THE INDIVIDUAL AND COLLECTIVE PROGRAMMATIC CHARACTERISTICS
OF FIVE SELECTED STRING ACADEMIES IN THE UNITED STATES

BY

AARON MATTHEW JACOBS

DISSEYATION

Submitted in partial fulfillment of the requirements
for the degree of Doctor of Musical Arts in Music
with a concentration in Performance and Literature
in the Graduate College of the
University of Illinois at Urbana-Champaign, 2016

Urbana, Illinois

Doctoral Committee:

Professor Erik Lund, Chair
Professor Louis Bergonzi, Director of Research
Professor Charlotte Mattax Moersch
Clinical Assistant Professor Megan Freivogel McDonough
Abstract

This intrinsic case study examines the individual and collective programmatic characteristics of five selected string academies that implement a curriculum developed by Mimi Zweig of the Indiana University Jacobs School of Music. The curriculum, available at stringpedagogy.com, is heavily influenced by the work of Paul Rolland and Shinichi Suzuki. The research focused on six characteristics of the academies: instructional program, geographic and physical setting, organizational structure and administration, finances, student recruitment, and personnel. The analysis process generated an additional key characteristic: faculty and student activities in the community. Data were gathered from online sources, archival documents, and extensive interviews and email correspondence with the five site directors, as well as other string academy faculty and staff.

The study interprets string academies in the broader context of stringed instrument instruction in the United States and elucidates the evolution of string academy organization and instructional practices. As models of community-based stringed instrument instruction, string academies exhibit characteristics of independent music schools, divisional music schools of collegiate music units, and string programs built on Rolland and Suzuki’s pedagogies. They operate with varying degrees of autonomy from larger institutions and have demonstrated their ability to adapt to different settings and institutional expectations. They frequently participate in apprenticeship-model studio teacher preparation in classroom and laboratory settings, in conjunction with local universities. The string academy model evolved from instructional offerings dedicated to the violin, and all published curricular materials focus primarily on this instrument. Diversification of the pedagogical approach of string academies has resulted in its
adaptation for use in American public school settings and for teaching the viola, cello, and, to a lesser degree the double bass.

Teachers at the five string academies employ a common pedagogical approach, and all site directors commented on the importance of teachers being philosophically and pedagogically aligned, a characteristic that string academies share with Suzuki programs in the United States. String academies’ legacy connection to Mimi Zweig and her work has not inhibited adjustments of the curriculum or programmatic structure in response to local circumstances and settings. As a result, string academies display a combination of flexibility and faithfulness to Zweig’s core pedagogical principles.
Acknowledgments

First and foremost, I am eternally grateful for the patience and unwavering support of my wife, Tatiana, and son, Pavel, who endured the many interspersed weeks and months during which I was largely unavailable due to the solitary demands of writing this document. I am grateful to my parents, who kept me practicing all those years and who provided the foundation for who I am today. I am grateful to my many instructors and professors over the years, particularly the two who I believe have had the most lasting and positive impact on my professional life: Dr. Penny Thompson-Kruse and Vasile Beluska.

I am indebted to my research advisor, Dr. Louis Bergonzi, who has a knack for asking the most difficult questions and who inspired me to push beyond the boundaries of my own perceived research capabilities. I remember with gratitude Dr. Reid Alexander, whose untimely death prevented his membership on my committee, but whose 1997 dissertation was one of the most influential and important sources I reviewed. I want to thank the members of my doctoral committee, Megan Freivogel, Dr. Erik Lund, and Dr. Charlotte Mattax Moersch, and I thank Dr. Marc Baldwin for providing such efficient and exceptional editing assistance.

I would like to extend a very special thank you to Dr. Brenda Brenner, Darcy Drexler, Rebecca Henry, Sherry Siniit, Stacia Spencer, and Mimi Zweig for their permission, time, patience, encouragement, and remarkable openness. Without these inspirational mentors and pioneers in the field of string pedagogy, the present study would not have been possible.
TABLE OF CONTENTS

CHAPTER 1: INTRODUCTION .............................................................................................................. 1
  Site Selection and Overview ........................................................................................................... 2
  The Pedagogy ................................................................................................................................. 10
  Need for the Study ......................................................................................................................... 14
  Purpose of the Study ...................................................................................................................... 15
  Definition of Terms ....................................................................................................................... 15
  Positionality of the Researcher ...................................................................................................... 16
  Limitations .................................................................................................................................... 19

CHAPTER 2: REVIEW OF RELATED LITERATURE .............................................................................. 24
  Community-based Arts Instruction in the United States .............................................................. 24
  Characteristics of Rolland and Suzuki Programs of Instruction ................................................. 37
  String Academies ......................................................................................................................... 54
  Chapter Summary ......................................................................................................................... 55

CHAPTER 3: METHODOLOGY ........................................................................................................... 61
  Research Methods ......................................................................................................................... 61
  Data Collection ............................................................................................................................. 63
  Trustworthiness ........................................................................................................................... 64
  Data Analysis ............................................................................................................................... 65
  Ethics and Human Subjects Review ............................................................................................ 65

CHAPTER 4: FINDINGS ..................................................................................................................... 66
  Instructional Program .................................................................................................................... 66
  Geographic and Physical Setting ................................................................................................. 112
  Faculty and Student Activities in the Community ....................................................................... 119
  Organizational Structure and Administration ............................................................................ 122
  Finances ....................................................................................................................................... 134
  Student Recruitment .................................................................................................................... 151
  Personnel ..................................................................................................................................... 154

CHAPTER 5: SUMMARY AND DISCUSSION ...................................................................................... 170
  Summary of Findings .................................................................................................................... 171
  Discussion ..................................................................................................................................... 187
  Recommendations for Future Research ....................................................................................... 216
  Coda .............................................................................................................................................. 218

REFERENCES ..................................................................................................................................... 219

APPENDIX A: INTERVIEW QUESTIONS .......................................................................................... 233

APPENDIX B: INSTITUTIONAL REVIEW BOARD LETTER .............................................................. 237
APPENDIX C: BALTIMORE OFFERINGS................................................................. 238
APPENDIX D: SEQUENCES OF GROUP INSTRUCTION ................................. 245
APPENDIX E: MASTER CLASS PRESENTERS AND ARTISTIC ADVISORS ...... 250
APPENDIX F: FIGURE 2 CALCULATIONS ............................................................ 252
APPENDIX G: SITE DIRECTOR PROFILES....................................................... 254
CHAPTER 1
INTRODUCTION

In 2005, I earned a bachelor’s degree in music education from Bowling Green State University (BGSU) in Ohio. While continuing at BGSU for an additional year to pursue an artist’s certificate in violin performance, I was free from the demands of academic courses, so I pursued a violin instructor opening at a local community music school.

One would think that I had developed all of the necessary expertise to do this job well. After all, I was a Suzuki-trained violinist from age four and had Suzuki teacher training under my belt. I was an experienced private teacher of middle- and high-school students. I had done my student teaching in the public schools (grades 6–12) and was now a state-certified practitioner with a music education degree. I was confident … that is, until an entire waiting list of students was dropped in my lap—a dozen beginning violin students age three to seven. Stress! I soon realized that my experience with beginners was deficient at best, and I was quickly overwhelmed by the difficulties of teaching such young children.

In a panic, I began researching childhood psychology, sought advice from my mentors, and scoured the Internet and libraries for resources. I eventually stumbled across an original curriculum that incorporated Shinichi Suzuki’s repertoire and philosophy. It was Mimi Zweig’s stringpedagogy.com.

I was intrigued. Here was a curriculum that tied into my background in Suzuki and that matched my fledgling philosophies as a teacher, but that offered so much more. Many late nights of study and planning my instruction started to pay off. I began
incorporating the logical progression of beginning repertoire from the website, which I found greatly enhanced my students’ learning of the musical and pedagogical concepts of rhythm, ear training, note reading, and musical form. Furthermore, while many of my instructional activities had been far too complicated for such young learners to understand and execute successfully, now everything was easy for them and their progress accelerated quickly. Whereas previously my students would squirm and struggle to concentrate, now they were engaged! They began to develop a great love for playing the violin and looked forward to their lessons and daily practice. Finally, I had achieved some success and a new passion for working with children was born.

This was the beginning of my decade-long journey in violin and viola pedagogy, research, and program development, all of which motivated the present intrinsic case study as well as my creation of a violin and viola program for children and young adults at the University of Illinois.

**Site Selection and Overview**

The examples of community-based programs of stringed instrument instruction chosen for this study are the oldest and most developed programs influenced by Mimi Zweig and her work at Indiana University’s (IU) Jacobs School of Music String Academy (Figure 1) in Bloomington, Indiana. Zweig, an IU violin and viola professor, created the string academy there in 1976 and went on to establish a second program, the Young Violinists and Cellists Program (YVCP) at the Wisconsin Conservatory of Music in Milwaukee, Wisconsin, in 1982. In 1990, the YVCP was reorganized as an independent music school and renamed the String Academy of Wisconsin.
Three additional sites influenced by the Jacobs School of Music String Academy model have been chosen for this study: the String Academy of Wyoming in Laramie, Wyoming; the Strings Division of the Music Academy at Northwestern University Bienen School of Music in Evanston, Illinois; and the String Department of The Peabody Preparatory of The Johns Hopkins University in Baltimore, Maryland. At this last site, three distinct string programs within The Peabody Preparatory String Department fall within the scope of this study since they were all influenced by Zweig’s string academy model: the Young People’s String Program (YPSP), the Performance Academy for Strings (PAS), and the Pre-Conservatory Violin Program (PCVP).

![Timeline of sites covered in this study.](image)

In this chapter, I will first examine the origins and leadership at these five sites, starting with Mimi Zweig and the history of the Jacobs School of Music String Academy. For each of the other sites, I discuss the initiation of the program(s), each site director’s relationship to Mimi Zweig, and his or her experience with the string academy model.
Mimi Zweig and the String Academy Model

Mimi Zweig has been developing precollege string programs across the United States since 1972. She also had a successful career as a professional performer, playing with the American Symphony, Syracuse Orchestra, Piedmont Chamber Orchestra, and Indianapolis Symphony (Zweig, 2007, p. 49). Many of her students have won major competitions, and have performed as soloists with and as members of leading orchestras and string quartets throughout the world (Stephan Shipps, quoted in Zweig, 1991, p. 63).

Zweig’s first experience in program development came in 1972, after she moved to Winston-Salem, North Carolina to perform with the Piedmont Chamber Orchestra at North Carolina School of the Arts (Patrick, 2005). There, she became an assistant teacher with Nancy Kredel (a former student of noted violinist and pedagogue Paul Rolland) and assisted in the development of a string program for children in the Winston-Salem school system (Wheeler & Zweig, 2007, p. 2). Zweig also spent two years creating a program for children in Pittsburgh before moving to Bloomington (Patrick, 2005; M. Zweig, personal communication, November 9, 2015).

Zweig described her initial inspiration for what would become the Jacobs School of Music String Academy:

The first vision for the String Academy was based on attending the concert that Betty Hague [well-known Suzuki teacher and IU graduate] presented in 1975. She came to Bloomington with her performing group. And that gave me a vision of—well, oh my gosh, this is what I want to do, to have kids that play this way, play together, play solos, to travel throughout the states and to see that they are having fun. So this was the initial vision for the String Academy. I was clueless as to what the future would hold. (M. Zweig, personal communication, September 22, 2014)

During her first year in Bloomington, Zweig began with six students (Wheeler & Zweig, 2007, p. 15). When the program became associated with the university in fall
1976, Zweig began teaching group classes in addition to private lessons. By this point, her studio had grown to about 15 students; by 1980 there were so many students that she had to hire her first assistant (M. Zweig, personal communication, September 22, 2014). As of 2007, the academy had grown to 160 violin and cello students (Wheeler & Zweig, 2007, p. 15).

During the early years of the Bloomington string academy, Zweig was living in Indianapolis, serving as assistant principal viola in the Indianapolis Symphony, and commuting to Bloomington to teach. In 1978, Zweig was offered a lecturer position at IU; she began teaching pedagogy courses in 1980 and also served as an instructor of university viola students for many years (M. Zweig, personal communication, July 27, 2013). Today, Zweig is a full professor and member of the violin/viola faculty at the Indiana University Jacobs School of Music.

The Jacobs School of Music String Academy at Indiana University

The Jacobs School of Music String Academy operates within the Indiana University Jacobs School of Music. The distinctive organization of the instruction delivered constitutes an important part of the academy’s model. Each week, students have a private lesson and a group class. Beginning students have an additional lesson, called the “helper lesson.” This is a private lesson given by a university student who is taking a string pedagogy class and is observing the academy students’ private lessons with string academy faculty (Wheeler & Zweig, 2007, p. 15). Private lessons start at 30 minutes in length, with an hour-long group class. Both instructional periods expand in duration commensurate with a student’s advancement.
One prominent feature of the String Academy is an ensemble of its most advanced students, known as the Violin Virtuosi. “The Violin Virtuosi perform a number of concerts outside of Bloomington. Highlights of the last few years have been tours of France, Spain, Sweden, Italy and Japan, a concert at Carnegie Recital Hall and an appearance on the National Public Radio show, ‘From the Top’” (Wheeler & Zweig, 2007, p. 15). In 2006, the Violin Virtuosi received special attention from PBS television in the form of a documentary, *Circling Around: The Violin Virtuosi* (Isoda, 2006), broadcasted on more than 200 public television stations (Zweig, 2007, p. 49). The documentary followed 11 students who were members of the Violin Virtuosi under Zweig’s direction (Zweig 2007, p. 49). The name of this group changes to simply Virtuosi when cello students are incorporated (M. Zweig, personal communication, July 27, 2013).

**The String Academy of Wisconsin at the University of Wisconsin–Milwaukee**

Also founded by Mimi Zweig, the String Academy of Wisconsin began as the Young Violinists and Cellists Program (YVCP), a program of the Wisconsin Conservatory of Music in Milwaukee, Wisconsin, in 1982. In 1990, financial difficulties at the conservatory caused the constituents of the YVCP to decide to start anew as a nonprofit independent music school, the String Academy of Wisconsin (SAW) (Zweig, 1991, p. 63).

In a September 1990 article, Tom Strini recorded Mimi Zweig’s sentiments at the time:

We left with very heavy hearts. … It looked for a while as if the conservatory would close its doors entirely, and here I had brought all these people in to teach. The insecurity precipitated a new home for my program. … Everything was aboveboard. … The conservatory knew what we were doing, and they were
sympathetic. The board members said that they would do the same thing in my position. (Zweig quoted in Strini, 1990)

With only two months between the split and the beginning of the academic year, much had to be done to organize the new string academy. The first priority was to secure a new location, and the nearby University of Wisconsin–Milwaukee (UWM) was selected:

UWM saw the advantages of a connection with the string academy: the academy would be a source of recruiting new students to the university, would justify the use of space, and would serve as a community outreach program. It was determined that UWM was interested, and a commitment was made to the string academy. (Zweig, 1991, p. 63)

Ensuing efforts focused on forming an advisory board and board of trustees, setting up faculty benefit packages, and initiating fundraising efforts (Zweig, 1991, pp. 63-64).

In fall 1996, Darcy Drexler became the academy’s director. Drexler had been a faculty member since 1986 and had assisted in founding the String Academy of Wisconsin in 1990. In fall 1999, UWM and the SAW partnered in creating a master’s degree program in string pedagogy. Both UWM and SAW faculty members teach courses in this program. Zweig continues to serve as artistic advisor, visiting Milwaukee on a regular basis.

**The String Department of The Peabody Preparatory of The Johns Hopkins University**

The Peabody Preparatory is a division of The Peabody Institute of The Johns Hopkins University in Baltimore, Maryland. The current String Department Head of The Preparatory, Rebecca Henry, was hired in 1987 and tasked with revamping the String Department’s offerings. Henry was well prepared to do this as she was Zweig’s first assistant at IU in 1980 and subsequently served as lecturer for the IU School of Music
and assistant director of the Young Violinists Program (the former title of the Jacobs School of Music String Academy) from 1982 to 1987.

Under Henry’s leadership, The Peabody Preparatory String Department has reorganized its offerings, gradually adding new programs and revamping existing ones. These steps were taken in accordance with the twofold mission of The Peabody Preparatory:

[The Preparatory] offers gifted children and adolescents the opportunity to realize their highest potential as leaders of the next generation of performing artists. In addition, it provides an education in music and dance to all members of the community who desire it, regardless of age, professional intention, or previous training. This dual mission is based upon the notion that every individual has the capacity for artistic expression at some appropriate level of understanding and skill. (Johns Hopkins Peabody Institute, n.d.-a)

Three programs of The Peabody Preparatory String Department are largely aligned with the first portion of this mission and fall within the scope of this study, due to the influence of Zweig’s string academy model: the Young Peoples String Program (YPSP), the Performance Academy for Strings (PAS), and the Pre-Conservatory Violin Program (PCVP).

Henry developed the YPSP in 1987, focusing her initial efforts on beginning students and adding string ensembles and other performance opportunities for students over the ensuing 20 years as the program grew (R. Henry, personal communication, July 7, 2013). In 2007, the String Department received funding from the Dorothy and Richard Starling Foundation to develop the PCVP to “support and challenge the most advanced, serious, and gifted violinists at the Preparatory. Young artists in this program are playing at the advanced level and display the artistic potential to pursue a performance career in
music” (Johns Hopkins Peabody Institute, n.d.-m). In 2010, the String Department created the PAS for upper intermediate and advanced string students in grades 7–12.

In accordance with the two-part mission of The Peabody Preparatory, the String Department provides several additional programs so that any student, regardless of his or her level of playing or seriousness, may find a niche and receive instruction. Additionally, The Preparatory offers workshops for teachers and collaborates with The Peabody Conservatory to prepare future music professionals through associated string pedagogy courses and internships.

**The String Academy of Wyoming**

The String Academy of Wyoming was initiated in 1994 as part of the Community Service Education division of the University of Wyoming in Laramie (S. Sinift, personal communication, July 11, 2013). Due to university budget cuts, the Community Service Education division was discontinued in 2009. To sustain the String Academy, its founder and director, Sherry Sinift, elected to reorganize it as an independent music school. Legally, the String Academy of Wyoming is an S corporation, and it rents instructional space at a local civic center (S. Sinift, personal communication, July 11, 2013).

Sinift’s experience with the string academy model began in 1980 while she was pursuing a master’s degree at Indiana University, as a student of Mimi Zweig, and concurrently serving as Zweig’s assistant in the Young Violinists Program. In 1983, Sinift moved to Milwaukee at Zweig’s invitation to teach in the Young Violinists and Cellists Program at the Wisconsin Conservatory of Music. She stayed there for a decade and assisted in the founding of the String Academy of Wisconsin in 1990 before relocating to Laramie in 1993. In addition to directing the String Academy of Wyoming,
Sinift is also an academic professional lecturer in the School of Music at the University of Wyoming, teaching studio violin and a series of string pedagogy courses. Students in those courses observe and have opportunities to assist with instruction at the String Academy.

**The Strings Division of the Music Academy at the Northwestern University Bienen School of Music**

The Music Academy operates within the Northwestern University Bienen School of Music. In 1995, Stacia Spencer was appointed as coordinator of the Strings Division of the Music Academy and senior lecturer for the Bienen School of Music, where she teaches string pedagogy courses (S. Spencer, personal communication, July 29, 2013). Spencer’s string pedagogy courses are linked to the Music Academy’s string offerings in much the same way as at the other four sites.

Stacia Spencer had been a viola student and graduate assistant to Mimi Zweig from 1985 to 1987 while pursuing a master’s degree in viola performance at IU, and she succeeded Rebecca Henry as assistant director of the Young Violinists Program at IU from 1987 to 1993, also serving as an assistant professor at the IU School of Music during that time (S. Spencer, personal communication, July 29, 2013). In 1993, Spencer started a string program at Sherwood, the Community Music School at Columbia College Chicago, prior to her appointment at Northwestern two years later.

**The Pedagogy**

A distinct feature of the five sites investigated for this study is use of the curriculum developed by Mimi Zweig, which blends the pedagogy, musical vision, and teaching philosophies of several of her influences, such as Shinichi Suzuki, Paul Rolland,

The contributions of Suzuki and Rolland had the greatest influence on Zweig’s curriculum and her string academy model. Suzuki’s influence is observed in the incorporation of his teaching philosophy, parental involvement, group instruction, and repertoire. Two key concepts listed on stringpedagogy.com are derived from Suzuki’s teaching philosophy:

1. All children are encouraged to strive for their potential. Given the right environment, any child can learn to do anything, and in particular, to play the violin. This musical environment includes supportive and actively involved parents, listening to good music from an early age (including the early violin pieces), and good instrumental training. …

2. Children can learn to do anything given enough repetitions in an encouraging environment. As a result, practice is based upon the number of repetitions rather than the quantity of time. (Wheeler & Zweig, 2007, p. 14)

Rolland was professor of violin and string pedagogy at the University of Illinois at Urbana-Champaign from 1945 until his death in 1978. His 40-year career comprised work as a “performing artist, pedagogue, researcher, editor, author, clinician, arts advocate, administrator and a leader in music organizations” (Fanelli, 2001, p. 2). Rolland’s influence permeates the mechanics of how the violin is taught through the use of natural physical motions of the body, which reduce physical tension; concepts of developing rhythm and pulse are also incorporated, as well as repertoire from *New Tunes for Strings*, composed by Stanley Fletcher in collaboration with Rolland (Wheeler & Zweig, 2007, p. 14).

Zweig noted that Rolland’s series of films, *The Teaching of Action in String Playing*, “changed my life” (Zweig, 2011, p. 20). She further commented:
Even though I met Paul Rolland only one time in the early 1970s, he remains one of the most influential voices in my teaching. … Rolland had the genius to recognize that what we teach in the first lessons sets the stage for everything to come. He was one of the first pedagogues to discuss free physical motions of the body and its importance to playing musically with technical fluidity. (Zweig, 2011, p. 20)

Additionally, elements of traditional string pedagogy are incorporated such as developing note-reading skills at an early age, the use of scales and etudes, and a varied repertoire. Above all else, however, Zweig persistently emphasizes one key concept: “The glue that holds all the information together is teaching, practicing, and performing in a nonjudgmental environment. This environment allows students the freedom to make mistakes, recognize the mistakes, and correct the mistakes with the many necessary repetitions” (Zweig, 2007, p. 49).

The pedagogy, documented at stringpedagogy.com, is presented in five volumes, although volume 3 is still in development (Wheeler & Zweig, 2002–2015). Volume 1A describes Zweig’s approach, explains how concepts from Suzuki and Rolland are emphasized in the curriculum, describes instruction at the Jacobs School of Music String Academy, and presents a detailed strategy for teaching the violin from the beginning stages through “Twinkle, Twinkle, Little Star” and the variations, the first selections included in Suzuki book 1 (Wheeler & Zweig, 2007). Volume 1B is an intricate guide to teaching Suzuki violin books 1 and 2, along with descriptions of group class content, with specific lesson plan examples for group classes (Wheeler & Zweig, 2007). Volume 2 is the most extensive and departs from the Suzuki repertoire to focus on etudes by Rodolphe Kreutzer, scales, shifting, finger dexterity, vibrato, and additional repertoire (Wheeler & Zweig, 2007). These three sections together include over 70 video recordings to demonstrate various concepts with students, and they were the first volumes to be
displayed when stringpedagogy.com went live in 2002 (Wheeler & Zweig, 2002–2015). The sections can be downloaded in pdf format (which includes text only). A DVD containing both text content and video clips is also available (Wheeler & Zweig, 2002–2015). Until September 2015, a membership at stringpedagogy.com cost $75 a year. However, content can now be viewed on the website free of charge, thanks to recent sponsorship by Connolly Music and Thomastik Strings (M. Zweig, personal communication, November 9, 2015).

Volume 5 was created by Brenda Brenner (a co-director of the Jacobs School of Music String Academy) and appeared in 2009. It details the use of Volume 1A content for use in homogeneous or heterogeneous classroom settings, extending the violin curriculum to instruction on the viola, cello, and double bass (Wheeler & Zweig, 2002–2015). Volume 4, released in 2015, features explanations from Susan Moses (the other co-director of the Jacobs School of Music String Academy) with regard to choosing the correct cello size for students, positioning the instrument, posture, bowing, and practice techniques, as well as associated video clips and sample lessons (Wheeler & Zweig, 2002–2015).

Additional features of stringpedagogy.com include suggested articles, repertoire lists, a forum, a marketplace, and a list of teachers approved by Mimi Zweig organized by country and U.S. state (stringpedagogyconnect.com) to assist students and parents searching for a teacher (Wheeler & Zweig, 2002–2015). Volume 3 is intended to be a more extensive and detailed chapter on cello pedagogy (M. Zweig, personal communication, November 9, 2015). Other future plans include a chapter on instrument
maintenance and editions in Korean and Spanish (M. Zweig, personal communication, November 9, 2015).

Need for the Study

The literature on string pedagogy contains extensive work on the contributions of Suzuki and Rolland that undergird the curriculum of string academies. Furthermore, Zweig’s own website describes her curriculum in great detail. However, little information is available about the programmatic characteristics of this group of string academies beyond their websites and a few short articles. To date, only one source has provided a written account of the academies’ programmatic development: a 1991 article by Zweig in the American String Teacher on the initiation of the String Academy of Wisconsin (Zweig, 1991). That 25-year-old source does not provide an accurate picture of the Wisconsin program today, let alone the others created by Zweig’s colleagues.

An analysis of the string academy model and its adaptation to new settings beyond Bloomington is warranted as the influence of Mimi Zweig and the Jacobs School of Music String Academy continues to grow. The information obtained in this study could help other communities seeking to create additional programs in the future by providing details on how string academies operate within different contexts.

Although this study is of significant value to the realm of string pedagogy, it was also of immediate value for me, as I am currently developing a string academy at the University of Illinois at Urbana-Champaign. By documenting and comparing the characteristics of five string academies, I have acquired invaluable insight that has aided my project and will continue to enhance my future professional endeavors.
Purpose of the Study

The purpose of this study is to describe and provide an analytical perspective on the individual and collective programmatic characteristics of five selected string academies. The following characteristics were identified prior to data gathering to focus the research:

A. Instructional Program
B. Geographic and Physical Setting
C. Organizational Structure and Administration
D. Finances
E. Student Recruitment
F. Personnel

The analysis process generated an additional key characteristic: Faculty and Student Activities in the Community. See Appendix A for the question protocol.

Definition of Terms

Collegiate music unit. A college, conservatory, department, institute, or school of music that is a unit of a larger degree-granting institution such as a university.

Divisional music school. A community music program operated by a collegiate music unit.

Independent music school. A community music program with independent administration, not operated by a collegiate music unit or any other parent organization.

Site director. The administrative head of string educational offerings at each string academy site, regardless of whether the word director occurs in the person’s official job title.

String academy. For ease of understanding, this term was chosen to refer to all five sites investigated for this study, even though the words are not a part of each site’s
official title. It also reflects their common derivation from the Jacobs School of Music String Academy at Indiana University.

**String academy curriculum.** The basis of string academy curriculum is displayed on stringpedagogy.com. Creative adaptations and additions to this curriculum may be found in *Teaching the Violin and Viola: Creating a Healthy Foundation* (Northwestern University & Spencer, 2014) and *ViolinPractice* (Freeman & Henry, 2015b). However, the reader is directed to stringpedagogy.com, as it is the most comprehensive resource.

**Studio teacher preparation.** String academies function as lab settings for collegiate-level internships and/or string pedagogy courses to prepare students of associated collegiate music units to teach in string academies or similar settings, such as the private studio. Therefore, the apprenticeship model of teacher preparation in string academies is a model of studio teacher preparation.

**Positionality of the Researcher**

I have previous experience with Mimi Zweig’s curriculum via stringpedagogy.com, with Professor Zweig in person, and at the string academies in Bloomington, Evanston and Milwaukee. I experienced the apprenticeship studio teacher preparation model firsthand during my master’s degree studies at the University of Wisconsin–Milwaukee (with Darcy Drexler and the String Academy of Wisconsin) and at Northwestern University (with Stacia Spencer and the Strings Division of the Music Academy at Northwestern University Bienen School of Music). These experiences provided me with the opportunity to observe students and teachers engaging in private lessons and group classes on a weekly basis, and also to teach in those settings. My
pedagogy courses covered the theories and background of the curriculum and the intricacies of working with children and young adults at all levels, and they helped me to develop my own professional ideas about string pedagogy.

During summer 2012, I attended Mimi Zweig’s Retreat for Violin and Viola Teachers at the Indiana University Jacobs School of Music. On this occasion I met Dr. Brenda Brenner, Rebecca Henry, and Sherry Sinift (among others) and learned more about the various academies. My attendance at this retreat planted the seed for this dissertation.

While pursuing my Doctor of Musical Arts degree in violin performance and literature at the University of Illinois at Urbana-Champaign, I developed a private studio of violin and viola students as part of a local independent music school in Urbana. In fall 2011, after recruiting a critical mass of students, I began organizing group classes and established a violin program modeled after the string academies to which I had been exposed in Bloomington, Evanston, and Milwaukee. After two years, the violin program had grown too large for me to handle independently, so the director of the community music school increased her involvement and brought in additional teachers. Through no fault of anyone involved, we soon discovered that our team of teachers had very different and conflicting views about pedagogy and how the program should be structured. The conflicts led to several difficulties that affected the quality of the program, and within a year we amicably parted ways.

This first undertaking in program development provided me an invaluable professional learning experience. I underwent that ordeal while conducting interviews with the five string academy site directors involved in this study. As I listened to the
directors speaking about their relations with faculty members and the importance of teachers being philosophically and pedagogically on the same page, and as I gained glimpses into their approach to developing and sustaining their program, I was able to identify my errors and understand the factors that had contributed to the difficulties I had experienced. All this set the stage for what was to come.

In November 2014, Brenda Brenner at IU asked me to create a violin program modeled after IU’s Fairview Violin Project at two elementary schools in Danville, Illinois, and I was hired by the Danville Consolidated School District No. 118 as a consultant and instructor for this program. I began guiding instructional delivery for nearly 100 first-graders in January 2015. After determining its success, the school board elected to extend the program for both first and second grades (a total of nearly 200 students) for the 2015–2016 school year.

In December 2014, I was asked to create a string program for the School of Music at the University of Illinois at Urbana-Champaign. Called the Illinois String Academy, it is organized through the School of Music’s office of Outreach and Public Engagement. The program opened its doors in fall 2015, and it currently offers private and group instruction in violin and viola to 47 students.

The professional relationships that I have developed with Brenda Brenner, Darcy Drexler, Rebecca Henry, Sherry Sinift, Stacia Spencer, and Mimi Zweig played a crucial role in the evolution of this dissertation. Interacting personally with each of them and studying their string academies in depth has served to strengthen these relationships and has greatly enhanced my knowledge of string academy curriculum, instructional methods,
organization and development. Now, as I assume the role of director myself, I am poised and informed.

My decade-long experience of incorporating stringpedagogy.com curriculum into my teaching, my background with the string academies at the University of Wisconsin–Milwaukee, Northwestern University, and Indiana University, and my own endeavors in program development have given me extended, firsthand experience with how those programs and the Baltimore and Wyoming sites are managed and organized. This experience was invaluable during my research as I determined topics for investigation, prepared interview questions, and analyzed data. Moreover, my experience gave me a strong basis of common ground and understanding as I interviewed the site directors, leading to richer levels of inquiry and analysis. However, my prior understanding also led me to make several assumptions about site organization that then needed to be weeded out during the process of interviews, fact checking, and further analysis.

**Limitations**

Because the present study focuses on the programmatic characteristics of string academies, I do not present an analysis or evaluation of the sequence of skills, teaching strategies, approach to violin technique, or related string pedagogy used at the five sites. This is because these elements of the pedagogy are clearly articulated on stringpedagogy.com and consciously assimilated by string academy faculty members, and also because, ideally, such an analysis would require the systematic observation of teachers and students during the instructional process. The review of literature was limited to the pedagogical and programmatic ideas of Paul Rolland and Shinichi Suzuki,
as these two noted pedagogues were the greatest cited influences on the string academy model and curriculum (Wheeler & Zweig, 2007, pp. 13–14; Zweig, 2011, p. 20).

The selection of sites that draw upon Zweig’s influence and her work at Indiana University’s Jacobs School of Music String Academy was limited to the five oldest and most developed programs. I do not investigate other examples of community-based stringed instrument instruction in the United States. Even though some examples of community-based stringed instrument instruction may incorporate the pedagogical concepts of Rolland and/or Suzuki, because their pedagogical grounding is not based on Zweig’s work, they are beyond the scope of the present study.

Programmatic characteristics of string academies were examined by investigating the sets of conditions that led to the appearance of those characteristics, such as elements of geographic location, administrative structure, finances, and others as presented in chapter 4 of the present study. Features of the pedagogical approach employed at string academies are considered only as they relate to the appearance or development of individual and collective programmatic characteristics across the sites. This includes the historical passing down of pedagogical information from Mimi Zweig to her former students, now colleagues, as this process has determined certain qualities of the programs they lead as site directors of string academies.

In order to present the current programmatic characteristics of the five sites, data collection was limited to academic years 2012–2013 and 2013–2014, and it was supported by any relevant historical information that was provided by site directors or found in archival materials and other literature. As a result, any additional programming that occurred within site offerings after spring 2014 was not included in depth, such as
the Playing Partners program in Baltimore, which was launched in the fall of 2014 and would have been an example of extended programming.

The data gathered are not used to assess the effectiveness of string academies, as a proper evaluation of effectiveness was beyond the scope of the present study. Such a determination would have required systematic observation of the instruction that takes place at string academies, as well as anonymous interviews with participating students and families. This extent of intrusion into each program was not possible. Instead, any assessment is related to the characteristics of programmatic content in relation to the literature.

I believe that my past experience provided an enhanced level of trust among site directors that allowed me to conduct my research more freely. However, uncertainties as to exactly how the information would be presented occasionally resulted in some uneasiness among the site directors. For example, in accordance with the member-checking agreement into which I had entered with each site director, transcripts and outlines were presented to the directors for approval. Following their review, I was confronted with the concern that, since much of my information had come directly from interviews and was presented to the directors in conversational form, the language could be interpreted as unprofessional. In response, I explained that my intention was not to publish this material in unedited form, but to edit it into more professional language. To alleviate this concern, I asked directors to approve only the raw information in my outlines, explaining that I would gather any direct quotations that I wanted to use for the dissertation while writing it and then present those quotations at a later date for their permission.
I relate this story in order to illustrate one potential limitation of the study: despite my close relationships with the site directors, they still may have avoided sharing information that they felt could portray their work in something other than a positive light. I sensed that site directors became somewhat protective when I raised issues of quality control, particularly when they involved fellow faculty members. This protectiveness is understandable, given the confidential nature of personnel matters. At times, site directors also seemed careful when describing relationships with host institutions, faculty compensation, or budgets and expenses, so that information could not be misconstrued. Since the responses of site directors and their provision of additional materials were entirely voluntary, it is quite likely that some information was carefully crafted or withheld. Additionally, as a part of the member-checking process, site directors were given the authority to request that I not include certain information that was disclosed during interviews. This occurred in a few instances on the topics described above. However, in my opinion I have been quite successful in characterizing the academies without the inclusion of any interview data that the site directors would consider detrimental.

There were also limitations regarding the degree and extent of detail to which I was able to gather data. Burns (2010) discussed the likelihood of validity and generalizability limitations in a cross-case study:

There are potential weaknesses that hinder the cross-case study. These are most critical for data collection on the first case during the early stages of the research, and have an impact on outcomes regarding judgments on the validity and generalizability of the findings. The concern for validity may occur because as the number of cases increases, the amount of data collected on each case is likely to decrease and chances of error (validity) in the information are therefore increased because particular aspects in the one case may be overlooked in the search for commonalities across the cases. These problems are further exacerbated by the
On certain topics, I was able to obtain much more information for some sites than for others. For example, revenue and expense data were available only for the Milwaukee site, as the nonprofit status of the String Academy of Wisconsin puts this information in the public domain. Sherry Sinit provided a reasonable amount of financial detail, albeit in general terms, for the Laramie site. In contrast, it was very difficult to describe the budgets of the Baltimore, Bloomington, and Evanston sites as their financial management is intermingled into the larger structures of their collegiate music units. Consequently, specific revenue and expense data were confidential and remained unavailable for description or analysis.
CHAPTER 2

REVIEW OF RELATED LITERATURE

The string academies investigated for this study exhibit characteristics of independent community music schools, divisional music schools of collegiate music units, and string programs based on Suzuki and Rolland pedagogies. This chapter is divided into three main sections: (1) community-based arts instruction in America, (2) characteristics of Rolland and Suzuki programs of instruction, and (3) string academies.

Community-based Arts Instruction in the United States

This section traces community-based arts instruction in America, from the settlement house movement to the formation of the National Guild for Community Arts Education (NGCAE). Characteristics of community schools of the arts are then discussed, followed by relevant research on community music schools and collegiate divisional music schools.

The Settlement House Movement

The settlement house movement was directly responsible for the development of community schools of the arts in America (Egan, 1989, p. 78). During the late 19th and early 20th century, most settlement houses

were large buildings in crowded immigrant neighborhoods of industrial cities, where settlement workers provided services for neighbors and sought to remedy poverty. … Unrelated middle-class women and men lived cooperatively, as “settlers” or “residents” who hoped to share knowledge and culture with their low-paid, poorly educated neighbors. (Wade, 2004, para. 1)

The first settlement house to offer instruction in music was the Hull House in Chicago, established by Jane Addams and Ellen Gates Starr in 1892 (Wyatt, 1998, p. 26). This was soon followed by Cold Mariners Temple in New York City, which opened in 1894 (Palmer, 2010, pp. 15–16). “With establishment of these new music programs in
settlement houses, the idea spread to other settlement houses throughout the United States. The Settlement Music School Movement was born” (Palmer, 2010, p. 16).

As Palmer (2010, p. 16) describes, the settlement movement grew quickly, leading to the establishment of the National Federation of Settlements (NFS) in 1911. This led to the organization of special interest groups within the NFS, including a Committee on Art that eventually divided into separate committees, including the Music Division in 1922.

By the early 1930s, there were over 40 settlement music programs where music was taught to more than 8,000 students. … The Music Division eventually became a national association dedicated to community music programs, the National Guild of Community Music Schools, which was founded in 1937. … In 1974, after 37 years of growth and with 44 institutional members, the National Guild of Community Music Schools membership voted to change its name to National Guild of Community Schools of the Arts, to better reflect the larger scope of arts disciplines served by their member organizations. (Palmer, 2010, pp. 16–17)

In 2010, the National Guild of Community Schools of the Arts changed its name again, to the National Guild for Community Arts Education (NGCAE), in order to reaffirm its identity “as an association of arts education providers dedicated to the values of quality, accessibility, and accountability and [to] further signal [its] commitment to advocating for increased access to lifelong learning opportunities in the arts” (NGCAE, n.d.-c).

