link was created for each university so that responses could be linked to a specific program while still maintaining the confidentiality of each student's individual response. The students surveys were sent out on January 15th, 2014, after the complete the survey, this was necessary due to many school's spring semester not starting until February. The beginning of the semester was chosen for distribution in hopes that it would yield a higher number of responses.

Qualtrics automatically deactivated the survey links after the designated period of time, preventing students and instructors from responding after the designated time period. Qualtrics also tracked IP addresses, helping to prevent duplicate responses from a single individual. Responses from both surveys were collected, stored, and sorted using the Qualtrics program.

52

CHAPTER 5 - Results

The purpose of this study is to investigate the perceived impacts of the inclusion of Steel Pan Ensembles in Collegiate Curricula in the Midwest. The following are the findings from the surveys distributed to 30 collegiate steel pan ensembles in the Midwest. The purpose in collecting the following data was to answer the following research questions:

1. Are there any perceived impacts among teachers and students of the inclusion of steel pan ensemble within collegiate music programs.

2. Do the views and teaching methods of the teachers impact the students' musical learning and the students' opinions of the ensemble?

3. Do students and/or teachers feel that steel pan ensemble is an important part of a college curriculum and why?

Of the 30 instructors that were sent surveys, nine of them responded for a response rate of 30%. Unfortunately, only six of the nine instructors chose to forward the student survey to their students. The possible correlations between teachers and students are a major focus of this study. Because of this, only instructors who's data was accompanied with student data was applicable. Thus, only the six schools from which both instructor and student surveys were returned were used in this study. From these six schools there was a total of 49 student responses.

Program Demographic Information

The six programs who chose to participate in this research represent a good sample of steel pan ensembles of the Midwest. These ensembles vary in size from ten members to over forty. Some schools have one ensemble; others, over two. Some ensembles perform as few as five times a year while others perform over thirty times. Many programs offer other world music ensembles such as gamelan, Latin jazz, and African drumming. All of the ensembles are at least 14 years old and one program was established before 1980. As stated in chapter two, only 5 programs in the entire United States existed before 1980. Given that the majority of the ensembles of the Midwest were started between 1980-2000, with only a few existing before

53

1980, I believe this survey to be an accurate representation of steel pan ensembles in the Midwest. For additional demographic information see Table 5.1. The order of Table 5.1 does not correspond with the letter assigned to schools in future Tables. This was done to further insure participant confidentiality.

Year Est.	1970-1980	1980-1990	1980-1990	1990-2000	1990-2000	1990-2000
Number of Steel bands	2	1	2	1	2	2+
Ensemble Size(s)	25-30 10-15	15-20	40+ 25-30	10-15	40+ 15-20	20-25 10-15
Hours of rehearsal per week	4	3	2 1/2	2-6	2-3	1.5-3.5
Performances Per Year	10	10+	6-10	5-8	10	12-33
Steel band Required?	Yes for Certain Students	No	No	Yes for Percussion Majors	No	Yes for Percussion Majors
Other Ensembles Offered	Gamelan, Latin Jazz Ensemble, African Drumming			Thai, Chinese, African Drumming	Gamelan	Chinese, Latin Jazz Ensemble

Table 5.1	Ensemble	&	Instructor	Demog	raphic	Information
				· · · c	,, .	

All instructors were found to be relatively experienced with steel pan. Their experience ranged from 10 years to 31 years with an average of 23.3 years. It was also found that all six instructors had experience playing steel pan before teaching pan, only one of which hadn't played pan while in college. An unexpected find was that only one of the six instructors was the original founder of the school's ensemble. The rest of the instructors had inherited the ensemble from their predecessor. For a complete description of the teaching experience of the steel pan instructors see Table 5.2.

Teach Exp. Playing	27 Years	10 Years	24 Years	25 Years	23 Years	31 Years
Teach Exp. Teaching	15 Years	6 Years	20 Years	18 Years	20 Years	20+ Years
Pan Exp. while in College?	Yes	Yes	Yes	No	Yes	Yes
Founding Instructor of the Ens.?	No	No	No	No	Yes	No

Table 5.2 Instructor Demographic Information

Additional demographic information regarding the groups' choice in literature, methods of instruction, other university ensembles they reference, and companies they use was collected in the instructor survey. The results from these questions can be found in Appendix D.

Student and Teacher Enjoyment

The majority of both student and teacher participants rated that they enjoy steel pan ensemble at a high level. The average teacher enjoyment level for playing and teaching was 6.5 and 6.67 respectively. The average student enjoyment level was 6.69. This was calculated by individual student responses, not by the average of each school listed below. All of these averages are based from the Likert-type scale used in the surveys where a 7 represents the highest level of enjoyment. A Spearman Rho test was used to determine if any correlation existed between teacher and student enjoyment levels. It was found that a significant positive correlation of .99 existed between student enjoyment and both teacher playing enjoyment and teacher teaching enjoyment. Average instructor and student enjoyment levels for each program can be found in Table 5.3 below. As stated previously, the letters assigned to the programs in the following tables do not correspond with Tables 5.1 and 5.2.

Table 5.3 Participants Enjoyment Levels

	Α	В	С	D	Ε	F
T-Playing Enjoyment	4	7	7	7	7	7
T-Teaching Enjoyment	5	7	7	7	7	7
Student Enjoyment	2	6.67	6	6.84	6.83	7

Teachers and students were also asked an open response question about what they liked or disliked most about the ensemble. The most frequent teacher response dealt with the ensemble's ability to expose their students and audiences to other styles and cultures. Many of the instructors also commented on their general enjoyment of the literature and the enjoyable "groove" of the ensemble. The dislikes from the instructors all related to the logistics of the ensemble. This included low funding, continuity of ensemble members, and instrument maintenance.

In answering what they like most about steel pan ensemble, the students gave a total of 58 responses. These responses have been organized into the categories shown below in Table 5.4. Also included in this table is the frequency in which each response was given.

Student Response	%
Stress reliever/Fun atmosphere/Energetic/Physically engaging	28%
Variety of music/General appreciation of the music	22%
Sense of community/Camaraderie	12%
Uniqueness of the instrument/Different from the norm	7%
Improved musicality	7%
Accessibility of the instrument	5%
Learning a new instrument	5%
Goal oriented	5%
Opportunity to arrange	5%
Performance opportunities	3%

As shown in Table 5.4, the most common response from students about what they like most about the ensemble was the stress-free atmosphere of the group. Several students commented on how the ensemble helps relieve stress and put them in a good mood for the rest of the day. Students related the stress-free nature of the ensemble to both the style of literature performed as well as the joy that comes from playing the instrument. Students also enjoy the camaraderie of the ensemble, both in practice and in performance. Students like being a part of a large ensemble where everyone contributes and is held accountable by both the instructors and fellow students. Other popular responses from students included the high energy and fun atmosphere of performing with the ensemble, the accessibility of the instrument, the uniqueness of the instrument, learning about the history of the instrument, and getting a chance to arrange for the group.

Some student responses were specific to their primary instrument. Several percussion students commented that they enjoyed getting to play a more active role in an ensemble. A popular response from non-percussion instrumentalists and vocalists was how the ensemble helped their sense of rhythm and allowed them to practice reading in unfamiliar clefs. One vocal student involved in the study stated:

57

The rhythms and bass clef reading supplied in a hands on ensemble like this has been invaluable to my teaching and my understanding of form, rhythm, and ensemble blend. I would recommend this class to all teaching assistants in the school of music as this is an opportunity to be a part of living music and to learn while having fun. I know choir is supposed to be similar, but this ensemble really emphasis internalizing the subdivision that singers so often lack.

The students' dislikes of the ensemble all related to one of two subjects. The first of which, and the most popular, was the varied abilities and levels of experience in the group. Many beginning students find the music difficult and struggle to keep up with the rest of the group. Many of the more experienced players commented on the music being too easy or repetitive. The more popular of these two scenarios was the beginning student struggling with the level of difficulty in the ensemble. To test if students tend to enjoy the ensemble more as they gain more experience, the students' enjoyment ratings were compared to their semesters of study. It was found that a significant correlation between these two factors existed of 0.84, showing that in this study the longer the student has been in the ensemble, the more they tend to enjoy it. When the same test was run using only students who had been in the ensemble for four semesters or less, (n = 29) the correlation was weaker but still significant at 0.40.

Another dislike of the students that was discovered in this research was the lack of opportunities to perform as an individual. This relates both to the students' opportunities to perform as a soloist, as well as play an individual part or line in the ensemble. While the majority of students enjoyed the team atmosphere of the ensemble, some students found this was their least favorite aspect of the ensemble.