Of course, NGCAE member institutions are not the only source of community arts education in America; thousands of organizations exist to provide arts education to their communities in a variety of forms. The NGCAE is currently composed of more than 450 member institutions in 45 states (NGCAE, n.d.-b), but it estimates that in America today, “more than 7,000 nonprofit arts organizations and government agencies invite
open access to classes, lessons, and workshops in dance, literary arts, media arts, music, theater, visual arts, and other disciplines” (NGCAE, n.d.-a).

**Community Schools of the Arts**

Evans and Klein (1992) identified three features of a community school of the arts: (a) it does not grant degrees, (b) it offers sequential instruction in music and other disciplines, and (c) it is “open to all interested students, regardless of talent or ability to pay” (foreword). Evans and Klein posit that a “worthwhile” community school of the arts will exhibit: (a) “quality of artistic instruction,” (b) “quality of community service,” (c) “reach into the community,” and (d) “financial stability” (pp. 79–80).

In the NGCSA publication *Ten Steps toward Starting a Community School of the Arts*, MacLaughlin (2003) wrote that a community school of the arts:

- Is a non-profit, educational organization whose mission, purpose and primary activity pertain to arts education.
- Registers and enrolls students in lessons and classes on a daily or weekly basis year-round, usually during out-of-school hours and on weekends.
- Offers sequential, skills-based instruction in the performing, visual and literary arts to allow students to attain their highest level of artistic competence.
- Provides instructional activities in a facility it owns or rents (or is owned or rented by its umbrella organization).
- Does not discriminate on the basis of race, religion, color, national and ethnic origin, or sexual orientation and admits all interested students, regardless of aptitude or ability to pay.
- Does not grant degrees but often discovers and nurtures the ability and drive of those who possess professional potential.
- Hires faculty with educational, teaching, and/or professional experience who are dedicated not only to concepts of artistic and educational excellence, but also to an understanding of individual needs.
- Sets affordable tuition fees and offers financial aid for students who cannot afford to pay.
- Serves the community in a variety of ways including partnerships with public schools and other educational, cultural and social service organizations. (MacLaughlin, 2003, p. 2)
MacLaughlin outlines two general models for the organization of a community school of the arts: divisional schools and independent schools. A divisional school exists within a larger organization, such as a college or university, symphony orchestra, theater company, or other type of local arts agency. “These organizations see education as an important part of their mission and, to meet that part of their mission, have developed a community school of the arts as one component within their overall activities” (MacLaughlin, 2003, p. 11). MacLaughlin details the advantages and disadvantages of this structure:

**Divisional school advantages:**
- The basic legal and governance structure already exists.
- Basic management systems are already in place (e.g., accounting, marketing, personnel, technology, office support, etc.).
- The parent organization already has a community identity.
- Often divisional schools already have space available for a school.

**Divisional school disadvantages:**
- Usually the actual governance of a divisional school falls within the responsibility of the parent organization and is removed from the school itself. If a divisional school has a board, it is nearly always an advisory board and not a governing board.
- Often a divisional school has difficulty raising contributed income (financial gifts, donations and grants) on its own; usually the parent organization controls fund-raising efforts and activities. This can limit the scope, size and growth of the divisional school.
- The parent organization already has a community identity, which may overwhelm the visibility of a new community school of the arts.
- The space offered by the parent organization, while financially an absolute delight, may come with “strings attached” (e.g., scheduling complexities, use restrictions, etc.) and may be unsuitable for a community school of the arts. (MacLaughlin, 2003, pp. 11–12)

According to MacLaughlin, developing an independent structure for a community school of the arts is typically more complicated than developing a divisional structure; since there is no existing overarching structure to fit into, everything must be developed from the ground up. This means that most independent schools must incorporate (usually
as 501(c)(3) nonprofit organizations), set up a board of directors, develop by-laws, policies, and organizational values, and go through a process of constructing financial management systems, hiring faculty, and securing revenue, among a host of matters specific to the organization (MacLaughlin, 2003, pp. 12–13).

An independent structure also carries several advantages and disadvantages:

Independent school advantages:
- An independent school is master of its own destiny; its development is in its own hands.
- An independent school may give the community a feeling of more direct community ownership. …
- An independent school may be more visible as a community school and more easily identifiable within the local community than a divisional school.

Independent school disadvantages:
- An independent school is master of its own destiny; its development may slip through its own fingers.
- Some community members may not understand the need for a new community organization. …
- Some community members will understand it, but see a community school as unnecessary. (MacLaughlin, 2003, p. 15)

Community Music Schools

There is some consensus in the literature on the particular qualities of community music schools that set these institutions apart within the larger field of community-based arts instruction. Fields (1972, p. 109) and Steele (1972, p. 111) both described a community music school as a service agency, available to all, offering musical instruction in response to local and individual needs. Case studies by Davis (2004, p. 7) and Baranski (2011, pp. 4–5) focused on describing specific community music school sites to determine the role that these schools have played in the lives of their stakeholders (students, parents, teachers, and administrators), what motivates them to participate, and what keeps them engaged.
Palmer (2010) focused on the historical circumstances of the Hochstein School of Music in Rochester, New York, in search of successful characteristics of the school’s programs that could be used as a model for similar endeavors. Four such characteristics were identified: consistency of mission, visionary leadership, innovation in programming, and community connections (p. 172).

Fischler (2007) surveyed music faculty at select NGCSA member schools in order “to develop an inventory of music teacher roles which pertained to the setting [of] community schools of the arts” and “to discover how music teachers perceive their actual job roles vs. their ideal job roles” (pp. 22–24). Fischler’s findings defined roles for teachers at community schools of the arts (CSAs) and provided implications related to the training of teachers in these schools. Implications most related to the present study addressed collegiate training of potential CSA teachers, indicating that the necessary components involved in training college students to teach in CSAs may be present at colleges and universities, but may not all exist within the same discipline:

For instance, music performance majors may take coursework including intensive work in mastering and teaching their instrument as well as in studio management and collaborative musicianship. Music education majors may take coursework in educational theory, philosophy, history, classroom management, working with parents and the community, and leadership, as well as in mastering their instrument and course content in their area (choral, general music, strings, brass). In order to educate and train future CSA teachers, a track of coursework which includes preparation as instrumental and pedagogical experts as well as content which provides training in educational philosophy, history, curriculum development, role modeling, culture and technology are recommended. (Fischler, 2007, pp. 221–222)

**Collegiate Divisional Music Schools**

One particularly thorough study that explores partnerships between divisional music schools and their associated collegiate music units is Alexander’s 1997
dissertation. In the introduction of this study, Alexander posits several benefits that a divisional music school can provide to its associated collegiate music unit:

(a) serve as a laboratory or practicum experience for undergraduate and graduate students studying to become music teachers and performers; (b) provide an easily accessible format for community recitals, guest master classes, and outside performances for invited artists; (c) act as a feeder system for the music department and college as a whole; and (d) furnish a broad range of noncredit music enrichment courses including history, theory, ear training, and music ensembles. (Alexander 1997, p. 5)

At the time of Alexander’s study, 46 of the 213 members of the National Guild of Community Schools of the Arts (NGCSA) were divisional music schools within collegiate music units; 45 of these responded to Alexander’s survey (1997, p. 1). Alexander found that divisional music schools relied heavily on their own generated revenues for operations, and used external sources to fund scholarships for existing students (p. 112). In fact, more than 90% of the operating budgets of these schools were supported by the collection of tuition and fees (p. 113). More than 90% of the schools surveyed compensated teachers at hourly rates; fewer than 20% offered medical or pension benefits (p. 113). Additionally, over 60% of these schools offered compensated teaching opportunities to qualified university students, both graduate and undergraduate (p. 114). Alexander posited some general guidelines for community music school administrators:

A community music school must have a defined mission statement, an administrative staff and budget separate from the college department, and the ability to raise funds independently of the parent department, including scholarship money for enrolled pupils. … [T]he head administrator, whether full- or part-time, must be viewed as an equal member of management and be able to articulate clearly the needs and mission of the community program.

The parent institution should provide generous in-kind contributions in the specific areas of (a) administrative office space, (b) teacher studio space, (c) power and light, (d) rehearsal and performance space, and (e) janitorial services.
The community program is obliged to pay for support staff and teacher salaries as well as routine office expenses from generated income.

Part- and full-time teachers employed by the community music program must be qualified teachers with a minimum of a bachelor degree and with the potential to teach in both the community music program and the collegiate curriculum. Community music teachers should be provided with a written contract, hourly wage rate, and an appropriate benefit package including medical and pension benefits. …

A mechanism should exist for the periodic evaluation of teachers employed by the community music program. The evaluation model should not be modeled after the university tenure system but rather adapt to the unique characteristics of the community music environment. …

The secondary curriculum (high school students) should be as comprehensive as possible and, beyond individual lessons, include class instruction. Class instruction should be considered for subject areas such as music ensemble activities, music theory, jazz studies, class piano, and music history. (Alexander 1997, pp. 108–110)

Alexander (1997) offered the following recommendations for the relationship between collegiate music units and divisional schools: (a) collegiate music units can extend their involvement in communities through performances and shared faculty appointments; (b) divisional music schools should have independent administration and governing boards; (c) they should employ qualified teachers who have experience working with precollegiate students; (d) accreditation guidelines should be developed for non degree-granting institutions by the National Association of Schools of Music (NASM); (e) the administrative head of a preparatory department should maintain an equivalent role to other collegiate administrative peers; and (f) divisional music schools should have mission statements (pp. 26–29).

Several more developing links between university- and community-based music instruction can be found among the NASM proceedings from annual meetings held since Alexander’s study. Those proceedings were analyzed. Ingle (1999) discussed the role of
music units in relating to independent music teachers and outlined five principles that emerged in interviews with university pedagogy instructors, department heads, and independent music teachers:

1. Independent music teachers are the lifeblood for providing students who plan to major in music. …
2. Music units have a vested interest in seeing that the independent music teachers are the best teachers in the community. …
3. The independent music teaching profession is not regulated in any way. And while excellent teaching is going on, there is also a lot of bad teaching. This need, however, provides the collegiate music unit with the opportunity to provide continuing professional education for the independent music teacher.
4. Music units must connect with the independent teacher so that mutual respect and partnerships may develop. …
5. Local music teacher associations provide a ready-made audience for college pedagogy faculty and students and, as such, should be better utilized by the music unit as a resource. (Ingle, 1999, pp. 27–28)

Collegiate divisional music schools exist in communities of various sizes. Schultz (1999) speculated the musical needs of small and larger communities, asserting that collegiate music units should take the following steps: (a) offer performances for community members to attend; (b) assess the collegiate music unit’s “ability to provide supportive services to the surrounding areas”; (c) create mutually beneficial programs that serve the collegiate music unit and fill community voids; (d) recognize that a preparatory department in a small community offers collegiate music units the opportunity to “grow their own” as a means of recruitment; and (e) employ collegiate music students and facilitate mentoring with music unit faculty (pp. 30–33).

An important contributor to NASM proceedings, both pre- and post-1995, is Michael Yaffe, currently the Associate Dean for the Yale School of Music, who has authored several important reports describing university and divisional music school partnerships. According to Yaffe (2003), divisional music schools have important
operational needs, such as “materials, promotion, space, administrative support, advertising, all the support services that your college music programs need” (p. 49).

Divisional music schools bring great benefits to the collegiate music unit as well, such as publicity, visitors to campus as audience members or potential donors, access to potential future music majors, enhanced community service, graduate student employment opportunities, and many others depending on local circumstances. Funding opportunities may also be available to divisional music schools that are not available to the collegiate music unit. Yaffe outlined criteria that divisional schools of collegiate music units should meet in order to ensure their success:

1. a clear mission that focuses on the education of the constituents of the community school, not for the primary benefit of pedagogy students or others in your college program;
2. a reasonable expectation of financial return—these are not cash cows if they are done well, but they can cover all direct costs and generate a net positive cash flow if there are enough students;
3. an opportunity to hire high-quality faculty with experience teaching in the programs that are developed. Graduate students with teaching experience are acceptable, professional teachers are preferable, but undergraduates are not appropriate unless there is significant supervision and the mission of those programs is clearly articulated to the public;
4. a place at the table—by that I mean a clear reporting line to the proper place in the administrative structure of the department or school, and the opportunity to make the school’s case and sometimes even prevail (this is not to say that the school needs special treatment, but it is to say that once you start one of these programs, it will grow and sometimes its needs must be part of the overall administrative strategy of your larger school or department);
5. the opportunity to fundraise with carefully defined objectives;
6. a staff sufficient to operate the program effectively. (Yaffe, 2003, pp. 48-49)

In *Musical Chairs: A Management Handbook for Music Executives in Higher Education*, Yaffe (2006) delved deeper into the significance of appropriate mission statements, the educational value that programs provide to the college student, types of
programs that a divisional music school may offer, the importance of providing financial aid, allocating space, choosing and classifying faculty, fundraising, and the placement of divisional music schools within the administrative structures of their associated collegiate music units (pp. 2-4). Yaffe identified fundraising as a point of frustration for some divisional music schools, because they have encountered restrictions on their ability to engage in fundraising efforts (p. 4). Yaffe states that this is unfortunate for two reasons:

It limits the potential for a fully developed community music school, and it ignores the fact that many foundations and individuals who do not support college-level music will support community-based programs. Although circumstances at any given institution may vary, it is recommended that fundraising be permitted for financial aid support and special programs at the very least. Since independent community music schools raise funds for about 40 percent of their total yearly income, it seems reasonable to assume that divisional schools will support themselves through nonearned income as well. (Yaffe, 2006, p. 4)

Dennison (2004), in a report delivered to a NASM annual meeting, described various commonly reported locations of community music instruction, including music stores, for-profit music schools, and private instructors contracted through band directors. “In any of these situations,” Dennison observed, “supervision of the effectiveness and quality of the teaching is negligible. [However,] if a teacher decides to teach at a community school, faculty members have required expectations” (2004, p. 41).

Negligence in the supervision of independent music teachers was Dennison’s overarching theme as she pointed out the vagueness of both the NASM and NGCSA descriptions of faculty requirements (p. 42). In her view, divisional music schools often employed college students to teach without providing the necessary pedagogical support:

In order to ensure effective teachers, the community schools must provide assistance to help teachers to develop the appropriate skills necessary to work with a wide variety of ages and abilities. Opportunities for observing seasoned faculty members, being observed by other staff, and mentoring and sharing
concerns among faculty are all ways a school can assist with the new teacher. Periodical written comments and evaluations by parents provide the teacher with helpful information and also offer many positive comments on the teacher. Observation by administration is very helpful, and, when conducted in a non-threatening manner, can be very helpful to the teacher. There should be opportunities for staff to receive additional training (i.e. Suzuki, Kindermusik, and conferences) to improve teaching skills. Otherwise a school is just a building that rents space. (Dennison, 2004, p. 44)

Zweig (2004) outlined several benefits that a divisional music school can offer to a collegiate music unit: (a) a “laboratory setting for teacher training”; (b) “eventual employment for qualified students as string teachers, piano accompanists and coaches, and theory teachers”; (c) “community outreach”; (d) “bringing and introducing the diverse population to the campus”; (e) “graduating high school seniors can feed into the music school”; and (f) “generate publicity that is beneficial for fund-raising at the community level” (p. 46). Additionally, Zweig offered more detail on the training of future teachers:

A proven way to accomplish the training of the aspiring professional is to create a thriving pre-college program in the university setting. This program becomes the place from which the university student experiences first-hand how to teach, how to interact with parents, and how to set up and run pre-college programs. The established program becomes a model from which the graduating performance major can create a new program. The bonus to the music school is that these programs can be self-sustaining. (Zweig, 2004, p. 46)

The NASM continues to make available two publications related to community education. The Assessment of Community Education Programs in Music (NASM, 1988) is “designed to assist institutions and individuals making assessments about community education programs,” as well as “to assist the user to develop a holistic view of community music programs, whether they are independent or connected with institutions of higher education” (p. v). “Community Education and Music Programs in Higher Education” is a briefing paper on the “present and future relationships between two types
of institutions: those concerned with community education and those focused on higher education” (NASM, 1991, p. 1). The former, based on its content and organization, appears to be a precursor to the Accrediting Commission for Community and Precollegiate Arts Schools assessment guide discussed below. The latter explains the impact that community education programs can have on the general public, particularly those who study in such programs but do not pursue careers in music. It also offers recommendations on the education of gifted students who may pursue music careers, relating both topics to choices in program content. Furthermore, the paper covers the influence of both community education and higher education on pedagogical philosophies and capabilities, the roles that the two education sectors can play in leadership development, and recommendations for further research.

The Accrediting Commission for Community and Precollegiate Arts Schools (ACCPAS) “was established in 2001 by the Council of Arts Accrediting Associations to assess and accredit schools such as those that belong to the Arts Schools Network” (ACCPAS, 2009, p. 1). In 2009, it published A Guide to Assessing Your Arts School: Questions for Internal Review and Reflection. The difference between this assessment document and the similar NASM publication discussed above (NASM, 1988) is that the former is music-specific whereas the latter applies to the complete network of arts schools, including art, design, dance, and theatre. The NGCSA worked with the ACCPAS to produce an almost identical version of the Guide for its members or potential members. The Guide is presented as a series of questions within an organized framework to assist with the following activities:

- evaluating the effectiveness and viability of current activities at a school
- planning improvement of current operations
• assessing the demand for new programs or directions
• planning new initiatives
• developing and maintaining positive connections with the school’s parent organization, if one exists
• determining the organization’s readiness for and (if desired) preparing to apply for national accreditation (ACCPAS, 2009, p. 5)

Peters (1979) and Clark (1989) examined preparatory departments within NASM-accredited institutions. Peters provided a status study and annotated directory of precollegiate instruction within NASM music units, while Clark looked at the relationship between preparatory departments and enrollment and hiring trends of NASM music units. Both researchers reached several of the same conclusions: (a) most preparatory departments had a director other than the administrative head of the music unit; (b) preparatory departments were generally self-sustaining; (c) preparatory departments were typically provided with facilities and equipment by the music unit; (d) most instruction provided within preparatory departments was in the form of applied instrumental lessons, with additional classes and special programs offered frequently; (e) enrollment at preparatory departments was steadily increasing; and (f) preparatory departments existed in all types of communities, regardless of local demographics or size of the music unit (Peters, 1979, pp. 1–4; Clark, 1989, pp. 96–97).

**Characteristics of Rolland and Suzuki Programs of Instruction**

Because the curriculum displayed on stringpedagogy.com cites the crucial pedagogical influence of Paul Rolland and Shinichi Suzuki (Wheeler & Zweig, 2007, p. 14), this section will review literature on these two noted pedagogues. First I will summarize Rolland’s pedagogical contributions and his Illinois String Research Project. I will then discuss the integration of Suzuki pedagogy within mainstream American string pedagogy, along with the characteristics that Suzuki programs share with string
academies. The section concludes with a comparison of Rolland- and Suzuki-derived pedagogy and curricula.

**Paul Rolland and the Illinois String Research Project**

The greatest influence on the mechanics of violin instruction in string academies derives from esteemed violinist and pedagogue Paul Rolland (Wheeler & Zweig, 2007, p. 14). During his years at the University of Illinois at Urbana-Champaign (1945–1978), Rolland produced an impressive oeuvre of pedagogical materials and resources. The most comprehensive descriptions of this output appear in an annotated bibliography by Eisele (1980) and a dissertation by Fanelli (2001).

Fanelli’s review of Rolland’s work led him to these conclusions:

1. Rolland, his writings, and his research continue to have relevance for the contemporary string educator and performer, and for future studies. Many research studies noted that the pragmatic nature and sound physiological principles of his pedagogy still pertain to current research in biomechanics, kinesiology, music medicine, and studio and method class instruction.
2. Researchers continue to cite Rolland’s works and compare them to those of other major string pedagogues of the twentieth century.
3. Rolland’s writings and research papers are included in more types of studies than any other of his pedagogical colleagues from the era in which he taught.
4. The predominant areas of string education research that cite Rolland are pedagogy, curriculum design, and teaching literature.
5. The inaccessibility of Rolland’s major pedagogical publications and visual materials for the practicing teacher and researcher could lead to the erosion of his work’s saliency and individuality and jeopardize its continued importance in string education.
6. A number of researchers have annotated Rolland’s philosophical ideas on the teaching and learning process, string education in particular, and music education in general, countering criticisms that his work lacked a philosophy of teaching. Rolland [is] one of the major string pedagogues of the twentieth century, and his work and pedagogy are both revolutionary and visionary. (Fanelli, 2001, pp. 38–39)
As a model of community-based music education, the Illinois String Research Project, in which Rolland served as project director, demonstrated the application of his pedagogical ideas to classroom teaching on stringed instruments. The final report of the Illinois String Research Project (Rolland, 1971) summarized this effort and provided evaluations of it by string teachers and other professionals.

The report describes how the project was implemented in the public schools of Champaign and Urbana (Rolland, 1971, pp. 138–146), as well as at other pilot locations in Illinois (pp. 176–185). As Urbana-Champaign was the epicenter for the project and Rolland was personally involved in delivering the instruction, more details were provided on the organization of instruction there than at the other pilot locations. Administrative and instructional assistance was provided to the Urbana schools, which employed only one string instructor—a wind instrument specialist who taught both band and strings (p. 138). In Champaign, because the school district employed three stringed instrument specialists, additional administrative or instructional assistance was not deemed necessary (p. 138). The project’s intention to start violin and cello classes for grades 1 through 4 in the Urbana school system was announced in May of 1967, with instruction beginning in June and October of that year (p. 138).

Several unexpected problems were encountered during the project’s implementation in the Urbana school system. A total of 130 students from four elementary schools registered during the 1967–1968 school year, more than twice the 60 students originally planned for (Rolland, 1971, pp. 138–139).

Since the school administration insisted that either all or none of the students be accommodated, the large registration created unexpected problems in staffing the teaching program. Some of the classes, especially those for first and second graders, were extremely large and difficult for the inexperienced instructors to
handle. Numerous scheduling and transportation problems had to be solved. The scheduling of classes before and after school hours caused attendance problems, especially during the winter months. (Rolland, 1971, p. 138)

Nonetheless, the Urbana program is described in the report as “one of the most important achievements of the Project”:

The Urbana program was instrumental in providing trial of the teaching ideas and materials as they were intended. The classes were regularly observed by Project assistants and students of the String Pedagogy course and served as a valuable training opportunity for a number of teacher trainees. (Rolland, 1971, p. 142)

Students at the Urbana schools met twice a week for half an hour, taught by project assistants in classes of 3 to 14 pupils. Most children studied violin due to their young age, the report says, but a cello class was also started for students in grades three through five (pp. 139–140). However, due to the necessity to divert resources to statewide trials and the appointment of an additional string teacher by the Urbana school district, teaching was discontinued at the four Urbana elementary schools after only one year (p. 142).

A particular accomplishment noted by the report was the development of an advanced class that was featured in several of the project’s films and performed for many regional, state and national conventions (Rolland, 1971, p. 138). Students of the advanced class received instruction more often, and for a longer period of time (3.5 years by the end of the project), than any other class of the project, and were the only students taught directly by Rolland (pp. 138–142). This included a four-week summer program prior to the initiation of the full program in the Urbana school system (p. 139). These students also attended a weekly class with Rolland in addition to two weekly classes taught by project assistants at the students’ respective schools throughout the 1967–1968 school year (p. 139). Project assistants observed Rolland’s teaching and assisted with his instruction (p. 139). Following the 1967–1968 school year, the advanced class continued
its instruction with Rolland once or twice a week for an hour, joined by additional
students from the Urbana and Champaign school districts who had shown outstanding
progress (pp. 142–143). This climaxed with a performance at the White House

Seventeen teachers in 13 Illinois cities conducted additional trials of the materials
during the 1967–1968 school year (Rolland, 1971, p. 177), and 22 teachers conducted
trials in 20 cities during the 1968–1969 school year (p. 178). Project assistants visited
these sites about once every three weeks to conduct observations; they were instructed
“not to coach the cooperating teachers on any facet of the curriculum” (p. 179). The
project director visited each site once throughout the school year and worked with project
assistants to produce accurate reports. Three conferences with cooperating teachers were
held, and written communications were distributed to teachers frequently (p. 179).

The project produced a series of 17 films with supporting manuals that were
circulated to teachers at the piloting locations (Rolland, 1971, p. 182). Teachers were
requested to “show each film two or three times during the appropriate period of
instruction” (p. 182).

The “Action Studies” presented in the films and manuals were the core of the
research, and these were to be compatible with musical material of the teacher’s
choice. Therefore, the musical materials developed by the Project were offered to
the cooperating teachers as an option. Almost all of the teachers requested the
various tune and exercise recordings and their texts. Many also ordered the
musical materials inspired by the Project. (Rolland, 1971, p. 182)

The films, called The Teaching of Action in String Playing, coordinated with a
suggested curriculum guide, classroom wall charts, and teacher manuals, were the
principal product of the project. A tune record and three exercise records were also
developed (Rolland, 1971, p. 350). Rolland provided an overview of the results:
The materials were used and tested in twenty-two Illinois schools, as well as in the local program. Five out-of-state centers participated in additional testing of some of the materials.

In addition, over fifty national, regional, state- or university-sponsored teachers’ meetings and the White House Conference on Children witnessed the results of the Project through film demonstrations or performances by the local Project classes.

The elated response to these presentations, as well as the diligent testing program (described in detail in this Report), witness the fulfillment of Project goals and indicate that movement education, paired with rhythm training, can indeed produce highly superior results in the class teaching of string instruments. (Rolland, 1971, p. 350)

The Diversification of Paul Rolland’s Violin Pedagogy

The pedagogical contributions of Paul Rolland have become highly diversified, in most cases during his lifetime and with direct input from Rolland. Rolland described his violin teaching methods with children individually and in homogeneous class settings before the initiation of the Illinois String Research Project, noting that his instruction very closely resembled that of this project (cited in Fischbach, 1972, p. 160). His work on the Illinois project effectively diversified Rolland’s pedagogical approach to the viola, cello and double bass, and to the homogeneous and heterogeneous forms of class instruction on stringed instruments in American public schools. Following this, the materials developed as part of the project were adapted to a series of method books—Prelude to String Playing—first published in 1971 and designed for individual or class instruction (both homogeneous and heterogeneous) for students of any age. In this effort, Rolland collaborated with Margaret Rowell, co-author of the cello book, and Edward Krolick, co-author of the double bass book (Fanelli, 2001, p. 263). After Rolland’s death, Sheila Johnson, also in collaboration with Krolick and Rowell, revised the method book series, published in 1985 under the title Young Strings in Action (Fanelli, 2001, p. 267).
Additionally, Rolland published a collection of American nursery rhymes and folk songs for violin, viola, and cello under the title *Tunes and Exercises for the String Player* (Fanelli, 2001, p. 269). Other materials for use in both solo and homogeneous or heterogeneous class or ensemble settings are the result of Rolland’s collaboration with Stanley Fletcher (*New Tunes for Strings*, violin, viola, and cello) and Mervin Whitcomb (*String Music for Concert and Study* for violin, viola, cello, and double bass) (Fanelli, 2001, pp. 268–269).

**Suzuki Programs in the United States**

As models of community-based music education, Suzuki schools or programs offering instruction in stringed instruments often exhibit similar programmatic and pedagogical elements to string academies. Zweig’s curriculum has extensively incorporated Suzuki’s philosophy on parental involvement and group instruction, and the Suzuki method books (Suzuki, 1955, 1980–1993, 1991–1996) are an important part of the literature used in string academy instruction.

The repertoire, selected and sequenced by Suzuki, has become an indispensable component of accepted practices in stringed instrument instruction across America, incorporated by countless teachers, even those who use the literature through more traditional means (e.g., Barber, 1993, para. 3; Haugland, 2009, p. 29; Lo, 1993, p. 24). Haugland noted Suzuki’s popularity in a variety of instructional settings:

Many private teachers now use the Suzuki literature even if they use it in a more traditional manner. Entrance to camps, festivals, orchestras, etc., are often based on what Suzuki book the string student is currently playing. The games and series of steps in the technique are borrowed from Suzuki pedagogy and applied in traditional teaching in both private studios and public schools. (Haugland, 2009, p. 29)
In agreement with Lo (1993, p. 24), Barber (1993) contended that before the injection of Suzuki pedagogy into the culture of American string instrument education, the label “traditional teaching” did not exist: “It is only because of the tremendous impact that Suzuki instruction has had on string education that we have even added the term ‘traditional teaching’ to our string vocabulary” (Barber, 1993, para. 3).

Some elements of Suzuki’s work have been misunderstood in North America, resulting in controversy. One is the portrayal of Talent Education as the “Suzuki Method,” a term invented by Western proponents (Mehl, 2009, para. 4). As Barber (1993) asserted, “Although [Suzuki’s] repertoire is published and commonly referred to as a ‘method,’ it is actually an educational philosophy that can be applied to the teaching of any subject or skill to students of any age.” Similarly, Starr (2000, p. v) reported Shinichi Suzuki’s disapproval of using the term “method” to describe his approach: “Suzuki himself doesn’t like the term, because he regards it as more than a method. He thought if the word ‘method’ were to be used, it should be called the ‘mother-tongue’ method.” This focus on method, rather than viewing Suzuki’s mother-tongue method and educational philosophy as interdependent ideals (Bauman, 1994, p. 6), is likely one cause of the misinterpretation of his work in the West. Bauman (1994) quoted Suzuki’s words on these two concepts:

“As quickly and easily as children learn their native language, they can learn music and other areas of study without toil.” But he was also very quick to add, “Our activities are not directed at producing professional musicians, but persons of beautiful sense—outstanding human beings.” The first statement is the method, and the second is the philosophy. (Bauman, 1994, p. 5)

Another cause of Western misinterpretations of Suzuki’s work may be the manner in which it is presented. Although Suzuki’s method and philosophy are well documented
in his own writings, repertoire books, speeches and essays (e.g., Madsen, 1990, pp. 154–155), Mehl (2009, para. 7) described these works as “sketchy and anecdotal,” lacking a systematic description. She further observed that much of the literature on Suzuki tended more to venerate than to evaluate his work.

The misunderstandings of the Suzuki approach have been partly responsible for the criticism directed toward it. John Kendall, a key figure in the introduction of Suzuki Talent Education into America and author of *The Suzuki Violin Method in American Music Education* (1966, 1973, 1978, 1985), responded to criticisms of Suzuki in the preface to the 1985 revised edition:

> There is still a certain amount of controversy and criticism of some aspects of the Talent Education movement. … The danger of “cultism” and narrow, dogmatic interpretations of the pedagogical approach have not disappeared, but the major thrust of the movement, and the constant efforts to improve teaching skills and parent understanding, must inevitably raise the standards and produce positive results. (Kendall, 1985, p. 7)

Kendall’s concern for improving teaching and raising standards may be an acknowledgment of the early experience of Suzuki Talent Education in the United States. According to Mehl (2009), the early enthusiasm for Suzuki’s method led “many teachers [to] set themselves up as Suzuki teachers with minimal qualifications or knowledge of the method. Eventually, serious teachers began to organize themselves and establish training programmes for Suzuki teachers, inviting Suzuki to give workshops” (para. 57). This frequent mistreatment of the Suzuki method in America led European proponents to systematize teacher training early on (para. 58).

Analyzing the injection of Suzuki instruction into various cultures, Mehl (2009) commented that the method is extremely adaptable and open to multiple interpretations. For this reason, because Suzuki’s ideas evolved over the course of his life, and because
he allowed others to take the lead in disseminating his approach throughout the world, the method cannot today be easily characterized as Japanese or Western:

He taught by personal inspiration rather than by a system he had set down in detail, and he expected the teachers he trained to do the same. Consequently, translation of the method takes place at the level of each individual teacher, whether inside Japan or abroad … and [Suzuki’s] training focused strongly on development of the trainee’s character rather than pedagogy. … Suzuki’s willingness to let others take initiatives, as well as his naïveté in practical and business matters had two main consequences—first, the immense diversity in the practice of the method and, second, its global organization, which is highly structured, but independent of its founder and his successors in Japan. (Mehl, 2009, para. 77)

Starr (2000, p. v) and other writers have supported individuality in teaching within the general umbrella of Suzuki principles. Lee (1992, p. 58) maintained, “Teaching Suzuki’s concepts does not mean adhering to any strict set of rules; rather by understanding his philosophy, one may create his own means of developing the abilities necessary to violin playing.” Lo (1993) similarly asserted that for many teachers, “any established ‘method’ would only serve as a general framework for a point of departure, and the practical matter of day to day teaching is a living art which is constantly growing and developing” (p. 24). Lee and Lo seemed to agree that it is natural for any skilled teacher to develop a unique understanding of the Suzuki method and incorporate personal, creative adaptations. In fact, one could argue that the only person who really taught the Suzuki method was Suzuki himself; every other associated approach is merely a translation of what he did (Shepheard, 2012, pp. 63–64). Furthermore, because Suzuki’s primary goal in teaching violin to children was to create good citizens (Suzuki, 1983, p. 104), Suzuki valued his own educational philosophy, and similarly the development of each teacher’s own creative approach to teaching, far more than the repertoire he chose or the technical components he used to teach the violin.
Consequently, Suzuki instruction has become highly diversified in America, in many instances without direct involvement from Suzuki (Mehl, 2009, paras. 10, 78). The variations include adaptations of the method, philosophy and/or materials to instruments not taught by Suzuki (such as viola, string bass, guitar, harp, organ, recorder, and voice), to heterogeneous string instrument classes in American public schools (Brunson, 1969; Zahtilla, 1970), original approaches to teaching (Lee, 2003; Lo, 1993; Nelson, 1994; Romeo, 1986; Wheeler & Zweig, 2007), and an abundance of additional materials for use in both solo and ensemble settings (Mehl, 2009, para. 78).

There is a rich body of literature on the tenets of Suzuki instruction (e.g. Barber, 1993; Bauman, 1994; Blaker, 1995; Dawley, 1979; Hofeldt, 2000; Kendall, 1985; Lee, 1992; Lee, 2012; Lo, 1993; Madsen, 1990; Nelson, 1994; Perkins, 1993; Romeo, 1986; Starr, 2000). From these descriptions can be derived several programmatic characteristics that string academies share with Suzuki programs, such as (a) expectations for parent involvement; (b) emphasis on beginning at a young age; (c) attention to creating a positive and nurturing environment for study; (d) reliance on group instruction as well as private instruction; (e) inclusion of a standard, graded repertoire that all students learn; (f) a common approach to teaching among teachers; and (g) employment of well-trained teachers.

Only one study was found that focused directly on the programmatic characteristics of Suzuki instruction in community music schools. Based on a 1995 survey of 67 Suzuki violin programs within member institutions of the NGCSA, with a response rate of 67%, Blaker’s (1995) study offers a composite of Suzuki violin programs within U.S. community music schools. The typical program that offered Suzuki
instruction as an option, Blaker reported, (a) situated it alongside non-Suzuki instrumental instruction also offered by the community music school; (b) had approximately 99 violin students, 60 of whom were receiving Suzuki instruction; (c) employed about seven violin teachers, four of whom would be Suzuki violin teachers with a degree in music; (d) offered Suzuki instruction for other instruments in addition to the violin, with cello and piano being the most common; (e) emphasized beginning Suzuki instruction at an early age; (f) offered group instruction in Suzuki, as well as offerings in string orchestra, chamber music, and/or musicianship classes; and (g) invited parents of Suzuki students to attend individual and group instruction (pp. 61–63).

Comparisons of Rolland and Suzuki’s Pedagogical Contributions

A small body of literature compares Rolland’s work to Suzuki’s (Fanelli, 2001; Fischbach, 1972; Lee, 2003; Nelson, 1994; Perkins, 1993). The studies by Lee, Nelson, and Perkins also compare these two with other noted pedagogues.

According to Fanelli (2001, pp. 198–204) Rolland and Suzuki had contact with each other and exchanged ideas. One exchange was said to have sparked Suzuki’s concept of “tonalization.” Reportedly, Suzuki asked Rolland about the warmup techniques of vocalists:

Suzuki asked, “What do you call it when singers sing up and down arpeggios?” Paul answered, “Vocalizing. Every singer vocalizes to improve voice quality.” Suzuki asked, “What does a violinist do?” and Paul replied, “Well, we don’t have a name for it.” Suzuki said, “What about calling it ‘tonalizing.’ ” So out of that conversation emerged the term “tonalization” which had not been used before. (Kendall, cited in Fanelli, 2001, p. 199)

Perkins (1993) produced a comparative study of the pedagogies of Kato Havas, Paul Rolland, and Shinichi Suzuki. Perkins examined each pedagogue’s approach to teaching “basic posture and positions, bowing technique, left arm and hand movements,
and tone production” and she “traced the origins of these techniques and examined important influences upon each of the three pedagogues” (p. 230). Perkins found that “Rolland’s technique is the most accessible of the three. It can be successfully implemented into any program, especially in a public school setting. … It can also be easily adapted for most other string methodologies, private or group” (pp. 233–234). However, Perkins advised caution with regard to the incorporation of Suzuki’s technique, though encouraging string teachers to consider it seriously. Perkins stated that random incorporation of only certain components of Suzuki’s technique may be counterproductive, and she advised extensive training and observation in order to assimilate them. Perkins described Suzuki’s technique as much more traditional an approach than that of Havas or Rolland, but also highlighted the substantial compatibility between Suzuki’s and Rolland’s technical components (pp. 234–235). Perkins additionally offered insight into the lesser popularity of Rolland’s method:

Since Rolland’s death in 1978, his method has lost considerable impetus. The success of the Rolland Method has been eclipsed in the United States by the popularity and accessibility of the Suzuki Method. Some string teachers attribute this to the fact that Rolland’s method lacks a clear philosophy or “higher purpose.” Ironically, since many of Rolland’s ideas have become woven into current string pedagogy, these same teachers are unaware that they often use his techniques in their teaching. Rolland’s pedagogical research and contributions continue to stand the test of time because of their fundamental soundness. Although such ideas would easily coalesce with most public school string teaching programs in America today, teacher training in the Rolland Method, unfortunately, is not widely available. (Perkins, 1993, p. 235)

Nelson (1994) compared the contributions of six violin pedagogues: Leopold Auer, Carl Flesch, Ivan Galamian, Paul Rolland, Kato Havas, and Shinichi Suzuki. Nelson sought to create a unified approach to pedagogy that would incorporate all six approaches, but found that this was impossible due to several direct contradictions among
them. Nevertheless, Nelson said, “The lack of a synthesis actually offers the teacher more freedom of choice, since most of the ideas of the six pedagogues are of use in various situations” (1994, pp. v–vi). In agreement with Perkins (1993), Nelson noted the flexibility of Rolland’s technique, saying that it “can be adapted to almost any situation,” while describing some of Suzuki’s techniques (specifically the German style bow hold and a low left elbow) as “simply outdated” (p. 229).

Lee (2003) studied the contemporary pedagogical approaches to teaching violin of Ivan Galamian, Shinichi Suzuki, Paul Rolland, Kato Havas, Elizabeth Green, Simon Fischer, Mimi Zweig, Otakar Sevcik, Kek-Tjiang Lim, and Ronald Patterson. Her study was designed “as a compendium of resources for the teaching of basic violin technique … from which the violin teacher can choose an appropriate solution toward a particular problem” (abstract).

Probably the most compelling comparison available between Rolland and Suzuki is the one made by Rolland himself in a letter of November 21, 1972 to G. F. Fischbach, contained in Fischbach’s dissertation (1972). Fanelli (2001) described this letter as “one of the most important documents he [Rolland] produced” (p. 24). From the letter we learn of the extent to which Suzuki’s contribution affected Rolland’s work. Rolland communicated what may have been a particular frustration for him:

There is a tendency today to identify all sorts of programs under the Suzuki label. If children learn to play without reading notes or if a group performs solos in unison, the observer is quick to identify it as “Suzuki.” To the superficial observer, who tends to oversimplify concepts, the similarities between the teaching of Suzuki and my project will be numerous. But to the person who looks deeper it will be obvious that we are dealing with a completely different trend and quality. (Rolland, quoted in Fischbach 1972, p. 155)
In relation to this point, Rolland traced his own teaching of children back to the early 1940s (long before the Suzuki movement began in America), highlighting that his earlier teaching was not much different from what he was doing in 1972: “I have used both rote teaching and note reading devices, motion and marching games. … I gave these children the same rhythmic training as in the Project” (in Fischbach, 1972, p. 160).

Rolland summarized his view of the two sides of Suzuki’s contribution, as “educational philosopher” and “violin teacher” (in Fischbach, 1972, pp. 156–157). Rolland posited that Suzuki as an educational philosopher was unique in his adaptation of Friedrich Froebel’s philosophy of violin teaching and in Suzuki’s own revelation of the “mother-tongue approach” (p. 157). Suzuki the violin teacher, however, is dwarfed by Suzuki the educational philosopher, according to Rolland: “He is one of a number of outstanding string teachers of this age, but his teaching from the point of instrumental technique is not unique” (p. 157).

Discussing Suzuki’s influence on the Illinois String Research Project, Rolland first identified a few paramount differences: (a) the Illinois project aimed at the use of the whole body in violin playing; (b) the films and manuals produced by the project are applicable in any situation and with any age group, whereas the Suzuki approach is geared toward a specific age group; and (c) the body of literature studied for the project predates the introduction of the Suzuki approach in America by decades, and most of these sources were of far greater importance than the Suzuki’s work (Fischbach, 1972, pp. 157–158). Rolland described the fact that Suzuki teachers and his own project’s teachers may use similar games and exercises (the “place and lift” game, for example) as “trivial and unavoidable” (p. 158). He concluded:
The major aspect of adaptation of the Suzuki philosophy, and perhaps the only one of any consequence to the Illinois Project, was the use of recorded teaching repertoire. Originally we entertained the idea of using the Suzuki record for the Project, but this gave way to an urge to produce a record of the first tunes based on the American folklore. … But here the Suzuki influence stopped. The students were taught traditional notation along with rote approach, and gradually the two were synthesized. … Other notable differences in the Project were: the teaching of older children, the use of large movements during the early stages; use of the positions, almost from the start; use of left and right hand pizzicato (Suzuki now uses this also) before using the bow; teaching in classes rather than privately; not relying on parental help which in most cases is unavailable. Hence, in the Project we tried to find the answer to conditions typical to the American scene and were careful not to fall into the trap so common among the Suzuki followers: that of applying a program geared to the preschool child at a later age when the child’s approach to learning has already changed, and when note reading no longer should be avoided, on the contrary, it becomes a vehicle for faster learning of a greater variety of repertoire. (Rolland, quoted in Fischbach, 1972, pp. 163–164)

Rolland- and Suzuki-derived Curricula

One of the most significant features distinguishing string academies from other community-based models of stringed instrument instruction is their use of Mimi Zweig’s curriculum, developed with influence from Paul Rolland, Shinichi Suzuki, and traditional methods. Zweig’s website states that her approach integrates the violin pedagogy, musical vision, and teaching philosophy of Shinichi Suzuki, Paul Rolland, Josef Gingold, Tadeusz Wronski, Janos Starker, and Jerry Horner. By synthesizing the best aspects of each pedagogue, Mimi Zweig and her colleagues at the Indiana University String Academy are engaged in a teaching process that releases the creative potentials of their students. (Wheeler & Zweig, 2007, p. 13)

Another example of Rolland- and Suzuki-derived curriculum is offered by Romeo (1986), who designed an original comprehensive, five-year curriculum for young violinists that includes music history, music theory, aural skills, and violin technique through private lessons, group lessons, and chamber music. Romeo described the curriculum in this way:
The concept of violin technique is drawn from a wide range of sources. … The physiology of Paul Rolland’s method plays an important role in the curriculum. Volumes I through IV of the Suzuki literature are used extensively while other pedagogues are also included in the sequence of technique. … The violin technique is taught primarily in conventional private lessons and reinforced in the group setting. The music history and theory sequences are to be taught mainly in a group setting and reinforced in the private lesson. The aural skills training is a separate program assigned for home practice while chamber music is studied both in the private and group settings. (Romeo, 1986, pp. 12–13)

One final and recent example is the stringed instrument curriculum offered by the American String Teachers Association. The goal in developing this curriculum was to provide a document that:

- is comprehensive, relevant, and practical
- is based upon excellent sequential string pedagogy
- is flexible and can be used or adapted to a wide range of curricular standards (at national, state, or local levels)
- is structured in a way that conveniently provides for differentiated instruction
- contains specific teaching sequences for curricular knowledge and skills
- facilitates the measurement and evaluation of curricular knowledge and skills
- reflects current language used in curriculum development throughout the profession
- is relevant to the skills and knowledge required for twenty-first century learners (Benham et al., 2011, p. 12)

The document notes the wide range of perspectives and schools of thought that influence the string instrument teaching profession, specifically those of Kato Havas, Paul Rolland and Shinichi Suzuki, among others (Benham et al., 2011, p. 12). However, within the curriculum there are no descriptions or citations that would provide evidence of how the works of various pedagogues were incorporated into the curriculum. Instead, references are organized in different categories, such as program design, bowing, online resources, method book series, technique for the violin, viola, cello, and double bass, as well as other categories (Benham et al., 2011, pp. 257–264). Sources related to the pedagogical
contributions of Paul Rolland and Shinichi Suzuki seem to have informed subjects of program design and violin technique, and Mimi Zweig’s stringpedagogy.com is listed as an online resource (Benham et al., 2011, pp. 257–261). Again, however, it is not clear which sources influenced specific areas of the curriculum.

**String Academies**

Sources describing the programmatic characteristics of string academies are few, consisting only of each academy’s website, web-based curricular resources, and short articles. Only students at Indiana University’s Jacobs School of Music have conducted research involving the implementation of the string academy model.

Pabón (1999) observed Mimi Zweig, Betty Haag, and Cyrus Forough teaching precollege violin and viola students at the Indiana University Summer String Academy during summer, 1997. Pabón’s purpose was to explore these teachers’ techniques in search of the factors that made them successful teachers (p. 10). Pabón identified two related concepts that undergirded their work: modeling of tasks, and the fact that they “engaged in scaffolding the student in the performance of a whole task,” rather than looking at a whole task and breaking it down (p. 95). Pabón also commented on a unique feature of Zweig’s teaching:

Zweig’s work revolves around establishing a technical foundation that will enable freedom in performance. She believes that most problems in performance and in the learning process are caused by tension. Physical tension has as its source mental tension caused by the attitudes such as perfectionism. Her approach then is to encourage the student to view mistakes as simply “information,” and to be “nonjudgmental” so that this source of tension is disarmed. (Pabón, 1999, p. 88)

Montgomery (2009) surveyed parents and teachers at the Jacobs School of Music String Academy to identify any relationships between parental involvement and musical achievement in beginning violin students. Montgomery found that the most significant
factor related to achievement was the amount and regularity of students’ practice, which was highly related to the initiation of musical activities in the home environment (p. 48). Other significant factors were parents’ note taking during lessons and the parents’ own practice habits. Based on these observations, Montgomery encouraged parents without a musical background to engage in learning the instrument alongside their child (p. 48).

**Chapter Summary**

String academies are one type of community-based schools of the arts, and as such, the characteristics of string academy sites will be compared to those of community schools of art in this study. According to the literature, community schools of art (a) do not grant degrees; (b) are nonprofit service agencies with missions pertaining to instruction in the arts; (c) do not discriminate based on talent, ability to pay, gender, race, religion, or sexual orientation; (d) offer affordable rates and opportunities for financial assistance; (e) hire qualified faculty; and (f) engage in outreach efforts in their surrounding communities (Evans & Klein, 1992; MacLaughlin, 2003).

Two possible organizational models of community music schools were discussed in this chapter: divisional and independent schools (MacLaughlin, 2003). A divisional school operates within the framework of a parent organization, such as a university or college, symphony orchestra, or other professional organization. Independent schools are typically nonprofit 501(c)(3) organizations developed by their constituents. MacLaughlin (2003) outlined several advantages and disadvantages of independent and divisional music schools, which can be used as a guide in comparing string academy sites. An additional disadvantage identified by Yaffe (2006, p. 4) was that divisional music schools do not always have the autonomy to do extensive fundraising.
Some string academy sites are independent music schools, and others are divisional music schools operated by collegiate music units. Whereas independent and divisional music schools may be seen as part of the larger category of community schools of the arts or community music schools, the most significant branch of the literature focuses on collegiate divisional music schools. This imbalance may reflect the complexity involved in the organization of community music schools within larger institutions, such as a collegiate music unit.

The literature describes several possible characteristics of collegiate divisional music schools, which will be used as points of comparison for divisional string academy sites. Divisional music schools can (a) be primarily or entirely self-sustaining; (b) exist successfully in communities of all sizes; (c) provide laboratory experiences that train existing college students as teachers, and that also aid the recruitment of future college students interested in such programs; (d) provide employment for qualified college students; (e) serve as a platform for extending invitations to performing artists and guest clinicians; (f) engage in community outreach through the performances, events, and programs it offers, exposing the broader community to an atmosphere of higher education; (g) help to recruit graduating high school seniors to the collegiate music unit and to the university as a whole; and (h) offer noncredit or postsecondary courses in music (Alexander, 1997; Clark, 1989; Drew, 1971; Peters, 1979; Zweig, 2004).

The literature also contains several recommendations for collegiate divisional music schools. Collegiate divisional music schools should (a) have an advisory board and a mission statement focused on the education of divisional music school students, not for the primary benefit of college students; (b) have an independent budget; (c) have a staff
separate from the collegiate music unit, large enough to administer the program effectively; (d) have the opportunity to hire qualified and experienced faculty; (e) have an administrative head with a reporting line equivalent to other administrative peers within the collegiate music unit; (f) have the opportunity to fundraise with defined objectives; (g) be provided in-kind space and utilities by the collegiate music unit; and (h) create mutually beneficial programs that serve the collegiate music unit and fill voids for that which is already offered within the surrounding community (Alexander, 1997; Drew, 1971; Peters, 1979; Schultz, 1999; Yaffe, 2003, 2006).

Recommendations in the literature related to the hiring of college students to teach in collegiate divisional music schools stated that (a) student employees should normally be graduate students with prior teaching experience; (b) employing undergraduate students to teach in divisional music school programs is not recommended unless significant supervision is provided; (c) pedagogical support, assistance, mentoring, and opportunities for additional training should be provided to college students teaching in collegiate divisional music schools; and (d) periodic evaluations should be conducted in a nonthreatening manner (Alexander, 1997; Dennison, 2004; Yaffe, 2003).

A major source discussed in this section was the final report of the Illinois String Research Project, conducted through the University of Illinois at Urbana-Champaign by Paul Rolland for two years starting in 1967. This project’s major product was a series of films, *The Teaching of Action in String Playing*, which presented Rolland’s action studies for string teaching, which were at the core of the research. Topics in the project report that are relevant to string academies include extended programming in public schools, instructional practices (especially the establishment of the “advanced class” described in
the report), intended applications of the teaching materials produced by the project, and teacher preparation. Graduate and pedagogy students at the University of Illinois participated in the project as observers or were employed as teaching assistants, in a manner similar to the apprenticeship model used by string academies to prepare future teachers.

The final report indicated that the films, materials, and manuals created by the project could be applied in any string teaching situation, and were designed to be compatible with any musical materials, method, or system that a string teacher might choose to employ, as well as with any age group. This broad applicability has been corroborated by subsequent research, including studies that compared Rolland’s work to that of other well-known string pedagogues (Fanelli, 2001; Nelson, 1994; Perkins, 1993).

Literature related to the method, philosophy, and repertoire developed by Shinichi Suzuki has shown that many stringed instrument teachers have been influenced by Suzuki, even when the influence has come through more traditional means of stringed instrument pedagogy that are not directly connected to or labeled as Suzuki (Barber, 1993; Haugland, 2009; Lo, 1993). Some writers, even those with extensive personal knowledge of or direct ties to Shinichi Suzuki, warned against dogmatic implementation of the Suzuki method, or in fact against referring to it as a method at all, as this would be contrary to Suzuki’s own thoughts on the matter (Barber, 1993; Kendall, 1985; Mehl, 2009; Starr, 2000). Additionally, as indicated by several professionals with ties to Suzuki instruction (Barber, 1993; Kendall, 1985; Lee, 1992; Lo, 1993; Mehl, 2009; Starr, 2000), as well as through concepts related by Shinichi Suzuki (Bauman, 1994; Shepheard, 2012; Starr, 2000; Suzuki, 1983), Suzuki valued his own educational philosophy and the
development of each teacher’s own creative approach to teaching far more than the repertoire he chose or the technical components he used to teach the violin.

The programmatic characteristics of Suzuki programs in community music school settings may resemble those found in string academies in terms of: (a) expectations for parent involvement, (b) emphasis on beginning at a young age, (c) attention to creating a positive and nurturing environment for study, (d) reliance on group instruction as well as private instruction, (e) inclusion of a standard, graded repertoire that all students learn, (f) a common approach to teaching among teachers, and (g) employment of well-trained teachers. Additionally, Blaker (1995) offered a composite of typical Suzuki programs that will be compared to string academies.

The pedagogical contributions of both Paul Rolland and Shinichi Suzuki have become highly diversified. This includes adaptation of Rolland and Suzuki pedagogy to (a) instruments not originally taught by Rolland or Suzuki (Rolland cited in Fischbach, 1972; Rolland, 1971; Mehl, 2009), (b) homogeneous and heterogeneous stringed instrument classes in American public schools (Brunson, 1969; Fanelli, 2001; Zahtilla, 1970), (c) original approaches to teaching (Benham et al., 2011; Fanelli, 2001; Lee, 2003; Lo, 1993; Nelson, 1994; Romeo, 1986; Zweig, 2007a) and (d) an abundance of additional materials for use in both solo and ensemble settings (Fanelli, 2001; Mehl, 2009).

This chapter extensively compared the pedagogical contributions of Rolland and Suzuki, noting how examples of original curricula that incorporate aspects of Suzuki’s work, in combination with the ideas about teaching violin developed by Rolland, have provided a basis for the creation of three original curricula, including that which is used in string academies. In the literature, Suzuki’s educational philosophy, not the teaching of
technical components, is frequently viewed as unique (Nelson, 1994; Rolland, quoted in Fischbach, 1972). Conversely, some teachers seemed to question whether Rolland’s output exhibits a specific teaching philosophy at all, whereas his teaching of technique is regarded as revolutionary and visionary (Perkins, 1993). Sources have indicated that the two approaches share several related ideas and are highly compatible with each other (Fischbach, 1972; Nelson, 1994; Perkins, 1993). Stringpedagogy.com emphasizes the contributions of both pedagogues, noting specific elements of the Suzuki philosophy that are incorporated, as well as the development of free and natural physical motions in string students as inspired by Rolland (Wheeler & Zweig, 2007, p. 14).

Research on the implementation of the string academy model consists only of two master’s theses on topics that have only minor implications for the present study. Overall, an insufficient amount of research has been devoted to the subject of string academies, thus justifying the need for this study.
CHAPTER 3
METHODOLOGY

The present study relied on a qualitative approach to research, as this was the best choice for addressing the study’s purpose of describing and analyzing the individual and collective programmatic characteristics of five selected string academies in the United States. Specifically, I applied a case study approach due to its ability “to enhance our understanding of contexts, communities and individuals” (Hamilton & Corbett-Whittier, 2013, p. 3). Because I was professionally associated with the directors of the string academies and due to my particular interest in string academies, this was an intrinsic case study (Putney, 2010, p. 117).

Characteristics drawn from the literature and chosen to guide the research were (a) instructional program, (b) geographic and physical setting, (c) organizational structure and administration, (d) finances, (e) student recruitment, and (f) personnel. An additional characteristic, faculty and student activities in the community, was generated in the course of analysis.

Research Methods

The purpose of the study was addressed by completing descriptive cross-case summaries of five string academies. Data were gathered from a variety of sources. See Table 1 for a summary of how these sources were applied to the program characteristics identified for study.
Table 1

*Descriptive Summaries and Data Sources for String Academy Characteristics*

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Data Source</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>A. Instructional Program</strong></td>
<td></td>
</tr>
<tr>
<td>i. Curriculum</td>
<td>a, c</td>
</tr>
<tr>
<td>ii. Instruments taught</td>
<td>a, b, c</td>
</tr>
<tr>
<td>iii. Course of study</td>
<td>a, b, c</td>
</tr>
<tr>
<td>iv. Instructional calendar and scheduling</td>
<td>a, b, c</td>
</tr>
<tr>
<td>v. Performances and special events</td>
<td>a, b, c</td>
</tr>
<tr>
<td>vi. Student admission and placement</td>
<td>a, b, c</td>
</tr>
<tr>
<td>vii. String academies as virtual and digital sites for studio teacher preparation</td>
<td>a, b, c</td>
</tr>
<tr>
<td>viii. Extended programming</td>
<td>a, b, c</td>
</tr>
<tr>
<td><strong>B. Geographical and Physical Setting</strong></td>
<td></td>
</tr>
<tr>
<td>i. Geographical location</td>
<td>a, c</td>
</tr>
<tr>
<td>ii. Facilities</td>
<td>a, c</td>
</tr>
<tr>
<td><strong>C. Faculty and Student Activities in the Community</strong></td>
<td></td>
</tr>
<tr>
<td>i. String academy faculty activities</td>
<td>a, c</td>
</tr>
<tr>
<td>ii. String academy student activities</td>
<td>a, c</td>
</tr>
<tr>
<td><strong>D. Organizational Structure and Administration</strong></td>
<td></td>
</tr>
<tr>
<td>i. Program size</td>
<td>a, b, c, d</td>
</tr>
<tr>
<td>ii. Administrative setting and structure</td>
<td>a, c, d</td>
</tr>
<tr>
<td><strong>E. Finances</strong></td>
<td></td>
</tr>
<tr>
<td>i. Revenue</td>
<td>a, c, d</td>
</tr>
<tr>
<td>ii. Expenses</td>
<td>a, c, d</td>
</tr>
<tr>
<td>iii. Financial support for students</td>
<td>a, c, d</td>
</tr>
<tr>
<td><strong>F. Student Recruitment</strong></td>
<td></td>
</tr>
<tr>
<td>i. Reputation</td>
<td>a, c</td>
</tr>
<tr>
<td>ii. Advertising</td>
<td>a, b, c, d</td>
</tr>
<tr>
<td>iii. Websites</td>
<td>a</td>
</tr>
<tr>
<td><strong>G. Personnel</strong></td>
<td></td>
</tr>
<tr>
<td>i. Program Leadership</td>
<td>a, c</td>
</tr>
<tr>
<td>ii. Faculty</td>
<td>a, c</td>
</tr>
<tr>
<td>iii. Workloads and compensation</td>
<td>a, b, d</td>
</tr>
<tr>
<td>iv. Faculty evaluation, training and professional development</td>
<td>c</td>
</tr>
</tbody>
</table>

Note: (a) online sources; (b) archival documents (i.e., articles, newsletters, student handbooks, archived website files); (c) interviews and email correspondence with current site directors of string academies to gather additional data and to expand, clarify, and interpret data gathered online; and (d) interviews and email correspondence with key administrators to fill gaps in information not provided by site directors.
Data Collection

To increase efficiency, before conducting any interviews I gathered information from online sources. These included (a) string academy websites; (b) demographic information and geographical terms from the U.S. Census Bureau and the Cost of Living Index (COLI) from the Council for Community and Economic Research; (c) web-based pedagogical resources set up by site directors in Baltimore, Bloomington, and Evanston (i.e., violinpractice.com, stringpedagogy.com, and Coursera, respectively) (Freeman & Henry, 2015b; Northwestern University & Spencer, 2014; Wheeler & Zweig, 2007); (d) information from the National Association of Schools of Music (NASM); (e) IRS form 990 from tax year 2013 for the String Academy of Wisconsin, including IRS instructions that aided in the interpretation of this form; and (f) websites for other organizations that have direct or indirect relationships with string academies.

In addition to documents downloaded from websites, four other types of archival documents were used: (a) documents from the String Academy of Wisconsin archives in Milwaukee; (b) documents included by site directors within email correspondence; (c) documents previously in my possession due to my prior professional experience with the academies; and (d) newspaper articles. Access to the String Academy of Wisconsin archives assisted me in gathering information for the Milwaukee site in such content areas as financial support for students, curriculum, and performances and special events. I received several additional electronic archives by email from site directors and key stakeholders. Syllabi from courses that I had attended in Evanston and Milwaukee aided my preparation of course descriptions for both sites. Journal articles by Brenda Brenner and Mimi Zweig helped me to describe curriculum and extended programming. Finally,
several documents downloaded from string academy websites contributed to the
descriptions of several content areas throughout chapter 4 of this document.

Interviews with site directors were semi-structured and informal, an approach that
Merriam (1998, p. 74) describes as

guided by a list of questions or issues to be explored, and neither the exact
wording nor the order of the questions is determined ahead of time. This format
allows the researcher to respond to the situation at hand, to the emerging
worldview of the respondent, and to new ideas on the topic.

Site directors and I entered into a member-checking agreement before interviews
took place. Therefore, typed transcripts of each interview were distributed to each site
director individually. Outlines of the interview and archival data to be used were then
submitted to site directors for approval and clarification. During the process of writing
and analysis, fact checking and requests for additional information were accomplished
via email. Lastly, after the writing and analysis were complete, direct quotations from the
interviews were submitted to site directors for approval.

Correspondence with key administrators at the Baltimore, Bloomington,
Evanston, and Milwaukee sites was accomplished via interviews and email. In Baltimore,
a Peabody Institute communications specialist clarified data about marketing strategies
for The Peabody Preparatory. In Bloomington, I interviewed Brenda Brenner (co-director
of the Jacobs School of Music String Academy) and Sally Nicholson (coordinator of the
Office of Pre-College and Special Programs for the Jacobs School of Music at Indiana
University). Member-checking agreements were arranged in the same fashion as for the
site directors.

Trustworthiness

Creswell (2013) outlined eight strategies that enhance the authenticity and
trustworthiness (or “validation,” to use Creswell’s term) of a case study research design, and he recommended that qualitative researchers employ at least two of them. My research employed triangulation, clarification of researcher bias, and member checking (Creswell, 2013, pp. 251–252).

Data Analysis

Data analysis was a constant process that occurred simultaneously with data collection. Creswell (2013) described in detail the “data analysis spiral” for case study designs, in which a researcher engages in a process of “data organization” (i.e., “create and organize files for data”), “reading, memoing” (“read through text, make margin notes, form initial codes”), “describing the data into codes and themes” (“describe the case and its context”), “classifying the data into codes and themes” (“use categorical aggregation to establish themes or patterns”), “interpreting the data” (“use direct interpretation; develop naturalistic generalizations of what was ‘learned’ ”), and “representing, visualizing the data” (“present in-depth picture of the case (or cases) using narrative, tables, and figures”) (pp. 183, 190–191). As Creswell explained, by spiraling through these steps “the researcher engages in the process of moving in analytic circles rather than using a fixed linear approach,” gradually allowing for deeper and more comprehensive, “custom-built” analysis (Creswell, 2013, p. 182).

Ethics and Human Subjects Review

I solicited the University of Illinois at Urbana-Champaign institutional review board for permission and the study was awarded exempt status. See Appendix B for a copy of the approval letter.
CHAPTER 4

FINDINGS

Findings are presented on the individual and collective programmatic characteristics of string academies listed in the purpose of this study, as well as the subtopics identified through the process of analysis.

Instructional Program

In this section, the instructional program of string academies will be examined, including the curriculum used; instruments taught; courses of study and their components, such as private lessons, group classes, and ensembles; instructional calendar and class scheduling; performances and special events; student placement and admission; string academies as virtual and digital sites for studio teacher preparation; and extended programming. Results within each section are presented as a comparison across sites.

Curriculum

Mimi Zweig’s curriculum as represented on stringpedagogy.com serves as the pedagogical basis for how faculty at all five string academy sites teach.¹ This is because the site directors at the Baltimore, Evanston, Laramie, and Milwaukee sites have all received extensive pedagogical training from her. As a result, there is great consensus across all sites about what students are expected to know and do and how they are to be taught.

Underlying the instruction that takes place at string academies are two characteristics of the curriculum not described in chapter 1 above: providing instruction to students within a nonjudgmental environment, and parental support.

¹ For a detailed description of the curriculum displayed on stringpedagogy.com, see the section on “The
Nonjudgmental Environment. Perhaps reflecting her experience with and interest in the Talent Education Approach of Shinichi Suzuki, Zweig contends that a nonjudgmental environment for teaching, practicing and performing is “the glue that holds all the information together … [by allowing] students the freedom to make mistakes, recognize the mistakes, and correct the mistakes with the many necessary repetitions” (Wheeler & Zweig, 2007, p. 49). This glue is also represented by valuing mistakes, not as errors but as opportunities, or as key information that helps one learn:

Encouraging a nonjudgmental approach to learning helps the student to release self-imposed restrictions when he or she thinks they are the only one who is experiencing a certain difficulty or is afraid of making a mistake. We have to go forward. That’s what experience is. I think a nonjudgmental approach and the quest to try your best, to make your best effort and not to be discouraged because you’re afraid to make a mistake, are so important. (D. Drexler, personal communication, July 29, 2013)

A nonjudgmental approach nurtures each student’s varying abilities in a supportive atmosphere. The overarching motivation of string academy instruction is adaptation to the individual needs of each student, which is an important feature of a nonjudgmental approach:

I think we all believe that music has a purpose beyond students becoming performers or professional violinists. That is important, but it’s not the only motivator for what we do. We have seen many cases where music has been enriching in a person’s life even though they are limited in their abilities and/or choose another career path. Music study enriches all lives. (S. Sinfitt, personal communication, July 11, 2013)

Parental Involvement. As part of the string academies’ assimilation of the Suzuki educational philosophy, parental involvement is an integral part of string academy instruction. All string academy personnel strive to communicate to parents their expectations in this regard. The student handbook for the Jacobs School of Music String Academy is a good example as it describes the parents’ role very clearly:
It is expected that parents of beginning students in the String Academy will attend all group and private lessons and practice with his/her child every day [formatting in original]. Parents should be actively involved in the learning process—taking notes during lessons and groups and following through on the ideas in the daily practice. Positive and encouraging parental involvement is the biggest indicator of student success in our program! As the student progresses and matures, the private teacher will inform the parent as less parental involvement is needed. (Jacobs School of Music String Academy, 2012, p. 2)

Teachers discuss the parents’ role with families during introductory correspondence and/or meetings in which a statement of program policies is distributed, and through an ongoing process of informal conversation during private lessons and group classes (D. Drexler, personal communication, January 27, 2014; R. Henry, personal communication, July 7, 2013; S. Sinift, personal communication, July 11, 2013; S. Spencer, personal communication, July 29, 2013; M. Zweig, personal communication, July 27, 2013). The Laramie and Milwaukee sites provide parents additional information on their websites or as downloadable files. In Baltimore, communication with families includes student deficiency notices, which are used to communicate chronic problems with attendance, preparedness, or attitude on an as-needed basis; and periodic progress reports and parent meetings, which are held once each semester (Johns Hopkins Peabody Institute, 2013b, pp. 6–7). Rebecca Henry described the importance of this communication and its perennial nature:

It’s never enough because we’re always thinking; “Don’t they get this?” And then we remember it’s a new generation [of parents]. You have to constantly educate the parents, and you have to remember that young parents are different from parents who have been around for 10 years. Most of our parents are just fantastic, but this is always one of the management issues. You are always going to have a few parents whose idea of what is good for their child is different from your idea, and that’s always a challenge. (R. Henry, personal communication, July 7, 2013)
Instruments Taught

The violin is the most prevalent stringed instrument taught in string academies. This may be because all string academy site directors base their work on the pedagogical approach defined at stringpedagogy.com, which focuses on the violin. The viola is included in the string academy curricular model, as the approach to string technique in all published curricular materials primarily targets these two upper string instruments. Although instruction on cello is also available at all string academies, instruction for the double bass is offered only in Baltimore. Another difference between the curriculum for upper and lower strings is related to the consistency of approach implemented by teachers within and across each site.

Viola. Because stringpedagogy.com focuses on the violin, it may not be readily apparent how instruction for the viola is handled at string academy sites. However, viola instruction is also considered important and is specifically mentioned in the mission statements for Bloomington, Laramie, and Milwaukee (Jacobs School of Music String Academy, 2012, p. 6; String Academy of Wisconsin, n.d.-g; String Academy of Wyoming, n.d.-c). Furthermore, all five sites educate violists on a regular basis (D. Drexler, personal communication, July 29, 2013; R. Henry, personal communication, July 7, 2013; S. Sinift, personal communication, July 11, 2013; S. Spencer, personal communication, July 29, 2013; M. Zweig, personal communication, July 27, 2013).

Four of the five site directors (Drexler, Henry, Spencer, and Zweig) stated their belief that it is best for beginners to start on the violin. “I think little tiny violas just don’t sound that good,” said Rebecca Henry, herself a violist, “and physically, pedagogically, I
think doing the early years on the violin is probably better” (personal communication, July 7, 2013). Stacia Spencer, also a violist, supported this notion as well:

After years of playing the violin, I switched to the viola in my junior year of high school. I have always believed it is best if students begin their training on the violin because there is a wide variety of repertoire to choose from, the beginner’s instruments typically have a better sound, and the students seem to have a better understanding of the violin’s facilities. When the time comes to switch to viola, they can just play. (S. Spencer, personal communication, July 29, 2013)

Darcy Drexler confirmed this philosophy as well, stating that her preference would be for violin students to progress to the level of studying Edouard Lalo’s violin concerto, *Symphonie Espagnole*, before picking up the viola so that their facility can be developed on a smaller instrument (D. Drexler, personal communication, July 29, 2013).

On the faculty listings at string academy sites, several faculty members are listed as teachers of both violin and viola, but none are listed exclusively as viola instructors. This is not to suggest that violinists teach viola students, but that all those who teach the viola also teach the violin. For the 2013-2014 academic year, 5 of 17 faculty members were listed on the website as teaching both violin and viola in Baltimore, and the other 12 were listed as violin faculty (Johns Hopkins Peabody Institute, n.d.-m); in Evanston, three of five faculty members were specifically listed on the website as teaching both instruments (Northwestern University Bienen School of Music, n.d.-b); in Laramie, all four are listed as teaching violin and viola (String Academy of Wyoming, n.d.-b); and in Milwaukee, just one of the five was identified as teaching both instruments (String Academy of Wisconsin, n.d.-c). In Bloomington, specific information on teachers who double as violin and viola faculty is not shown on the website. However, Zweig commented that all violin students at the Virtuosi level (the most advanced level) are required to study the viola also, and that for many years she had been a viola instructor at
the IU School of Music (M. Zweig, personal communication, July 27, 2013). Zweig stated that typically students will progress to the level of the Dmitry Kabalevsky or Max Bruch violin concertos before experiences with the viola are encouraged; these experiences usually take the form of playing viola in a chamber ensemble at first, “and some of them love it so much they just switch” (M. Zweig, personal communication, July 27, 2013). Encouraging violin students to first play the viola in chamber music is a common trend among all five sites (D. Drexler, personal communication, July 29, 2013; R. Henry, personal communication, July 7, 2013; S. Sinift, personal communication, July 11, 2013; S. Spencer, personal communication, July 29, 2013; M. Zweig, personal communication, July 27, 2013).

Site directors at the Baltimore, Laramie, and Milwaukee sites mentioned ways in which each site has tried to integrate the viola over the years. In Milwaukee, the possibility of viola groups was advertised in schedule and fees brochures for 15 years (String Academy of Wisconsin, 1990–2005), small viola ensembles have occasionally been included in concert programs (String Academy of Wisconsin, 1996, 1997), and in 1992 there was a viola division for the schoolwide concerto competition (String Academy of Wisconsin, 1992). However, despite several efforts, a more extensive viola program never sprouted. Henry described similar circumstances in Baltimore:

We’ve tried doing a [viola] group and have occasionally had success with a mixed level [viola] group, but we have more just been accommodating the kids that come. If we have somebody come to start on violin at the age of eight or nine, we throw it out there as an option. We encourage the older beginners: “Have you thought about the viola?” (R. Henry, personal communication, July 7, 2013)
This is one of the few cases where beginning students are encouraged to start on the viola, and age is clearly a factor; these students are physically bigger than most beginners at string academy sites.

Currently, the most integrated example probably exists in Laramie, where group classes are called “violin and viola” groups, and where viola students can be seen participating in group classes as early as the Suzuki book two level (String Academy of Wyoming, 2013a). Sinift explained:

We don’t have enough violas to make a viola class, so we accommodate with the repertoire. They don’t play all of the repertoire that a particular group is working on, but we make sure that they are playing something in keys that both the violins and violas can play, some things that will be just for viola, and then maybe they will play a piece with cellos and go rehearse that piece with the cello group. We’ve done that a few times. (S. Sinift, personal communication, July 11, 2013)

Viola instruction is thus more prevalent among students at advanced playing levels in string academies, but beginning students studying the viola are rare. In Evanston, teachers have encountered students who want to begin on the viola, and this is permitted as an option, since students there can take individual lessons without participating in group classes (S. Spencer, personal communication, July 29, 2013). The same option exists in Baltimore. However, none of the sites have started students on the viola in a way that allows them to participate in beginning group classes.

We really encourage the violin students when they get into the Performance Academy to play viola in quartet or orchestra for a semester, and through that we do get a number of kids who fall in love with it and end up switching. So our viola scene at the upper levels is pretty healthy. (R. Henry, personal communication, July 7, 2013)

**Cello.** Cello instruction is offered at all five string academy sites. Although all published curricular materials for string academies are primarily geared toward the violin and the viola, the cello programs at each site function within the same pedagogical
framework, including a similar progression of note reading instruction, musicianship
skills, scales and etudes, Suzuki and extended repertoire, all within a nonjudgmental
environment. Site directors in Bloomington, Laramie, and Milwaukee indicated that cello
curricula incorporate ideas from Paul Rolland as well (D. Drexler, personal
communication, November 12, 2015; S. Sinift, personal communication, November 15,
2015; M. Zweig, personal communication, November 9, 2015). In Baltimore, Rebecca
Henry indicated that the YPSP cello coordinator has had less direct experience with
Rolland’s work than the violin faculty, but believes the instructor to be somewhat
influenced by Rolland as well (R. Henry, personal communication, November 9, 2015).

Zweig has been the central figure in disseminating the curriculum and
pedagogical concepts used for the violin and viola at all string academy sites. However,
because there is no equivalent cello figure involved at string academies, there is less
uniformity in cello teaching across sites. Only one source provides additional detail on
cello teaching: Volume 4 of stringpedagogy.com, “Cello Teaching of Susan Moses,” a
new feature as of summer 2015, includes descriptions and videos of the teaching
techniques of Susan Moses, co-director of the String Academy and director of the Cello
Program at the Jacobs School of Music String Academy (Wheeler & Zweig, 2002–2015).
In addition, a more detailed cello chapter is planned for stringpedagogy.com (M. Zweig,
personal communication, November 9, 2015).

**Double Bass.** Offering double bass instruction has proven to be a challenge for
string academies. At the Evanston and Milwaukee sites, incorporating the double bass has
been considered over the years (D. Drexler, personal communication, June 28, 2015; S.
Spencer, personal communication, June 29, 2015). Drexler said that it is a possibility, but Spencer stated that no one asks for double bass instruction so it has never been offered.

Double bass offerings had existed at the Baltimore (1992 to 2015), Bloomington (2001 to 2005) and Laramie sites (2009 to 2011), but in each case the programs were discontinued upon the departure of double bass instructors, indicating (as Zweig acknowledged specifically) that such programs are largely driven by one person (R. Henry, personal communication, June 28, 2015; S. Sinift, personal communication, June 29, 2015; M. Zweig, personal communication, July 1, 2015). In Baltimore, private lessons and group classes for the double bass have been offered through the YPSP since 1992 (R. Henry, personal communication, November 9, 2015). Double bass group classes have been organized differently than other YPSP group classes for the violin and cello, which meet weekly throughout the academic year. Instead, string bass groups meet only three times per semester (Johns Hopkins Peabody Institute, n.d.-p). Unfortunately, double bass offerings within the YPSP were discontinued in 2015 when the instructor relocated out of the area (R. Henry, personal communication, June 28, 2015). A search is currently underway for a new instructor to rebuild the program. Henry said, “We will search for someone who will stay in the area and is interested in really developing it. You have to have the right person running it and there aren’t that many bassists with experience at this. I find it is better to wait for the right person than hire just anyone” (R. Henry, personal communication, June 29, 2015).

In Bloomington, double bass instruction was offered from 2001 to 2005, modeled after violin and cello offerings (M. Zweig, personal communication, July 22, 2015), but, just as in Baltimore, was discontinued when the instructor relocated (M. Zweig, personal
communication, July 1 and 2, 2015). In Laramie, Sherry Sinift also alluded to the importance of finding the right person:

> We did have string bass [from 2009 to 2011]. The teacher was not a good fit for the program and it was difficult to integrate bass into group concerts. I’m not opposed to offering bass instruction on principle, but there has also not been a strong motivation or impetus to replace the bass component. (S. Sinift, personal communication, June 29, 2015)

**Course of Study**

The course of study for string academy students has three main components: private lessons, group classes, and ensembles. In addition, sites have distinct classes designed for beginners, instruction in theory and musicianship, summer offerings, and additional opportunities for intermediate and advanced students, such as competitions and touring ensembles. These characteristics will be discussed and compared below.