Knowledge of the History of the Ensemble

The data from the survey was tested to see if a correlation existed between the teachers' knowledge and the students' enjoyment, as well as the students' knowledge and their own enjoyment. On both of these accounts a significant correlation was found of over .99. This shows that as the participants' self-assessed knowledge of the instrument increased, the students were more likely to enjoy the ensemble. It also demonstrates that the teachers' knowledge base was just as important as the students' knowledge base to the their enjoyment of the ensemble. The teacher responses and the average of their students' responses can be found in Table 5.5 below.

58

Table 5.5 Participants Knowledge Levels

	Α	В	С	D	Ε	\mathbf{F}
Teacher Knowledge	5	7	6	6	6	6
Student Knowledge	3	3.89	3	4.53	3.83	5.16
Student Enjoyment	2	6.67	6	6.84	6.83	7

Impacts on Student Musical Learning

In the surveys, instructors were asked to rate how they felt the ensemble impacted their students' sense of rhythm, their ability to listen and balance in an ensemble, their understanding of harmony and voicing, and their appreciation of world music. Students were also asked to rate how the ensemble impacted themselves in the same areas. In general, both students and teachers felt that steel pan ensemble had a positive impact on all the aforementioned areas. The highest of which was on the students' sense of rhythm. The average teacher score in this area was 6.8 and the student average was 6.6. Since the highest possible rating participants were able to give was a seven, it can be seen that the ensemble has an extremely high perceived impact on the students sense of rhythm. All of the averages for the other categories were quite high as well. In fact, not a single category had an average rating of less than 6. See Table 5.6 below for a complete listing of averages.

			Sense o	f Rhythm		
	Teacher Avg.: 6.8			S	6.6	
	Α	В	С	D	Ε	F
Teacher	N/A	7	7	6	7	7
Student Avg.	N/A	6.33	6.5	6.74	6.5	6.83
L		I	Ability to Ble	nd and Balan	ce	I
	Т	eacher Avg.:	6.6	St	udent Avg.: 6	5.15
Teacher	N/A	7	7	5	7	7
Student Avg.	N/A	5.89	6	6.11	6.25	6.5
L		Under	standing of V	oicing and H	armony	
		Teacher Avg.	:6	\$	Student Avg.:	6
Teacher	N/A	5	7	4	7	7
Student Avg.	N/A	5.33	6.5	5.95	6.17	6.67
L		ŀ	Appreciation	of World Mu	sic	
	Т	eacher Avg.:	6.4	St	udent Avg.: 6	.45
Teacher	N/A	7	6	5	7	7
Student Avg.	N/A	6.125	6	6.53	6.33	7
L		*All :	averages base	ed off of a seve	en point Like	rt-type scale.

Table 5.6 Ensemble Impacts on Musical Learning

The responses from teachers and students from school A were incomplete and were therefore omitted from this portion of the research. As can be seen from the data, in general, students and teachers both felt that steel pan ensemble has strong positive impacts on the aforementioned musical concepts. To better understand the data being presented, a composite musical learning score (CMLS) was calculated for each participant. The CMLS is the average score given by participants for all four concepts being discussed. The average CMLS for instructors was 6.45 and for students was 6.29. This shows us that while both students and

teachers of this study found steel pan ensemble beneficial to musical learning, instructors found it slightly more beneficial than the students.

The next step in this research was to see if a correlation existed between a students' enjoyment of the ensemble and their CMLS. A significant correlation was found to exist of .96, showing that students who rated their level of enjoyment higher were also more likely to rate their musical learning higher. This correlation was even higher (.99) when the CMLS was replaced with the students rating of how the ensemble impacted their appreciation of world music. This means that the students' enjoyment level and how the ensemble impacted their appreciation of world music were more closely related than the other categories of musical learning.

The CMLS of the students were also compared to the CMLS of the instructors to investigate if any correlation existed. It was discovered that a significant correlation existed of .97. This means that the perceptions of instructors and students on how the ensemble impacts musical learning are positively related. As the ratings of the instructors increase, so do the students and vice versa. Although .97 is still an extremely strong correlation, it is worth noting that this is one of the lower correlations found to exist in this study.

On the topic of the ensemble's impact on the students' understanding of voicing and harmony, the effect of student arranging was investigated. Students were asked whether or not they had experience arranging for the ensemble. Their responses were then compared to how the ensemble impacted their understanding of voicing and harmony. For students that hadn't arranged for the ensemble, their average rating was 5.81, for those that had their average rating was 6.64. A T-Test was used to determine whether or not this difference between the averages was significant. The test came back with a p value of .02 showing that the difference was significant at the .05 level. This means that for this study, those participants who have arranged for steel pan ensemble find the ensemble more beneficial to their understanding of harmony and voicing than those who haven't. However, with an average of 5.81, students who haven't arranged for the ensemble still found the ensemble beneficial in this area.

61

Improvisation

The data returned a wide variety from both students and teachers on the amount of time spent on improvisation. However, not a single student responded they desired to spend less time on improvisation. 52% of student respondents desired to spend more time improvising, while the other 48% were happy with the current amount of time being spent on the topic. This, accompanied with the lack of any students wanting to spend less time on improvisation, demonstrates that there is a general desire from the students of this study to spend more time on improvisation.

A correlation was found to exist between the students' assessment of time spent on improvisation and their desired amount of time spent on improvisation. This positive correlation of .98 means that a student who believes more time is currently being spent on improvisation is more likely to want to spend more time on the topic and vise versa. To further test this correlation, the same Spearman Rho test was used to test for a correlation between the teachers assessment of time spent on improvisation and the students desired amount of time spent on improvisation. Again, a significant positive correlation was found of .40. Table 5.7 shows the students' rating of time spent on improvisation and what percentage of those students wanted to spend more, less, or the same amount of time on improvisation.

Table 5.7 Amount of Time Spent on Improvisation - Student Responses

Never	Almost Never	Rarely	Sometimes	Frequently	Almost all the time	All of the time
8%	17%	13%	40%	21%	0%	2%

How often is improvisation used in your ensemble?

Would you like more, less, or the same amount of time spent on Improvisation?

ſ	Less: 0%	Less: 0%	Less: 0%	Less: 0%	Less: 0%		Less: 0%
		Same:62.5%	Same:33.3%	Same:52.6%	Same:50%	N/A	Same:0%
	More: 75%	More:37.5%	More:66.7%	More:47.3%	More:50%		More:100%

As a qualitative portion of this study, teachers were also asked what their primary reasons and considerations were when deciding how much time to spend on improvisation. Instructors responded that a lack of student interest and limited rehearsal time often restricted the amount of time that could be spent on improvisation. Other instructors argued the importance of teaching the students to improvise and therefore feel it necessary to make time during rehearsal to teach the subject. Some instructors stated that they teach only a portion of the students to improvise individually outside of rehearsal to save on rehearsal time, further demonstrating that adequate rehearsal time is an important factor. Others believed it important to teach the entire group to improvise and use lead sheets to have the entire group work on improvisation at the same time.

Importance of the Ensemble to Musical Development

To explore the importance of the ensemble to the students' musical development, the following three questions were asked of both teachers and students. The following questions are quoted from the student survey. Teacher surveys used the same questions but were in regards to their students, rather than their own musical development.

1.Does steel pan ensemble offer you anything that you don't get or don't get as much of from other ensembles? If yes please specify.

2.Do you feel that steel pan ensemble has been an important part of your musical development? Why or why not?

3.Do you feel that steel pan ensemble is an important part of a complete college program? Why or why not?

Question One

1.Does steel pan ensemble offer you anything that you don't get or don't get as much of from other ensembles? If yes please specify.

For the above question, all instructors answered yes except one. The reasons for responding yes dealt primarily with the characteristics that separate steel pan ensemble from other groups. The instructors of this study view the ensemble as being a popular music ensemble, which separates it from the art music focus of other groups. Teachers felt that steel

pan ensemble's focus on groove, dancing, and the use of various styles creates an enjoyable atmosphere for student learning. The one teacher who didn't respond yes also didn't respond no. They responded "not necessarily, there are other opportunities for this. I'm trained to do it and I'm interested in it, and I have shared that with my students. It's just what we've chosen to do." From their response we can gather that this instructor values the educational opportunities of steel pan ensemble, but they also believe other ensembles could be effectively used in the same way if necessary.

Of the students that answered this question (n = 42) 40 of them answered yes (95%) and two answered no (5%). The students who did not answer this question were students who weren't involved in any other ensembles. The students who answered no did not elaborate on why. The 40 students who answered yes to the first question gave a total of 53 reasons why. These responses have been organized into the categories show in Table 5.8.