A detailed description for the Baltimore site is provided in Appendix C, as this site has seen a unique evolution compared to the other string academy sites, resulting in the creation of three distinct programs: the Young People’s String Program (YPSP), the Performance Academy for Strings (PAS), and the Pre-Conservatory Violin Program (PCVP). Appendix C provides a more specific contextual picture of the Baltimore site, including the many additional enrichment opportunities offered by the String Department of The Peabody Preparatory, which are not discussed in this chapter.

**Private Lessons.** The most basic component of the course of study at string academies is individual private lessons, which are required for all students at all sites. The duration of private lessons changes as students advance. At all sites, beginning students start with 30-minute lessons and increase to 45- or 60-minute lessons.
Decisions to increase the lesson time are at the private teacher’s recommendation, based on a variety of factors such as age, maturity, and the quantity of material being studied. Darcy Drexler outlined a few norms for students enrolled at the String Academy of Wisconsin: around the middle of Book 3, students expand to 45-minute lessons, and at Book 5 they increase to 60 minutes; very serious students may take 90-minute lessons (D. Drexler, personal communication, July 29, 2013). Baltimore also has a 90-minute lesson option (Johns Hopkins Peabody Institute, 2013a). In Bloomington, more time (beyond 60-minute weekly lessons) is given to advanced students as needed (Wheeler & Zweig, 2007, p. 15).

At all sites, students are selected to also receive “helper lessons,” taught by university students enrolled in pedagogy classes. The “helpers” observe the private lessons of the students to whom they are assigned and then meet with those students for individual instruction. Usually these students are beginners, but they can be more advanced depending on the needs and experience of university students. This system is most clearly described in Bloomington:

In addition to the group and private lessons, Beginning through Book Two violin students enrolled in the IU String Academy are offered an opportunity to work with a “practice helper” in the Fall and Spring Semesters (there are no helpers in the summer). (Jacobs School of Music String Academy, 2012)

**Group Classes.** Group instruction is a fundamental characteristic of string academies’ course of study at all levels. The figures in Appendix D provide concise illustrations of the sequence of group instruction at the five string academy sites, and they will be referenced throughout this section.

---

2 For an additional description of helper lessons, see “String Academies as Virtual and Digital Sites for Studio Teacher Preparation,” later in this section.
Group classes are designed to be motivational and fun for students and to provide a social environment for their study experience (Johns Hopkins Peabody Institute, 2013b). In group classes, students experience instruction on instrumental technique, ensemble playing, and practice in solo performance with piano (Jacobs School of Music String Academy, 2012; String Academy of Wyoming, n.d.-a). Also, concepts learned at the private lessons are reinforced and the groundwork is laid for more advanced ensemble experiences as students advance (Johns Hopkins Peabody Institute, 2013a).

Group classes also include an informal process of instruction in note reading, music theory, music history, rhythm, and aural skills, starting from the very beginning levels. Because the content of private lessons and group classes is connected, these categories are also an informal feature of private lessons, as is any additional repertoire covered in group classes. As the figures in Appendix D indicate, music theory and/or musicianship instruction is then formalized at the Bloomington and Milwaukee sites at specific points within the sequence of group instruction. In Baltimore, students age 10 or older have the option to participate in the theory track offered through The Peabody Preparatory, which includes a full complement of classes, including a full year of instruction that may be taken online (R. Henry, personal communication, August 8, 2015). The theory track is not included as part of the YPSP, the PAS, or the PCVP and is therefore not displayed in Figure D1. However, less advanced students of the PAS in Baltimore attend a weekly musicianship class, which includes work in eurythmics, ear training, solfège, and basic theory (Johns Hopkins Peabody Institute, n.d.-d). In Bloomington and Milwaukee, theory courses are a required feature of the instructional

---

3 See Appendix C for a specific description of musicianship class enrollment within the PAS.
design as students reach Suzuki books 5 or 6 in violin, and at differing points for cello (Figures D2 and D5) (D. Drexler, personal communication, July 29, 2013; String Academy of Wisconsin, n.d.-f; Indiana University Jacobs School of Music, n.d.-d; M. Zweig, personal communication, September 22, 2014).

Another feature of group classes at the Baltimore, Laramie, and Milwaukee sites is distinct introductory programs for beginning students. Both the Laramie and Milwaukee sites organize a “Beginner’s Week,” coinciding with the start of the fall semester in Laramie and the start of the summer session in Milwaukee (String Academy of Wyoming, 2013b; D. Drexler, personal communication, July 29, 2013). During this week, beginning students and their parents meet daily for an hour of group instruction intended to jump-start their study (String Academy of Wyoming, 2013b; D. Drexler, personal communication, July 29, 2013). Baltimore’s YPSP incorporates beginners differently from all other sites (Figure D1): special introductory classes called “Fiddlers Four” and “Cello Fun” arrange students age four and five in groups of two to four students throughout the academic year. A similar “Introduction to Cello” class is offered all year to beginning cello students age seven to nine, and the cello faculty have used this as an effective recruiting tool; the equivalent “Introduction to Violin” class for students age five to eight is offered only in the summer (R. Henry, personal communication, July 7, 2013; Johns Hopkins Peabody Institute, n.d.-p). Students in these beginning classes do not receive individually scheduled private lessons; however, both private and group experiences are incorporated into the structure of class meetings, in which students participate until they are ready to be incorporated into YPSP beginner classes (Johns Hopkins Peabody Institute, n.d.-p).
All sites require students to be taking private lessons in order to enroll in group classes. At Bloomington, Laramie, and Milwaukee, simultaneous participation in both group classes and private lessons is the only option; students sign up for the entire program. At Baltimore and Evanston, however, students can enroll in private lessons without participating in group classes. In Baltimore, this greater flexibility would seem to correspond to the twofold mission of The Peabody Preparatory (see Appendix C). However, especially for young beginners, participation in the YPSP is strongly encouraged: “Students age 5 through eighth grade are expected to participate in the full YPSP educational program, which includes a weekly YPSP group class as well as individual instruction” (Johns Hopkins Peabody Institute, 2013b). Participation in group classes is also strongly encouraged in Evanston, and the tuition structure has been incentivized to stimulate enrollment:

To avoid having students drop out due to high participation cost, we charge a very small incidental fee for group classes. This allows students a full musical experience alongside private lessons, including the many performance opportunities. These recitals and concerts are perks that come along with participation. The cost is kept low enough that the students would not be saving much if they dropped out. (S. Spencer, personal communication, July 29, 2013)

Progression through a sequence of group classes is based predominantly on repertoire according to the Suzuki books, not on age (Wheeler & Zweig, 2007, p. 97; D. Drexler, personal communication, July 29, 2013; Johns Hopkins Peabody Institute, 2013b). As a result, the volume number of the Suzuki series that the group members are studying is often used as the name for the group class. This is the case in Bloomington, Evanston, and Laramie (Figures D2 to D4). Sometimes group names will be combined to fit enrollment; for example, if enrollment numbers are low, two groups may be combined to create a Book 2/3 class (M. Zweig, personal communication, July 27, 2013). In
Baltimore and Milwaukee, however, group classes are named after musical terms or famous performers of the violin (Figures D1 and D5), such as Allegro, Neveu, and Kreisler (String Academy of Wisconsin, n.d.-f; Johns Hopkins Peabody Institute, n.d.-p). This option makes it easy to change the boundaries of the repertoire without having to rename the groups or deal with disproportionate enrollment across groups; it also creates a “teachable moment” for students to learn about great violinists (D. Drexler, personal communication, July 29, 2013 and November 12, 2015; R. Henry, personal communication, November 9, 2015). Additional decisions on group arrangements may be based on a variety of factors, such as age, maturity, technical and musical considerations, abilities in note reading and/or music theory, group dynamics, and class size (D. Drexler, personal communication, July 29, 2013 and November 12, 2015; R. Henry, personal communication, July 9, 2013; Johns Hopkins Peabody Institute, 2013b). This flexibility permits faculty members to create effectively functioning group classes in which each child is challenged (R. Henry, personal communication, November 9, 2015).

At all sites, the duration of group instruction increases as students advance. The five figures in Appendix D outline instrument specific group class durations at each site. The Baltimore, Bloomington, and Milwaukee sites have the most similarities, in that time increases occur sooner and to a greater extent than at the other sites, most likely because they are the three largest programs. The Bloomington and Milwaukee sites share another similarity in how they arrange instruction for the most advanced students, in that 90-minute master classes are included as part of the class period (String Academy of Wisconsin, n.d.-f; M. Zweig, personal communication, September 22, 2014). As a result, class durations for violin can total up to four hours in Bloomington for violin and three
hours in Milwaukee. The Bloomington program also incorporates chamber music into the four-hour (or five-hour if theory is included) structure (Indiana University Jacobs School of Music, n.d.-d). In Baltimore, students in the PAS engage in more instruction time (5.5 hours) than at any other site (Figure D1).

All sites set a required minimum enrollment of students in an individual group class, although it can be averaged out across all group classes at a site, with enrollment in one class below the minimum if another class is above the minimum, in order to adhere to financial requirements set by tuition rates. In Bloomington, the minimum is six students (M. Zweig, personal communication, July 27, 2013). Evanston must have four students for a group class to be financially viable (S. Spencer, personal communication, July 29, 2013). Baltimore has adapted the YPSP introductory courses to work with groups of two to four (Johns Hopkins Peabody Institute, n.d.-p); all other YPSP group classes have a six-student minimum (R. Henry, personal communication, July 7, 2013). Laramie has a minimum of eight students for each of the younger groups; once students progress to 60-minute private lessons, the minimum becomes six students per group class (S. Sinift, personal communication, July 11, 2013). Milwaukee sets an overall average requirement of at least 10 students per group throughout the entire program; younger groups are kept small, usually around six students, and larger class sizes at more advanced levels make up for those smaller beginner groups (D. Drexler, personal communication, July 29, 2013).

In Baltimore, Bloomington, Evanston, and Laramie, the maximum size of a group is generally 12 members (R. Henry, personal communication, July 7, 2013; S. Sinift, personal communication, July 11, 2013; S. Spencer, personal communication, July 29,
2013; Wheeler & Zweig, 2007, p. 97; M. Zweig, personal communication, July 29, 2013). Sinift and Spencer both commented on their experiences in leading classes of 15 students. In both cases, enrollment in a particular class had been somewhat low, and two classes were condensed, but the resulting large group was difficult to manage and composed of undesirable variation in age and ability levels, so those classes were eventually split apart again (S. Sinift, personal communication, July 11, 2013; S. Spencer, personal communication, July 29, 2013). Spencer proceeded to identify eight students as the most desirable group size (S. Spencer, personal communication, July 29, 2013). In Milwaukee, Drexler identified 15 students as a flexible maximum for advanced classes only (D. Drexler, personal communication, July 29, 2013).

**Chamber Ensembles and Orchestras.** Chamber ensembles and/or orchestra experiences are offered to students at all sites. In Baltimore, PAS small ensembles include the Peabody Violin Choir, the Peabody Cello Choir, and Performance Academy Chamber Music (Johns Hopkins Peabody Institute, n.d.-d). Younger PAS students have an hour of violin or cello choir, followed by an hour-long musicianship class (first semester) or work in chamber ensembles such as string quartets (second semester) (R. Henry, personal communication, May 6, 2014). Older PAS students do not attend violin or cello choir or musicianship classes. Instead, they work in a small chamber ensemble for two hours (R. Henry, personal communication, May 6, 2014). During the 2012–2013 academic year, Bloomington had one quartet ensemble and Evanston had two (S. Spencer, personal communication, September 8, 2014; M. Zweig, personal communication, July 27, 2013). However, in Bloomington and Evanston, chamber music is emphasized more heavily during the summer for intermediate and advanced students,
and it is incorporated more extensively as an optional activity in Evanston and through the Summer String Academy\(^4\) in Bloomington (S. Spencer, personal communication, July 29, 2013; M. Zweig, personal communication, July 27, 2013). In Laramie, chamber music opportunities are incorporated when there are enough advanced students to make it feasible to do so, and when the director determines that doing so will suit the students’ needs; they do not necessarily occur every year, depending on enrollment (S. Sinift, personal communication, July 11, 2013). In Milwaukee, chamber music is not organized during the academic year due to students’ busy schedules, but a week-long Chamber Music Festival\(^5\) occurs during the summer for string players who have reached Suzuki book 5 or above (String Academy of Wisconsin, n.d.-b; D. Drexler, personal communication, July 29, 2013).

Orchestral opportunities are offered at the Baltimore, Bloomington, and Milwaukee sites. In Bloomington, a chamber orchestra is organized for advanced students once a year, rehearsing for three weeks prior to a performance (Wheeler & Zweig, 2007, p. 15). However, plans to extend this experience throughout the academic year, meeting on a weekly basis, were initiated for the 2013–2014 academic year (M. Zweig, personal communication, July 29, 2013). In Milwaukee, a chamber orchestra is organized for students participating in the summer Chamber Music Festival, as well for the most advanced students once a year to accompany concerto competition winners (D. Drexler, personal communication, July 29, 2013). In Baltimore, PAS large ensembles include the Peabody Youth Orchestra (PYO) and the Young Artists Orchestra (YAO). Participation in an orchestra is open to anyone but is required for PAS students and

\(^4\) See “Summer Offerings” later in this section.
\(^5\) See “Summer Offerings,” later in this section.
included in their tuition (Johns Hopkins Peabody Institute, n.d.-d). Every January, a String Orchestra Festival is held for three weeks in lieu of other PAS activities, and PAS students collaborate with violin students from the PCVP (Johns Hopkins Peabody Institute, n.d.-d). PCVP students are also required to register for at least one other ensemble, such as Performance Academy Chamber Music or the Peabody Youth Orchestra (Johns Hopkins Peabody Institute, n.d.-g). Orchestral opportunities are not offered through the string academy sites in Evanston and Laramie, but students are encouraged to participate in local youth orchestras.⁶

**Ensembles for the Most Advanced Students.** Each site puts together an ensemble of the most advanced violin students enrolled, with equivalent cello ensembles in Bloomington and Milwaukee. In Baltimore, the top-level violin ensemble is set up through the Pre-Conservatory Violin Program (PCVP), but PAS chamber ensembles are also established for the most advanced violin, viola, and cello students at The Peabody Preparatory. Bloomington and Milwaukee both have “Virtuosi” ensembles for violin and cello, and Evanston’s equivalent is a violin ensemble called the “Northwestern Strings.” In Bloomington, violin students of the Violin Virtuosi, viola students (and/or violinists doubling as violists), and cello students of the Cello Virtuosi are often combined to perform as the Jacobs School of Music Virtuosi (M. Zweig, personal communication, July 27, 2013). Milwaukee similarly pairs the Violin Virtuosi with its I Cellisti group for chamber orchestra performances (D. Drexler, personal communication, July 29, 2013). Laramie’s top-level students come together for special performances but there is no established group with a specific title (S. Sinift, personal communication, July 11, 2013).

---

⁶ See “Faculty and Student Activities in the Community,” later in this chapter.
Top-level ensembles engage in additional performances relative to the rest of each string academy’s student body. They often travel locally, nationally, or even internationally to perform. In Baltimore, the PCVP participates in four main performances each year, and several impromptu performances are scheduled locally or in nearby states during the year (Johns Hopkins Peabody Institute, n.d.-d). Bloomington might have 5 to 10 extra performances a year for the Jacobs School of Music Virtuosi, including national and international tours (Wheeler & Zweig, 2007, p. 98). The Milwaukee and Evanston groups have also traveled nationally and internationally and give several impromptu performances throughout the year (D. Drexler, personal communication, July 29, 2013; S. Spencer, personal communication, July 29, 2013). In Laramie, performances throughout the community are frequent, and some academy members have traveled to Evanston to perform as well (S. Sinift, personal communication, July 11, 2013).

**On-site Competitions.** Baltimore and Milwaukee are the only sites that hold their own competitions. In Milwaukee, a concerto competition using preselected pieces occurs each year with four winners (two per instrument—one upper-level and one lower-level) in violin and cello (D. Drexler, personal communication, July 29, 2013). Upper-level winners perform their solos each year at the annual Scholarship Benefit concert, accompanied by a chamber orchestra; lower-level winners perform with piano accompaniment at the Spring Concert at the end of the spring semester (D. Drexler, personal communication, July 29, 2013).

In Baltimore, The Peabody Preparatory offers five competitions open to the entire Preparatory community, provided that they meet competition requirements. A biannual
Honors Competition is open to the most advanced students, granting winners a high-level recital opportunity at an important Peabody Preparatory event. The Part Recital Competition has three age categories (12 and under, 13 to 18, and 19 and older), in which four winners are selected who have prepared 15 to 20 minutes of music. Preparatory faculty nominate students to compete in the Preparatory String Ensemble Competition, which features the winner in a solo performance with the Preparatory String Ensemble. The Junior Concerto Competition is open to instrumentalists age 14 and under, and the winner solos with the Preparatory’s Young Artists Orchestra. Finally, the Concerto Competition, open to the most advanced students age 18 and younger, offers its winner the chance to perform an entire concerto with the Peabody Youth Orchestra (Johns Hopkins Peabody Institute, n.d.-e).

**Summer Offerings.** Summer offerings at string academies vary in scope. In Baltimore, group classes in violin and cello, as well as orchestra, are offered to students age 6 to 12 through a five-day summer camp called “Allegro Strings” (Johns Hopkins Peabody Institute, n.d.-n). The Bloomington and Milwaukee sites offer summer sessions that function much like the academic-year program, with a weekly private lesson and a weekly group class; Bloomington offers two four-week sessions and Milwaukee offers one six-week session (Wheeler & Zweig, 2007, p. 98; String Academy of Wisconsin, n.d.-i). In Laramie, students may register for four, six, or eight private lessons during the summer and may attend four group classes interspersed throughout July and August (S. Sinift, personal communication, June 2015; String Academy of Wyoming, n.d.-c). Evanston has no site-associated summer offerings other than private lessons as needed (S. Spencer, personal communication, July 29, 2013).
Baltimore and Milwaukee also offer week-long chamber music day camps for advanced students. The Peabody Chamber Camp in Baltimore is geared toward middle- and high-school students who are accepted by audition (Johns Hopkins Peabody Institute, n.d.-n), and the Chamber Music Festival in Milwaukee is for students in Suzuki book 5 or above (String Academy of Wisconsin, n.d.-b). The Baltimore and Milwaukee summer chamber programs also include orchestral experiences (String Academy of Wisconsin, n.d.-b; Johns Hopkins Peabody Institute, n.d.-n).

Bloomington offers its students the most intensive summer camp experience. The Summer String Academy is a four-week sleep-away camp for violinists, violists, and cellists age 12 to 18, who must audition to participate (Indiana University Jacobs School of Music, n.d.-g). The program features private lessons, master classes, chamber music, and recitals (Indiana University Jacobs School of Music, n.d.-g). Among the faculty for this program are site directors Rebecca Henry, Sherry Sinift, and Mimi Zweig.

**Instructional Calendar and Scheduling**

The instructional calendars and schedules of string academies are influenced by local circumstances. A site’s degree of scheduling flexibility depends on student and family schedules and on commuting distances. In addition, group class schedules can also be affected by faculty and preservice teacher schedules; room schedules of collegiate music units; off-site youth orchestra schedules; religious considerations; and pianist availability. Whereas the scheduling of individual instruction in a broad sense presents little difficulty for string academies, as private lessons are arranged directly with one’s private teacher, group lesson scheduling is more complex and merits more detailed examination.
**Instructional Calendars.** All sites publish a yearly calendar prior to the start of the academic year. In the university cities (Bloomington, Evanston and Laramie), interviews ascertained that calendars can be somewhat flexible due to the generally short commuting distances and faculty’s knowledge of student schedules. However, in Baltimore and Milwaukee, calendars are very inflexible. Both site directors indicated that they publish a yearly calendar far in advance, due to busy student and family schedules and longer commutes (D. Drexler, personal communication, July 29, 2013; R. Henry, personal communication, July 7, 2013).

**Group Class Schedules.** Table 2 outlines when beginning, intermediate, and advanced classes take place at each site. Saturdays are used most heavily in Baltimore and Milwaukee, the two areas of greater population density, because families have time to commute to classes (D. Drexler, personal communication, July 29, 2013; R. Henry, personal communication, July 7, 2013). Family schedules are very busy in Baltimore, said Rebecca Henry. “People work in Washington, drive home to Baltimore, get home at seven; they’re not going to drive their child another half-hour for rehearsals” (R. Henry, personal communication, July 7, 2013). Even though Saturday classes are necessary in Baltimore and Milwaukee, some weeknight options have been available. Baltimore uses the Towson branch for additional YPSP classes on Thursday evenings, providing a more convenient site for suburban families (R. Henry, personal communication, July 7, 2013; Johns Hopkins Peabody Institute, n.d.-p). The PAS and the PCVP do not have this option; students must come to the main downtown campus on Saturdays to participate.
Table 2

*Group Class Schedules (2012–2013)*

<table>
<thead>
<tr>
<th>Site</th>
<th>M</th>
<th>T</th>
<th>W</th>
<th>Th</th>
<th>F</th>
<th>Sat</th>
</tr>
</thead>
<tbody>
<tr>
<td>Baltimore</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Main Branch</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>B/I/A</td>
<td></td>
</tr>
<tr>
<td>Branch</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>B/I</td>
<td></td>
</tr>
<tr>
<td>Bloomington</td>
<td>I</td>
<td>B/I</td>
<td>B</td>
<td>B/I</td>
<td>A</td>
<td></td>
</tr>
<tr>
<td>Evanston</td>
<td>B/I</td>
<td>A</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Laramie</td>
<td>A</td>
<td>I</td>
<td></td>
<td></td>
<td></td>
<td>B</td>
</tr>
<tr>
<td>Milwaukee</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>B/I/A</td>
</tr>
</tbody>
</table>


However, some flexibility is still offered, with two branch locations (Towson and Howard County) available as private lesson locations, as long as the private teacher is available at those locations. In Milwaukee, some cello classes have been held on weekdays, which were more convenient for room and teacher schedules, as well as helping master’s degree students to schedule their observation and participation (D. Drexler, personal communication, July 29, 2013).

The three university city sites (Bloomington, Evanston, and Laramie) primarily have weekday classes, but the most advanced classes in Bloomington occur on Saturdays to accommodate commuters from beyond the immediate area, such as Indianapolis (M.
Zweig, personal communication, July 27, 2013). In stark contrast to Baltimore and Milwaukee, the Bloomington program doesn’t encounter many schedule issues, according to Zweig, who commented on the scarcity of traffic and short commuting distances for string academy families (M. Zweig, personal communication, July 27, 2013). Spencer similarly indicated minimal scheduling difficulty in Evanston either, citing youth orchestra schedules and the Orthodox Jewish Sabbath observance as the two major factors that affected scheduling decisions. Among the three university city sites, Laramie (the smallest geographical area of the five) has had to make the most adjustments to accommodate student schedules due to frequent sports and family leisure activities on the weekends, after-school conflicts for students on weekdays, and pianist availability (S. Sinift, personal communication, July 11, 2013).

**Performances and Special Events**

Performances are considered a very important part of the curriculum and instructional methods at string academy sites. Student performance may be as a soloist, in a group, in formal or informal settings, or as part of a competition, and it may occur on site or in the community.

Even though group classes are designed to give students the opportunity to perform solos for their peers on a regular basis, several types of public performances are organized as well. Some include all the students enrolled in a string academy, such as group class concerts and solo recital series in which all students are expected to perform a solo once or twice per year. Other special performance opportunities specific to each site are organized, such as honors recitals, presentations of entire works, half or full recitals
given by individual students, chamber or orchestral performances, and outreach performances.

**Group Concerts.** All sites organize at least two concerts per year in which students perform in group class ensembles, usually at the end of a semester or quarter. These group concerts involve all students enrolled. They also add momentum to the structure of weekly group classes by motivating students to learn new repertoire, play together (in unison and or in two or more parts) and to showcase what they’ve learned. In Baltimore, these types of concerts apply only to the YPSP, as the PAS and the PCVP have their own program-specific performance schedules. In Baltimore, Bloomington, and occasionally Milwaukee, one of these yearly performances is held around Halloween and students dress up in costume to perform (D. Drexler, personal communication, July 29, 2013; R. Henry, personal communication, July 7, 2013; Wheeler & Zweig, 2007, p. 97). Laramie also organizes a fall semester concert in November, and all four sites hold group concerts at the end of the spring semester. In Bloomington, a third group concert is scheduled in mid-March for more advanced groups (Wheeler & Zweig, 2007, p. 98), and Milwaukee holds special group events at outreach sites, involving students in the Urban Students in Arts Scholarship Program (D. Drexler, personal communication, July 29, 2013). Group concerts are organized similarly in Evanston, but since the schedule is based on quarters rather than semesters, the concerns occur at the end of the fall and spring quarters (S. Spencer, personal communication, July 29, 2013).

**Solo Recitals.** In the Baltimore, Bloomington, and Milwaukee programs, all students are required to perform in solo recitals at the end of each semester (D. Drexler, personal communication, July 29, 2013; R. Henry, personal communication, July 7,
2013; Wheeler & Zweig, 2007, pp. 97–98). However, solo recitals in Evanston and Laramie are organized differently. In Evanston, a solo recital involving all students takes place at the end of the winter quarter (S. Spencer, personal communication, July 29, 2013). In Laramie, solo recitals occur three to four times per semester (String Academy of Wyoming, 2013b). This is a feature at the other sites as well, since all programs organize regular optional solo recitals for which students can sign up when they are ready to perform. Additionally, honors recitals are organized at the Laramie and Milwaukee sites, and students are selected to perform at these events (D. Drexler, personal communication, July 29, 2013; S. Sinift, personal communication, July 11, 2013). Similarly, Bloomington holds an entire works concert every February for students who are ready to play a complete sonata, concerto, or virtuoso piece (Wheeler & Zweig, 2007, p. 97).

**Chamber and Orchestra Concerts.** Chamber ensemble or orchestral recitals are organized as appropriate for each program. At The Peabody Preparatory in Baltimore, students in the PAS engage in chamber music performance once per semester (Johns Hopkins Peabody Institute, n.d.-d), and the three youth orchestras that involve strings perform two to three times a year (Johns Hopkins Peabody Institute, n.d.-q). The other four sites organize chamber ensemble concerts, as well as chamber orchestra concerts in Bloomington and Milwaukee, depending on their site-specific offerings.

**Community Performances.** All string academies’ on-site performances are open to the public, and the academies seem to arrange performances at different locations throughout their local communities such as churches, retirement centers, shopping

---

7 See the “Course of Study” section earlier in this chapter.
centers, local festivals, and special events (D. Drexler, personal communication, June 28, 2015; R. Henry, personal communication, June 28, 2015; S. Sinift, personal communication, July 11, 2013; S. Spencer, July 29, 2013). These outreach performances vary in scope and frequency. Typically they involve just a portion of the student body, but occasionally the entire student body participates (D. Drexler, personal communication, June 28, 2015; R. Henry, personal communication, June 28, 2015; S. Sinift, personal communication, July 11, 2013; S. Spencer, July 29, 2013).

**Collaborative Performances and Events.** String academy sites sometimes collaborate with other arts organizations for performances and events. In addition, all five sites have joined in organizing two “Violin Pedagogy Weekends.” The first of these, directed by Spencer, took place at the Northwestern University Bienen School of Music in Evanston in April 2011 (S. Spencer, personal communication, July 29, 2013); Henry of The Peabody Institute directed the second in April 2014 (R. Henry, personal communication, July 7, 2013), which also included collaboration with the Maryland Talent Education Center. These innovative events included master classes, performances, lectures, and panel discussions with key faculty members and directors from each site.

Other collaborations at the Baltimore site have included performances by YPSP students at city or area arts festivals, including the duo spring festival organized by the Maryland State Music Teachers Association (MSMTA) and the Maryland–D.C. chapter of the American String Teachers Association (ASTA) (R. Henry, personal communication, July 7, 2013, and June 28, 2015). The Evanston site has collaborated with the Hyde Park Suzuki Academy and with the Chicago Symphony Center for performances (S. Spencer, personal communication, July 29, 2013). Laramie students
have participated in a concerto competition hosted by the Wyoming State ASTA chapter in conjunction with the Cheyenne Symphony Orchestra (S. Sinift, personal communication, July 11, 2013). The Cheyenne Symphony has also invited string academy students to perform at a fundraising event and in a student showcase concert, and the city of Laramie invites arts organizations throughout the city to perform in the annual “Happy Holidays Laramie” concert each December (S. Sinift, personal communication, July 11, 2013). In Milwaukee, guest soloists invited to perform with the Milwaukee Symphony often offer open master classes for youth as part of their contract with the symphony. All master classes are free and open to the public and are usually presented in partnership with the String Academy of Wisconsin and other organizations such as the Milwaukee Youth Symphony Orchestra and the University of Wisconsin–Milwaukee (D. Drexler, personal communication, January 27, 2014). The String Academy of Wisconsin has also engaged in performance collaborations with Early Music Now, a local organization that specializes in performances of period music (D. Drexler, personal communication, January 27, 2014).

**Special Events.** Other special events occur periodically, especially at the three sites with the largest enrollment (Baltimore, Bloomington and Milwaukee). The most common types of special events are master classes or workshops in which guest artists or faculty members from site host institutions are invited to work with string academy student soloists or collegiate pedagogy students in a public class setting. Some special events have featured community building; for example, Laramie held a “play-in” for students, followed by a potluck picnic (String Academy of Wyoming, 2013b). Sinift stated that workshops or master classes have occurred in Laramie about every other year,
and the presenters have all been guests of the String Academy of Wyoming (personal communication, July 11, 2013). Henry and Zweig (among others) have both visited the Laramie site, and occasionally other musicians who visit Laramie for cultural programs will also come to the String Academy of Wyoming and lead master classes (S. Sinift, personal communication, July 11, 2013). In Evanston, master classes are most often scheduled in cooperation with Northwestern University Bienen School of Music faculty members (S. Spencer, personal communication, July 29, 2013). Guests have also visited the Evanston site, and Zweig visits periodically to lead master classes and workshops for collegiate pedagogy students (S. Spencer, personal communication, July 29, 2013).

The Baltimore, Bloomington, and Milwaukee sites also collaborate with their host institution faculty; however, guest artist visits are far more frequent at these sites than in Evanston and Laramie. In Bloomington, master classes occur regularly throughout the academic year and are a distinct feature of the Summer String Academy. In Baltimore, for the 2013-2014 academic year alone, four guest artists and one Peabody Conservatory faculty member were engaged to work with students in the PCVP program (Johns Hopkins Peabody Institute, n.d.-g). In Milwaukee, the list of guest master class presenters is quite extensive. Many artists have come to work with String Academy of Wisconsin students several times, thanks to the aforementioned cooperative effort with the Milwaukee Symphony Orchestra, which often engages soloists to work with students of the String Academy (as well as the Milwaukee Youth Symphony Orchestra) as part of the professionals’ contractual agreement with the symphony. University of Wisconsin–

8 For lists of guest master class presenters at the Baltimore, Bloomington, and Milwaukee sites, see Appendix E.
Milwaukee Peck School of the Arts faculty members are also engaged often to work with students in master class settings (D. Drexler, personal communication, July 29, 2013).

**Student Admission and Placement**

String academies admit students in two ways: as beginners with no previous playing experience or as transfer students who have played previously. For both groups, individual needs are the primary consideration in determining how students will be integrated into string academies, depending on their age, site registration requirements, and teacher availability.

**Beginners.** Beginning the violin or cello at a young age is emphasized at all sites, although the preferred ages differ slightly. Beginning students are typically admitted between the ages of four and seven in Evanston, between four and eight in Milwaukee, and between five and eight in Bloomington and Laramie (D. Drexler, personal communication, July 29, 2013; S. Sinift, personal communication, July 11, 2013; S. Spencer, personal communication, December 2, 2015; Wheeler & Zweig, 2007, p. 97). In Baltimore, students must be at least age four before being accepted into introductory courses for the YPSP, such as Fiddler’s Four or Cello Fun, and must be five years old to be considered for individual instruction or full YPSP enrollment (Preparatory Registration Systems Coordinator, personal communication, December 15, 2015; Johns Hopkins Peabody Institute, n.d.-p). However, guidelines regarding the maximum permissible age of beginning students for the YPSP are not formally defined. The String Department of The Peabody Preparatory has many programs available for students of varying ages and ability ranges, so there are typically a few options for incoming

---

9 See Appendix C.
students who cannot be integrated into the YPSP immediately (Preparatory Registration Systems Coordinator, personal communication, December 15, 2015).

Special considerations for beginning students that fall outside the typical starting age are on a case-by-case basis at all sites. In Milwaukee, younger students are sometimes considered; in such situations, discussions with parents are helpful in gaining insight about how a parent is likely to become involved in a child’s study. “You never want to rule someone out,” said Darcy Drexler; “the key for beginners is the role of the parent” (D. Drexler, personal communication, July 29, 2013). Drexler reported accepting one beginning student at age 11, but this is probably the conceivable maximum, or otherwise the age gap with other beginning students creates problems (D. Drexler, personal communication, July 29, 2013). Zweig shared a similar sentiment in relation to the Bloomington site:

For example, if there is a 12-year-old beginner I would recommend another teacher or program. The 12-year-old will most likely not feel comfortable with the 5-year-old beginners, and the 5-year-olds will probably learn much faster. (M. Zweig, personal communication, July 27, 2013)

In Baltimore and Evanston, since students can enroll in private lessons without group classes, there is more flexibility to admit students outside the typical age range. Both sites have an associated department or division devoted to early childhood music education, so very young students can be referred to these programs (R. Henry, personal communication, July 7, 2013; Northwestern University Bienen School of Music, n.d.-c). Students older than the typical age range may apply to enroll in private lessons without group instruction at any time, and often they will join group classes at a later date when their age is a better match (Preparatory Registration Systems Coordinator, personal

The timing of a beginning student’s enrollment also plays a factor. Site directors in Bloomington, Evanston, Laramie, and Milwaukee all indicated a preference that beginning students initiate their instruction at the same time each year, usually at the beginning of a semester or quarter (D. Drexler, November 30, 2015; S. Sinift, personal communication, November 15, 2015; S. Spencer, personal communication, November 19, 2015; M. Zweig, personal communication, November 29, 2015). Beginning students who enroll at other times may end up starting with only private lessons or may be incorporated into a group mid-term (D. Drexler, November 30, 2015; S. Sinift, personal communication, November 15, 2015; S. Spencer, personal communication, July 29, 2013; M. Zweig, personal communication, November 29, 2015). According to Spencer, when a student seeks to enroll at an odd time, discussion with parents is essential to determine what is best for that child (S. Spencer, personal communication, July 29, 2013). For example, some students may do very well even if not participating in every activity, but on the other hand, if there is a student who is very timid or shy, the faculty may recommend that the student enroll in private lessons without a group class until he or she is ready to participate more effectively (S. Spencer, personal communication, July 29, 2013).

The Baltimore site is distinct in this regard, as the sheer size of The Peabody Preparatory String Department and variations in registration requirements across its many programs add a degree of complication. However, this complexity is designed to
accommodate the individual needs of all incoming students, regardless of age.\textsuperscript{10} The registration process includes placement interviews that assist parents in directing communications to the proper faculty member (Johns Hopkins Peabody Institute, n.d.-b, n.d.-m; Preparatory Registration Systems Coordinator, personal communication, December 15, 2015).

**Transfer Students.** Depending on the site, transfer students are integrated into string academies by way of interviews, consultation lessons, or auditions to assess the student’s playing level and past experience. In Bloomington, for example, transfer students must audition for acceptance and placement into the program (M. Zweig, personal communication, July 27, 2013). In Laramie, however, Sinfilt meets with students for what is called a consultation lesson:

What that entails is a meeting with parent and student for half an hour. The student plays a scale and a piece for me, and then I tell them about the format of the program. I work with them for a little bit and say, “These are the things we would work on changing in your playing, and this is the repertoire we would use, this is the group you would go into.” I explain to them what the purpose of the group is and explain the practice expectations. This is so they can get to know me, so that I can tell them face to face about the program, but then also to make sure that they really know it’s what they want. Some transfer students, if they have a lot of remediating to do, may or may not want to do it. They may just want to play “for fun,” in which case our program is not going to be a good fit for them. I feel it is important for the parent and the child to make that decision before they enter the program rather than getting involved and then through the course of the semester realizing, “Oh, this is pretty demanding,” and only then realizing it’s not a good fit. So I try to give them a chance to figure out if what we are offering is what they want and to assess their own commitment to the program before they actually begin. (S. Sinfilt, personal communication, July 11, 2013)

Similarly, Drexler described a process by which students and families are fully informed about what participation in the String Academy of Wisconsin would entail, after which it is usually clear to students and their families whether or not the program is

\textsuperscript{10} See Appendix C.
a good fit (D. Drexler, personal communication, July 29, 2013). An office administrator handles much of the initial communication with transfer students and their families to determine whether or not an in-person meeting is necessary. Drexler further explained:

Our office administrator is very good at explaining the program and helps inquiring parents understand the curriculum commitment. This is a comprehensive program; it’s not for everyone, and it’s a commitment, both financially and time-wise. We are not super-selective; the String Academy is open to anyone. We want people to come and we want them to be happy. But the way our program is set up, if someone is in high school and wants to start the violin, well, it might not be the thing to do. Usually they figure that out themselves. (D. Drexler, personal communication, July 29, 2013)

In Baltimore and Evanston, if a student does not fit into an established group class, other programs or private lessons (without group involvement) are available (R. Henry, personal communication, July 7, 2013; S. Spencer, personal communication, July 29, 2013). At the String Department of The Peabody Preparatory in Baltimore, prospective students fill out an online lesson placement form and may attend placement interviews at previously designated times each semester, with any additional communication handled by faculty and staff (Johns Hopkins Peabody Institute, n.d.-b, n.d.-m).

String Academies as Virtual and Digital Sites for Studio Teacher Preparation

One important feature of all five string academies is their function as sites for studio teacher preparation. This occurs in physical and virtual spaces and in support of preservice college students and in-service practitioners. Table 3 outlines the types of teacher preparation resources associated with each site.