 Table 5.8 Question One Student Responses - Reasons for Answering Yes

Relaxing/Enjoyable/Fun Concert Atmosphere	28%
Exposure to new music/Focus on music other than classical	15%
Sense of Community	9%
Understanding of Rhythm	8%
Opportunity to work on areas that are outside of their primary instrument	8%
High number of performance opportunities	6%
Smaller ensemble/Accountability	4%
Physically engaging	4%
Better sense of listening/Sense of ensemble	4%
The challenge of learning a new instrument	4%
Opportunity to be in an instrumental ensemble (Vocal major/non-music majors)	4%
Opportunity for rote teaching	2%
Opportunity to improvise	2%
Opportunity to arrange	2%
Improved sight reading	2%

As shown in the table above, the most common response from students was regarding the atmosphere of the ensemble. Students enjoyed the fun, relaxed, and stress-free environment in which they rehearse, learn, and perform. The following is a response from a student that applies to this category.

Definitely. Steel band is like taking a break from classes for a while just chilling and playing music. I don't have to be absolutely terrified that I'll miss a note and get called out on it. Simultaneously, I feel like I need to put work into practicing to be good at the music. It's the perfect balance of fun and intensity that other ensembles can't offer because they have serious reputations and it's infinitely more noticeable if someone messes up.

What is important to notice from this quote is that while the student values the fun atmosphere of the ensemble, they still take it seriously. The student also mentions still having to practice to get better but that they don't have to be terrified of mistakes. Another student states that:

This might apply to all percussion instruments, but steel band is a very social experience. Because we are able to stand, able to talk, able to gesture, the experience usually contains laughs, dancing, and jokes. Maybe the world's most well behaved steel band would disagree, but all of my experiences have been social and family-like. Three of my years of steel band have been with community groups with wildly different ages and economical situations. I don't think the local wood wind ensemble has the same fun a steel band has. And in a more obvious way, our repertoire typically lends itself to dancing and enjoying the experience. As much as I want us to have symphonies, there's a joy in playing consistently likable music.

This quote signifies the importance of the fun atmosphere, the physical nature of the ensemble, the sense of community in the ensemble, and the different style of music of the ensemble. It also compares the ensemble against woodwind ensembles and draws clear distinction between the two. All these can be related back to the students' enjoyment of the ensemble.

Question Two

2.Do you feel that steel pan ensemble has been an important part of your musical development? Why or why not?

In regards to the second of the three questions being discussed, all teachers responded yes except for one who didn't answer the question. The number one reason for their answer had to do with the musical benefits of the ensemble. This included improving the students rhythmic perception, understanding of harmony, their understanding and appreciation of various styles of music, and their ability to improvise. The other reoccurring response from teachers dealt with the ensemble getting students experienced with performances, both paid and unpaid. From the demographics collected in the survey, we know that the number of performances a year for these groups vary anywhere from 5 to 33, demonstrating that these ensembles are generally very active. Teachers felt that having to prepare for this many performances taught their students professionalism and responsibility. Several teachers also commented on the ensemble's ability to improve the students sense of community, both within the school and with the surrounding area. Lastly, one teacher responded that they felt the ensemble is unique in helping their students grow in a holistic fashion.

In answering the second question, 92% of students responded yes while the other 8% responded no. The 45 students that responded yes to this question gave a total of 65 reasons why. In order to analyze their responses as to why they answered yes, their responses were separated into the categories shown in Table 5.9 below.

Student Response	%
Appreciation/Understanding/Exposure to various styles of music	22%
Improved rhythmic understanding	12%
Improved ensemble awareness/Ability to listen in an ensemble	9%
General musical development (no specific area given)	8%
Improved reading skills/Sight reading/Reading of various clefs	8%
Improved improvisation	6%
Uniqueness of the instrument	6%
Stress free environment/Sense of community/Enjoyment of the ensemble	6%
Opportunity to continue playing music/start playing music in college (non-music majors)	6%
Opportunity to learn a new instrument	5%
Helped to develop a better touch	5%
Improved understanding of voicing and harmony	5%
Steel pan is their primary instrument	3%

Table 5.9 Question Two Student Responses - Reasons for Answering Yes

Of the total 65 reasons given by students for answering yes, 48 of these responses (74%) dealt with areas of musical learning. 22 of the respondents also gave more than one reason for their response. This demonstrates that many students felt the ensemble is able to work on many concepts at once, something several students mentioned directly in their response.

Of the 49 students who responded to the survey, 4 of them (8%) answered no to this question. Out of those four, only one student had a negative view of the instrument stating that "I view it as a novelty instrument". Another student simply stated that they had only been in the ensemble for a few weeks and the ensemble hadn't yet had any significant impact on them. The other two students enjoy the ensemble but didn't feel it critical to their development. One of these two argued that they had already developed strong musicianship before joining the group and the other argued that the techniques learned to play steel pan are specific to the instrument and don't transfer to other instruments.

Question Three

3.Do you feel that steel pan ensemble is an important part of a complete college program? Why or why not?

In answering the last question, two instructors answered no (33%). One of these instructors stated that "many great schools do not have a pan program. It is my favorite part of my job, but if a school/percussion professor did not want to pursue it, I completely understand." The other instructor responded that "It is [for] ours, but again, there are other activities that are just as valid and viable. The worst thing I could imagine is a steel band run by someone who was not qualified or interested in it and was just doing to fill a requirement." From these two responses we gather that both instructors feel that steel pan ensemble has been an important part of their college's curriculum, but they don't believe it is a critical for every curriculum.

Of the four teachers that responded yes (66%), two teachers rationalized their responses simply by stating "for the reasons stated previously" referring to their responses to the first two questions. One instructor argued that as the ensemble becomes increasingly more popular, it is important that students have exposure to the instrument while in college. The last teacher stated that:

Yes. This is one of the most unique acoustic instruments in the world and it very effectively brings together people from all walks of life and musical persuasions. It combines various music learning methods and the repertoire performed appeals both to the intellect and the emotion.

This response demonstrates that this instructor believes that the ensemble has a unique ability to effectively teach a large group of students musical concepts and musical appreciation while simultaneously establishing a sense of community within the ensemble.

Of the students who choose the answer this question (n = 46) 78% answered yes and the other 22% answered no. The 36 students who answered yes gave a total of 44 reasons why. The same procedure used to code and organize the data from previous questions was used for this question and the results are shown below in Table 5.10.

Table 5.10 Question Three Student Responses - Reasons for Answering Yes

Student Response	% of Students
Exposure to New Music/Diversity/Broaden Horizon	36%
Musical Training Benefits	18%
Community/Non-Music Major Participation	16%
Uniqueness of the ensemble/Different than Other Ensembles/Variety	16%
Enjoyable/Low-Stress	11%
Preparation for Music Ed Majors/Pan becoming more popular in schools	9%
Performance Opportunities	2%

Many students expressed how they felt that it is important to experience new things while in college. These students valued steel pan because it was a new experience for them. This response came from both music and non-music majors. Another area referred to by many students was the ensembles' ability to create a sense of community and the importance of that sense community while in college. One student that felt this was important stated that:

It requires critical thinking skills through blending, adapting, and using musical concepts. The band also helps with memory and creates an area for collaboration. Apart from the obvious musical benefits it gives every band member a group, a niche to belong to and I believe that the camaraderie we create through the music gives a sense of belonging and decreases collegiate isolation and depression.

The main focus of this quote is directed towards the sense of community within an ensemble, but it also has elements of the musical learning that happens within the ensemble. The student also mentions the importance of the sense of community to the their overall college experience. For this student, the ensemble goes beyond the study of music and effects their well-being.

Ten students (22%) answered no to this question. Of these ten students, nine of them mentioned something positive about the ensemble. These nine students enjoy and value the ensemble but wouldn't label it as "essential." One student responded to the question:

I feel that steel band is something that's fantastic to have, but if you do not have an instructor who is passionate about it, it would be pointless to invest enough money for a set of pans. So I would say it's not essential to a college program, but can swiftly become a very cool thing to have at your college if you get it started.

As demonstrated by this quote, this student does enjoy their steel pan ensemble experience. The student does however worry about the quality of the ensemble if it were led by someone who is less passionate about the instrument. One other student from this group used the same argument but added that students shouldn't be required to take steel pan ensemble. This student felt that students who don't enjoy it tend to bring down the rest of the group. Two other students argued that students should play an instrument and should be exposed to world music while in college. While these students thought steel pan can serve this purpose, they also felt that other ensembles could serve this purpose as well.