All five string academies function as laboratory settings for college level violin and viola students in string pedagogy courses. Baltimore, Bloomington, Evanston, and Milwaukee provide a lab setting for collegiate cello students as well, and Baltimore
Table 3

*Teacher Preparation Resources*

<table>
<thead>
<tr>
<th>Site</th>
<th>Baltimore</th>
<th>Bloomington</th>
<th>Evanston</th>
<th>Laramie</th>
<th>Milwaukee</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pedagogy courses</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Master’s degree</td>
<td>✓</td>
<td></td>
<td></td>
<td></td>
<td>✓</td>
</tr>
<tr>
<td>Teacher workshops</td>
<td>✓</td>
<td>✓</td>
<td></td>
<td></td>
<td>✓</td>
</tr>
<tr>
<td>Pedagogy web resources</td>
<td>✓</td>
<td>✓</td>
<td></td>
<td></td>
<td>✓</td>
</tr>
</tbody>
</table>

*Note.* All site-associated universities offer master’s degree programs for string instrumentalists. The master’s programs indicated in this table, however, have degree requirements directly associated with string academy program offerings. *Sources:* Northwestern University & Spencer (2014); D. Drexler, personal communication, July 29, 2013; R. Henry, personal communication, July 7, 2013; S. Sinift, personal communication, July 11, 2013, and April 11, 2014; Freeman & Henry (2015b); S. Spencer, personal communication, July 29, 2013; Wheeler & Zweig, 2007; M. Zweig, personal communication, July 27, 2013.

provides the same for double bass. However, Evanston and Milwaukee are the only sites where college-level cello pedagogy courses exist that are equivalent to those available for the violin and viola. In Baltimore and Bloomington, cello and/or double bass opportunities for teacher preparation are fewer than for the violin and viola and, when available, require special coordination with string academy faculty and the collegiate music unit, as there are no equivalent cello or double bass pedagogy courses associated with string academy instruction (Johns Hopkins Peabody Institute, n.d.-f; M. Zweig, personal communication, July 27, 2013).
All string pedagogy courses are part of the course offerings available to college students at the hosting collegiate music units for the Baltimore, Bloomington, Evanston, and Milwaukee sites. The Laramie site does not have a host institution, but it does have a relationship with the University of Wyoming, as Sinift, teaches string pedagogy courses and studio violin for the university’s music department (S. Sinift, personal communication, April 4, 2014). In Baltimore, Bloomington, Evanston, and Milwaukee, the site directors also teach pedagogy courses, with additional instructors for pedagogy courses in Bloomington and Milwaukee. In Bloomington, Brenda Brenner, the co-director, also teaches courses in violin and viola pedagogy, and in Milwaukee, cello faculty member Stefan Kartman teaches cello pedagogy (B. Brenner, personal communication, September 22, 2014; D. Drexler, personal communication, July 29, 2013).

The content of the violin and viola pedagogy courses is similar across sites, but there are variations. The Bloomington, Evanston, Laramie, and Milwaukee sites include similar courses geared toward preparing students to teach, in accordance with several elements of string academy curriculum (Brenner, 2015; Drexler, 2007; R. Henry, personal communication, May 6, 2014; S. Sinift, personal communication, July 11, 2013; Spencer, 2008; Zweig, ca. 2013). At all four sites, at least two levels of courses are organized in the same way (i.e., Pedagogy I in the fall and Pedagogy II in the spring); Evanston has three levels because Northwestern University uses a trimester system. As a result, each site offers a pedagogy course lasting one full academic year.

A first-level class at all four sites involves the study of materials related to the philosophy and approach of Paul Rolland, Shinichi Suzuki and Mimi Zweig; beginning
lessons and pre-Twinkle repertoire; a technical and musical analysis of how to teach Suzuki and extended repertoire; group lesson activities; interaction with parents; and observation of private lessons and group classes (Brenner, 2015; Drexler, 2007; R. Henry, personal communication, May 6, 2014; S. Sinift, personal communication, July 11, 2013; Spencer, 2008; Zweig, ca. 2013). Subsequent classes continue with most of the same topics (i.e., teaching Suzuki and extended repertoire, group lessons, parent interactions, and observation), as well as progressing into the study of intermediate and advanced violin and viola technique development (Drexler, 2007; S. Sinift, personal communication, July 11, 2013; Spencer, 2008; Zweig, ca. 2014).

Bloomington has two sets of Pedagogy I and II classes, related to undergraduate and graduate study, respectively (M. Zweig, personal communication, July 27, 2013). Zweig teaches graduate student pedagogy courses and Brenner teaches undergraduates. Additionally, Zweig teaches a pedagogy research seminar that can be taken in conjunction with Pedagogy II (M. Zweig, personal communication, July 27, 2013). Students who show great interest may also volunteer with the string academy to gain further experience or register for independent study (M. Zweig, personal communication, July 27, 2013). At Northwestern as well, independent study options give university students additional opportunities to observe and work directly with string academy students (S. Spencer, personal communication, July 29, 2013).

Henry commented that the courses she teaches at The Peabody Conservatory are a little different from those at the other sites:

The pedagogy class is not 100% a teacher training class. The background of the students in my classes is very different and very international. I have students who grew up in Suzuki programs, students who started in public schools, and others from all over the world. I have to be very diplomatic in how I talk about pedagogy
and teaching violin and respectful of their backgrounds. (R. Henry, personal communication, July 7, 2013)

Several elements of the Baltimore pedagogy classes are similar, however, and two levels exist. In the first semester, Rolland and Suzuki approaches are studied, including an overview of Suzuki book 1, but the second semester is more topical with students doing independent research on a pedagogue of their choice (R. Henry, personal communication, July 7, 2013). Course requirements also include observing YPSP lessons, classes, and concerts (R. Henry, personal communication, July 7, 2013). After a year of pedagogy study, Peabody Conservatory students majoring in violin or viola then have the opportunity to take lessons with Henry on their non-major instrument (either violin or viola) and to work on repertoire (R. Henry, personal communication, July 7, 2013).

Drexler and Sinift also teach similar pedagogy classes that are more topically oriented (as opposed to “how to teach” classes) in Milwaukee and Laramie, respectively (D. Drexler, personal communication, July 29, 2013; S. Sinift, personal communication, July 11, 2013). Such courses exist at IU and Northwestern as well, though string academy personnel do not teach them. These courses are a common elective offering for bachelor’s- and (more typically) master’s-level performance majors at colleges and universities accredited by the NASM (National Association of Schools of Music, 2014, pp. 100, 129).

A distinctive element of “how to teach” pedagogy courses at all five sites is the requirement that university students must meet individually with a string academy student whose private lessons they observe and give that student “helper lessons” (Drexler, 2007; R. Henry, personal communication, July 7, 2013; S. Sinift, personal
communication, July 11, 2013; Spencer, 2008; Zweig, ca. 2014). This element provides college students with the opportunity to gain hands-on teaching experience.

Even though all site-associated collegiate music units have master’s degree programs in performance, within which pedagogy courses are degree requirements or electives, Table 3 points out that master’s degree programs are directly associated with string academy program offerings in Baltimore and Milwaukee. In Baltimore, students pursuing a master’s degree in performance (violin or viola) at The Peabody Conservatory may choose an emphasis in pedagogy:

This area of graduate focus is designed for students accepted to a performance major who wish to broaden their study to include particular emphasis attention to concurrent development of pedagogical knowledge and skills. Performance/Pedagogy does not indicate a separate degree program. It does indicate pedagogy emphasis accomplished through elective credit within the student's M.M. performance program. (Johns Hopkins Peabody Institute, n.d.-f)

Performance/pedagogy master’s students are actively involved in the YPSP, attend courses taught by the Preparatory String Department chair (Rebecca Henry), develop and present a portfolio as a final project, and may engage in an official internship lasting one year (R. Henry, personal communication, July 7, 2013; Johns Hopkins Peabody Institute, n.d.-k). Occasionally, students pursuing master’s degrees in cello or string bass may fulfill this aspect of the program through a two-year internship (Johns Hopkins Peabody Institute, n.d.-f).

In Milwaukee, the String Academy of Wisconsin functions as a lab setting for master’s degree students in string pedagogy at the University of Wisconsin–Milwaukee. String Academy of Wisconsin faculty members Drexler and Kartman teach the required pedagogy courses for this degree program (D. Drexler, personal communication, July 29, 2013, and July 7, 2014). The degree entails 10 credits of specific required courses (such
as graduate studies, music history, a theory elective, and a recital) and 16 credits of performance courses (including lessons on the major instrument, studio master class, symphony orchestra and two courses of advanced instrumental performance repertoire) (University of Wisconsin-Milwaukee, n.d.). Part of these degree requirements are the levels I and II string pedagogy courses as first described above, during the fall and spring semesters of the first year, plus a level III course during the fall semester of the second year (D. Drexler, personal communication, July 29, 2013). Cello pedagogy students also participate in separate courses for all three levels (D. Drexler, personal communication, July 29, 2013). Violin and viola pedagogy students participate in the same courses except for level III, where they are separated for the second half of the semester (D. Drexler, personal communication, July 29, 2013). Additionally, a seminar on historical perspectives on violin, viola and cello pedagogy is attended by all pedagogy students regardless of their instrumental focus (D. Drexler, personal communication, July 29, 2013). Assistantships are available to master’s students in string pedagogy, in connection with the String Academy of Wisconsin’s Urban Students in Arts Scholarship Program (USAS) (D. Drexler, personal communication, July 29, 2013). In Bloomington, assistantships (referred to as associate instructor positions) are intrinsically tied to the Jacobs School of Music String Academy (M. Zweig, personal communication, September 22, 2014), and the Northwestern University Bienen School of Music offers work-study options associated with its Music Academy.

As Table 3 indicates, teacher workshops are offered at Baltimore, Bloomington, and Milwaukee. In Baltimore, these programs are open to studio teachers, public school teachers, conductors and pedagogy students, and they consist of a series of four classes
spread across the academic year. Each one consists of a 75-minute master class followed by a 45-minute teacher workshop; a different overarching subject for the series is chosen each year (Johns Hopkins Peabody Institute, n.d.-o).

The Bloomington site offers two five-day, back-to-back sessions during the summer. Session I is a prerequisite for Session II and is titled “Beginning the Violin Journey.” Participants may choose to attend this session only or to stay for session II, “Establishing a Healthy Foundation with Etudes, Scales and Repertoire” (Indiana University Jacobs School of Music, n.d.-e).

The Milwaukee site offers a workshop called “Teaching the Violin to Children” and has offered cello workshops in the past as well (D. Drexler, personal communication, September 25, 2014). This four-day violin workshop is taught by Drexler and Zweig during the summer (String Academy of Wisconsin. n.d.-k).

**Teacher Preparation and the Application of String Academy Curriculum.**

College students trained at string academy sites may go into their communities to teach independently and/or in association with other organizations. In one respect, this could enable string academies to further change the culture of stringed instrument teaching in their immediate geographic areas and elsewhere. In Milwaukee, it led to an application of string academy curriculum and instructional practices to other instructional settings, specifically one interested in Latino students.

The first graduate of the UWM master’s program in string pedagogy, Dinorah Marquez, has created the Latino Arts Strings Program, established in 2002 at the United Community Center in Milwaukee, and housed in the Bruce-Guadalupe Community School (Latino Arts, n.d.). Latino Arts employs other graduates from the UWM master’s
program as well as former faculty members of the String Academy of Wisconsin (D. Drexler, personal communication, January 27, 2014). Instruction at the Latino Arts Strings Program resembles that of the String Academy of Wisconsin, and it is similarly defined as a precollege program. However, it is specifically geared toward the Hispanic community in Milwaukee, incorporating mariachi ensembles and various forms of Latin American folk music (Latino Arts, n.d.). Other graduates of the UWM string pedagogy master’s program are on the faculty of the Suzuki Department of the Wisconsin Conservatory of Music (D. Drexler, personal communication, January 27, 2014), which likely represents the use of string academy curriculum in a Suzuki music school setting.

Web-based Resources. Site directors in Baltimore, Bloomington, and Evanston sites have each created web-based pedagogical resources (Table 3) to support teacher development and training. The most detailed and foundational description of the curriculum used at string academy sites is stringpedagogy.com.\textsuperscript{11} Two additional web-based pedagogical resources present creative adaptations and additions to stringpedagogy.com that are used at the Baltimore and Evanston sites.

Stringpedagogy.com, owned and created by Mimi Zweig, includes six hours of streaming video examples of Zweig’s teaching, and was envisioned by Zweig to help teachers, students and parents. Until September 2015, a membership at stringpedagogy.com cost $75 a year. However, thanks to recent sponsorship by Connolly Music and Thomastik Strings, all stringpedagogy.com web content may now be viewed free of charge. The DVD edition can be purchased for $85 and does not require an internet connection to view its text content, including more than 70 video clips, and

\footnote{\textsuperscript{11} For a description of the pedagogical contents of stringpedagogy.com, see “The Pedagogy” in chapter 1.}
additional Violin Virtuosi performance videos (Wheeler & Zweig, 2002-2015). Online users may access all the information and videos included on the DVD, plus additional features (such as newly entered volumes and a forum) not included on the DVD (Wheeler & Zweig, 2002-2015).

Violinpractice.com is co-owned and created by Peabody Preparatory String Department chair Rebecca Henry and Phyllis Freeman, founder and director of the Maryland Talent Education Center (R. Henry, personal communication, September 17, 2014; Freeman & Henry, 2015b). It features the ViolinPractice Method, “a holistic, web-based violin method that integrates the development of technique and musicianship through a sequence of repertoire, VP videos and supporting materials” (Freeman & Henry, 2015b). Designed to support students, parents and teachers, violinpractice.com cites Paul Rolland, Shinichi Suzuki, Mimi Zweig, and Ivan Galamian as major influences (Freeman & Henry, 2015b). Online memberships at violinpractice.com may be purchased for $9.99 for one month, 24.99 for three months, or $29.99 for four months (Freeman & Henry, 2015a). A membership gives users access to both the ViolinPractice Method and the ViolinPractice Pedagogy Video Series, including all available print content (Freeman & Henry, 2015a). Some video examples, including limited materials available in print, are available from the website at no charge (Freeman & Henry, 2015b).

Through Coursera, a source of free online courses, Stacia Spencer, in conjunction with Northwestern University, created “Teaching the Violin and Viola: Creating a Healthy Foundation.” Presented in a 10-session format of readings, discussion, and video content featuring the teachers and students of the Strings Division of the Music Academy at Northwestern University, this course includes “master classes with some of the world’s
top string pedagogues”; “individual lesson demos of teaching violin/viola setup, left and right hand technique and pieces from the early violin/viola repertoire”; “group lesson demos of teaching music theory, ear training and fun activities that encourage good playing habits”; “a ‘field trip’ to the violin shop, where we will outfit a new beginning student with a proper instrument and bow”; and “a series of discussions and reflections with colleagues and peers across the globe” (Northwestern University & Spencer, 2014).

**Extended Programming**

Outreach programs exist in Bloomington and Milwaukee. In both cases, these programs represent collaborations with local public schools; include scholarship opportunities underwritten by corporate, foundation, government, or private support, along with in-kind donations; and offer instruction by string academy personnel.

The Urban Students in Arts Scholarship Program (USAS) is the String Academy of Wisconsin’s outreach initiative.12 Any student at the String Academy of Wisconsin may apply, but it is also open to students at two inner-city elementary schools in Milwaukee (Escuela Vieau and MacDowell Montessori), bringing training in the violin and cello directly to the children (String Academy of Wisconsin, n.d.-j). String Academy of Wisconsin faculty members travel to these schools to give private lessons during the week, and parents bring the students to UWM for group classes on Saturdays (D. Drexler, personal communication, September 25, 2014). Parents of students in this program are required to sign a contract agreeing to several requirements. Students are expected to stay in the program for an entire school year; they are required to arrive on time for lessons and classes and adhere to attendance policies; parents must complete the required

---

12 For specific USAS financial information, see “Financial Support for Students,” within the section on “Finances,” later in this chapter.
paperwork and pay fees; and there are daily practice and parental supervision requirements, as well as an expectation that families will participate in all school fundraising activities ([Drexler], ca. 2013).

The Fairview Violin Project in Bloomington was designed in 2008 by Brenda Brenner, associate professor of music education at the IU Jacobs School of Music. Co-director of the Jacobs School of Music String Academy since 1993, Brenner incorporates string academy curriculum into the Project. The program offers group violin instruction to first through fourth graders at Fairview Elementary, led by Brenner, an assistant violin instructor, and 20 graduate and undergraduate aides (Williams, 2011, p. 20). Occasionally, Fairview students have enrolled in the Jacobs School of Music String Academy upon completing this program (B. Brenner, personal communication, September 22, 2014). The project is independently funded by the Summer Star Foundation for Nature, Art and Humanity (Williams 2011, p. 20). Additionally, the Jacobs School of Music has provided in-kind donations of fractional-sized violins (Brenner, 2011b). Fairview is an economically disadvantaged school, with more than 80% of students qualifying for a free lunch, and was considered a failing school under the federal No Child Left Behind Act (Williams 2011, p. 20). One impetus for the project is to research “the cognitive and academic effects of early instrumental study on a group of children who would normally not participate in string education” (Brenner, 2011a). It also serves as a lab experience for Jacobs School of Music college students. Similar programs have been introduced at elementary schools in Attica, Indiana and Danville, Illinois (B. Brenner, personal communication, September 22, 2014).
Geographic and Physical Setting

This section examines the instructional settings of the five string academy sites, describing their geographic location and the facilities used.

Geographic Location

The geographic area in which each site operates provides the population from which string academies recruit their students. However, population totals do not adequately convey recruitment potential for a site; population density is more indicative.

The U.S. Census Bureau describes metropolitan statistical areas as areas that contain a core urban area of 50,000 or more people in population, and micro areas of at least 10,000 and fewer than 50,000 people (U. S. Census Bureau, 2013b). Core Based Statistical Areas (CBSAs) consist of the county or counties or equivalent entities associated with at least one core (urbanized area or urban cluster) of at least 10,000 population, plus adjacent counties having a high degree of social and economic integration with the core as measured through commuting ties with the counties associated with the core. The general concept of a CBSA is that of a core area containing a substantial population nucleus, together with adjacent communities having a high degree of economic and social integration with that core. (U. S. Census Bureau, 2012)

The five locations associated with this study exemplify three different types of CBSAs (Table 4). Baltimore, Evanston, and Milwaukee are all part of large metropolitan areas that encompass multiple counties. Bloomington is a metropolitan area with only one entity, and Laramie is a micropolitan area. Thus the first three string academies have a much larger population from which to draw students.

Bloomington, Evanston, and Laramie can be characterized in this study as university cities since they each host a major academic institution as the dominant landmark (Indiana University, Northwestern University, and the University of Wyoming,
### Table 4

*Statistical Area Delineations (2013)*

<table>
<thead>
<tr>
<th>Site</th>
<th>CBSA Delineations</th>
<th>Statistical Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>Baltimore</td>
<td>Baltimore-Columbia-Towson, MD</td>
<td>Metropolitan</td>
</tr>
<tr>
<td>Bloomington</td>
<td>Bloomington, IN</td>
<td>Metropolitan</td>
</tr>
<tr>
<td>Evanston</td>
<td>Chicago-Naperville-Elgin, IL-IN-WI</td>
<td>Metropolitan</td>
</tr>
<tr>
<td>Laramie</td>
<td>Laramie, WY</td>
<td>Micropolitan</td>
</tr>
<tr>
<td>Milwaukee</td>
<td>Milwaukee-Waukesha-West Allis, WI</td>
<td>Metropolitan</td>
</tr>
</tbody>
</table>

*Note: CBSA = Core Based Statistical Area. Source: U.S. Census Bureau (2013a).*

respectively. Unlike Evanston, Bloomington and Laramie are geographically isolated from any metropolises; the nearest large cities (Indianapolis and Cheyenne, respectively) are about an hour away. Evanston is further distinguished from all other sites by its greater population density and greater per-capita income. Average per-capita income in Evanston ($43,000) is almost twice that of any other site, and poverty levels are the lowest (see Table 5). Families in Bloomington are more mobile compared to those in other areas, whereas 83% of Baltimore residents live for more than one year in the same house.

Spencer described the impact of Evanston’s socioeconomic status (S. Spencer, personal communication, July 29, 2013). Before starting the program there, she had
Table 5

*Selected Statistics for Geographic Areas*

<table>
<thead>
<tr>
<th>Category</th>
<th>Site</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Baltimore</td>
</tr>
<tr>
<td>Population</td>
<td>622,104</td>
</tr>
<tr>
<td>Land area (square miles)</td>
<td>80.94</td>
</tr>
<tr>
<td>Persons per square mile</td>
<td>7,671.5</td>
</tr>
<tr>
<td>Per capita income (past 12 months)</td>
<td>$24,750</td>
</tr>
<tr>
<td>People below poverty level</td>
<td>23.8%</td>
</tr>
<tr>
<td>Living in same house one year or more</td>
<td>82.6%</td>
</tr>
</tbody>
</table>

*Note.* The statistics in this table are all from the U.S. Census Bureau. However, as the bureau publishes census results on an ongoing basis, not all figures are from the same year. Population = 2013; land area (square miles) = 2010; persons per square mile = 2010; per-capita income (past 12 months) = 2013 dollars; percentage of people below poverty level = 2009–2013; living in same house one year or more = 2009–2013. *Sources:* U.S. Census Bureau (2015a, 2015b, 2015c, 2015d, 2015e).

founded a similar program at the Sherwood Community Music School at Columbia College Chicago, located in a more urban environment. In Evanston, Spencer observed, families generally have more money to pay for tuition and quality instruments for their children (S. Spencer, personal communication, July 29, 2013).
Additionally, Henry and Zweig noted the influence of socioeconomic factors on student attrition at their locations. Henry referred to Baltimore as a stable area in terms of family population, noting that many students start at ages four or five and stay through graduation from high school (R. Henry, personal communication, July 7, 2013). In contrast, Zweig described a greater movement of students into and out of the area; she specifically cited the experience of Korean families, who are able to stay for two or three years before having to return to Korea (M. Zweig, personal communication, September 22, 2014). However, she said that enrollment is relatively stable because many students are the children of professors or other professionals who remain in the area (M. Zweig, personal communication, September 22, 2014).

**Facilities**

At all five sites, the amount of space utilized (Table 6) is generally proportional to the size and scope of the program.\(^{13}\) As academy enrollment expanded, so did the space available for instruction at sites housed within collegiate music unit facilities. None of the site directors reported a current shortage of space or that the availability of space has impinged upon program growth.

Baltimore, Bloomington, and Evanston use facilities provided by their associated collegiate music units. Laramie rents space from a local civic center (S. Sinift, personal communication, July 11, 2013); Milwaukee rents from the UWM music department (D. Drexler, personal communication, July 29, 2013).

All sites hold private lessons, classes, or rehearsals in more than one building, based on the nature of facilities provided by host institutions or through their

---

\(^{13}\) See “Program Size and Scope” within the section on “Organizational Structure and Administration,” later in this chapter.
Table 6

*Facilities*

<table>
<thead>
<tr>
<th>Site</th>
<th>Ba</th>
<th>Bl *10</th>
<th>E</th>
<th>L</th>
<th>M</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of private teaching studios</td>
<td>X</td>
<td>4</td>
<td>4</td>
<td>8</td>
<td></td>
</tr>
<tr>
<td>Number of classrooms used</td>
<td>X</td>
<td>*9</td>
<td>3</td>
<td>1</td>
<td>7</td>
</tr>
<tr>
<td>Host institution furnishes space and equipment</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Space is rented</td>
<td></td>
<td>✓</td>
<td>✓</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Located within associated School of Music facilities</td>
<td>Pl G P</td>
<td>Pl G P</td>
<td>G P</td>
<td>Pl G P</td>
<td></td>
</tr>
<tr>
<td>More than one building utilized</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>Off-site locations</td>
<td>P</td>
<td>P</td>
<td>Pl P</td>
<td>P</td>
<td>Pl P</td>
</tr>
<tr>
<td>Branch locations</td>
<td>2</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Space is shared with associated collegiate School of Music</td>
<td>Pl G P</td>
<td>Pl G P</td>
<td>G P</td>
<td>Pl G P</td>
<td></td>
</tr>
<tr>
<td>Space is shared among String Academy faculty</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>Some faculty have exclusive private lesson space</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td></td>
</tr>
</tbody>
</table>

*Note.* Ba = Baltimore; Bl = Bloomington; E = Evanston; L = Laramie; M = Milwaukee; X = specific figures could not be provided; * = an approximate figure; Pl = private lessons; G = group classes; P = performances. *Sources:* D. Drexler, personal communication, July 29, 2013; R. Henry, personal communication, July 7, 2013 and May 6, 2014; S. Sinift, personal communication, July 11, 2013; S. Spencer, personal communication, July 29, 2013; M. Zweig, personal communication, September 22, 2013.
relationships with other organizations. The Peabody Preparatory in Baltimore has a main campus and three branch locations, which are shared by various departments of the Preparatory (Johns Hopkins Peabody Institute, n.d.-h). The String Department uses two of these branch locations: Towson for private teaching, group classes and performances, and Howard County for private teaching only (R. Henry, personal communication, July 7, 2013, and May 6, 2014; Johns Hopkins Peabody Institute, n.d.-h). In Bloomington, studio, classroom, and performance spaces are spread throughout multiple buildings of the Jacobs School of Music (M. Zweig, personal communication, September 22, 2014). The Music Academy in Evanston, which encompasses four divisions including the Strings Division, has been provided with an exclusive location for private lessons, at a house in close proximity to the Northwestern Bienen School of Music. Group classes take place in a separate building of the music school, and performances occur in three separate buildings associated with the music school. Rented space in Laramie consists of three studio spaces and one large classroom; however, Sinift, as an employee of the university’s music department, uses an office there for private teaching. Reservations for performance space are made at a variety of locations throughout the city, including the university music department (S. Sinift, personal communication, July 11, 2013). In Milwaukee, all teaching and administrative spaces are housed within the music building on the UWM campus; performances are regularly held at two different buildings on the UWM campus and at a few area churches (D. Drexler, personal communication, July 29, 2013 and January 27, 2014).

All five sites share space with their associated collegiate music units and/or between faculty members to some extent. In Baltimore, all spaces at the main campus and
branch locations are shared among all divisions and departments of The Peabody Institute as needed (R. Henry, personal communication, May 6, 2014). In Bloomington, some Jacobs School of Music faculty studios are used, some string academy faculty members have been given studios for exclusive use, and practice rooms are reserved during specific teaching times (M. Zweig, personal communication, September 22, 2014). In Evanston and Laramie, one studio is for exclusive use and the other spaces are shared (S. Sinift, personal communication, July 11, 2013; S. Spencer, personal communication, July 29, 2013). Three spaces in Milwaukee are for exclusive use and five studios are shared (D. Drexler, personal communication, July 29, 2013). The site director has exclusive space; one faculty member is also on the UWM music faculty and has exclusive space; and another faculty member teaches from home (D. Drexler, personal communication, July 29, 2013). All four sites with direct relationships to collegiate music units (Baltimore, Bloomington, Evanston, and Milwaukee) must reserve classroom and performance space ahead of time (D. Drexler, personal communication, July 29, 2013; R. Henry, personal communication, May 6, 2014; S. Spencer, personal communication, July 29, 2013; M. Zweig, personal communication, September 22, 2014).\(^\text{14}\)

All site directors indicated that their facilities are considered adequate with just a few exceptions. In Baltimore, the use of space is gradually becoming less flexible as The Peabody Institute expands (R. Henry, personal communication, July 7, 2013). Until March 2015, one building in Evanston was not accessible for persons with disabilities, but this problem was solved when the Bienen School of Music opened a new Music and Communication Building. In Milwaukee, space limitations at UWM have caused

\(^{14}\) Administrative space and how it is obtained and/or allocated will be covered under “Organizational Structure and Administration” later in this chapter.
scheduling complications at times, but improvements have been made over the years to grant the String Academy of Wisconsin additional dedicated space (D. Drexler, personal communication, July 29, 2013).

Faculty and Student Activities in the Community

String academy faculty and students also participate in musical activities throughout their local communities that are not directly associated with their academy. Many faculty are connected to other arts organizations, where they function as representatives of their string academy, forging new relationships with organizations and with potential students and their families. Similarly, students’ off-site musical activities form a part of their overall musical education.

String Academy Faculty Activities

Faculty members are connected to local arts organizations in their local communities. Examples include Baltimore faculty members’ employment or association with the Baltimore School for the Arts, the Baltimore Symphony, and the Maryland–D.C. ASTA chapter (R. Henry, personal communication, July 7, 2013), or some Milwaukee faculty’s employment with the Milwaukee Symphony Orchestra (D. Drexler, personal communication, July 27, 2013).

In Baltimore, Bloomington, and Milwaukee, relationships with public schools include extended programming at schools that do not have their own string programs.15 Staff and students from these three sites have also traveled to local public schools for presentations and performances (D. Drexler, personal communication, July 29, 2013; R.

---

15 For information about the Fairview Violin Project in Bloomington and the Urban Students in Arts Scholarship program in Milwaukee, see “Extended Programming” within the section on “Instructional Program” earlier in this chapter and “Financial Support for Students” within the “Finances” section later in this chapter.
Occasionally, faculty activities can create conflicts of interest. In Laramie, Sherry Sinift is administrative coordinator and supervising teacher with the University of Wyoming String Project and also director of the String Academy of Wyoming. The former project offers string instrument instruction to school-age students in Laramie as well as development and training for students at the University of Wyoming Department of Music. Its project description states:

Children begin studying violin, viola and cello in the third and fourth grade. First and second year students attend two fifty-minute classes per week. Beginning in their third year, students receive a weekly private lesson and play in an ensemble. Tuition is kept low to allow participation regardless of income. UW String Project classes and lessons are taught by University of Wyoming music students under the close supervision of a master teacher. (University of Wyoming, n.d.)

Moreover, James Przygocki, director of the UW String Project, is also a faculty member at the String Academy of Wyoming. Sinift commented on her dual association:

Because I’m involved in both of those programs, it’s very hard for me to promote the String Academy because I feel like it’s a conflict of interest. So I don’t really promote the String Academy to the String Project parents even though I have permission from the director to do so. I have mixed feelings, and I don’t think the college students appreciate when they lose students out of their studios, so it’s kind of a tricky situation. (S. Sinift, personal communication, July 11, 2013)

String Academy Student Activities

Site directors are well acquainted with the additional musical and extracurricular activities in which their string academy students are involved. These include (a) public school string programs, (b) youth orchestras and similar ensembles, and (c) competitions. Depending on the site, string academy schedules are often designed to avoid conflicts
with off-site student activities, or they are set in accordance with observed trends in student availability.\footnote{See “Instructional Calendar and Scheduling” within the “Instructional Program” section earlier in this chapter.}

Students at all string academy sites often participate in public school string programs, unless their school does not have one (D. Drexler, personal communication, July 23, 2015; R. Henry, personal communication, July 23, 2015; S. Sinift, personal communication, July 11, 2013; S. Spencer, personal communication, July 23, 2015; M. Zweig, personal communication, July 2, 2015). The Baltimore Public Schools, for example, have no string programs, nor do many schools in Milwaukee (D. Drexler, personal communication, July 23, 2015; R. Henry, personal communication, July 23, 2015).

String academy students participate in local youth orchestras. Because The Peabody Preparatory offers such a surplus of various programs, including three youth orchestras that involve strings, student participation in outside ensembles is difficult to pinpoint in Baltimore (R. Henry, personal communication, July 11, 2013). Students at the Bloomington site who live in Indianapolis often participate in that city’s New World Youth Orchestra. Evanston students participate in several area youth orchestras, such as the Chicago Youth Symphony Orchestra or those offered through Midwest Young Artists (S. Spencer, personal communication, July 29, 2013). In Laramie, students at the appropriate playing level are encouraged to audition for the High Plains Sinfonia, a program under the auspices of the University of Wyoming String Project (S. Sinift, personal communication, July 11, 2013). In Milwaukee, several students are members of
the Milwaukee Youth Symphony Orchestra (D. Drexler, personal communication, July 29, 2013).

String academy students may participate in competitions as well, depending on the private lesson teacher’s recommendation as to whether doing so would be a positive experience:

Competitions also become a part of the musical education for students in the String Academy. The real benefit of a competition lies in the preparation process. The student needs to be ready at a specific time, with specific repertoire. It is the responsibility of the teacher to make wise decisions as to what a student is capable of doing and what is in the student’s best interest. (Wheeler & Zweig, 2007, p. 15)

Organizational Structure and Administration

This section discusses characteristics of program size and administrative structure at each site. Program size is discussed in terms of the number of faculty and students at each site and the scope of group instruction.

Program Size and Scope

I documented the number of faculty (Table 7) and the number of students enrolled in group instruction (Table 8) at each site in spring 2014. These figures indicate that violin enrollment is larger than cello enrollment at all sites, that both violin and cello enrollment dwarf that in viola, and that no site enrolled double bass students in group instruction (Table 8). However, these figures alone are an incomplete representation of program size. For example, fluctuations in enrollment occur over time. In Bloomington, Zweig indicated that violin enrollment increased nearly 30% over two years, from 93 violin students in 2012 to 120 in 2014 (M. Zweig, personal communication, September 22, 2014). Additionally, because enrollment in group instruction at the Baltimore and Evanston sites is optional, these sites enrolled more students than that indicated in Table
Table 7

*Number of Faculty by Site (Spring 2014)*

<table>
<thead>
<tr>
<th>Site</th>
<th>Baltimore</th>
<th>Bloomington</th>
<th>Evanston</th>
<th>Laramie</th>
<th>Milwaukee</th>
</tr>
</thead>
<tbody>
<tr>
<td>Violin/Viola</td>
<td>17</td>
<td>8</td>
<td>5</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Cello</td>
<td>6</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Bass</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>24</td>
<td>10</td>
<td>7</td>
<td>6</td>
<td>7</td>
</tr>
</tbody>
</table>

*Note.* Figures apply to academic years only; summer program figures are not included. Not all violin instructors teach viola; see “Instruments Taught” within the “Instructional Program” section earlier in this chapter for more information. *Sources:* Indiana University Jacobs School of Music (n.d.-a); Johns Hopkins Peabody Institute (n.d.-i); Northwestern University Bienen School of Music (n.d.-b); String Academy of Wisconsin (2014); The String Academy of Wyoming (n.d.-b).

8. Whereas 78 students were enrolled in group instruction for the Evanston site in spring 2014 (Table 8), private instruction overall was provided to a total of 125 students: 105 violin, 4 viola, and 16 cello (M. Molenaar, personal communication, December 12, 2015).

A direct comparison of faculty-student ratios across sites is not possible due to variances across sites in faculty workloads. The disproportionate number of faculty members listed for Baltimore when compared to the other sites (Table 7) is due to student enrollment in private lessons without group instruction, but is also due to the number of

---

17 See “Workloads and Compensation” within the section on “Personnel,” later in this chapter.
Table 8

*Number of Students Enrolled in Group Instruction by Site (Spring 2014)*

<table>
<thead>
<tr>
<th></th>
<th>Site</th>
<th>Baltimore</th>
<th>Bl</th>
<th>E</th>
<th>L</th>
<th>M</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>YPSP</td>
<td>PAS</td>
<td>PCVP</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Violin</td>
<td>120</td>
<td>14</td>
<td>8</td>
<td>102</td>
<td>71</td>
<td>39</td>
</tr>
<tr>
<td>Viola</td>
<td></td>
<td>5</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cello</td>
<td>31</td>
<td>5</td>
<td></td>
<td>24</td>
<td>7</td>
<td>17</td>
</tr>
<tr>
<td>Baltimore</td>
<td>151</td>
<td>24</td>
<td>8</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Totals</td>
<td>183</td>
<td>126</td>
<td>78</td>
<td>59</td>
<td>137</td>
<td></td>
</tr>
</tbody>
</table>

*Note.* Figures for viola students is representative only exclusive viola students. More viola instruction than this occurs; see “Instruments Taught” within the “Instructional Program” section earlier in this chapter for more information. YPSP = Young Peoples String Program; PAS = Performance Academy for Strings; PVCP = Pre-Conservatory Violin Program; Bl = Bloomington; E = Evanston; L = Laramie; M = Milwaukee.


programs that the String Department of The Peabody Preparatory handles, which go far beyond the YPSP, PAS, and PCVP.\(^{18}\)

The most critical depiction of program scope for each site is displayed in Appendix D, which contains five figures presenting the sequence of group instruction for each site. The number of violin groups is larger than the number of cello groups at all

\(^{18}\) See Appendix C.
sites (Figures D1, D2, D3, D4 and D5). The Baltimore site is by far the largest and most complex (Figure D1); it also enrolls the most students (Table 8). Bloomington and Milwaukee share the greatest degree of similarity (Figures D2 and D5); they are both large string academies, quite similar in size and scope, and have the most comparable figures of enrollment in group instruction (Table 8). Evanston (Figure D3) is smaller than the Baltimore, Bloomington, and Milwaukee sites as far as the sequence of group instruction is concerned, but is comparable to Bloomington and Milwaukee in terms of total enrollment numbers (125). Laramie is the smallest site in both its sequence of group instruction and overall enrollment (Figure D4 and Table 8).

**Administrative Setting and Structure**

Summaries of the administrative structure and its development for each site are provided to describe how each site’s structure has been established, as well as financial relationships with associated collegiate music units, where applicable. A cross-site summary appears at the end of this subsection.

**Baltimore.** The Peabody Institute of The Johns Hopkins University has two main divisions, The Peabody Conservatory and The Peabody Preparatory. The Peabody Conservatory is the professional degree-granting division (the collegiate music unit) of The Peabody Institute. Founded in 1894, The Peabody Preparatory (a divisional music school) attends to the musical needs of the community, with 20 departments serving approximately 2,000 students each week (Johns Hopkins Peabody Institute, n.d.-a). A defining characteristic of the Preparatory is its twofold mission:

[The Preparatory] offers gifted children and adolescents the opportunity to realize their highest potential as leaders of the next generation of performing artists. In addition, it provides an education in music and dance to all members of the community who desire it, regardless of age, professional intention, or previous
training. This dual mission is based upon the notion that every individual has the capacity for artistic expression at some appropriate level of understanding and skill. (Johns Hopkins Peabody Institute, n.d.-a)

The Peabody Institute has one business office and one financial system for the both the Conservatory and the Preparatory. However, the Preparatory has its own administration, including a dean, a registrar, a communications specialist, and several staff members (R. Henry, personal communication, July 7, 2013). The chair of the String Department reports to the dean of the Preparatory, who in turn is under the director of the Peabody Institute (R. Henry, personal communication, July 7, 2013). Duties associated with the String Department’s administration have been assembled into titled positions, but the titles are not necessarily an indication of full-time or part-time employment. Several roles are small enough for one person to assume multiple titles, giving the department flexibility in assigning administrative roles as changes in faculty responsibilities occur. The following list represents titled positions associated with the YPSP, PAS, and PCVP as of fall 2014:

- String Department Chair and Director of PCVP
- Director, PAS
- Co-Director, YPSP and Fiddlers Four Coordinator
- Co-Director, YPSP and Assistant to the YPSP Coordinator
- YPSP Cello Coordinator
- Chamber Music Coordinator and Conductor Young Artists Orchestra
- Assistant to the Chair, Accompanist Coordinator and Strings Web Administrator
- Conductor Preparatory String Ensemble

(Johns Hopkins Peabody Institute, n.d.-m)

Several Preparatory faculty members have shared teaching responsibilities within both the Preparatory and the Conservatory. In addition to her duties as chair of the String Department and director of the PCVP within the Preparatory, Rebecca Henry teaches violin and viola minor applied lessons (meaning that a student majoring in violin may
take viola lessons with her, or a viola major may take violin), instructs courses in string pedagogy, and mentors students in the Master of Performance-Pedagogy program for the Conservatory (R. Henry, personal communication, July 7, 2013). Two additional faculty members within the String Department of the Preparatory Division have taught classes for the Conservatory, and Preparatory students can sometimes take lessons with Conservatory faculty (R. Henry, personal communication, July 7, 2013).

**Bloomington.** The Jacobs School of Music String Academy is a divisional music school (i.e., the strings division) of the IU Jacobs School of Music. Seven additional divisions are part of the music school’s precollege offerings: ballet, choir, guitar, harp, musical beginnings, piano, and winds and percussion. Titled administrative positions within the String Academy include a director, co-director, co-director/director of the cello program, and administrator/coordinator for new students (Indiana University Jacobs School of Music, n.d.-a).

Most of the string academy’s operations and management are handled internally. But, as a precollege program embedded within the Jacobs School of Music, some string academy operations are incorporated into the larger organization via the Office of Pre-College and Special Programs of the Jacobs School. This office handles the String Academy’s accounting, auditing, website updates, student registration, reports, oversight, arbitration for situations between students and parents, faculty and staff policies and safety (especially those dealing with minors), communication with the marketing department, account collections, background checks, and contracts for employment (S. Nicholson, personal communication, September 22, 2014). It also interacts with the Office of Conferences and Event Registration (OCER) for the entire university. All
revenue collected from the Jacobs School’s precollege programs is passed through OCER (S. Nicholson, personal communication, September 22, 2014).

The Office of Pre-College and Special Programs generates revenue, only from the collection of student registration fees. During the academic year, each student incurs a $15 registration fee per semester (M. Zweig, personal communication, July 27, 2013). However, for the Summer String Academy,\(^\text{19}\) this registration fee is $70 because the office provides additional services: substantial amounts of communication with potential students; setting up accommodations; nametags and folders; liaison to campus offices (e.g., risk management, IU Conferences, PIC policy management); international services; human resource services; and communication management between the music school and the university’s business, employment, and scheduling offices (S. Nicholson, personal communication, September 22, 2014).

The IU Jacobs School of Music provides all administrative and instructional space for the program and handles tax reporting through its business office (M. Zweig, personal communication, September 22, 2014). Piano tuning and custodial services are additional advantages of the Academy’s association with the music school, which, additionally, funds an associate instructor position (i.e., a university student assistantship) to teach for the string academy (M. Zweig, personal communication, September 22, 2014). The String Academy director and co-director are also faculty members of the music school in the string and music education departments, respectively.

**Evanston.** The Music Academy at Northwestern University’s Bienen School of Music has provided community music education as a part of the Community Education

\(^{19}\) See “Summer Offerings” within the “Instructional Program” section, earlier in this chapter.
Department to children and adults for more than 70 years (Northwestern University Bienen School of Music, n.d.-a). The Music Academy is a divisional music school with four divisions (Kindermusic, piano, strings and voice), each led by a coordinator. Stacia Spencer is coordinator for the Strings Division. The academy is headed by a director (currently also the coordinator of the Piano Division) who works closely with the Associate Dean for Administration and Finance of the Bienen School of Music (M. Molenaar, personal communication, September 7, 2014). The dean sets the budget for the Music Academy, handles payroll and tuition deposits, and approves any purchase requests, with the exception of small items (M. Molenaar, personal communication, September 7, 2014).

The Bienen School of Music provides teaching studios, classrooms, administrative office space (at the Music Academy house, within walking distance of the School of Music), piano tuning, phone, utilities, office supplies, postage, bookkeeping services, printing and copying services, custodial services, and rehearsal and performance space. It also funds work-study appointments for university students who assist with Music Academy instruction (M. Molenaar, personal communication, September 7, 2014). Expenses are usually billed to the academy budget, but many costs, such as hall rental, are not broken out directly (M. Molenaar, personal communication, September 7, 2014).

**Laramie.** The String Academy of Wyoming is an independent music school, organized as an S corporation. It was originally a divisional music school of the Music Department of the University of Wyoming through a department called “Community Service Education” (S. Sinift, personal communication, July 11, 2013). However, due to budget cuts in 2009, the university discontinued this department. At this point, Sherry
Sinift reconstituted the String Academy as an S corporation, with herself as owner, and began renting instructional space from a local civic center (S. Sinift, personal communication, July 11, 2013). She considered organizing as a nonprofit or a limited liability corporation, but decided against it:

I did not feel confident that I could run a nonprofit board in my town without it having to be primarily staffed by parents, which made for an uncomfortable relationship, because in a nonprofit you are an employee of the board, and they make the hiring and firing decisions. I did not want to put my parents in that role. [Also], there isn’t enough independent philanthropy going on in a town the size of Laramie, so I decided against a nonprofit. I had a lawyer helping me with this and he advised against the limited liability corporation because as a sole proprietor of a business, that method had not been tested as far as liability goes and since I wanted to own the business myself, I was better off going with the corporation model. (S. Sinift, personal communication, July 11, 2013)

The S corporation model allows Sinift to file all taxes through her individual tax account at the personal rate rather than the higher corporate rate (S. Sinift, personal communication, July 11, 2013). However, as an S corporation the string academy is not eligible to apply for grants or receive tax-exempt contributions.

Sinift is currently the string academy’s director and sole administrator. For its first three years as an independent corporation, the program employed an administrative assistant to help with operations and management, and Sinift said that she may employ an assistant again in the future (S. Sinift, personal communication, July 11, 2013). An accountant is retained for payroll and tax services (S. Sinift, personal communication, July 11, 2013). The String Academy has a relationship with the UW Music Department, serving as the lab setting for university students in string pedagogy courses, which Sinift teaches (S. Sinift, personal communication, July 11, 2013).

**Milwaukee.** The String Academy of Wisconsin is an independent music school and a 501(c)(3) tax-exempt nonprofit organization. Its executive director, Darcy Drexler,
is in charge of strategic and financial decisions for the String Academy as well as artistic leadership (D. Drexler, personal communication, July 29, 2013). An office administrator, who works 30 hours a week, assists her. Drexler reports to a volunteer board of directors (String Academy of Wisconsin, 2013). Officers within the seven-member board include a chairperson, a vice president, and the executive director; additional seats are held by a treasurer, a parent representative, a faculty representative, and one at-large member (D. Drexler, personal communication, September 25, 2014). Board members encompass a variety of professional backgrounds; during 2012-2013 they included a realtor, a lawyer/realtor, a communications specialist, a stockbroker, and an arts administrator (D. Drexler, personal communication, September 25, 2014). The board is responsible to ensure that the academy fulfills its mission “to provide an opportunity for excellence in the pursuit of comprehensive musical study for young violinists, violists, and cellists” (String Academy of Wisconsin, n.d.-g). This mission statement is elaborated on the website in great detail through several additional points related to students, faculty, and the community.

Unlike the other four sites, the String Academy of Wisconsin also has an Artistic Board of Advisors, composed of distinguished artists, leaders, musicians, and teachers who have endorsed the academy (see Appendix E).

The String Academy of Wisconsin is housed within the UWM Peck School of the Arts, and rents space from its Music Department. In addition to instructional space, the rental agreement covers one office used specifically for administrative needs (D. Drexler, personal communication, July 29, 2013). Another space doubles as an office and studio.

20 See “Facilities” under “Geographic and Physical Setting,” earlier in this chapter.
for the executive director, and there is a small office area for other faculty (D. Drexler, personal communication, July 29, 2013).

As part of its relationship with the university, the String Academy provides the lab setting for string fundamentals and string pedagogy courses, as well as for the Master of Music degree in string pedagogy (D. Drexler, personal communication, July 29, 2013). These courses are taught by Drexler, who is an associate lecturer for UWM, and by a member of the cello faculty, who is also on the Music Department cello faculty. The rental agreement with the university also addresses utilities and janitorial services. The String Academy pays for its phone, bookkeeping, printing, copying, and any other internal expenses (D. Drexler, personal communication, July 29, 2013).

Summary. Each of the five sites has a distinctive administrative structure. The four sites with a direct collegiate affiliation (Baltimore, Bloomington, Evanston and Milwaukee) are housed within their respective collegiate music units, and they use collegiate music unit facilities for instructional purposes. Of the four, Milwaukee is the only independent music school, a 501(c)(3) nonprofit organization. The other three (Baltimore, Bloomington, and Evanston) are divisional music schools, administratively integrated into their collegiate music units. Bloomington and Evanston are the most similar, as both are under the umbrella of university School of Music offices that specialize in public engagement. Bloomington is the most independently run, assuming a great deal of its own administration. Evanston has independent administration as well, though it is spread across four divisions. Baltimore is more fully integrated than Bloomington or Evanston, as The Peabody Institute assumes all administrative responsibilities. Baltimore represents the largest and most complex system, which is also
older and more developed, even though the three programs (the YPSP, PAS, and PCVP) at The Peabody Preparatory that apply to this study are younger than those in Bloomington.

While the Laramie site was initially established much like Bloomington and Evanston, as a divisional music school with a direct relationship to a university music department, it has since forged a new path as an independent music school, legally organized as an S corporation.

Table 9 summarizes the administrative features of each site.

Table 9

*Administrative Context*

<table>
<thead>
<tr>
<th>Administrative context</th>
<th>Site</th>
<th>Ba</th>
<th>Bl</th>
<th>E</th>
<th>L</th>
<th>M</th>
</tr>
</thead>
<tbody>
<tr>
<td>Direct collegiate affiliation</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>Indirect collegiate affiliation</td>
<td>✓</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Independent organization</td>
<td>S</td>
<td>N</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Host institution assumes all administration</td>
<td>✓</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Host institution and program share administration</td>
<td>✓</td>
<td>✓</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Note.* Ba = Baltimore; Bl = Bloomington; E = Evanston; L = Laramie; M = Milwaukee; S = S-Corporation; N = 501(c)(3) nonprofit.
Finances

This section discusses sources of revenue, expenses, and financial support for students at all sites. Data are for the 2012–2013 fiscal year as reported by string academy site directors.

The discussion of revenue addresses tuition at all sites. However, to describe the specific nature of additional revenue sources and expenses at each site, the divisional music schools (Baltimore, Bloomington and Evanston), are discussed separately from the independent music schools (Laramie and Milwaukee) due to the differences in organization and the nature of the data collected. The most detailed information is available for Milwaukee, because of the String Academy of Wisconsin’s status as a nonprofit entity places all its tax reporting in the public domain.

Revenue

Tuition. The greatest source of revenue generated by string academies comes from tuition. Billing methods at each site differ based on two categories: private lessons and group class fees (either billed separately or combined), and billing period. Table 10 outlines these differences. Baltimore and Evanston both bill private lessons and group classes separately. At both sites, students have the option to take private lessons without enrolling in group classes, so separate fees are necessary. In contrast, Bloomington and Milwaukee charge a combined rate for lessons and groups and do not offer the option to enroll in lessons without group classes. Laramie is similar to Bloomington and Milwaukee in this respect, but uses a monthly billing system. Evanston also differs from the other sites because Northwestern University has trimesters instead of semesters.
<table>
<thead>
<tr>
<th></th>
<th>Baltimore</th>
<th>Bloomington</th>
<th>Evanston</th>
<th>Laramie</th>
<th>Milwaukee</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Individual/group</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Billed separately</td>
<td>✓</td>
<td></td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Billed together</td>
<td></td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td><strong>Billing period</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Per semester</td>
<td>✓</td>
<td>✓</td>
<td></td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>Quarterly</td>
<td></td>
<td></td>
<td></td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>Monthly</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>✓</td>
</tr>
</tbody>
</table>

*Sources:* Indiana University Jacobs School of Music (n.d.-d); Johns Hopkins Peabody Institute (2013a); S. Sinit, personal communication, July 11, 2013; S. Spencer, personal communication, July 29, 2013; String Academy of Wisconsin (n.d.-d).

**Tuition amounts.** Tuition and fees vary by site, based on the amount of instruction within a billing period and the duration of that period. Laramie and Milwaukee both operate on 17-week semesters, which include 16 weeks of group classes in Laramie and 15 in Milwaukee. Fees are based on 16-week semesters of lessons and groups in Baltimore, 14-week semesters in Bloomington, and 11-week quarters in Evanston. Tuition also varies by the duration and type of lesson (group or private).

Amounts used in Figure 2 have been calculated to represent the cost of 15 weeks of private and group instruction at each site, which is the mean duration of billing periods for all sites. For a detailed description of these calculations, as well as additional tuition
Figure 2. Semester tuition (2012–2013) by site and private lesson duration.

Note. Cost is for 15 weeks and represents the total tuition cost of private lessons and group classes, minus fees. Rates do not include tuition for any summer sessions or additional programs that may be offered at a site. Baltimore figures apply only to the Young People’s String Program. Sources: Indiana University Jacobs School of Music (n.d.-d); Johns Hopkins Peabody Institute (2013a); S. Sinift, personal communication, July 11, 2013; S. Spencer, personal communication, July 29, 2013; String Academy of Wisconsin (n.d.-d).

costs relative to each site, see Appendix F. Amounts for Baltimore in Figure 2 apply only to the YPSP, which has the highest tuition rates by far.

Sites with high population and a higher cost of living generally have higher tuition. Table 11 shows figures from the Cost of Living Index (COLI) for each site, compared with the national average. The COLI provides city-specific figures for Baltimore, Bloomington, and Laramie, but larger statistical areas (Chicago and Milwaukee–Waukesha) were used for the other two sites. The figures correspond very closely to the tuition amounts for each site as shown in Figure 2, as well as to population
Table 11

Cost of Living Index

<table>
<thead>
<tr>
<th>Site</th>
<th>Ba</th>
<th>Bl</th>
<th>C</th>
<th>L</th>
<th>M-W</th>
<th>Ave.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Composite COLI score (100%)</td>
<td>+8.9</td>
<td>-9.9</td>
<td>+16.6</td>
<td>-6.1</td>
<td>+2.0</td>
<td>100</td>
</tr>
</tbody>
</table>

*Note.* Figures for each location represent percentage above or below the national average cost of living. Ba = Baltimore; Bl = Bloomington; C = Chicago; L = Laramie; M-W = Milwaukee–Waukesha; Ave. = National Average. *Source:* Council for Community and Economic Research (n.d.).

data presented in Table 5, indicating that a site’s geographic location has an impact on tuition rates.

In Figure 3, tuition figures have been adjusted based on their composite COLI (Cost of Living Index) scores. With this adjustment there is a large gap between tuition costs in Baltimore and those elsewhere. This is likely due to the larger scope of The Peabody Preparatory as a whole, as it employs a significantly larger and more complex administrative team relative to the other sites.

Bloomington has the lowest tuition rates, with the exception of 30-minute tuition rates. However, the higher charge for 30-minute lessons is offset by the beginning tuition rate offered in Bloomington, shown in Table 12. Beginning students may take advantage of this rate during their first two semesters of study. A similar two-semester beginning rate is offered in Milwaukee. Baltimore also has a beginning rate (one for violin and one
Figure 3. Semester tuition (2012–2013) by site and private lesson duration, adjusted for cost of living.

Note. Cost is for 15 weeks and represents the total tuition cost of private lessons and group classes, minus fees. Rates do not include tuition for any summer sessions or additional programs that may be offered at a site. Baltimore figures apply only to the Young People’s String Program. Sources: Council for Community and Economic Research (n.d.); Indiana University Jacobs School of Music (n.d.-d); Johns Hopkins Peabody Institute (2013a); S. Sinift, personal communication, July 11, 2013; S. Spencer, personal communication, July 29, 2013; String Academy of Wisconsin (n.d.-d).

for cello) for introductory classes that help to incorporate beginners into the YPSP. However, the applicability of this beginning rate depends on the student’s progress, as they are incorporated into the full YPSP program when faculty believe that they are ready. Table 12 lists beginner rates in Baltimore, Bloomington, and Milwaukee for 15 weeks of instruction, including COLI adjustments.

---

See Appendix F.
Table 12

Introductory Beginner Rates (2012–2013)

<table>
<thead>
<tr>
<th>Site</th>
<th>Rate</th>
<th>Baltimore Violin</th>
<th>Baltimore Cello</th>
<th>Bloomington</th>
<th>Milwaukee</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cost for 15 weeks</td>
<td>$352</td>
<td>$454</td>
<td>$455</td>
<td>$574</td>
<td></td>
</tr>
<tr>
<td>Cost with COLI Adjustment</td>
<td>$321</td>
<td>$414</td>
<td>$500</td>
<td>$563</td>
<td></td>
</tr>
</tbody>
</table>

*Note. COLI = Cost of Living Index. Sources: Council for Community and Economic Research (n.d.); Indiana University Jacobs School of Music (n.d.-d); Johns Hopkins Peabody Institute (2013a).*

**Other revenue sources: Baltimore, Bloomington, and Evanston.** Partly because the Baltimore, Bloomington, and Evanston sites are divisional music schools of collegiate music units, specific figures on additional revenue were not provided, but the revenue sources can be described as follows.

In Baltimore and Bloomington, additional funding comes from grants, donations, and fundraising. Both sites have received grants from the Dorothy Richard Starling Foundation. In Baltimore, this grant underwrites tuition costs for students in the PCVP (R. Henry, personal communication, July 7, 2013). The Peabody Preparatory in Baltimore has also received grants applicable to the entire Preparatory as well as to other departments. The only other grant applying to the String Department is a Jack Kent Cooke Foundation grant to support the PAS (R. Henry, personal communication, July 7, 2013).

Bloomington’s Starling grant supports performances and travel for the Jacobs School of Music String Academy’s top level ensemble, the Virtuosi, as well as part of Mimi Zweig’s salary (M. Zweig, personal communication, July 27, 2013). This means
that none of her salary is funded by tuition payments, thus helping to hold tuition costs
down (M. Zweig, personal communication, July 27, 2013). Zweig noted that membership
fees for stringpedagogy.com also generate revenue for the string academy:

Stringpedagogy.com is my own little company. It is a profit company, as in very
small profit! These funds are my mini-foundation that I can use to support student
tuition, purchase instruments, hire pianists, supplement faculty positions, etc. (M.
Zweig, personal communication, July 27, 2013)

The Jacobs School of Music String Academy has also received support from
private donors. Most notable are Barbara and David H. Jacobs, the couple responsible for
a gift of $40.6 million to the IU School of Music in 2005 (Indiana University News
Room, 2005), prompting the school to change its name to the Jacobs School of Music.
Zweig referred to David Jacobs as “one of our most generous donors,” who also hosts the
Jacobs School of Music Virtuosi during trips to Argentina (M. Zweig, personal
communication, July 27, 2013). Zweig also noted receipt of occasional private donations
from other individuals, but indicated that the String Academy is mostly self-supporting

In Baltimore, The Peabody Institute’s development office reports to the Johns
Hopkins University development office, which means when raising money at Peabody,
one must seek permission from the parent university and follow several policies (R.
Henry, personal communication, July 7, 2013). Simply asking someone to fund a
program at The Peabody Preparatory is prohibited, since all giving must be approved by
the university development office, which in general will not authorize requests to people
who may already be giving to some other area of Johns Hopkins (R. Henry, personal
communication, July 7, 2013). The advantage of this arrangement is that the Preparatory
has access to professional fundraisers, but it loses considerable autonomy in fundraising:
[Professional fundraisers at Johns Hopkins] prefer to focus on fewer people who can donate large sums of money. They don’t want to spend time doing a dinner for $100 each, so it’s a challenge but they actually have been very helpful. For bigger things like the Starling Grant, they have definitely helped. They help me with the communications with that foundation. (R. Henry, personal communication, July 7, 2013)

One system of soliciting small donations at The Peabody Preparatory is called “donor’s choice,” in which faculty members may submit proposals to raise money for something very specific under $1,000 (R. Henry, personal communication, July 7, 2013; Johns Hopkins Peabody Institute, n.d.-c). The item is then placed on the website and emails can be sent to persons with potential interest. This has helped the String Department to purchase items such as a video camera or a viola for the PAS, or to commission a piece (R. Henry, personal communication, July 7, 2013).

Evanston must also follow rules when fundraising, so as not to interfere with the main mission of the Bienen School of Music, which is to support university students (M. Molenaar, personal communication, September 7, 2014). Some limited fundraising has been permitted for specific projects, such as music bag sales to support travel expenses for String Division performances, individual donations by Music Academy alums to support current students, or donations of used music (M. Molenaar, personal communication, September 7, 2014).

**Laramie.** Tuition represented the only source of revenue supporting the String Academy of Wyoming. Because of its status as an independent S corporation, donations are not tax deductible and are not solicited on a regular basis (S. Sinift, personal communication, July 11, 2013). In 2013, however, Sinift created a 501(c)(3) nonprofit organization called the Friends of the String Academy to raise scholarship money for students (S. Sinift, personal communication, July 11, 2013). The nonprofit status of this
Separate entity will allow it to apply for grants and seek donations. Sinf noted only two occasions when additional sources of funding existed: a projects grant from the Wyoming Arts Council during the academy’s first year (when it was still connected with the University of Wyoming), and a fundraising concert that was held to support travel costs to Evanston for Northwestern University’s Violin Pedagogy Weekend in April 2011.22

**Milwaukee.** Three general categories of revenue for the Milwaukee site are presented in Figure 4: program service revenue, contributions and grants, and fundraising and investment income. Program service revenue comprises the bulk of String Academy of Wisconsin resources, at 81.4% for the 2013 tax year. Out of that 81.4%, tuition revenue comprises 98.3% (or 79.7% of total income) (String Academy of Wisconsin, 2013; Part VIII, lines 2a and 2b) and the additional 1.7% is from the materials fee collected each semester (String Academy of Wisconsin, 2013; Part VIII, line 2c). The second-largest category is contributions and grants, which include government grants (String Academy of Wisconsin, 2013; Part VIII, lines 1e and 1f), individual donations, and corporate and foundation grants (D. Drexler, personal communication, September 25, 2014). Net income from fundraising events comprised 93% of all fundraising and investment income, or 4.5% of total income (String Academy of Wisconsin, 2013; Part VIII, line 8c) with investment and miscellaneous income constituting the remaining portion (String Academy of Wisconsin, 2013; Part VIII, line 10).

Fundraising events include a benefit concert as well as flower and coffee sales, which are held annually to raise money for student scholarships. Coffee is sold every November and delivered in December; flowers are sold in April and distributed in May in

---

22 See “Performances and Special Events” within the “Instructional Program” section, earlier in this chapter.
cooperation with a local greenhouse; and the scholarship benefit concert is held every May near the end of the semester (D. Drexler, personal communication, July 29, 2013). This is the only concert with an admission charge. In addition to generating scholarship funds and helping to keep tuition costs down, the coffee and flower sales require families to put in sweat equity, Drexler said:

When the String Academy was initiated, we had to raise eight or nine thousand dollars to make up for what tuition didn’t cover. So even if everyone paid full tuition, we still had to fundraise to help out full-paying students, and that is still the case today. That being said, we want every family to put some sweat equity into helping the String Academy and that’s why we have the flower and coffee sales. It communicates to our families that we are asking them to donate their time and effort, and perhaps some money as well if they purchase items from the sales themselves. It reinforces the understanding that the sales are not just for someone else, but they benefit every student in the String Academy. (D. Drexler, personal communication, July 29, 2013)
Drexler also indicated that the scale of the flower sale has somewhat diminished over time due to decreased participation:

We have done the flower sale from the start, and in the past we sold much more than we do today. It’s interesting. The participation is not as large as it used to be, and I think there are two reasons. First, because of funding cuts at all schools, everybody needs to have fundraisers, so there’s selling fatigue. It also seems that today’s generation of students and families are busier than they used to be. I think the first reason is probably the most prevalent, but I don’t think as many people jump in as much as they used to. That’s a feeling, not a cold, hard fact. (D. Drexler, personal communication; July 29, 2013)

Investment income comes from an endowment fund at the Greater Milwaukee Foundation, established in 1992 (D. Drexler, personal communication, July 29, 2013). Zweig (formerly director in Milwaukee as well as in Bloomington) created the endowment following a benefit concert by noted violinist Joshua Bell that raised $20,000 (D. Drexler, personal communication, July 29, 2013). Zweig stated in an October 1993 newsletter that “a strong endowment is the key to security for arts organizations” (Olsen & Zweig, 1993). Zweig added that an endowment “would allow us to provide adequate scholarships for talented and deserving students, develop special programs, increase enrollment, and have more time to devote to what we do best—teaching the violin, viola and cello to young people.” The endowment had grown to $115,866 by the end of tax year 2013 (String Academy of Wisconsin, 2013; Part X, line 11) through interest income and donations.

**Expenses**

At all sites, the largest expense is faculty compensation, including payroll taxes. In addition, all locations pay facility overhead costs. However, due to the limited availability of data, other cross-site comparisons are not possible. The only site for which a specific itemized list of expenses could be obtained was Milwaukee.
**Baltimore, Bloomington, and Evanston.** Budgets are difficult to describe for these sites, because they are divisional music schools and thus their finances are integrated into the larger structures of their associated collegiate music units. The largest expense in all three cases is faculty compensation, but this is unsubstantiated, as specific figures that would list itemized expenses are difficult to ascertain and were not disclosed by site directors. Discovering the nature of specific additional expenses in Baltimore was not possible since administration is completely assumed by The Peabody Preparatory and The Peabody Institute as a whole, and no details were released. In Evanston, the Music Academy is required to at least break even on all programming, and keeping expenses and administrative staffing as low as possible balances the budget (M. Molenaar, personal communication, September 7, 2014). Among the three string academies that function as divisional music schools, Bloomington appears to have the most control over budget information since it is the only one with program-specific administration. The budget categories in Bloomington that Zweig cited in one interview included faculty salaries, financial aid, administrative staff, travel, phone, marketing and advertising, supplies, and equipment (M. Zweig, personal communication, September 22, 2014).

**Laramie.** In Laramie, by far the largest expense is faculty and administrative compensation, including $800 to $1,000 per month in payroll taxes (S. Sinift, personal communication, April 11, 2014). As it was formerly a divisional music school, fees were increased by 10% to cover those taxes (S. Sinift, personal communication, April 11, 2014). Since the academy is now independent, Sinift pays taxes directly, working with an accountant to determine specific amounts for Medicare, workers’ compensation, and federal taxes (S. Sinift, personal communication, April 11, 2014). Additional expenses
include facility overhead costs (rent, utilities, Internet, insurance), professional services such as accounting and occasional legal fees, an annual $200 professional development fund for each faculty member, and marketing and advertising expenses such as the website, ads in a local newspaper, and printed materials (S. Sinift, personal communication, April 11, 2014).

**Milwaukee.** Figure 5 represents three categories of expenses in Milwaukee: salaries, benefits, and payroll taxes; occupancy (i.e., costs for occupying office space or other facilities); and other expenses. Salaries, benefits, and payroll taxes again represent the largest expense, totaling 82% of the entire budget. Of that 82%, salaries constitute 84.2% (i.e. 69% of the total budget) (String Academy of Wisconsin, 2013; Part IX, column A, lines 5 & 7), faculty benefits 9.5% (String Academy of Wisconsin, 2013; Part IX, column A, line 9), and payroll taxes 6.3% (String Academy of Wisconsin, 2013; Part IX, column A, line 10). The two largest categories of the “other expenses” in Figure 5 (which represent 10% of the overall budget) are office expenses and accounting, at 29% and 13% of this category, respectively (String Academy of Wisconsin, 2013; Part IX, column A, lines 13 and 11c). Additional expenses listed include advertising and promotion; travel; depreciation, depletion, and amortization; insurance; sheet music and instruments; fees and licensing; and miscellaneous expenses (String Academy of Wisconsin, 2013; Part IX, column A, lines 12, 17, 22, 23, 24b, 24c, and 24a, respectively). Interviews indicate other types of expenses that can arise at string academies: accompanist fees, printing and publications, office assistants, professional development for faculty, professional services such as payroll, and audits (D. Drexler, personal communication, September 25, 2014).
Financial Support for Students

Opportunities for students and families to receive financial assistance exist within all academies except Laramie. The other four use similar need-based financial aid systems, collecting family financial information to determine tuition discounts. Only Bloomington offers awards strictly on merit; Baltimore considers merit as a factor in its decisions on need-based awards. The String Academy of Wisconsin’s USAS program has been mentioned above but specific financial information will be provided below. Although the String Academy of Wyoming itself gives no tuition assistance, grant opportunities exist through relationships with local organizations.

Need-based awards vary in size and scope. In Bloomington, financial aid awards are limited to 10% of tuition and are awarded to families who have a total income under $35,000 per year or who qualify for the free or reduced-price lunch program at their
school (Indiana University Jacobs School of Music, n.d.-b). Bloomington also has a $25 courtesy discount for families with three or more children enrolled (Indiana University Jacobs School of Music, n.d.-b). Evanston uses a scale to determine discounts based on family income. Specific percentages were not provided, but awards are sometimes increased for large families or unusual circumstances (M. Molenaar, personal communication, September 7, 2014). In Baltimore, as noted, scholarship decisions consider both financial need and merit; a student must have several years of lesson experience before becoming eligible for aid, meaning that recipients will be at least age 8 and usually age 10 before they are considered (Johns Hopkins Peabody Institute, n.d.-l). Auditions for applicants are scheduled by Peabody Preparatory administration for all departments of the Preparatory (Johns Hopkins Peabody Institute, n.d.-l). Awards in Baltimore range from 25% to 75%, and they average approximately 40% (Johns Hopkins Peabody Institute, n.d.-l).

In addition to need-based awards, the Bloomington site offers separate merit-based awards (Indiana University Jacobs School of Music, n.d.-b). Merit award decisions are granted on a case-by-case basis at the discretion of string academy administration and faculty:

I am not privy to the parent’s tax form. The Special Sessions Office does this. I am involved in merit award decisions and we have control over who receives this funding. We will not deny any student who loves the violin, viola, or cello, and who is dedicated to working hard, the opportunity to study in the String Academy. (M. Zweig, personal communication, July 27, 2013)

The USAS at the String Academy of Wisconsin is open to any student at the academy, as well as participants in outreach programs at two inner-city elementary
Since the String Academy’s inception in 1990, the USAS program has funded approximately 20 to 40 students annually. … The cost of operating the USAS program is over $75,000 a year. This includes the costs of instruction, instrumental purchases, rental and maintenance, attending concerts, purchasing of music, administration costs and transportation expenses. The USAS program receives support from the Milwaukee Arts Board, the Wisconsin Arts Board, a wide variety of foundations and corporations, and from hundreds of generous individuals. (String Academy of Wisconsin, n.d.-j)

For the 2013–2014 academic year, the USAS budget indicated a total expense of $78,245 ([Drexler], ca. 2014). Expenses in the budget are listed in three categories: administrative personnel (11% of total expenses), such as the executive director, grant writer, and office administrator; artistic personnel (70%), which includes teachers and pianists; and outside fees and services (19%), such as space rental, marketing, printing, instruments purchases or repairs, supplies, and remaining expenses ([Drexler], ca. 2014). Revenue for the program was generated through corporate support (2%), foundation support (34%), other private support (37%, composed of individual donations and fundraising events), government support (6%), in-kind donations (9%, including donated space, instruments, and repairs), enrollment fees (9%), and material fees and miscellaneous (2%) ([Drexler], ca. 2014).

Darcy Drexler highlighted the importance of the USAS program for the String Academy of Wisconsin:

The scholarship program is very important to us, because there are kids that would not be able to have this opportunity if we didn’t have these scholarships. This year we had 38 students on scholarship with 27 to 30 students on full scholarship. Other awards paid for varying percentages of the tuition. Every student pays a $15 material fee in the fall and the spring that is not covered by a

---

23 For a more detailed description of how the USAS is implemented, see “Extended Programming” within the “Instructional Program” section, earlier in this chapter
scholarship. A student on full scholarship with a 30-minute lesson will pay an additional $15 fee each semester. So they pay $60 total for the year, and we provide instruments and music for them as well. (D. Drexler, personal communication, July 29, 2013)

Additionally, when USAS students graduate from outreach sites, efforts are made to continue their funding:

If someone is serious about studying and they want to continue, we will keep funding them. They start with 30-minute lessons and as they advance they will need 45-minute lessons. We will find more funds to help cover that. So we make a commitment. If the student is working and making progress and doing all the things they need to do, we will fund them through high school. (D. Drexler, personal communication, July 29, 2013)

Much of the funding for these scholarships comes from individuals, and as a result eight separate scholarship funds named after specific individuals appear in the String Academy of Wisconsin’s yearly list of donors ([Knudsen], ca. 2013). However, students are not told the name of the person whose funds they are receiving.

Aside from the USAS program, the String Academy of Wisconsin seeks ways to subsidize its instruction of all students:

The USAS program is not the only system set in place to grant financial aid. It is our philosophy that a quality musical education is essential to every child, and as such, we strive to keep costs down and make tuition affordable to all families. Each year, several fundraisers and benefit concerts raise money that helps lower costs for ALL students, as well as provide further scholarship to those families in need of further assistance. (String Academy of Wisconsin, n.d.-e)

Students requesting additional aid must submit an application along with a copy of the previous year’s federal income tax return (String Academy of Wisconsin, n.d.-e).

In Laramie, assistance for string academy students can come from the Friends of the String Academy—a nonprofit organization created by academy director Sinift and currently in the development stage—and the UW String Project at the University of Wyoming. As of June 2015, the Friends of the String Academy organization was dormant
while a board of directors was being formed, but its sole purpose is to generate scholarship money for String Academy students (S. Sinift, personal communication, July 11, 2013 and June 28, 2015). The UW String Project at the University of Wyoming was created by and is directed by James Przygocki, who is also a String Academy of Wyoming faculty member. Since 2012, Przygocki has conducted a scholarship program that enables String Project students to transfer into the String Academy (S. Sinift, personal communication, July 11, 2013). During the first year of this scholarship program (2012–2013), three violin students and one cello student were chosen by audition (S. Sinift, personal communication, July 11, 2013). Other selection factors included String Project teachers’ written evaluations, parent support, student work ethic, ability, and financial need as expressed by the parent; no disclosure of annual income was required (S. Sinift, personal communication, July 11, 2013).

**Student Recruitment**

In this section, the techniques that string academy sites use to recruit new students are described in three categories: reputation, advertising, and websites.

**Reputation**

The most significant form of student recruitment is the reputation that string academies have built in their local communities. All site directors noted that most of their students heard about the program through word of mouth, usually from families who had current or past experience with string academies (D. Drexler, personal communication, July 29, 2013; R. Henry, personal communication, July 7, 2013; S. Sinift, personal communication, July 11, 2013; S. Spencer, personal communication, July 29, 2013; M. Zweig, personal communication, July 27, 2013). This local reputation is also enhanced by
string academies’ community performances, periodic email blasts to current and past participants, and other compiled email lists. Faculty members add to string academy reputations as well through their involvement in other organizations, performances, and general community influence.

Advertising

Advertising strategies often take the form of printed materials, such as ads in local publications, brochures, fliers, mailings, and posters (Peabody Institute Communications Specialist, personal communication, January 29, 2015; S. Spencer, personal communication, July 29, 2013; M. Zweig, personal communication, July 27, 2013). In Evanston and Laramie, examples of advertising gathered through the course of interviews included occasional ads in local publications and fliers distributed to local establishments (S. Sinift, personal communication, July 11, 2013; S. Spencer, personal communication, July 29, 2013). In Evanston, such forms of advertising apply to the Music Academy as a whole and are controlled by the Music Academy’s director, whereas in Laramie they are independent efforts, since the String Academy of Wyoming is a separate organization (S. Sinift, personal communication, July 11, 2013; S. Spencer, personal communication, July 29, 2013).

The three largest string academies (Baltimore, Bloomington, and Milwaukee) engage in more advertising than Evanston and Laramie. The String Academy of Wisconsin in Milwaukee, as an independent music school, controls all marketing and publicity. Ads, brochures, fliers, posters, and press releases are all used frequently (D. Drexler, personal communication, July 29, 2013). In Baltimore and Bloomington, the

---

24 See “Performances and Special Events” within the “Instructional Program” section, earlier in this chapter.
associated collegiate music unit controls such marketing efforts almost exclusively (R. Henry, personal communication, July 7, 2013; M. Zweig, personal communication, July 27, 2013). In Baltimore, The Peabody Institute has a full marketing and communications office with five full-time staff, including a director, a graphic design specialist, a digital specialist, a communications specialist for The Peabody Conservatory, and another one for The Peabody Preparatory (Peabody Institute Communications Specialist, January 29, 2015). Ads in a list of local publications cover a wide territory, as the Preparatory has four campuses spread across the region; all ads and email marketing efforts are designed to direct traffic to The Peabody Institute website (Peabody Institute Communications Specialist, personal communication, January 29, 2015).

The IU Jacobs School of Music has a similar office for marketing and publicity, which releases information about people and events connected to the music school (Indiana University Jacobs School of Music, n.d.-c). However, the Office of Pre-College and Special Programs controls most marketing activities specific to the String Academy. A discussion with this office’s coordinator revealed that whereas the office had produced several printed materials for the String Academy in earlier years, now the focus is more heavily on online communications (S. Nicholson, personal communication, September 22, 2014). Ads have also been published in local publications like newspapers and magazines, or in nationally distributed publications like the American String Teacher and Strings magazine (S. Nicholson, personal communication, September 22, 2014). Despite this office’s role in controlling most publicity, the String Academy has engaged in its own marketing efforts from time to time, according to Zweig:

We were at a lower level of enrollment last semester, so I made a conscious effort to spread the word. I called Bloom magazine [a culture and lifestyle magazine for
the city of Bloomington] and they wrote a nice article. We did email blasts. I sent the cello teachers to the Bloomington schools. Now we have 129 violin students and over 25 cellos and are happily full! Sometimes we just need a little publicity spark to get the word out. (M. Zweig, personal communication, September 22, 2014)

Site directors in Bloomington and Milwaukee both indicated that advertising practices have changed toward greater reliance on electronic media (e.g., Facebook, email, websites, and Internet searches) and less reliance on printed materials or mailings as people are much less likely to read them (D. Drexler, personal communication, July 29, 2013; M. Zweig, personal communication, September 22, 2014).

**Websites**

All academies have websites that provide information about their programs. The three largest programs (Baltimore, Bloomington, and Milwaukee) have the most extensive information displayed on their websites and are the only ones with Google Plus, Facebook, Twitter and/or YouTube accounts (Indiana University Jacobs School of Music, n.d.-f; Johns Hopkins Peabody Institute, n.d.-a; String Academy of Wisconsin, n.d.-h). For these larger programs, posting answers to frequently asked questions on the website makes communication with prospective students and families more efficient.

At the three divisional music school sites (Baltimore, Bloomington, and Evanston), websites are controlled by the associated collegiate music units, and string academy program information is found within the larger framework of a website devoted to the collegiate music unit.