CHAPTER 6 - Conclusions

The purpose of this chapter is to use the results of the surveys to provide a better understanding of the perceived impacts of steel pan ensembles in collegiate curricula. To do this, the findings of the surveys will be used in an effort to answer the following three research questions.

1. Are there any perceived impacts among teachers and students of the inclusion of steel pan ensemble within collegiate music programs?

2. Do the views and teaching methods of the teachers impact the students' musical learning and the students' opinions of the ensemble?

3. Do students and/or teachers feel that steel pan ensemble is an important part of a college curriculum and why?

Although this study focused on the collegiate steel bands of the Midwest, the ultimate goal of this research is to further our understanding of the impact of steel pan ensemble on collegiate curriculum as a whole. The Midwest was chosen as a sample to represent the rest of the U.S. because of its high concentration of well developed steel pan ensembles. While the survey does represent a good sample of the steel bands of the Midwest, it is important to remember that these findings can only be definitively applied to those who participated in the survey. However, having a better understanding of the ensembles in this study should provide educators with a better understanding of how steel pan ensemble does, doesn't, or could impact their own curriculum.

Research Question One

1. Are there any perceived impacts among teachers and students of the inclusion of steel pan ensemble within collegiate music programs?

This research discovered that not only did the students of this study enjoy steel pan ensemble, but that they enjoyed it at an extremely high level. One could assume that most music professors and music students that are involved in any ensemble enjoy the experience to a certain extent. Although, most experienced musicians can attest that this is not always the case. From my own experiences as a music major, I can state that it can often become quite difficult to remember that creating music is supposed to be an enjoyable experience. Personally, I believe that it is important that students, especially music majors, keep this in mind when studying music. Being a happy and content musician can lead to more fulfilling performances for both the performers and the audience members, while a stressed and fearful performer can lead to a less profound experience.

As stated earlier, one would hope that any student involved in a collegiate ensemble would find some level of enjoyment from the group. To what extent they enjoy the ensemble now becomes the question. The average response rate of 6.69 (out of 7) from students on their enjoyment of steel pan ensemble seems incredibly high. Unfortunately, it can't be certain from this research how this number fairs against other ensembles. It can, however, be certain that a very large percentage of these students enjoy steel pan ensemble at a very high level. Future research should try to compare the level of enjoyment students have in steel band versus other ensembles. This could be done simply by following the same procedure as this study with the addition of including other ensembles as well.

Despite my best efforts, the nature of the survey did pre-dispose itself to returning results in favor of steel band. This is largely due to the fact that students who enjoy and value steel band are more likely to take the time to do the survey and to provide in depth responses. However, the incentive of possibly winning an iTunes gift card did help to combat this tendency. It is worth noting that not all students who took the survey enjoyed the ensemble, and that some negative qualitative answers were given. This helps to validate the findings of the study as it shows at least some students who thought less of the ensemble still took the survey.

Despite the inability to compare steel band to other college ensembles, the qualitative answers did provide a better understanding of why most students enjoy the ensemble. Knowing why students enjoy the ensemble at such a high level will allow directors to target these areas to improve upon the students' experience. Also, if a collegiate professor believed that their program was missing something that steel pan

offers (i.e. a sense of community or exposure to more styles of music) they might now be able to determine that steel pan ensemble would be a good fit for their program. The data has also shown that steel pan ensemble not only serves these purposes, but that most students enjoy the process as well.

Lastly, instructors of other ensemble types can take this knowledge and apply it to their ensembles. For example, creating more student ownership to improve camaraderie, giving students a chance to arrange for the group, getting the community involved with the ensemble, and playing a wider variety of music all might help improve the students' experience in any ensemble. Also, other ensembles might benefit from learning from the steel pan ensemble in creating a less stressful and more enjoyable atmosphere.

Generally speaking, there is usually a high level of discipline in Western music collegiate ensembles. Although this level of discipline demands a high level of performance from the students, it can also create a stressful environment. There are a lot of elements to the stress-free environment of a steel pan ensemble that so many students enjoy, and I don't know that it would be feasible for an orchestra to recreate this atmosphere entirely. However, seeing how the students value and take ownership of their steel pan ensembles should encourage other ensembles to try to create a more encouraging and less stressful atmosphere.

Another perceived impact that steel pan ensemble was found to have on students was on the students' musical learning. The impacts steel pan ensemble has on the students' senses of rhythm, their ability to blend and balance, their understanding of voicing and harmony, and their appreciation of world music were all investigated from both the student and instructors perspective. Although all areas were found to have strong positive impacts, it was found that it impacted their sense of rhythm and appreciation of world music the most.

One would assume that any ensemble would have musical advantages for the students involved. However, just how large of an advantage is the question. The lowest average impact found in this study was on the students understanding of voicing and harmony, which at a 6 (out of 7) is still a very strong impact. When this high level of musical learning on a wide variety of concepts is paired with the enjoyment students have

in the ensemble, it can be seen that steel pan ensemble can be a unique, efficient, and enjoyable way of studying music.

Another important impact that frequently exposed itself in the student responses was how the ensemble gave the students a chance to focus on areas that they normally couldn't with their primary instruments. Percussionists enjoyed being able to play melodies and being more active in the ensemble, flutists enjoyed working on reading bass clef, and vocalists enjoyed working on their rhythmic understanding. These are just a few examples of the many responses given by students. It is clear that when used properly, steel pan ensemble can be a great way to fill the gaps of a curriculum for all instrument types, creating a school of well-rounded musicians and music educators.

Lastly, for the schools that offered the ensemble to non-music majors, students valued the opportunity to be a part of an ensemble while in college. For some of these students, this was the first instrument and ensemble they have ever played in. It is becoming increasingly difficult to keep non-music majors involved in music during college, and even more so afterwards. I believe anything we can do to get more people involved in music is a good thing. Students of this study showed that while in college they valued opportunities to try new things. Therefore, schools that don't offer any ensembles to beginning musicians are missing an opportunity to get more students involved in music. I believe that if more programs created ensembles that were accessible to inexperienced musicians we could get a much larger portion of the community involved in music.

In conclusion, the researcher found that steel pan ensemble has a perceived impact on the participants' musical learning, enjoyment of music, and general well being. The ensemble, when used effectively, can be a fun and low-stress environment for students of all levels and instrument types to enjoy music and develop their artistry.

Research Question Two

2. Do the views and teaching methods of the teachers impact the students' musical learning and the students' opinions of the ensemble?

This investigation found that the enjoyment levels of both students and teachers were related. As the teachers' levels of enjoyment rose, so did that of the students. Perhaps, the attitude and demeanor of the teachers effect those of the students. Conversely, the attitudes of the students may impact the attitudes of their teachers. The likeliest scenario is that it is a little bit of both. In any case, this cycle can't be completed without a certain level of enjoyment from the instructor. This shows the importance of instructors enjoying and appreciating what steel pan ensemble has to offer their students.

The researcher also found that there existed a strong correlation (.96) between the students' enjoyment level and their CMLS (Composite Musical Learning Score). This was especially true regarding the students' appreciation of world music (.99). Since the students' musical learning is connected to their enjoyment, and their enjoyment is connected to the enjoyment of their instructor, we can deduce that the students' musical learning is at least somewhat impacted by the instructor's enjoyment of the ensemble as well.

If the instructor of the ensemble is not passionate about the group and doesn't enjoy working with the steel pan ensemble, then it is likely to have adverse consequences for the group. On the other hand, if a teacher is enthusiastic about the group and genuinely enjoys working with the ensemble, then the students are more likely to learn and to enjoy the group to a higher degree. This demonstrates the importance of having instructors that are passionate and enthusiastic teaching steel pan ensembles.

Knowledge on the history of the steel pan was also found to be a significant factor in the students' enjoyment. This includes both the knowledge of the student and of the teacher. The students whose self-assessed knowledge of the instrument was greater tended to enjoy the ensemble more. The same was true for students whose teacher's self-assessed knowledge was greater. This is important because it gives teachers an easy way to increase enjoyment throughout the ensemble. By doing some basic research about the history of the steel pan, instructors will have the ability to increase their own enjoyment. Doing so will also give the instructors the knowledge base needed so that they can pass their knowledge to their students, further increasing their students' enjoyment.