**Personnel**

In this section, site director backgrounds are discussed and compared. Faculties are then discussed, as well as workloads and compensation for existing faculty and staff
members at string academy sites. Lastly, the evaluation, training, and ongoing professional development of incoming and current faculty members are examined.

**Program Leadership**

Each string academy has a site director, who is primarily responsible for the creation and development of stringed instrument program offerings at that site. Data indicate that site directors at all five sites are a tightly knit group of teachers and administrators who not only have an extensive history with each other, but who are in close and regular contact, often getting together for events, workshops, or presentations or to lead instruction in various places. As Sherry Sinift explained, the nature of the relationships between site directors and between other close, long-term colleagues, is one of mutual respect, rather than a top-down structure:

I think the reason we are a tightly knit group has to do with a give and take, a mutual respect, an acknowledgement that we have all personally gone to the source of Mimi [Zweig’s] inspirations, plus have brought our own experiences to bear in a fruitful way. It is a special synergistic relationship—rather than a top-down relationship—in which I think we all learn from each other. (S. Sinift, personal communication, January 13, 2016)

A strong commonality in site director backgrounds is the pedagogical training they received from Mimi Zweig. Henry, Sinift, and Spencer were all Zweig’s students, both in pedagogy studies and in studio lessons (R. Henry, personal communication, July 7, 2013; Johns Hopkins Peabody Institute, n.d.-j; S. Sinift, personal communication, July 11, 2013; S. Spencer, personal communication, July 29, 2013). Furthermore, each of them was extremely involved in the Young Violinists Program at Indiana University, which is the former name of the Jacobs School of Music String Academy before cello

---

25 Program leadership varies depending on how each site is structured administratively; see “Organizational Structure and Administration” earlier in this chapter. Site directors for each site were engaged in interviews for this study. Profiles of each site director appear in Appendix G.
instruction was incorporated. Henry was Zweig’s first assistant in the Young Violinists Program from 1980 to 1982 and subsequently became an IU lecturer and assistant director of the Young Violinists Program until 1987 (R. Henry, personal communication, July 7, 2013). Sinift was also an assistant to Zweig in the Young Violinists Program from 1980 to 1982, and in 1983 she moved to Milwaukee at Zweig’s invitation to teach in the Young Violinists and Cellists Program (YVCP, which would later become the String Academy of Wisconsin in 1990) at the Wisconsin Conservatory of Music, where she taught for 10 years (S. Sinift, personal communication, July 11, 2013). Spencer was Zweig’s assistant in the Young Violinists Program from 1985 to 1987 and then held a position as assistant professor in the IU School of Music, succeeding Rebecca Henry as assistant director of the Young Violinists Program from 1987 to 1993.

Darcy Drexler’s past relationship with Mimi Zweig is different from the others, as she did not study under Zweig at IU. Drexler and Zweig met in 1986 when Drexler joined the YVCP. Through that appointment, she received extensive pedagogical training from Zweig (D. Drexler, personal communication, July 29, 2013). The YVCP was housed within the Wisconsin Conservatory of Music from 1982 until 1990, when it was reformed as an independent music school and established residence at the UWM Peck School of the Arts. Drexler continued to work closely with Zweig for 10 years until 1996, when Zweig stepped down as director of the String Academy of Wisconsin and Drexler assumed the position (D. Drexler, personal communication, July 29, 2013). Both Drexler and Sinift were involved in the creation of the String Academy of Wisconsin in 1990.

Site directors outlined several skills that they believe make them successful in their position: vision; choosing the right people; diplomacy and people skills; being
organized; skill on one’s instrument(s); patience; knowing how to motivate students; creative problem solving (both in teaching and managerially); teaching well; knowledge of the pedagogy and skills that students will learn; and having a passion for teaching, always striving to learn more and hone one’s skills (D. Drexler, personal communication, July 29, 2013; R. Henry, personal communication, July 7, 2013; S. Sinift, personal communication, July 11, 2013; S. Spencer, personal communication, July 29, 2013; M. Zweig, personal communication, July 27, 2013). One interesting aspect of the site director’s description of their work is that they seem to view themselves as teachers first, then directors, in sharp contrast to most arts management positions. Site directors emphasized the importance of teaching well, and of continuously striving for more pedagogical knowledge and better teaching results, more than any other topic. When asked about the difficulties that one might face as a director, Henry commented, “Sometimes the answer is just to teach well” (personal communication, July 7, 2013).

Zweig expressed what site directors generally considered the top two issues from a managerial standpoint:

Number one, a director needs to have a vision. Number two, a director needs to surround himself or herself with the best people; they have to be passionate about teaching, about working with kids and have knowledge of the skills. Once you have the right people you let them loose and let them do their thing. (M. Zweig, personal communication, July 27, 2013)

Faculty

Zweig, personal communication, July 27, 2013). Therefore, it is logical that all sites
would have teacher preparation built into or associated with their structure.26 However,
according to site directors, much more goes into teaching students successfully than a
common philosophy or use of string academy curriculum. Faculty members at string
academies bring considerable individual experience and creative skills to their
classrooms. Brenda Brenner, co-director of the Jacobs School of Music String Academy,
commented on the individuality of teaching styles within a common framework:

Each of us has our own style; we all do our own thing. Some of us have more or
less attention to detail, or we do things in a different way, but you have several
different dialects of what stringpedagogy.com says, and it’s really quite different.
(B. Brenner, personal communication, September 22, 2014)

Sinift warned against using the curriculum as a formula, mentioning a pitfall that she has
noticed at times:

I think sometimes people do treat it as a formula occasionally, thinking, “If I just
do X, I’m going to get Y.” But in reality, if I want to get to Y, of course I’ll try X,
but if that doesn’t work I can try A, B, and D, and F and G, and maybe I’ll be able
to get to Y. It involves an amazing amount of creative problem solving. Much of
it may be based on these basic principles, but then we have to create solutions for
every single student who walks in the room; it’s not a formula. (S. Sinift, personal
communication, July 11, 2013)

Sinift said that she uses about 90% of the curriculum, and later noted certain values of the
string academy approach, such as:

[a] teacher preparation; [b] teachers who also play their instruments well at least
to a certain level; [c] teachers who have a commitment to the core of Suzuki,
Rolland and Mimi [Zweig’s] melding of the two but are willing to continually
expand their knowledge of string pedagogy to embrace Suzuki’s Every Child
Can!,27 Mimi’s nonjudgmental approach, and go beyond that to something that is
effective and uniquely their own; [and d] teachers who are aware of, and striving
for, a national or international standard. (S. Sinift, personal communication,
January 12, 2016)

26 See “String Academies as Virtual and Digital Sites for Studio Teacher Preparation” within the
“Instructional Program” section earlier in this chapter.
27 See https://suzukiassociation.org/teachers/training/ecc/
Drexler and Spencer noted similar levels to Sinift in curriculum use in Milwaukee and Evanston (D. Drexler, personal communication, July 29, 2013; S. Spencer, personal communication, July 29, 2013). In Baltimore, however, the evolution and incorporation of the curriculum has progressed differently, according to Henry:

I think a difference between my program and the other ones, partly because it’s bigger and more complex, is that it’s not just me and one other teacher and grad students as faculty. The 20-some faculty here are not students, with an occasional graduate student “apprentice faculty” as the exception, and some of them have been teaching for 15 or 20 years. So it’s less autocratic. But I think if you’re going to have a program where you have group classes and you have 15 or 20 people teaching those students, the only way, to me, that that can work is if you get together and hash out pedagogically what is going to happen in those groups. So my goal is that we have a common pedagogy at the beginning—flexible, free, Rolland-based pedagogy, but that every member of our faculty feels that they have influence over the evolution of the program. (R. Henry, personal communication, July 7, 2013)

Site directors noted several additional characteristics that they look for in a teacher. In Baltimore, Laramie, and Milwaukee, prior training at a string academy site is certainly preferred, but is not necessarily a requirement, as all three sites have hired teachers without this type of training. In these cases, teachers must be “trainable,” according to Sinift (personal communication, April 11, 2014). Rebecca Henry commented similarly:

They have to be open-minded and not set in their ways, even if in their experience teachers just don’t do this. If you teach in this program, there are certain things that we just have to do, and if you don’t feel comfortable using a pinky house or using a sponge with a beginner, then it’s better if you do your own thing. (R. Henry, personal communication, July 7, 2013)

However, along with trainability, Henry also stressed good instincts and inquisitiveness:

I don’t want somebody to just do what I tell them. If they are young, of course, they are going to start with what you tell them, because that’s how best to start in a new environment, but they have to have some instincts that will develop creatively. (R. Henry, personal communication, July 7, 2013)
Site directors also indicated that teachers should have a passion for teaching and working with children; should be good musicians, highly proficient on their instruments; and should exhibit professional behavior, such as being punctual and reliable (R. Henry, personal communication, July 7, 2013; S. Sinift, personal communication, April 11, 2014; S. Spencer, personal communication, July 29, 2013).

With the exception of past national searches conducted in Baltimore and Milwaukee, faculty recruitment has taken a similar form across all sites, except for Laramie because of its small and relatively isolated geographic location. The other four sites routinely hire teachers who received training as students in site-associated collegiate string pedagogy courses (D. Drexler, personal communication, July 29, 2013; R. Henry, personal communication, July 7, 2013; S. Spencer, personal communication, July 29, 2013; M. Zweig, personal communication, July 27, 2013).

Violin and viola teachers must have received training in the specific curriculum and approach of string academies in order to teach at the Bloomington and Evanston sites (S. Spencer, personal communication, July 27, 2013; M. Zweig, personal communication, July 27, 2013). In Bloomington, stringpedagogy.com curriculum is followed quite closely, and all current violin and viola faculty members have been trained in the program by either Zweig or Brenner:

The violin teachers have been students in my studio or Brenda’s studio. This puts us all on the same page in approaching the instrument. It is a big benefit to the program to philosophically and physically agree to the basics such as no Brooklyn bridges [shoulder rests], sequence of repertoire, more or less how we teach the repertoire, where to put the fingers down and where to take them off in the beginning repertoire, what bow strokes to use, etc. Of course, I want all teachers to have their own ideas, personality, and enthusiasm. I think these are some of the reasons the String Academy works so well. The credibility is in the product. (M. Zweig, personal communication, July 27, 2013)
Additionally, faculty members in Bloomington must have attended a full year of string pedagogy courses before they can teach in the program (M. Zweig, personal communication, July 27, 2013). In Evanston, Spencer trained four of the five violin and viola faculty as preservice teachers at the Northwestern University Bienen School of Music, and the remaining one trained under Zweig and Brenner at IU (S. Spencer, personal communication, July 29, 2013).

Recruitment for cello faculty in Bloomington and Evanston is less defined. In Bloomington, the cello portion of the Jacobs School of Music String Academy is led by co-director, Susan Moses, who joined forces with Zweig in 1996 after a year as a visiting professor at the Jacobs School of Music in 1994-1995 (Indiana University Jacobs School of Music, n.d.-a). An additional cello faculty member has been engaged since 2007, but did not receive pedagogical training at IU (LinkedIn, n.d.). In Evanston, Paula Kosower organizes the cello offerings at the Music Academy and teaches a pedagogy course for the Northwestern University Bienen School of Music; an additional cello faculty member is native to the area (Northwestern University Bienen School of Music, n.d.-b).

Two violin and viola faculty in Milwaukee (including the site director) have been teaching for the String Academy of Wisconsin since its inception in 1990, and a third faculty member has been there since 1991; all three were recruited and trained by Zweig (D. Drexler, personal communication, July 29, 2013). Two additional faculty members received training from Zweig at IU; one studied at the String Academy of Wisconsin as a youth, the other at the Jacobs School of Music String Academy (String Academy of Wisconsin, n.d.-c). Several past faculty members and a current cello teacher were graduates of the associated string pedagogy master’s degree program at UWM (D.
Drexler, personal communication, July 29, 2013). The other Milwaukee cello teacher is also on the UWM faculty.

The Baltimore site has also recruited graduates of the site-associated performance master’s degree program with an emphasis in string pedagogy at The Peabody Conservatory (R. Henry, personal communication, July 7, 2013). However, this site has more faculty who did not receive previous training at any site-associated teacher preparation programs due to the size and complex nature of The Peabody Preparatory (R. Henry, personal communication, July 7, 2013).

In Laramie, faculty recruiting is very difficult; most faculty members at the String Academy of Wyoming teach there as a second occupation, having come to the area for other reasons such as to study at the university (S. Sinift, personal communication, July 11, 2013). The pool of potential faculty members is quite small, and none of the current faculty had received any formal training in the academy’s curriculum before being hired. Sinift noted that a national search for additional faculty would not be effective in Laramie, but that searches in the neighboring cities of Cheyenne, Wyoming, and Fort Collins, Colorado, have yielded some results (S. Sinift, personal communication, April 11, 2014).

While not all sites require faculty to have received previous training in string pedagogy at a string academy, they all expect them to align their approach with the teaching philosophy and curriculum used. For further details, see the “Evaluation, Training and Professional Development” section later in this chapter.
Workloads and Compensation

A distinction between full- and part-time positions is a feature only of the Baltimore and Milwaukee sites. Henry indicated that Baltimore has two full-time positions in cello (out of six cello faculty overall) and six or seven full-time positions in violin and viola (out of 17) at The Peabody Preparatory in Baltimore. Full- and part-time positions are based on the number of teaching hours accumulated and additional administrative duties assumed by faculty members. In all cases, teaching hours are compensated at an hourly rate and additional administrative duties receive a flat rate (R. Henry, personal communication, July 7, 2013). In Milwaukee, full- and part-time positions are also based on the number of hours spent teaching, but faculty members volunteer for any additional administrative or instructional duties, all doing their part to help with school operations (D. Drexler, personal communication, January 27, 2014). Duties of this sort have included organizing the yearly concerto competition or practice competition, arranging music, helping with fundraisers, and updating the website (D. Drexler, personal communication, January 27, 2014). Milwaukee is also unique compared to the other sites in that full-time staff receive a salary whereas part-time staff receive hourly pay (D. Drexler, personal communication, January 27, 2014). Full-time faculty also receive health benefits, another feature that further distinguishes Baltimore and Milwaukee from the other sites (R. Henry, personal communication, July 7, 2013; D. Drexler, personal communication, January 27, 2014). Part-time positions can grow into full-time work as faculty members take on more students and/or additional duties, but criteria distinguishing full-time from part-time teaching loads were not provided (R.

Workloads in Bloomington, Evanston, and Laramie depend on the individual faculty member and the number of hours he or she is willing to work. At all three sites, faculty members may engage in separate occupations, be studying full-time, or have busy family lives, all of which limit their availability (S. Sinift, personal communication, July 11, 2013; S. Spencer, personal communication, July 29, 2013; M. Zweig, personal communication, July 27, 2013).

In Bloomington, a core of five violin faculty and two cello faculty hold permanent positions, and two to three additional, rotating violin faculty positions are filled by teachers in training (M. Zweig, personal communication, July 27, 2013 and November 9, 2015). During the 2012-2013 academic year, the core violin faculty each had an average of 11 students and taught between one and three group classes (M. Zweig, personal communication, September 22, 2014). Faculty in rotating positions taught between 9 and 13 private students, typically those enrolled in half-hour lessons (M. Zweig, personal communication, September 22, 2014). Also, as part of the Jacobs School of Music, an associate instructor (a university student on assistantship) is assigned to work for the String Academy 12 to 13 hours a week, with the university paying this person’s compensation (M. Zweig, personal communication, July 27, 2013). The director, co-directors, an administrative coordinator, and the office of Pre-College and Summer Programs of the Jacobs School of Music share administrative duties (M. Zweig, personal communication, September 22, 2014). Director Zweig and co-director Brenner also occupy full-time faculty positions within the Jacobs School of Music.
In Evanston, two teachers served the majority of violin and viola students during the 2012-2013 academic year, with the director, Spencer, teaching the largest number (S. Spencer, personal communication, July 29, 2013). Two additional faculty members had time constraints that limited their teaching to between four and six hours, and an additional, recently hired teacher had just begun building a studio (S. Spencer, personal communication, July 29, 2013). In cello, one main teacher organizes the cello offerings, and a second cello teacher was recently hired (Northwestern University Bienen School of Music, n.d.-b).

In Laramie, most faculty members taught between 10 and 13 students and one or two group classes during the 2012–2013 academic year, with the exception of one teacher who accepts only two to three private students a year. Additional duties such as cleaning or administrative tasks like typing programs have been assigned to past administrative assistants, who received compensation for this work. However, for 2012–2013 Sinift handled this work herself, as the possibility of future administrative support positions was under review (S. Sinift, personal communication, July 11, 2013).

All faculty members in Bloomington, Evanston, and Laramie are paid at hourly rates (S. Sinift, personal communication, July 11, 2013; S. Spencer, personal communication, July 29, 2013; M. Zweig, personal communication, July 27, 2013). This is true even for co-director Brenner in Bloomington, as her paychecks from the Jacobs School of Music lump together separate funds from hourly String Academy pay and her salary as a School of Music faculty member (B. Brenner, personal communication, September 22, 2014). Zweig’s salary, as noted above, is partially supported by a grant.

**Faculty Evaluation, Training, and Professional Development**

The evaluation, training, and professional development of faculty members in string academies is an interconnected, ongoing, very flexible process depending on the teacher’s background in pedagogy and his or her knowledge of the instructional design and curriculum of string academies. Incoming teachers generally receive more individualized attention based on their level of experience. In Baltimore, Evanston, Laramie, and Milwaukee, site directors described processes for incoming faculty that encourage observations of other teachers and include one-on-one meetings for an undetermined period of time, depending on their particular needs (D. Drexler, personal communication, July 29, 2014; R. Henry, personal communication, May 6, 2014; S. Sinift, personal communication, July 11, 2013; S. Spencer, personal communication, July 29, 2013). In Bloomington, this process is more codified for violin faculty, who are required to have completed a full year of string pedagogy courses at the IU Jacobs School of Music (M. Zweig, personal communication, July 27, 2013).

Faculty members at all sites are encouraged to engage in ongoing professional development, and in Baltimore, Laramie and Milwaukee, funds are available for this purpose. In Laramie, Sinift has budgeted $200 per teacher for whatever the faculty believe will help them as a teacher, regardless of how many hours they teach; in fact, using this money is a contractual requirement (S. Sinift, personal communication, April 11, 2014). Baltimore and Milwaukee are similar in that teachers may request funds for travel or tuition related to workshops or other enrichment events (D. Drexler, personal
communication, January 27, 2014). Henry notes, however, that given the size of The Peabody Preparatory, it is often easier to bring in a guest presenter:

Faculty can apply for funds and they receive $300–500 to go to a conference or something similar. And of course we encourage it but we can’t fund everybody doing everything. That’s one reason why it’s actually easier for me to bring people here, because we have 15 to 20 faculty. So it’s less expensive for me to use academy funds or PVCP funds, or we have a prep strings enrichment fund that I started, and I can use these resources to pay a guest to come and do a workshop for our teachers. So we have better luck, it’s more efficient, to bring somebody here to do a master class for our students and have our faculty watch, than it is to send our faculty places. (R. Henry, personal communication, May 6, 2014)

Spencer, who has organized a Violin Pedagogy Weekend28 and master classes on a regular basis at Evanston, strongly encourages faculty to attend these events as well, and she often urges faculty to attend the summer Retreat for Violin and Viola Teachers in Bloomington (S. Spencer, personal communication, July 29, 2013). Zweig pointed out that Bloomington is already such a rich musical environment that allocating funds or scheduling teacher enrichment events is rarely necessary (M. Zweig, personal communication, July 27, 2013).

None of the sites have formal evaluation systems. Faculty members work as a team, supporting each other and engaging in meetings to discuss the needs of individual student and the overall program, and determining where improvements in instructional quality can be made by sharing ideas, offering each other feedback, or discussing upcoming events (D. Drexler, personal communication, July 29, 2014; R. Henry, personal communication, May 6, 2014; S. Sinift, personal communication, July 11, 2013; S. Spencer, personal communication, July 29, 2013; M. Zweig, personal communication, July 27, 2013). “We work together in a nonthreatening environment,” Zweig said. “We

28 See “Performances and Special Events” within the “Instructional Program” section earlier in this chapter.
want to make the best possible product where the kids are playing as beautifully as possible and having fun along the way” (M. Zweig, personal communication, July 27, 2013). Faculty meetings are a great opportunity to get teachers on the same page and plan instruction, as Henry described:

We meet all the time. For example, when we meet to set the repertoire of the Halloween concert, we go through it and decide exactly what part of the bow, exactly what are the articulations, exactly the tempo so that everybody knows, and then we pass out a very highly marked-up copy of everything so that every teacher knows exactly how it’s being done. (R. Henry, personal communication, July 7, 2013)

Meetings also give faculty members the opportunity to offer each other feedback, which enhances the quality of instruction:

We share a lot with each other in meetings. Teachers discuss what they are working on with a student, and we all share advice and ideas with each other to make each situation better. Our responsibility to each other and our students is to make sure our teaching is at the highest possible level, and that means we have to be able to speak freely with each other. (S. Spencer, personal communication, July 29, 2013)

Concerts and recitals also offer a means of evaluation, as faculty are exposed to each other’s students. All faculty members at string academy sites attend performances regularly, and faculty meetings offer an opportunity to reflect on student progress in a team environment, which enhances intrinsic motivation for faculty members and a desire to pursue improvement on a continuing basis, regardless of experience. Most of the responsibility rests on the site directors, however, and creating a supportive team environment requires diplomacy and cultivating respect, as Rebecca Henry explained:

I’m in charge, but I don’t try to pretend that I’m the best teacher, or that I’m the only one who’s going to take advanced students. I really try for every faculty member to feel that they can develop their students to as high a level as they want, and I think you have to be very careful when you’re first starting a program; you will lose your best people if they feel that whenever they train a good student that student leaves them and goes to you. It’s hard inside a program. Parents talk, “Oh,
we want to move to this teacher,“ and you really have to develop respect for your other faculty among the parents if you want to have a strong program. Each situation is different, of course, and has to be handled with care and respect. (R. Henry, personal communication, July 7, 2013)
CHAPTER 5

SUMMARY AND DISCUSSION

The purpose of this intrinsic case study was to describe and provide an analytical perspective on the individual and collective programmatic characteristics of five selected string academies in the United States. The following characteristics were chosen to guide the research: instructional program; geographic and physical setting; organizational structure and administration; finances; student recruitment; and personnel. An additional characteristic, faculty and student activities in the community, emerged during the process of analysis.

The study relied on a qualitative approach to research. Data were gathered through (a) online sources; (b) archival documents (i.e., articles, newsletters, student handbooks, archived website files); (c) interviews and email correspondence with current site directors of string academies; and (d) interviews and email correspondence with additional faculty and staff members at string academies. Cross-case descriptive summaries of the five string academies were presented in the chapter 4, organized by the characteristics of string academies listed in the purpose of this study, with the following subtopics:

**Instructional Program**: (a) curriculum; (b) instruments taught; (c) course of study; (d) instructional calendar and scheduling; (e) performances and special events; (f) student admission and placement; (g) string academies as virtual and digital sites for studio teacher preparation; (h) extended programming

**Geographic and Physical Setting**: (a) geographical location; (b) facilities

**Faculty and Student Activities in the Community**: (a) string academy faculty activities; (b) string academy student activities
Organizational Structure and Administration: (a) program size and scope; (b) administrative setting and structure

Finances: (a) revenue; (b) expenses; (c) financial support for students

Student Recruitment: (a) reputation; (b) advertising; (c) websites

Personnel: (a) program leadership; (b) faculty; (c) workloads and compensation; (d) faculty evaluation, training and professional development

Summary of Findings

Findings are presented according to the individual and collective characteristics of string academies listed in the purpose of this study, as well as the subtopics identified in chapter 4.

Instructional Program

Curriculum. Mimi Zweig’s curriculum as represented on stringpedagogy.com serves as the pedagogical basis for how faculty at the five string academies teach. This is because the site directors at Baltimore, Evanston, Laramie, and Milwaukee all received extensive pedagogical training from Zweig. As a result, there is great consensus across all sites on what students are expected to know and do and, correspondingly, how they should be taught.

Underlying the instruction at string academies are two prominent characteristics of the curriculum: the importance of providing instruction in a nonjudgmental environment, and parental involvement. Site directors contend that a nonjudgmental environment involves valuing mistakes not as errors but as opportunities, sources of key

---

29 For a detailed description of the curriculum displayed on stringpedagogy.com, see chapter 1 of this study. Creative adaptations of and additions to this curriculum may be found in Teaching the Violin and Viola: Creating a Healthy Foundation (Northwestern University & Spencer, 2014) and ViolinPractice (Freeman & Henry, 2015b). However, stringpedagogy.com is the most comprehensive resource.
information that helps one learn. This nurturing and supportive atmosphere allows students to release self-imposed mental tension:

[Zweig] believes that most problems in performance and in the learning process are caused by tension. Physical tension has as its source mental tension caused by the attitudes such as perfectionism. Her approach then is to encourage the student to view mistakes as simply “information,” and to be “nonjudgmental” so that this source of tension is disarmed. (Pabón, 1999, p. 88)

Parental involvement is an integral part of string academy pedagogy, and for that reason all string academy personnel work to communicate expectations for parental involvement. Teachers discuss the parental role with parents through introductory correspondence and meetings at which a statement of program policies is distributed, and through ongoing informal conversations around private lessons and group classes.

During interviews, site directors were questioned about the involvement of parents at string academies, as all string academy materials addressing the involvement of student’s family members are directed at parents specifically. It should be noted, however, that there are limitations to the term parental involvement. Teachers and researchers should consider replacing this emphasis on parent involvement with “family involvement” (Ferrara, 2011, p. 374) or “family engagement” (Weiss & Lopez, 2009), as these terms offer a definition that “focuses on children's learning in a variety of settings … and reflects the many different ways in which families and schools engage with and support one another” (Weiss & Lopez, 2009). Such terms also encompass a broader range of people who may play a parenting role in a child’s life, including siblings, “fathers, mothers, grandparents, kith and kin caregivers, LGBT (lesbian, gay, bisexual, and transgendered) parents, guardians, expectant parents, teen parents, and families with
diverse structures that include multiple relationships with significant others” (Head Start, 2014).

**Instruments taught.** The violin is the most prevalent instrument taught in string academies. This seems to be a result of the fact that all string academy site directors base their work on the pedagogical approach, teaching strategies, sequence, and goals defined on stringpedagogy.com, which focuses primarily on the violin. The viola is included in the string academy curricular model, as the approach to string technique in all published curricular materials targets these two upper string instruments. Although instruction on cello is also available at all string academies, instruction on the double bass is offered only at Baltimore. Another difference between the curriculum for upper and lower strings concerns the degree of consistency in the approach implemented by all the teachers within each site.

Site directors indicated a preference that beginning students start their instruction on the violin and later switch to viola should they choose to do so. The stated justifications for this preference included the following: (a) small violas do not sound as good as small violins; (b) more repertoire is readily available for violin instruction; and (c) students develop better left-hand facility on the violin. Between 2012 and 2014, beginning students studied the viola only in Baltimore and Evanston, but were not enrolled in group classes. The most integrated example of viola instruction was in Laramie, where students participated in combined violin and viola group classes as early as Suzuki book 2. At the one site (Baltimore) where students were encouraged or recruited to begin on the viola, age was a major determining factor. Beginning students age eight or older were considered more capable of using larger, better-sounding
instruments than younger beginners. Most often, violinists at string academy sites who are interested in the viola are encouraged to gain their initial viola experience through chamber music study. At the Bloomington site, all top-level violin students are required to study the viola. Two site directors indicated that a best-case scenario for a violin student’s switch to viola study would be after having progressed to a level that would include the violin concertos by Bruch, Kabalevsky, or Lalo.

Although all published curricular materials for string academies are primarily geared toward the violin and the viola, cello programs at all five sites function within the same pedagogical framework. However, there is less uniformity in cello teaching across sites than for violin and viola. Site directors indicated particular difficulty with offering double bass instruction, which has existed in Baltimore (1992 to 2015), Bloomington (2001 to 2005), and Laramie (2009 to 2011) but was discontinued in each case upon the departure of double bass instructors.

**Course of study.** The primary components of the course of study for string academies are private lessons, group classes, and ensembles. In addition, some sites have distinct classes designed for beginners, instruction in theory and musicianship, summer offerings, and additional opportunities for intermediate and advanced students, such as competitions and touring ensembles.

The most basic, required component of the course of study at string academies is private lessons with an academy faculty member. The duration of private lessons increases as students advance and is based on a variety of factors, such as age, maturity, and the quantity of material being studied.
A fundamental characteristic of the courses of study at string academies is group instruction, which occurs at all levels. The figures in Appendix D provide concise illustrations of the sequence of group instruction at the five string academy sites. Group classes are designed to be motivational and fun for students and to provide a social environment for their study. In group classes, students experience instruction on instrumental technique, ensemble playing, and practice in solo performance with piano. Group classes also include an informal process of instruction in note reading, music theory, music history, rhythm, and aural skills, starting from the very beginning levels. Because the content of private lessons and group classes is connected, these categories are also an informal feature of private lessons, as is any additional repertoire covered in group classes. Music theory and/or musicianship instruction is formalized at the Baltimore, Bloomington, and Milwaukee sites at specific points within the sequence of group instruction (Figures D1, D2, and D5), and in Baltimore, students age 10 or older may enroll in additional, optional music theory classes offered through The Peabody Preparatory.

Student progression through group classes is based predominantly on repertoire contained in the Suzuki books (Suzuki, 1955, 1980–1993, 1991–1996). Secondary considerations with regard to group placement and group lesson durations include age, maturity, technical and musical abilities, social dynamics, and class size. Each site increases the amount of group class instruction time as the levels advance. All sites set a required minimum enrollment, ranging from four to ten students, for each group class, although class sizes can be averaged out across all groups at a site in order to adhere to financial limitations set by tuition rates. In Baltimore, Bloomington, Evanston, and
Laramie, site directors pinpointed 12 as the somewhat flexible maximum number of students enrolled in an individual group. In Milwaukee, 15 students is the maximum for advanced classes whereas younger groups are kept smaller, with a beginner class typically consisting of about 6 students.

Simultaneous participation in both group classes and private lessons is required at Bloomington, Laramie, and Milwaukee. At Baltimore and Evanston, students may enroll in private lessons without participating in group classes. However, all sites require students to enroll in private lessons in order to enroll in group classes.

Chamber ensembles and/or orchestra experiences are offered for intermediate and/or advanced students at all sites, and each site has an ensemble or collection of the most advanced violin and viola students enrolled; the Bloomington and Milwaukee sites have equivalent ensembles for cello. Such top-level ensembles engage in additional performances relative to the rest of the student body, often traveling widely throughout their communities, nationally, or internationally. Baltimore and Milwaukee are the only sites to offer site-sponsored performance competitions. All sites offer private lesson instruction in the summer; all but Laramie and Evanston offer summer camps, but only Bloomington and Milwaukee have summer sessions that resemble the site’s corresponding academic-year program.

**Instructional calendar and scheduling.** At all string academy sites, private lessons are scheduled directly with one’s private teacher; however, group lesson scheduling is more complex. Considerations when scheduling group classes included family commuting schedules, faculty and preservice teacher schedules, room schedules at the collegiate music unit, after-school student activity conflicts, trends in family leisure
activities, off-site youth orchestra schedules, religious involvement, and pianist availability. Group classes take place on Saturdays in Baltimore and Milwaukee; on a weekday evening for a branch location in Baltimore; on weekday evenings in Bloomington, Evanston, and Laramie; and on Saturdays for the most advanced students in Bloomington.

All sites publish a yearly calendar prior to the start of the academic year. In the university cities (Bloomington, Evanston, and Laramie), calendars can be more flexible in terms of minor changes and additions due to short commuting distances and knowledge of students’ schedules. However, in Baltimore and Milwaukee, calendars are very inflexible due to busy family schedules and longer commutes.

Performances and special events. Performances are considered a very important part of the curriculum and instructional methods at string academy sites. Students perform as soloists, as group members, in formal or informal settings, or as part of a competition, either on site or in the community. All sites organize at least two concerts per year in which students perform in group class ensembles, usually at the end of a semester or quarter. At all sites, students typically perform a solo in a recital at least twice a year. At Baltimore, Bloomington, and Milwaukee, this is required at the end of each semester. Chamber ensemble or orchestra recitals are organized as they apply to each program. All on-site performances are open to the public, and additional efforts are made to organize performances at different locations throughout the academies’ local communities, such as at churches, retirement centers, shopping centers, festivals, and other special events.
String academies collaborate across sites and with other arts organizations on performances and events. String academies also organize additional special events for their student bodies on a regular basis, such as master classes and workshops.

**Student admission and placement.** String academies admit students either as beginners or as transfer students with prior playing experience. For both categories, individual needs are the primary consideration in determining how students will be integrated, giving consideration to age, registration requirements, and teacher availability. Beginning the violin or cello at a young age (generally between age four and eight) is emphasized at all sites, though exceptions are made for both younger and older students. Depending on the site, transfer students are integrated into string academies by way of interviews, consultation lessons, or auditions to determine a student’s playing level and past experience.

**String academies as virtual and digital sites for studio teacher preparation.** One important feature of string academies is their function as sites for studio teacher preparation. This occurs in physical and virtual spaces and in support of both preservice college students and in-service practitioners. All string academies function as laboratory settings for college-level violin and viola students in string pedagogy courses. The Baltimore, Bloomington, Evanston, and Milwaukee sites provide a lab setting for collegiate cello students as well, and Baltimore does the same for double bass. However, Evanston and Milwaukee are the only sites with college-level cello pedagogy courses equivalent to those available for the violin and viola. In Baltimore and Bloomington, cello and/or double bass opportunities for teacher preparation are fewer than for the violin and viola, and, when available, they require special coordination in conjunction
with string academy faculty and the collegiate music unit, as there are no equivalent cello or double bass pedagogy courses associated with string academy instruction. The Baltimore site is associated with a M.M. degree in violin or viola performance with an emphasis in string pedagogy through The Peabody Conservatory; the Milwaukee site is associated with a M.M. degree in string pedagogy through the University of Wisconsin-Milwaukee; Baltimore, Bloomington, and Milwaukee offer workshops to practitioners in the field; and site directors at Baltimore, Bloomington, and Evanston have created web-based pedagogical resources.

**Extended programming.** Outreach programs exist in Bloomington and Milwaukee. In both cases, these programs represent collaboration with local public schools; provide scholarships to students, often underwritten by corporate, foundation, government, or private support and by in-kind donations; and offer instruction by string academy personnel.

**Geographic and Physical Locations**

**Geographic location.** The geographic area in which each site operates provides the population from which string academies recruit their students. However, population totals do not adequately convey recruitment potential for a site; population density is more indicative. The string academies located in Evanston, Baltimore, and Milwaukee can draw from a much larger population than Bloomington and Laramie, both of which are geographically isolated from any metropolises. Evanston is distinguished from the other sites by high population density and greater per-capita income. Families in Bloomington are more mobile compared to other areas, whereas 83% of Baltimore
residents have lived for more than one year in the same house. Laramie has the smallest population and is the only area of the five classified as micropolitan.

**Facilities.** For all five sites, the amount of space utilized is generally proportional to the size of the program. Laramie rents space from a local civic center; Milwaukee rents space from the UWM Peck School of the Arts; and Baltimore, Bloomington, and Evanston use facilities provided by their associated collegiate music units. As academy enrollment expanded, so did the space available for instruction at the sites housed within collegiate music unit facilities. No site director reported a current shortage of space or that the availability of space has impinged upon program growth.

All sites hold private lessons, classes, or rehearsals in more than one building, based on the nature of facilities provided by collegiate music units or through relationships with other organizations. All sites share space with associated collegiate music units and/or between faculty members to some extent. All site directors indicated that their facilities are considered adequate, with rare exceptions.

**Faculty and Student Activities in the Community**

String academy faculty and students participate in musical activities throughout their local communities, not necessarily associated with their academy. In this way, they become representatives of their respective string academy sites in the broader arts community and build relationships with organizations, as well as with potential students and their families. Some significant faculty connections with local organizations have led to effective collaborations in Baltimore and Milwaukee, but also to a conflict of interest in Laramie that had to be intentionally avoided.
Students’ off-site musical activities represent an important part of their overall education. Site directors are well acquainted with these additional student involvements, especially in public school string programs, youth orchestras or similar ensembles, and competitions. Depending on the site, string academy schedules are often designed to avoid conflicts with off-site student activities or in accordance with observed trends in student availability.

Organizational Structure and Administration

**Program size and scope.** Violin enrollment is larger than cello enrollment at all sites, both violin and cello enrollment dwarf that of the viola, and none of the sites enrolled double bass students in group instruction (Table 8). Baltimore has the most complex organization and enrolls the most students. Bloomington and Milwaukee are about equally large, though smaller than Baltimore. Evanston has a less extensive sequence of group instruction but is comparable to Bloomington and Milwaukee in overall enrollment. Laramie is the smallest site on all measures.

**Administrative setting and structure.** Each of the five sites has a distinctive administrative structure. Three are divisional music schools, Laramie is an S corporation, and Milwaukee is a nonprofit organization. The four sites with direct collegiate affiliations are housed within their respective collegiate music units and use collegiate facilities for instructional purposes. Bloomington and Evanston are both under the umbrella of collegiate music unit offices that specialize in public engagement. Baltimore is most fully administratively integrated within the collegiate music unit (The Peabody Institute) and represents the largest and most complex system.
Finances

**Revenue.** The greatest source of revenue generated by string academies is student tuition, which varies by site. Even after adjusting for the annual cost of living, Baltimore has the highest tuition rates for the combined cost of individual and group instruction, but the lowest introductory rate for beginning students. The combined cost of individual and group instruction at the other four sites is quite similar. Bloomington has the lowest combined tuition rates of all five sites.

In Baltimore and Bloomington, additional funding comes from grants, donations, and fundraising. Baltimore and Evanston must adhere to fundraising restrictions imposed by their host institutions. Some limited fundraising for specific projects has been permitted, but these sites cannot pursue major donors without their parent organizations’ approval. In Laramie, tuition was the only source of revenue. Milwaukee engages in more fundraising efforts than other sites, raising money from contributions, grants, fundraising, and investment income.

**Expenses.** For all sites, the largest expense is faculty compensation, including payroll taxes. Additional expenses common to all sites include facility overhead costs. Cross-site comparison was impossible because only Milwaukee publicly discloses financial information.