Another area that was found to impact musical learning was whether or not the students had arranged for steel band. Those who had arranged for steel band felt that the ensemble helped with their understanding of voicing and harmony more so than those who hadn't. As seen in

appendix D, schools vary widely in the amount of original arrangements performed by the group. Some schools perform almost all original arrangements, while others hardly perform any at all. This is easily controlled by the instructor and can therefore be used as a tool to increase musical learning. It also means a cheap and relatively easy way of getting quality literature for the group to perform. However, when creating their own arrangements, instructors and students should be careful to take the necessary steps to obey copyright laws.

Improvisation was also discovered to be an important part of the students' overall experience. A very interesting aspect of this was that students who spent more time on improvisation were more likely to want to spend more time on the topic and vice versa. This shows that not only is steel band a great opportunity to teach improvisation, but it is also a great way to get students excited about it. Students often have fear about improvising, but I believe the stress-free environment of the steel band helps to combat this fear. In steel pan ensemble, some students might feel it easier to let go of their fear of improvising, relax, and enjoy creating their own music. The data shows that as students begin to experiment with improvisation, and have a little success with it, they desire to improvise more.

The amount of time spent on improvisation is again in the hands of the instructor. What is interesting was that one professor argued that students lacked a desire to improvise, yet the data from their program argued otherwise. Equally interesting was the fact that no student desired to spend less time on improvisation, they were either satisfied with the amount of time spent or desired to improvise more. This desire to improvise on pan is most likely due in part to improvisation being inherent to the instrument. The instrument was created by people who had no musical training and couldn't read any music. The instruments were tuned by ear and to this day almost everything is taught by rote. This study has shown that American students desire to improvise in steel band, something that I think many teachers overlook and under appreciate.

In the current study, there was found to be a positive correlation between the perceptions of the instructors on the ensembles impact on musical learning and that of the student's perceptions of musical learning. As the instructors CMLS increased so did their students'. The learning of these musical concepts might be natural and inherent in the ensemble, but the data shows that the instructor has a hand in the quality or quantity of the musical learning that takes place in the ensemble. It is therefore important that instructors know, appreciate, and utilize steel band in a way that takes full advantage of these learning opportunities.

In sum, the answer to the second research question the answer is yes. The views and teaching methods of the instructor do impact the students' musical learning and their opinion of the ensemble. For the students of this study, the instructors' enjoyment and opinions of musical learning were related to the students' enjoyment and to the students' learning. It is therefore important that instructors of steel pan ensembles take the time to accurately assess what the ensemble has to offer their students, as well as what they as teachers can do to improve the students' experience.

Research Question Three

3. Do students and/or teachers feel that steel pan ensemble is an important part of a college curriculum and why?

In order to answer the final research question three open answer questions were asked of both students and teachers. The last of these three questions simply asked the third research question directly to the participants and the first two helped add context to their reasoning why. The three questions asked are as follows:

1.Does steel pan ensemble offer you anything that you don't get or don't get as much of from other ensembles? If yes please specify.

2.Do you feel that steel pan ensemble has been an important part of your musical development? Why or why not?

3.Do you feel that steel pan ensemble is an important part of a complete college program? Why or why not?

As shown in the previous chapter, the answer to all three of these questions was an overwhelming yes. However, what was more important than simply the participants yes or no response was their qualitative reasons for why. If steel pan ensemble is truly an important part of a college program, it needs to offer the students something special that they can't get from other ensembles. One of these unique characteristics of the ensemble, as well as one of the most common responses from students, was the general fun and low-stress atmosphere of the

ensemble. As stated earlier in this chapter, I believe, and the survey suggests that the students do as well, that this is an important quality of the ensemble to college students.

There are a lot of causes for this enjoyable atmosphere, one of which is the physical nature of the group. Many students mentioned that they valued this aspect of the ensemble and that other ensembles don't offer them the opportunity to be as physically engaged. For many steel pan ensembles it is acceptable, if not required, that the performers be physically engaged during the performance. Many ensembles even choreograph the movement between sections so that the group is uniform. Much like improvisation, the physical nature of the ensemble is inherent in the ensemble. For most students, they don't have to be told to move, it just happens naturally. In the *kalinda* rituals that led to the creation of steel pans, dancing was the focal point. To this day, dancing is a must for the steel bands in Trinidad. At Panorama, 40% of the group's final score is based off of the energy of their performance, and a large portion of that 40% is based off of their movement.

It is no secret that music and dance frequently coincide with one another, yet Western classical music has separated the instrumental performers from dancing. Western classical music still has movement in it, but I would argue that it is at a lower level and in a different way. The data from the survey reinforces this theory as many students stated that steel pan ensemble offered them a chance to dance, while other ensembles did not. I believe the physical nature of the group is very important to the fun and relaxed atmosphere so commonly referred to by the students.

Along the same lines, and another very popular response, was in regards to the communal nature of the ensemble. I believe that this goes hand and hand with the students' enjoyment of the ensemble. The sense of belonging and acceptance to the group, along with the social atmosphere, creates an enjoyable experience for the students. I believe that this sense of community is also inherent in the ensemble. The steel bands of Trinidad started as, and remain to this day, representatives of their neighborhoods. In Trinidad, rehearsals are much more than just rehearsing music, they are social events lasting hours on end. And, after months of preparation, the steel bands showcase their hard work by competing in a nationwide contest, coinciding with Carnival, where tens of thousands community members come to support the bands of their neighborhoods. This sense of community in the steel bands is an integral part for

Trinidadians, and this study has revealed that the same could be said about the collegiate steel bands of the United States.

I believe, as do many of the respondents of the survey, that the sense of community within the steel pan ensemble is one the distinguishing characteristics of the ensemble. Because of its inherent nature, I believe steel bands will always have an advantage over Western music ensembles in establishing a sense of community. Not only did students state that they appreciated this sense of community, but also that they didn't get this from other ensembles. Instructors of Western music ensemble might be able to match the sense of community within their group, but it would be difficult. Although difficult, this study has shown that this endeavor might be worthwhile. This is especially true for schools that do not offer a steel pan ensemble.

Another unique characteristic that steel pan ensemble offers its students is a chance to work on techniques outside the realm of their normal instrument. For instance, a soprano vocalist might find that playing bass or cello pans improves their bass clef reading, while percussionists might find it beneficial to play the melody on the tenor pan. Both of these scenarios were present in the study. Many non-percussionists also commented on the ensemble's ability to improve their rhythmic understanding. Many of the voices of the steel pan, especially the supporting voices, are heavily syncopated and use many off beats. Hours of repetition playing e's and a's (the second and fourth partial of a group of sixteenth notes) can drastically improve the students' sense of rhythm. Also, the ability to be able to physically express rhythms is an important tool for music educators. This is a technique that steel pan ensemble can teach all musicians, not just percussionists. It is possible for students to focus on these areas without steel pan ensemble, but the experience would most likely be far less applicable or enjoyable.

Lastly, the most common overall response from students for the last three qualitative questions dealt with the ensemble's ability to expose students to new styles of music. Although this is not something completely unique to this ensemble, it is something that the ensemble does very well. The steel pan is very rhythmic in nature, but it is also melodic and incorporates Western tuning. This makes it extremely easy to adapt the steel pan to many styles. Again, other ensembles can be used to serve this purpose, but the question is to what extent. Most other world ensembles like gamelan, African drumming, samba bands, taiko drumming, and Latin jazz ensembles are generally limited to the style of their region. Also, other ensembles such as

gamelan would be limited as their pitches and scales are different and less transferable to Western music.

As mentioned in chapter two of this paper, Trinidad has a very rich and diverse culture combining elements of Indian, African, Chinese, and Western cultures. Because the people of Trinidad are just as diverse as the music they play, the steel pan ensemble is a great way to expose students to a wide range of diverse music. Perhaps other world music ensembles should be used to dive deeper into the music and culture of one country or region, while steel pan can be a broader introduction to several styles. While any ensemble could be utilized in a way that exposed students to other styles outside of their normal paradigm, this would most likely not be done as easily as it is done in steel pan ensemble.

When asked the third research question directly, 66% of teachers and 78% of students said yes. As discussed in the previous chapter, almost all participants that answered no did so because even though they valued their experience in steel band, they felt that other ensembles could serve the same purposes. The research question is also rather vague. Clarifying what it meant for an ensemble to be "important" most likely would have yielded more uniform results. Many students seemed to have interpreted important as meaning crucial. Therefore, since programs can be successful without steel pan ensemble, some students deemed it not an important part of a complete college program.

I believe what is really important to take away from the participants' responses is the importance of instructor and student dedication to the group. Both teachers and students expressed that an ensemble with unenthusiastic participants (including both students and teachers) can lead to a less fulfilling experience. Also, although musical learning can happen with inexperienced and unenthusiastic leaders, we have established a connection between the teachers' practices and attitudes with the students' learning. Therefore, for steel pan ensemble to be as effective as possible, the instructor of the ensemble needs to be aware of and appreciate what the ensemble has to offer their students.

To summarize the answer to the third research question, the answer is yes. When taught properly, the ensemble can be an effective and enjoyable way of creating well-rounded musicians who have a deeper appreciation for a wide variety of music. However, the success and importance of the ensemble in collegiate curricula is determined by the attitudes, knowledge, and teaching methods of the instructors.

Discussion

To paraphrase and reiterate the answers of the research questions, it was found that for the participants of this study, steel pan ensemble has a strong positive impact on the students musical learning, their enjoyment of music, and their general well-being. It was also found that the instructor plays an active role in the level of impact the ensemble has on the previously mention areas. Lastly, if executed properly, the ensemble can be an important part of complete college program. Now that the research questions have been answered the new question becomes why is this important and how will this impact the music community.

To begin this discussion I would first like to address the third research question. Although we know that the majority of participants felt that the ensemble was an important part of a complete college program, what is more important to know is why they felt this way. Whether or not the participants felt the ensemble was crucial to their curriculum, the one thing almost everyone agreed on was the importance of the material being taught by the ensemble. This study showed the importance of exposing students to a wide variety of music, teaching students to improvise, giving them opportunities to arrange for ensembles, and providing students with a low-stress atmosphere to enjoy making music.

As stated previously, all these concepts could be taught in other ensembles. However, I don't believe any other ensemble does all the above as efficiently or naturally as steel pan ensemble. This is especially true when led by a passionate and knowledgeable instructor. Although it is not completely necessary for music programs to offer steel pan ensemble, as evident by the many successful music programs that don't, I do believe it could be a beneficial addition to any program.

One of the most significant findings of this study was just how much participants enjoy steel pan ensemble. The extremely high enjoyment ratings from both students and teachers actually made correlation tests less accurate because so many respondents answered with the same ratings (6 and 7). Regardless, these ratings are extremely high for a very large portion of participants. I believe this could be a very interesting area for future research. It would be interesting, as well as relevant, to compare students enjoyment of steel pan ensemble to their enjoyment of other ensembles. By doing so, we could better understand how steel pan ensemble compares to other ensembles. Furthermore, how the students' participation in steel pan ensemble impacts their overall enjoyment of music could also be investigated. If it was found that steel

pan ensemble impacted the students enjoyment of other ensembles it could drastically change the importance of the ensemble. This could be done by comparing a student's enjoyment of orchestra who is also enrolled in steel pan ensemble to a student's enjoyment of orchestra who is not enrolled in steel pan ensemble.

The importance of using improvisation in the ensembles also proved to be an important discovery of this research. I theorize that the role of improvisation in the ensemble is related to its low-stress environment. Students are often afraid of improvising because they are afraid of playing a wrong note or sounding "bad" in front of their peers. This fear is alleviated, at least to some extent, by the low-stress atmosphere of the steel pan ensemble. Furthermore, after a few successful attempts at improvising, students begin to enjoy the experience and desire to improvise more. This trend is shown in the results of chapter 5.

One of the drawbacks, or possibly an advantage, of learning to improvise on pan is that it is usually not the students' primary instrument. This usually means that the students have less technical facility on the instrument and are limited in their ability to improvise. There are some collegiate music programs that require all of their students to learn to improvise using their primary instruments, regardless of the instrumentation. This is usually done by assigning students to combos that correspond with their theory classes. For instance, a combo might have a vocalist, percussionist, cellist, and an oboe player. As this scenario demonstrates, this method can create some unusual combo groups. However, these unconventional combos might be beneficial to students as it may broaden their sense of what is "acceptable" in music.

While this system is certainly innovative and pedagogically sound, I do believe that a steel pan ensemble still has an advantage over it. While students using their primary instrument gives them the opportunity to use their technical prowess, steel pan ensembles gives them the opportunity to improvise in a care-free environment. Some students, and likely the majority, will be more afraid to improvise on their primary instrument because they are expected to sound "good." To these students, sounding "bad" on their primary instrument would be failing. This causes fear and anxiety when improvising. Because steel pan is not their primary instrument, in general, students are less afraid of sounding "bad."

It was discovered in this study that improvisation plays an important role in the students' experience of steel pan ensemble. However, this topic needs to be researched much more thoroughly. The topic of improvisation in music education is an area that has been widely

discussed and researched, but how steel pan ensemble can be used to fit this need still needs to be investigated. The use of steel pan in primary education to teach improvisation has, to a small extent, been researched. However, the use of the instrument at the collegiate level to teach all musicians to improvise remains almost completely unexplored.

Final Thoughts

As stated in the first chapter of this paper, this research was not meant to be an advocacy paper on the importance of steel pan ensembles in every collegiate program in the U.S. It has merely provided a deeper understanding of a few programs as to why, or why not, the students and teachers of those programs value the ensemble and deem it worthy of their curriculum. Steel pan ensemble might not be appropriate for every school. However, I do urge faculty to take an objective look, without any preconceived notions, on what the ensemble has to offer their students.

As discovered in this investigation, the instructor of a steel pan ensemble plays a large role in the success of the ensemble, not only in the quality of performances, but in the musical learning that takes place. Therefore, I urge steel pan ensemble directors to evaluate their teaching methods objectively. By researching the history of the instrument, incorporating improvisation, using student arrangements, and incorporating a wide variety of styles, instructors can ensure a quality student experience. When taught properly by passionate and knowledgeable instructors, steel pan ensemble can be a valued part of any collegiate curriculum.

Bibliography

- Borde, Percival. "The Sounds of Trinidad: The Development of the Steel-Drum Bands." *The Black Perspective in Music* 1 (1973): pp. 45-49.
- Crowley, Daniel. J. "Music from Oil Drums by Pete Seeger." *Ethnomusicology* 3 (1959): 33-34.
- Cruz, Herminio. D. "A Descriptive Study of the Music Programs in Roberto Clemente High School and Selected Feeder Schools as they Relate to Bilingual-Bicultural Education." D.Ed. thesis, University of Illinois at Urbana-Champaign, 1979.
- Dudley, Shannon. *Carnival Music in Trinidad*. New York: Oxford University Press, 2004.

_____. *Music from Behind the Bridge: Steelband Aesthetics and Politics in Trinidad and Tobago*. Oxford: Oxford University Press, 2007.

- George, Kaethe. "Ellie Mannette: A Golden Celebration." *Percussive Notes* 34 (1996): 32.
- _____. "Ellie Mannette: Training Tomorrow's Steel Band Tuners." *Percussive Notes* 32 (1994): 31-32.

_____. "Interview with Ellie Mannette." *Percussive Notes* 43 (1990): 34-38.

Grant, Cy. Ring of Steel: Pan Sound and Symbol. London: Macmillen Education, 1999.

Harris, Scott. "Expanding the Rold of the Steel Drum Band: It's Not Just Another Percussion Ensemble." *Percussive Notes* 46 (2008): 20-21.

- Haskett, Brandon. "A Case Study on the Importance and Value of the Desert Winds Steelpan Program." D.M.A.dissertation, Arizona state University, 2009.
- Martin, Andrew. R. "A Voice of Steel through the Iron Curtain: Pete Seeger's
 Contirbutions to the Steel Band in the United States." *American Music* 29 (2011): 353-380.

_____. "Pan-America: Calypso, Exotica, and the Development of Steel Pan in the United States." Ph.D. dissertation, University of Minnesota, 2011.

_____. "Words of Steel: Pete Seeger and the U.S. Navy Steel Band." *The Journal of New York Folklore*, (2008): 20-28.

- Munro, Martin. *Different Drummers: Rhythm and Race in the America*. Berkeley: University of California Press, 2010.
- O'Connor, G. Allen. "A Brief Survey of Steel Drum Programs in North American Schools." *Percussive Notes* 19 (1981): 58-59.

_____. "Pan: Heartbeat of a Nation," *Percussive Notes* 19 (1981): 54-55.

- Rogers, Lisa. "Elliott 'Ellie' Mannette," *Percussive Arts Society*, http://www.pas.org/experience/halloffame/MannetteElliot.aspx
- Seeger, Pete. *Music from Oil Drums*. Motion Picture. Directed/Performed by Pete Seeger. Ridgefield: CCM Films, 1956. Film.

_____. *Steel Drums, How to Make and Play Them: An Instruction Manual.* New York: Oak Publications, 1964.

Smith, Angela. Steel Drums and Steelbands: A History. Lanham: Scarecrow Press, 2012.

- Stuempfle, Stephen. *The Steelband Movement*. Philadelphia: University of Pennsylvania Press, 1995.
- Svaline, J. Marc. "Ellie Mannette: Master of the Steel Drum." *Teaching Music* 8 (2001): 46-49.
- Tiffe, Janine. "The Arrival of Steel Pan in the United States." *Percussive Notes* 10 (2007).
- _____. "Trinidadian Steel Drum (Pan) Band in the Three Great Lakes States: A Study of Musical Migration." M.M. Thesis, Kent State University, 2006.
- Williams, Kenyon. "Steel Band in American Schools: What They Are, What They Do, and Why They're Growing!" *Music Educators Journal* 94 (2008): 52-57.

Appendix A - Instructor Survey

At your university you are a:

- O Faculty Member
- O Adjunct Faculty Member
- O Graduate Student
- O Undergraduate Student

Besides steel pan ensemble what other duties are part of your position at your university?

Are you the primary steel pan ensemble director at your college or university?

O Yes

Are there other directors associated with your steel pan ensemble?

YesNo

Please list any other faculty or students who are also directors of your steel pan ensemble.

How many members do you have in your steel pan ensemble? If you have multiple ensembles please give the size of each individual ensemble.

What year did your college or university start its steel pan ensemble?

Did you help to create the steel pan ensemble at your current university or did the ensemble already exist when you were appointed?

I helped create the ensemble

O The ensemble already existed

How many hours a week does your steel pan ensemble(s) rehearse?

Please select all the ensembles that your university offers.

U Wind Ensemble/Concert Band	African Drumming
🗌 Orchestra	🗌 Latin Jazz Ensemble
Jazz Band	🗌 Gamelan Ensemble
🗆 Jazz Combos	Other(s) Please specify additional ensembles below
Percussion Ensemble	

How many years of experience do you have playing steel pan?

How many years of experience do you have teaching a steel pan ensemble?

Did you have any steel pan ensemble experiences while you were in college? (If you are a graduate student please apply this only to the schools you previously attended)

O Yes O No

Did you have any experience playing in steel pan ensemble prior to attending college?

O Yes

🔾 No

On the following scale rate your knowledge of the history of the steel pan.

		I know little about the history of steel pan	I know a fair amount about this history of the pan		I know a great deal about the history of the steel pan	
0	0	0	0	0	0	0

On the following scale rate how much time you spend educating your students on the history of steel pan.

No time	Almost no time	Little time	A fair amount of time	A good amount of time	A great amount of time	All of the time
0	0	0	0	0	0	0

On the following scale rate your comfort level for teaching and playing in a steel pan ensemble

	I am highly uncomfortable	I am moderately uncomfortable	I am slightly uncomfortable	I am neither uncomfortable nor comfortable	I am slightly comforable	I am moderately comfortable	I am highly comfortable
Teaching	0	0	0	0	0	0	0
Playing	0	0	0	\odot	0	0	0

On the following scale rate how much you enjoy or dislike teaching and playing in a steel pan ensemble

	I dislike it highly	I dislike it moderately	I dislike it slightly	I neither dislike nor enjoy it	I enjoy it slightly	I enjoy it moderately	I enjoy it highly
Teaching	0	0	0	0	0	0	0
Playing	0	\circ	0	0	0	0	0

What are some aspects that you dislike or like most about steel pan ensemble?

What are some aspects that you think your students dislike or like most about steel pan ensemble?

Is being involved in steel band a requirement of your program?

- \bigcirc Yes for certain music students (list below)
- O Yes for all music students

🔘 No

On the following scale rate how much you think steel pan ensemble affects your typical student in the following areas.

	Highly negative impact	Moderately negative impact	Slightly negative impact	Neither negative nor positive impact	Slightly positive impact	Moderately positive impact	Highly positive impact
Their sense of rhythm	0	0	0	0	0	0	0
Their ability to listen and balance in an ensemble	0	\bigcirc	0	0	\bigcirc	0	0
Their understanding of harmony and voicing	0	\bigcirc	0	0	\bigcirc	0	\bigcirc
Their melodic development (their ability to create a melody)	0	\bigcirc	0	0	\bigcirc	0	0
Their appreciation of world music	0	\odot	0	\odot	0	\odot	0

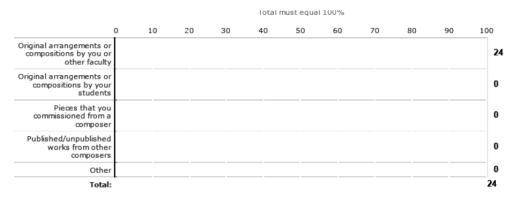
How often do you arrange or compose for steel pan ensemble?

Never	Less than once every other year	About once every other year	About once a year	About twice a year		More than five times a year
\bigcirc	\odot	\odot	0	\odot	\bigcirc	\odot

How often does one of your students arrange or compose for steel pan ensemble? (i.e. if you have three students a year arrange one piece you would then select three to five times a year)

	Less than once	About once every			Three to five times	More than five times
Never	every other year	other year	About once a year	About twice a year	a year	a year
0	0	0	0	0	0	0

What percentage of your literature is:



What percentage of your literature would you classify as the following styles:



On the following scale rate how much you feel steel pan ensemble effects your students understanding of the above mentioned styles.

Highly negative	Moderately negative	Slightly negative	Neither a positive	Slightly positive	Moderately positive	Highly positive
impact	impact	impact	nor negative impact	impact	impact	impact
0	0	0	0	0	0	\odot

What percentage of your literature is taught by:

(If you have more than one section of steel pan ensemble that use different methods please use this question for your top ensemble.)

		Must equal 100%									
	0	10	20	30	40	50	60	70	80	90	100
Conventional weste music notat											0
A method of notati specific to your progr											0
By re	ote										0
Oth	ner										0
Tol	al:										0

What percentage of your literature is taught by: (Only answer if you have more than one section of steel pan ensemble that use different methods. Use this question to represent your ensembles other than your top ensemble.)

Must equal 100%

	0	10	20	30	40	50	60	70	80	90	100
Conventional weste music notati											0
A method of notati specific to your progra											0
By ro	te										0
Oth	er										0
Tot	al:										0

Do you have any specific college programs or colleagues that you reference to find new literature? If yes please specify.

0	Yes
0	No

What companies, businesses, or individuals do you use to purchase materials for steel pan ensemble? (Pans, Mallets, Stands, music, etc)

How often is improvisation practiced in rehearsal?

Never	Almost never	Rarely	Sometimes	Frequently	Almost all of the time	All of the time
0	\odot	\bigcirc	0	\odot	\bigcirc	\bigcirc

What are your primary reasons and considerations when deciding how much time to spend on improvisation?

Do your students play the same instrument all semester or do they rotate between instruments?

 $\,\bigcirc\,$ All students play the same instrument all semester

- A few students will rotate
- Many students will rotate
- All students will rotate

What are your primary reasons and considerations when deciding whether or not to rotate students between instruments?

How many performances on average does your steel pan ensemble perform per year? If your university has more than one ensemble use your top ensemble for this question.

What percentage of your performances are:

		Must equal 100%									
	0	10	20	30	40	50	60	70	80	90	100
On Campus Concert	s										0
Off campus concert (steel pan ensemble the focal point. Includ music festivals	e										C
Playing for a specia event (weddings ceremonies, etc.	в,										0

Do you feel that steel pan ensemble has been an important part of your student's musical development? Why or why not?

Do you feel that steel pan ensemble offers your students anything they don't get or don't get as much of from other ensembles? If yes please specify.

Do you feel that steel pan ensemble is an important part of a complete college program? Why or why not?

Would it be acceptable if I contacted to elaborate on some of your answers? If yes please include your email address. All material from this survey as well as future correspondents will remain confidential.

Yes
No

Appendix B - Student Survey

	apply)
Music Education	Musicology
Music Performance	Ethnomusicology
Music Composition	Other Music Based Major (please specify)
O Music Therapy	Other Non Music Based Major (please specify)
What is your primary instrument?	
)o you have any secondary instrun	nents? If yes please list them below
What year of school are you curren	tty enrolled in?
🔘 Freshman	O 2nd Year Senior+
 Freshman Sophmore 	 2nd Year Senior+ Master's Student
) Sophmore	⊖ Master's Student
 Sophmore Junior Senior 	O Master's Student
 Sophmore Junior Senior 	⊖ Master's Student
 Sophmore Junior Senior 	O Master's Student
 Sophmore Junior Senior How many semesters have you been to be a second secon	O Master's Student O DMA/PHD Student In a college steel pan ensemble? Including the current semester of sch
Sophmore Junior Senior How many semesters have you bee	O Master's Student

What instrument(s) have you played in steel pan ensemble? Include all instruments you have played previously.

Tenor/Lead	Quadraphonics
Double Tenors	Bass Pans
Double Seconds	Drum Set/Engine Room
Guitar	Other (please specify
Cello	

Have you ever participated in a world music ensemble other than steel pan ensemble? If yes please specify below.

\bigcirc	Yes
0	No

On the following scale rate your knowledge of the history of the steel pan

I know nothing	I know almost nothing about the	I know a little about	I know a fair amount about the	I know a good amount about the		I consider myself an expert on the
		the history of the steel pan				
0	0	0	0	0	0	0

On the following scale rate how much you enjoy playing in steel pan ensemble.

I dislike it highly	I dislike it moderately	I dislike it slightly	I neither enjoy nor dislike it	I enjoy it slightly	I enjoy it moderately	I enjoy it highly
0	0	0	0	0	0	0

What are some of the aspects you dislike or like most about steel pan ensemble?

		la la

On the following scale rate how much steel pan ensemble effects you in the following areas.

	Highly negative impact	Moderately negative impact	Slightly negative impact	Neither a positive nor negative impact	Slightly positive impact	Moderately positive impact	Highly positive impact
Your sense of rhythm	0	0	0	0	0	0	0
Your ability to listen and balance in an ensemble	0	0	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
Your understanding of harmony and voicing	0	0	0	0	0	0	\bigcirc
Your appreciation of world music	0	0	0	\odot	0	\odot	0

Have you ever composed or arranged for steel pan ensemble?

) Yes

🔘 No

How often would you say improvisation is practiced in rehearsal?

Never	Almost never	Rarely	Sometimes	Frequently	Almost all of the time	All of the time
0	0	\odot	0	0	0	0

Would you prefer it if your ensemble spent more, less, or the same amount of time on improvisation?

MoreLessSame

Do you feel that steel pan ensemble has been an important part of your musical development? Why or why not?

Do you feel that steel pan ensemble is an important part of a complete college program? Why or why not?

Does steel pan ensemble offer you anything that you don't get or don't get as much of from other ensembles? If yes please specify.

Would it be acceptable if I contacted you to elaborate on some of your responses? If yes please include your email address. All material from this survey as well as future correspondents will remain confidential.

0	Yes		
0	No		

If you wish to be entered for a chance to win an Itunes gift card please include your email address below.

Appendix C - Informed Consent Statement

Faculty Version

(Name of instructor),

My Name is Ben Yancey and I am the percussion Graduate Teaching Assistant at Kansas State University. I am currently doing research on the perceived impacts of the inclusion of Steel Pan Ensemble in Collegiate Curriculum in the Midwest. Your participation of the attached survey could help us to better understand the benefits, if any, of offering steel pan ensemble in college curriculum as well as how teaching methods effect the student's experience. The survey should take around ten minutes to complete. Your participation is completely voluntary and your responses will be kept confidential. You may quit the survey at any time should you decide you no longer wish to participate. To take the survey simply click on the link below answer the questions based on your own experiences and opinions. By continuing on and completing the survey you are consenting to participating in this research. If you have any questions or concerns please contact me at BPYancey@ksu.edu. Your input will be highly valued and appreciated, thank you for your time!

Ben Yancey

Student Version

Students of (name of institution),

My name is Ben Yancey and I am the percussion Graduate Teaching Assistant at Kansas State University. I am currently doing research on the perceived impacts of the inclusion of steel pan ensemble in Collegiate Curriculum in the Midwest. Below is a link to a survey that you may complete to help with my research. The survey should take around ten minutes to complete. Should you choose to participate in my research and complete the following survey you will be entered into a raffle for a chance to win an iTunes gift card. Ten gift cards will be given away in total.

Your participation could help us to better understand the benefits, if any, of offering steel pan ensemble in college curriculum as well as how teaching methods effect the student's experience. Your participation is completely voluntary and your responses will be kept confidential. You may quit the survey at any time should you decide you no longer wish to participate. To take the survey simply click on the link below answer the questions based on your own experiences and opinions. By continuing on and completing the survey you are consenting to participate in this research. If you have any questions or concerns please contact me at BPYancey@ksu.edu. Your input will be highly valued and appreciated, thank you for your time!

Ben Yancey

Appendix D - Additional Ensemble Demographics

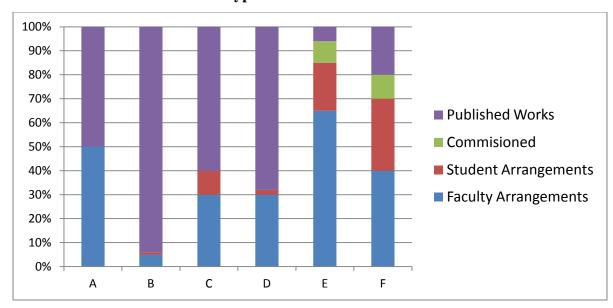
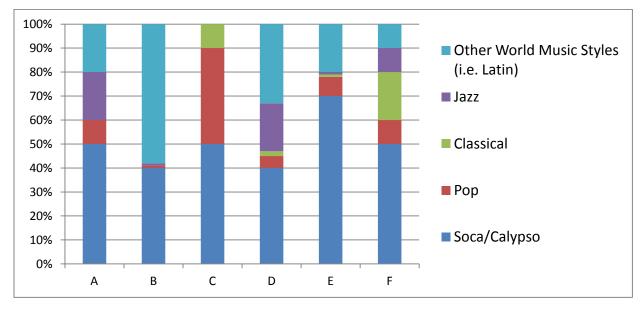


Table 0.1 Ensemble Literature Types

Table 0.2 Ensemble Literature Styles



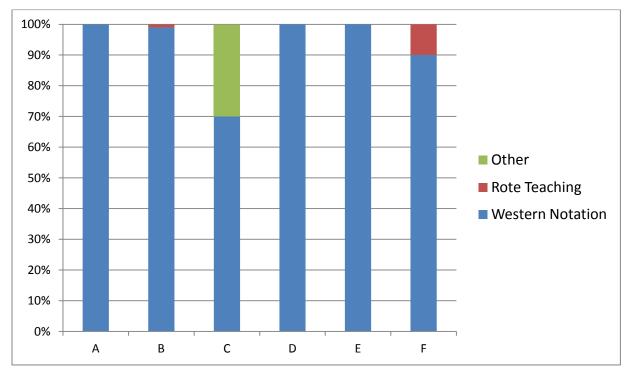
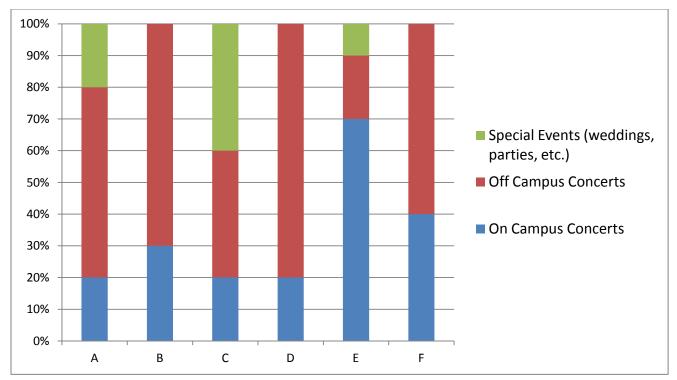


Table 0.3 Ensemble Methods of Instruction

Table 0.4 Ensemble Concert Venues



Appendix E - Companies, Colleges, and Other resources

The following are the responses given by instructors on which companies and programs they use and reference when finding new literature, buying new instruments, and maintaining instruments.

Table 0.5 Literature Companies

Engine Room Publishing - www.engineroompublishing.com Mau Mau Music - www.maumaumusic.com Pan Ramajay Productions - www.ramajay.com Panyard - www.Panyard.com

Table 0.6 Instrument, mallet, and hardware Companies

Cliff Alexis - No personal website, email at steel@niu.edu Coyle Steel Drums - www.Coyledrums.com Innovative Percussion - www.InnovativePercussion.com MalletMan Custom Pan Products - www.MalletMan.biz Mannette Instruments - www.MannetteInstruments.com Panyard - www.Panyard.com

Table 0.7 University Steel bands Referenced to

N I U Steel band - http://www.niu.edu/Music/ensembles/steelband.shtml U. of Iowa Steel Band - http://music.uiowa.edu/ensembles/percussion-ensembles