Because Baltimore, Bloomington, and Evanston are divisional music schools, their finances are integrated into the larger structures of their respective collegiate music units. In Baltimore, administration is completely assumed by The Peabody Preparatory and The Peabody Institute. In Evanston, the Music Academy is required to at least break even on all programming, motivating it to keep expenses and administrative staffing as
low as possible. Expense categories in Bloomington include faculty salaries, financial aid, administrative staff, travel, phone, marketing and advertising, supplies, and equipment. Additional expenses in Laramie include taxes, accounting, legal fees, a professional development fund for faculty, and marketing and advertising expenses. Milwaukee’s 2013 tax form 990 listed expense categories as faculty salaries and benefits; office expenses; accounting; advertising and promotion; travel; depreciation, depletion, and amortization; insurance; sheet music and instruments; fees and licensing; and miscellaneous expenses. Other expenses identified in interviews included accompanist fees, printing and publications, office assistants, professional development for faculty, professional services such as payroll, and audits.

**Financial support for students.** Opportunities for students and families to receive financial assistance exist at all sites except Laramie. These four sites generally use similar need-based financial aid systems. Bloomington is the only site to offer separate merit-based awards, but in Baltimore, need-based awards also take merit into account. The String Academy of Wisconsin in Milwaukee also offers a defined scholarship program, the USAS, open to its own students and those at two inner-city schools served by the academy’s outreach program. Laramie offers no direct aid, but support is available through relationships with local organizations.

Need-based awards vary in size and scope. In Bloomington, financial aid is limited to 10% of tuition. Evanston uses a scale to determine discounts based on family income; specific percentages were not provided, but awards are sometimes increased for large families or unusual circumstances. In Baltimore, since need-based scholarships also require merit, students must have several years of prior experience before they become
eligible. Auditions are held for new applicants in Baltimore, where the average award is 40% of student tuition, with a high of 75%.

Student Recruitment

Reputation. All site directors noted that the most effective publicity is word of mouth, usually from families who have current or past experience with string academies. String academy reputations in their local communities are enhanced through community performances and email communications with current and past participants and to other compiled email lists.

Advertising. Various printed materials are used, especially at the three largest academies (Baltimore, Bloomington and Milwaukee). In Baltimore and Bloomington, the associated collegiate music unit controlled advertising efforts almost exclusively. Site directors in Bloomington and Milwaukee indicated that advertising practices have changed over time, with less reliance on printed materials or mailings and increased use of electronic media.

Websites. All academies have websites; the three largest programs (Baltimore, Bloomington and Milwaukee) display the most extensive information. At the three divisional music schools, the associated collegiate music units control websites.

Personnel

Program leadership. The site director is most responsible for the creation and development of programs at each site. All five site directors, despite the geographic distance between them, remain a tightly knit group, with long relationships and close, regular, ongoing contact. They often come together for events, workshops, or presentations. Three site directors studied directly under Zweig, who remains the director
at Bloomington; the remaining director, Darcy Drexler in Milwaukee, received pedagogical training from Zweig through her faculty appointment to the Young Violinist’s and Cellist’s Program (YVCP) at the Wisconsin Conservatory. Sinift and Drexler also worked together in Milwaukee and participated in founding the String Academy of Wisconsin in 1990.

Site directors described a range of skills required in their work. Most strikingly, they tended to view themselves as teachers first, then directors. They emphasized, more than any other topic, teaching well and continuously striving for more pedagogical knowledge and better teaching results. From a managerial standpoint, the top two concerns were having a vision for the program and choosing the right people.

**Faculty.** All site directors commented on the importance of philosophical and pedagogical alignment of string academy faculty. However, they also noted the importance of individuality of teaching styles within a common framework, warning against using string academy curriculum as a step-by-step formula. If a potential faculty member has not received previous training at a string academy site, that person must be “trainable”—i.e., open-minded, not set in his or her ways, and willing to teach string academy curriculum as expressed by the site director. In addition, site directors want faculty members who have good instincts; are inquisitive; exhibit a passion for teaching and working with children; are highly proficient on their instruments; and exhibit professional behaviors such as being punctual and reliable.

Violin and viola teachers who received training as preservice students in site-associated, college-level string pedagogy courses are routinely hired in Baltimore, Bloomington, Evanston, and Milwaukee. In Bloomington, all violin and viola teachers
are former or current students of Zweig or her co-director, Brenda Brenner, and have attended a full year of pedagogy courses before they were permitted to teach in the program. In Evanston, four of the five violin and viola faculty studied under Stacia Spencer at the Northwestern University Bienen School of Music, and the remaining member received training at Indiana University from Zweig and Brenner. In Milwaukee, three faculty have been with the String Academy of Wisconsin since 1990 or 1991, and all three were recruited and trained by Zweig; many other current or past faculty received training as preservice teachers at the Bloomington and Milwaukee sites.

Violin and viola faculty members without preservice training at string academy sites have been hired at Baltimore, Laramie, and Milwaukee, and all five sites have hired cello teachers without previous string academy training. Baltimore has the most teachers without prior string academy training, due to the size and complex nature of The Peabody Preparatory. Laramie has a very limited pool of candidates, and none of its faculty had received any formal training in the curriculum prior to their hiring.

**Workloads and compensation.** All site directors also hold positions at associated or nearby colleges, as either adjunct or full-time faculty. The distinction between full- and part-time positions for string academy faculty members is a feature only of the Baltimore and Milwaukee sites, which are also the only two to give health benefits to full-time faculty. Faculties at all sites receive hourly pay, with the exceptions of full-time faculty in Milwaukee, who receive a salary, and extra administrative duties in Baltimore, paid as an additional stipend. At all sites, faculty workloads depend on the number of hours that faculty are willing to work and their ability to grow a studio over time.
Faculty evaluation, training, and professional development. These processes are flexible and vary depending on a teacher’s background in pedagogy and his or her knowledge of the instructional design and curriculum of string academies. In Baltimore, Evanston, Laramie, and Milwaukee, site directors described processes for incoming faculty that encourage observing other teachers and also include one-to-one meetings for an undetermined period of time. In Bloomington, this process is more codified for violin faculty, since they must have completed a full year of string pedagogy courses at the IU Jacobs School of Music. Professional development funds are available to faculty members in Baltimore, Laramie, and Milwaukee.

No sites have formal evaluation systems. Faculty work as a team, supporting each other and engaging in meetings to discuss student needs, improve instructional quality, offer feedback to each other, plan instruction, and discuss upcoming events. Concerts and recitals enable faculty to hear each other’s students and foster feedback opportunities. All faculty attend student performances regularly and reflect on student progress at faculty meetings.

Discussion

The findings permit interpretation of string academies in the light of previous research, as well as of their place within the context of string instrument instruction in the United States and the evolution of string academy organization and instructional practices. The following discussion will consider notable programmatic characteristics of string academies. It will also consider the commonalities between the Zweig-inspired string academies and the earlier work of Rolland and Suzuki. Topics for discussion include the following: (a) administrative setting and structure; (b) inclusion of viola, cello
and double bass instruction; (c) adaptations for the perceived instructional needs of students; (d) Paul Rolland’s Illinois String Research Project and string academies; (e) Suzuki and string academy instruction in the United States; (f) teacher preparation; (g) evolution and diversification; (h) alignment of pedagogical approach; (i) the pedagogical approaches of Rolland and Suzuki, and the architecture of string academy curriculum; and (j) implications.

Administrative Setting and Structure

In this subsection, I will evaluate the five string academies with relation to the features of community-based art schools described in chapter 2 above.

String academies as a form of community-based arts instruction. Some string academy sites are independent music schools, whereas others are divisional music schools within collegiate music units. They generally exhibit the characteristics of divisional music schools—functioning in a financially self-sustaining way in various communities, providing laboratory experiences for future teachers and employment for qualified college students, hosting performing artists and guest clinicians, offering performances in the community, and supporting their associated university’s recruiting efforts. String academies do not offer their own noncredit or postsecondary courses, but several of them do so in collaboration with universities and serve as teacher preparation sites.

String academies generally conform to standard recommendations for the organizational structure of a divisional music school within a collegiate music unit, with a few exceptions. The Music Academy of the Northwestern University Bienen School of Music does not have a mission statement, and only one string academy (Milwaukee) has
a formal advisory board. Provisions for in-kind space and utilities appear to be adequate, but site directors did not disclose detailed information in this regard. String academies’ use of college students is strongly consistent with recommendations in the literature, with regard to student readiness, supervision, support, and evaluation.

**Independent or divisional status: advantages and disadvantages.**

MacLaughlin (2003) outlined specific advantages and disadvantages of independently and divisionally structured community schools of art, as discussed in chapter 2. Many of MacLaughlin’s points about independent structures were related to community perceptions of the organization. However, collecting data on broader community perceptions of string academies was not within the scope of the present study.

The divisional status of the Baltimore, Bloomington, and Evanston sites affords several advantages. They have considerable access to the facilities of their respective collegiate music units, which keeps expenses down; they are enveloped in previously established insurance plans, protecting them from liability; they receive the cover of larger financial systems; they have access to professional services in arts management, governance, accounting, marketing, personnel, technology, development, and office support services through their associated major university; they enjoy enhanced credibility; and students are consistently exposed to an atmosphere of higher learning, as well as the chance to learn from collegiate faculty and students.

Divisional string academies also encounter some disadvantages as a result of their administrative setting and structure. Yaffe’s observation (2006, p. 4) that divisional music schools may not have the autonomy to do extensive fundraising was confirmed for Baltimore and Evanston. However, Baltimore has gained some benefit from its access to
professional fundraising staff at The Peabody Preparatory. Bloomington, on the other hand, has not encountered any restrictions (M. Zweig, personal communication, November 9, 2015).

Another potential disadvantage is space limitations. The Baltimore site has experienced limits as to the amount of space offered by the collegiate music unit. Such limitations may constrain a string academy’s ability to schedule events or make last-minute schedule changes.

Attachment to collegiate organizations brings advantages to all four programs housed within collegiate music units, including the Milwaukee site (which is not a divisional music school but rents space from a university school of music). In Milwaukee, Darcy Drexler confirmed that the association with an institution of higher learning enhances the String Academy of Wisconsin’s credibility, and the university facilities are extremely affordable (D. Drexler, personal communication, July 29, 2013). However, Milwaukee’s independent status also offers flexibility not available to a divisional music school, in that the organizational and financial structures could stay intact should the academy ever need to relocate. The String Academy of Wyoming had to restructure in 2009 as an independent music school due to university budget cuts; Milwaukee would be well prepared for any disruption of its existing relationship with UWM, as its independent structure is already established, with 25 years of fundraising experience to fall back on.

String academies may bring advantages to their hosting collegiate music units, by (a) helping to recruit new students to the collegiate music unit and training existing students; (b) providing employment opportunities for qualified college students; (c)
engaging in community outreach, making the college and the music unit more accessible
to the public, which in turn may have community and recruiting benefits for the college
as a whole; and (d) enhancing the reputation of the collegiate music unit, in that students
of string academies and of the collegiate music unit alike take their experience out into
the world, representing the college (D. Drexler, personal communication, July 29, 2013;
S. Spencer, personal communication, July 29, 2013; Zweig, 2004). Site directors in
Baltimore, Bloomington, and Milwaukee confirmed that string academies have recruited
students to their respective associated collegiate music units (whether as former string
academy students who pursued degrees in music or as incoming college students who
were attracted to the pedagogy courses), and all three view their respective string
academies as effective recruiting tools for the collegiate music unit. However, while
Spencer noted that the pedagogy offerings associated with the Northwestern University
Bienen School of Music have been very beneficial to university music students, she
believes that expecting the string academy to feed students into the music school is not
entirely realistic:

Sometimes people view the academy as a recruiting tool for Northwestern, but
that is not the case. Realistically, most of the students do not want to become
professional musicians when they grow up. Most of the students who actually
choose to pursue music prefer to attend schools further away from where they
grew up. (S. Spencer, personal communication, July 29, 2013)

Because string academies serve as a laboratory setting for collegiate string
pedagogy courses, college students observe professional teachers and gain direct hands-
on experience working with string academy students, supplementing the lead teacher’s
instruction. This feature, present at all five sites, can enhance the benefits for both the
string academy as well as the collegiate music unit in terms of recruitment potential,
exposure, employment, and credibility. Using the same facilities as collegiate music units also makes it easier for college students to attend private lessons and group classes. Sherry Siniﬁt’s position in the University of Wyoming music department allows for ease of scheduling as well, as she teaches her private lessons in her university studio. However, observations of other teachers or group classes at the Laramie site require students to travel to rented studio space off campus.

According to Siniﬁt, several String Academy of Wyoming students have gone on to enroll as music students at the University of Wyoming (S. Siniﬁt, personal communication, July 11, 2013). Additionally, the former divisional music school status of the String Academy of Wyoming and its ongoing indirect association with the university’s music department through pedagogy courses and common faculty may afford the Laramie site some similar advantages to those enjoyed by the other four sites.

**Historical context of the sites.** Varying historical circumstances related to the development of the administrative setting and structure of string academies have led to differences across sites in students’ access to instruction, as well as in the sequence of group instruction. For example, Bloomington, Laramie, and Milwaukee operate very independently, as their creation and evolution stemmed primarily from a single individual and they were generally built according to Mimi Zweig’s design. Bloomington is the only one of these three that exists within the larger context of other divisional offerings at the IU Jacobs School of Music, but it is also the most independently operated of the three divisional music schools.

Baltimore and Evanston are different in that the string academy model was grafted into a preexisting structure. The Peabody Preparatory and the Music Academy of
the Northwestern University Bienen School of Music are much older than any of the five string academies; indeed, they are older than the pedagogy itself. One result of this relationship is that there are comparatively more entry points for students at these sites; for example, they allow enrollment in private lessons without group classes, whereas Bloomington, Laramie, and Milwaukee do not. Additionally, in Baltimore, the string academy model operates alongside a diverse set of stringed instruments offerings and has been integrated into a broader institutional mission (see Appendix C).

Another significant difference across string academy sites is in the sequence of group instruction (see Appendix D). The two sites with the greatest uniformity in this regard are Bloomington and Milwaukee. These two sites share a common evolution as both were founded and developed by Mimi Zweig, who had been operating the Bloomington site for six years before developing the Milwaukee program, which she would continue to direct for 14 years. The Milwaukee sequence of group instruction (modeled after Bloomington) had evolved to approximately its current state by the time Zweig stepped down as director in 1996, and only minimal changes or additions seem to have occurred since. At the other sites (Baltimore, Laramie, and Evanston), site directors built programs from the ground up, without Zweig’s presence, and in different administrative contexts. As a result, their respective sequences of group instruction show greater variation, most notably in Baltimore due to the larger institutional mission of The Peabody Preparatory, and in Laramie due to the smaller size of the community.

**Inclusion of Viola, Cello and Double Bass Instruction**

String academy curricula focus most heavily on the violin, and there are differences across sites in their approaches to teaching the viola, cello, and double bass.
Additional discussion can shed light on these issues, drawing on existing literature, on other contexts where these instruments are taught, and on the historical evolution of the five string academy sites.

**Viola instruction in string academies.** The five sites reflect different views of viola instruction among site directors and different resulting instructional configurations. All site directors indicated a preference that beginning students start their instruction on the violin and later switch to viola should they choose to do so. The stated justifications for this preference included were that (a) small violas do not sound as good as small violins, (b) more repertoire is readily available for violin instruction, and (c) students develop better left-hand facility on the violin. However, interview data and changes in instructional offerings over time suggest that these views and configurations are still evolving.

The literature contains perspectives that both reinforce and contradict the views of site directors at string academies. For example, repertoire does not seem to be a significant inhibitor to beginning on the viola. Students throughout the United States begin their instruction on the viola, not the violin, and the majority of method books developed for both homogeneous and heterogeneous class instruction on bowed stringed instruments are designed with this fact in mind. The Suzuki repertoire collection, which provides the base repertoire for string academies, has a set of eight volumes of repertoire for viola instruction, spanning the same range of levels as the violin books. Finally, solo and ensemble repertoire for the viola is also extensive at all levels (American String Teachers Association & Littrell, 2009).
The concern for deficiencies in the repertoire seems to be related more to the design of group instruction at string academies. Because string academy group instruction at the beginning levels is homogeneous by instrument, all beginning violin students study a common repertoire that involves unison performance of songs and exercises on the A and E strings, as provided on stringpedagogy.com. The beginning violin curriculum is therefore not transferable to the viola in a group setting at string academies without significant changes or adaptations, as the viola does not have an E string. Because of this difference, separate group classes for viola have been tried at Baltimore and Milwaukee, but waned due to low enrollment. There have not been separate viola classes at Laramie for the same reason, but adaptations to the repertoire have made possible combined violin and viola group classes as early as Suzuki book 2.

Even if string academy curriculum were adapted for use in combined violin and viola group classes, this would create a problem for the youngest students, since the availability of small violas is extremely limited. Practitioners have often strung fractional-sized violins with viola strings (Morrison, 2001, para. 4; “Too Small to Be Beautiful?” 2000, para. 2), but four- or five-year-old students who make up much of the student population at beginning group classes in string academies often use violins as small as one-sixteenth of normal size. Even the smallest violas or viola strings available on the market (with a body length of 10 inches or, more commonly, 12 inches) when otherwise a student should use a 1/16 size violin (commonly at 8.5 inches) or even a 1/10 size (at 9 inches) hardly seem adequate. Nonetheless, on several websites, such as that of the Suzuki Association of the Americas, one can find informal discussions of strategies for stringing small violins as violas. One article even describes what is called a “hole in
the heart operation,” wherein the sound of small violins strung with viola strings was improved by drilling a hole through the top of the instrument, allowing the sound post to make direct contact with the bridge (Morrison, 2001, para. 9). However, the subject requires a systematic review of all strategies by experienced teachers and professional luthiers and through blind tone quality tests. Such study would certainly prove useful to teachers of preschool and even school-age students who want to begin their instruction on the viola rather than the violin.

Different contexts for viola instruction contribute to the formation of different views among teachers. The various circumstances of and goals for viola instruction throughout the world likely contribute to a lack of consensus in the profession, so a deeper examination is necessary to understand the context of viola instruction at string academies.

**Perspectives on viola instruction.** A 1985 article by William Preucil discusses considerations associated with the development of the Suzuki repertoire series for viola. Interestingly, Preucil reported an assumption made in preparing the viola volumes, “that generally these books would be used by students somewhat older than the average preschool beginner” (p. 19). As a result, position study and shifting were presented earlier, with the justification that the school-age beginning viola student would have a better understanding of these concepts and to allow for earlier experiences with ensemble music (pp. 19-20). Preucil also offered advice for using the books with younger beginners and mentioned some “outstanding results” with beginning violists (p. 20). Specifically, he referred to the Preucil School of Music in Iowa City, noting a total enrollment of 15 viola students, the youngest of which was age five (p. 20).
Noted violist William Primrose supported many of the preferences regarding viola study expressed by site directors at string academies (in Dalton & Pimrose, 1988).

Primrose indicated his preference for students who have switched to viola from violin and who have developed a reasonably good left hand technique as a result:

[Students switching from violin to viola] makes it much easier for me. … We need to take into consideration the fact that most children should start playing a stringed instrument at about five years of age. As few of them are big enough physically to play on even a cutdown viola, or a small one, I have seen children play viola on a violin tuned a fifth down … and it is hardly satisfactory when you play a sickly-sounding violin with droopy strings tuned down. … Surely the really important dissimilarity—the very essence of it—between violin playing and performance on the viola resides in the subtle distinctions in tone production. These may not even be perceived unless the student is utilizing something approximating to a full-size viola. (quoted in Dalton & Primrose, 1988, pp. 5, 9)

In his discussion with Primrose, Dalton referred to the views of another noted violist, Walter Trampler:

[Trampler] found that original violists often have what he calls a “slow technique,” a slower left hand than violinists who have converted. Trampler remarked that his violists are far better off if they have been violinists up to the point where they were playing Mozart concertos at least, maybe the Wieniawski D Minor Concerto, Lalo’s *Symphonie Espagnole*, and pieces such as these. They then have facility. He commented that it has not usually been imposed upon young violists, through the literature at least, to play with that sort of dexterity. (Dalton and Primrose, 1988, p. 5)

Primrose agreed with Trampler “a hundred percent” (quoted in Dalton & Primrose, 1988, p. 5). Primrose also approved the notion that every violinist should study the viola, as “it purifies their souls” (p. 12). However, performance of the viola at a higher technical and artistic level was a different matter for Primrose altogether, one that should be left to the exclusive professional violist in any public setting (pp. 12–13).

Parker (2014) surveyed viola teachers’ perspectives on viola pedagogy at the university or conservatory level. In relation to perspectives on studying the viola or the
violin first, Parker’s findings were inconclusive (p. 78). Participants who agreed with the concept of initially studying the violin mentioned the development of facile technique and a broadened level of musicianship through learning a body of violin repertoire; however, no reasons were listed for those who disagreed with this view (p. 78). Participants \((n = 19)\) also provided circumstances in which they would encourage a violinist to switch to viola, which included “the physical attributes of the student and student’s love of or interest in the viola’s sound” (p. 82).

Karrell Johnson outlined some of the ambiguity of the viola teaching profession:

"Discussions in the literature about teaching the viola are often presented exclusively from the perspective of the private teacher’s studio. A modern view would also address violists who begin study in school string classes. Here, where it is essential to retain an adequate supply of violists in the program to ensure sufficient numbers for middle and high school orchestras, string teachers face the task of attracting good students to the viola. This suggests an examination of the process of recruiting and, indeed, if it is better to begin on the viola in the first place. … Some university teachers and professional performers feel that there are advantages to beginning the violin and changing to viola at some appropriate time. … As the overwhelming majority of players today begin viola in school classes, effective recruiting or prudent switching is a crucial task for the string teacher. (quoted in Barnes, 2005, p. 1)"

Student recruitment and well-advised switching are issues to which site directors at string academies give careful consideration. Furthermore, as Johnson noted in his reference to the characteristics of different instructional settings, the context of instruction plays a major role in any decisions made. However, one context present in string academies that Johnson did not consider explicitly is that of viola instruction with the preschool-age beginner.

In summary, while many perspectives on viola instruction in the literature are aligned with that of string academies, Preucil’s (1985) description of Suzuki instruction for the viola represents a contrasting view. Preucil assumed that most beginning violists
would be older than preschool age, but he also noted outstanding results with students as young as age five. Additional background information would be helpful to determine if or how these students were provided with group instruction, as this is a specific management issue in organizing viola instruction at string academies, where the vast majority of upper string instrument students study the violin and where homogeneous group classes are a feature of the instructional process. Unfortunately, there is no publication on current practices in viola instruction among Suzuki programs that would offer an adequate comparison to string academies.

Additional research is needed to adequately describe and codify viola study in relation to student recruitment, the context of instruction (e.g., string academy, Suzuki or public school instruction), switching from violin to viola or vice versa, instrument quality (especially fractional sizes), available repertoire, technique development, beginning age, and the physical attributes of viola students. Such study would shed light on practices in viola pedagogy throughout the United States, not only on those of string academies.

**Cello and double bass instruction in string academies.** Instruction for the cello at string academy sites is less prominent and its pedagogy less codified than that of the violin and viola. This is even less so for the double bass. There is no central disseminator of cello or double bass pedagogy at string academies as Zweig is for violin and viola. The three sites that have offered double bass instruction in the past (Baltimore, Bloomington and Laramie) each discontinued offerings upon the departure of double bass instructors, indicating that these programs are largely driven by one person (M. Zweig, personal communication, July 1, 2015). Cello offerings are, in most cases, more recent and less developed than violin and viola instruction, especially in Evanston and Laramie.
Instructional differences are compounded by the fact that, in most cases, the apprenticeship-model studio teacher preparation programs associated with each site for cellists do not exist or do not include what is currently available in teacher preparation for violinists and violists.

One might conclude that instruction for the cello and double bass is not as pervasive at string academies because the pedagogy is not as developed as for the violin and viola. But this contention raises the question: was there even an opportunity for these pedagogies to be developed to the same extent? The origins of the string academy sites lie with Mimi Zweig, her curriculum on stringpedagogy.com, and her training of the other four site directors, which has led to great uniformity in violin and viola pedagogy across sites. Moreover, a site director who is either a violinist or a violist has established each site, and thus the primary focus of these directors (including the instruction they personally carried out) was for the violin and viola.

Summary. It is clear that the string academy model has not yet been fully extended for any instrument other than the violin. They all owe their existence to the desire of a violin teacher, Mimi Zweig, to educate future violinists, and then a subsequent intention to include all bowed orchestral stringed instruments. The resulting efforts to include cello and/or double bass at the various sites followed a similar trajectory. The difficulty in developing cello and double bass offerings, as expressed by site directors, lies in securing faculty with the necessary experience that is compatible with string academies both philosophically and pedagogically.

This does not indicate either that string academies are or are not successful in their instruction on viola, cello, and double bass; that type of determination is not part of
the purpose of this study. Certainly, countless unseen factors may have played a part in how instruction on these instruments has evolved at string academies. For example, the nature of violin teaching makes it more accessible to greater numbers of students than the viola, cello, and double bass, all of which are bigger, more expensive, and historically less prominent. Additional challenges and/or possible strategies could be identified by studying the incorporation of viola, cello, and double bass among Suzuki programs and the Talent Education Movement in the United States. It will be interesting to see what the future holds for cello instruction at string academies as plans for a detailed cello chapter on stringpedagogy.com come to fruition.

**Adaptations for the Perceived Instructional Needs of Students**

One overarching principle of string academy instruction is to adapt to the needs of each individual student. Adaptations have occurred in response to the perceived instructional, financial, and cultural needs of students, as well as in response to perceived cultural changes over time and motivations related to program development (e.g., offerings of group instruction at all levels, or the inclusion of viola, cello, or double bass instruction). All these factors, combined with high instructional expectations, have contributed to the evolution of each site’s offerings.

While the instructional goals across sites may be similar, the methods by which they achieve these goals differ significantly in some ways. For example, instructional adaptations described in interviews indicate various means by which beginners or transfer students are accepted or incorporated into programs (particularly at advanced levels or with regard to chamber music opportunities). Some sites allow for optional participation in group classes while others do not; transfer students may have to play an audition at one
site, whereas at another, a meeting with string academy administration suffices. At higher performance levels, special adaptations in response to the needs of just two or three students are commonplace in Laramie. Meanwhile Bloomington, over the span of just three years, has shifted from offering two levels of advanced classes (the Violin Virtuosi) to one level and back to two again; in addition, a viola class appeared in 2015, and chamber groups and orchestra opportunities have surfaced that were not present for the previous or following years (M. Zweig, personal communication, September 22, 2014). And in Baltimore, what started as one individual program (the YPSP) has evolved into three distinct and highly defined instructional programs.

All sites have unique financial and organizational contexts and constraints. But in all cases, the motivation for structural changes seems not to be one of financial gain (e.g., what can we do to make more money?), but concern for students’ best interests (e.g., what can we do to meet their needs?), weighed against what is affordable. This notion is augmented by the skills that site directors cite as major contributing factors to success in their positions, the apprenticeship-based means by which preservice teachers and faculty are trained and mentored, and the many stories related during interviews that reflected a focus on the needs of an individual student. All these factors suggest an environment characterized first by concern for quality of instruction and secondarily for financial or organizational requirements.

The sites also display certain idiosyncrasies that reflect what site directors reported as results of their interaction with the local culture. These have included responding to the needs of a smaller community and the choice of an S corporation organizational model (Laramie), family commuting trends (Baltimore and Milwaukee),
religious considerations (Evanston), conflicts of interest (Laramie), coordination with off-site student and family activities and schedules (all sites), affluence (Evanston), and faculty recruitment (Laramie). Further investigation would likely reveal still more individualized features.

One can observe organizational and instructional reactions to changes in the culture over time as well. The switch from relying on printed advertisements and mailings to increased use of electronic media is one example. Drexler observed that fewer parents have received formal music training than in the past, affecting the hiring of parents as pianists for group classes (D. Drexler, personal communication, September 25, 2014). In the same interview, Drexler said that students don’t appear as accustomed to singing as in earlier years, and that this factor has influenced how singing is incorporated into instruction. Both Drexler and Sinift noted that today’s students seem significantly busier than in the past, limiting what families can fit into their schedules and creating conflicts with String Academy instructional schedules (D. Drexler, personal communication, July 29, 2013; S. Sinift, personal communication, July 11, 2013). Sinift commented:

It’s a different time. Nowadays I find that there are so many things offered for kids, dance classes and all manner of sports and theater classes that I find getting a child who is willing to make the commitment and achieve the kind of excellence that we’re searching for is more rare. (S. Sinift, personal communication, July 11, 2013)

Drexler added that busy schedules have also negatively impacted the String Academy of Wisconsin’s parent organization, which before 2007 had been thriving under a volunteer parent leader:

It’s difficult to find someone to step up and say, “I will be the leader.” Today there is a different generation of parents. That’s not to say that the parents don’t
want to help; around 2008 things got to the point where people have so many things on their plate. (D. Drexler, personal communication, September 25, 2014)

**Paul Rolland’s Illinois String Research Project and String Academies**

There are commonalities between string academies and Paul Rolland’s work in the Illinois String Research Project. From both the IU Jacobs School of Music (via Zweig) and the Illinois String Research Project (via Rolland), original pedagogies emerged. Rolland and Zweig both relied on emerging technologies to disseminate their approach—film and the Internet, respectively. Both Zweig’s initial string academy and Rolland’s research project were hosted by a collegiate music unit that engaged in studio teacher preparation using an apprenticeship model that encompassed classroom and laboratory settings. The Fairview Violin Project in Bloomington (2008–present) also offers instruction in a public school setting in a style similar to that of Rolland’s project, with large, homogeneous classes. Both Fairview and Rolland’s project functioned as lab settings for university students as well. Both were funded research sites—Fairview by a single benefactor, the Illinois String Research Project by a grant from the Office of Education in the U.S. Department of Health, Education, and Welfare.

There are some significant programmatic elements of the Illinois String Research Project that string academies do not share. These include the widespread teaching of school-age beginners; the teaching of students only in classes, rather than by a combination of group and private instruction; and the absence of expectations for parental involvement. In the case of the Illinois String Research Project, these elements were motivated by the desire to create a pedagogy that responded to the typical conditions of stringed instrument instruction in the United States at the time (Rolland, cited in Fischbach, 1972).
**Suzuki and String Academy Instruction in the United States**

Based on the tenets of Suzuki instruction described in the literature (e.g. Barber, 1993; Bauman, 1994; Blaker, 1995; Dawley, 1979; Hofeldt, 2000; Kendall, 1985; Lee, 1992; Lee, 2012; Lo, 1993; Madsen, 1990; Nelson, 1994; Perkins, 1993; Romeo, 1986; Starr, 1976), string academies share several features with Suzuki programs, such as (a) expectations for parent involvement; (b) emphasis on beginning at a young age; (c) attention to create a positive and nurturing environment for study; (d) reliance on group instruction as well as private instruction; (e) inclusion of a standard, graded repertoire that all students learn; (f) a common approach to teaching among teachers; (g) employment of well-trained teachers; and (h) inclusion of opportunities for teacher preparation. The defining characteristics in the case of string academies are use of the pedagogical concepts developed by Paul Rolland, a legacy connection to Mimi Zweig, and her direct involvement in the five string academy sites to varying degrees.

Programmatic characteristics shared between string academies and Suzuki programs in community music schools include those described by Blaker (1995). Within both Suzuki programs and string academies, (a) the most common bowed stringed instrument offered in addition to the violin is the cello, (b) beginning instruction at an early age is emphasized, (c) group instruction is offered as well as offerings in orchestra, chamber music, and/or musicianship classes depending on the site, and (d) parents attend instruction. Because many of the sites that Blaker surveyed included offerings for Suzuki instruction alongside other non-Suzuki instrumental instruction offerings, the divisional string academies (Baltimore, Bloomington, and Evanston) resemble Blaker’s composite in that they are also situated alongside other divisional instrumental instruction offerings.
that are not influenced by string academy curriculum. However, only in Baltimore does the divisional school offer instruction in stringed instruments by persons not trained in string academy curriculum, as part of the broader institutional mission of The Peabody Preparatory. Furthermore, because Blaker’s composite provided separate enrollment figures for violin students who received Suzuki instruction in addition to those who received non-Suzuki instruction, including violin faculty who were not all Suzuki teachers, the community music school sites that Blaker investigated provided greater access to instruction and/or more diverse offerings for violin students than string academies in Bloomington, Evanston, Laramie, and Milwaukee.

**Teacher Preparation**

Models of studio teacher preparation exist among Suzuki programs and string academies, and they were also a feature of Paul Rolland’s Illinois String Research Project. The model used to prepare teachers to deliver string academy curriculum is an apprentice model in which a teacher trainee works with and observes the master teacher’s instruction and then supplements the instruction that a young student receives by directly teaching the student. This occurs in private lessons as well as group classes at string academies, which are used as a lab setting for college-level internships and string pedagogy courses.

**Teacher preparation in the Illinois String Research Project.** The apprenticeship model employed in Rolland’s project was similar to that in string academies, in particular with regard to the “advanced project class.” Students in this advanced class—who are featured in the film series made by the project, *The Teaching of Action in String Playing*—were the only ones to receive instruction directly from Rolland
himself (Rolland, 1971). Additionally, their instruction occurred more often and over a longer period of time (3.5 years by the completion of the project) than at any of the project’s other pilot locations. Project assistants and graduate students assisted with instruction and, along with students in a string pedagogy course at the University of Illinois, observed the project’s implementation in the Urbana public schools (Rolland, 1971).

**Teacher preparation and Suzuki programs.** Teacher preparation for Suzuki programs has been institutionalized to a great degree, and is more codified than that in string academies. The Suzuki Association of the Americas (SAA) certifies teacher trainers to train individuals who attend a series of core courses developed by the SAA, arranged in units named according to the numbered Suzuki repertoire books for each instrument (Suzuki Association of the Americas, 2015). Stringpedagogy.com is institutionalized too, but no formal certification or licensure in the pedagogical approach currently exists.

The supplementing of a young students’ instruction by teacher trainees, present in string academies, is not paralleled by official Suzuki teacher training’s primary emphasis on observation. Both string academies and Suzuki programs serve as lab programs and generate income for graduate students in American colleges and universities, but guidelines for Suzuki teacher training emphasize observation primarily, and no guidelines exist that address the type of studio teacher preparation apprenticeship model used in string academies (Suzuki Association of the Americas, 2015).

Both the SAA and stringpedagogy.com offer a teacher listing and lesson searching service for a program or a private teacher throughout the United States and
other countries. Only SAA membership is required in order to be on the SAA list; Suzuki training is not. Therefore, individuals may say they teach according to the Suzuki method and demonstrate an affiliation with the SAA by paying membership dues even if they have received no formal training. However, the SAA will display a teacher’s Suzuki training on a member’s profile should a member choose to have it displayed. Addition to the list on stringpedagogyconnect.com requires the direct personal approval of Mimi Zweig.

**Evolution and Diversification**

There is evidence of the evolution and diversification of the work of Paul Rolland, as well as of Suzuki instruction in the United States, which is related to the evolution and diversification of string academy curriculum. Rolland’s and Suzuki’s pedagogical contributions have been adapted to (a) instruments not originally taught by Rolland or Suzuki (Mehl, 2009; Rolland as cited in Fischbach, 1972; Rolland, 1971), (b) homogeneous and heterogeneous string instrument classes in American public schools (Brunson, 1969; Fanelli, 2001; Zahtilla, 1970), (c) original approaches to teaching (Benham et al., 2011; Fanelli, 2001; Lee, 2003; Lo, 1993; Nelson, 1994; Romeo, 1986; Wheeler & Zweig, 2002-2015); and (d) an abundance of additional materials for use in both solo and ensemble settings (Fanelli, 2001; Mehl, 2009). Suzuki programs have also been integrated into a variety of institutional settings, such as independent and divisional music schools (Suzuki Association of the Americas, 2015). These signs of evolution and diversification have legacy connections to Paul Rolland and Shinichi Suzuki that start with their instruction on the violin, which is parallel to string academies and Mimi Zweig.
Similar to many Suzuki programs in the United States, string academies have been integrated into other institutional settings. The first sign of the diversification of string academy curriculum was its integration into the Wisconsin Conservatory of Music in 1982. This led to the first independently organized string academy, the String Academy of Wisconsin, in 1990. The next institutional integration was into The Peabody Preparatory in Baltimore in 1987. The string academy model’s successful placement within the broad institutional mission of The Peabody Preparatory is significant, and it has perhaps caused a greater degree in the evolution of programmatic characteristics than any other example. This is seen most notably in the creation of three separate and distinct programs for instruction, and in the inclusion of string academy curriculum alongside more diverse offerings in stringed instrument instruction.

Other signs of the evolution and diversification of string academy curriculum are similar to those of Rolland’s and Suzuki’s ideas, in that the pedagogical approach has been adapted for use in American public schools in both homogeneous and heterogeneous settings, and also transferred to the viola, cello, and double bass. The viola was integrated into the instructional design for violin. The first appearance of cello instruction was present at the Milwaukee site in 1983, and for the double bass in 1992 in Baltimore. Recent developments in this realm include a section on the cello teaching of Susan Moses on stringpedagogy.com, as well as plans for a more detailed cello chapter to be placed on the website. Also included on stringpedagogy.com is a chapter detailing the application of string academy curriculum for use in a homogeneous or heterogeneous class setting; however, there are no data on its implementation in the heterogeneous setting. Examples of its application to homogeneous violin classes in American public
schools exist at Fairview elementary in Bloomington, as well as in two additional programs modeled after Fairview in Attica, Indiana and Danville, Illinois.

**Evolution among site directors and other closely associated colleagues.**

Because site directors and other closely associated, long-term colleagues represent a very tightly knit group of teachers and administrators, their continued frequent contact and collaboration have resulted in personal and collective evolutions of string academy curriculum as well as of the pedagogical approach as a whole. Even though Mimi Zweig is the original impetus for the pedagogical approach used in string academies, the close association of site directors has influenced and modified Zweig’s approach as well (R. Henry, personal communication, July 7, 2013; S. Sinift, personal communication, January 13, 2016). These close and long-term relationships resemble those of an association or organization, such as the Suzuki Association of the Americas, though they still lack formal definition.

**Alignment of Pedagogical Approach**

All site directors commented on the importance of teachers in string academies being philosophically and pedagogically aligned, a programmatic characteristic that string academies share with Suzuki instruction in the United States. This approach ensures continuity across program offerings and across sites and that the pedagogical content delivered to students during private and group instruction in programs with multiple teachers is mutually reinforcing, not conflicting. It also serves as a basis for teacher preparation and faculty orientation.

However, too great an adherence to a single common approach to teaching according to Suzuki principles has, historically, caused controversy. When Suzuki
instruction was first introduced to the United States in the 1960s and 1970s, evidence in the literature (Kendall, 1985; Mehl, 2009), as well as in the reports of some site directors (S. Sinift, personal communication, July 11, 2013; M. Zweig, personal communication, September 22, 2014), suggests that this common approach led to many dogmatic applications of the method. Because the enthusiasm for Suzuki Talent Education was so great, many teachers who lacked experience or knowledge of the method nevertheless called themselves Suzuki teachers (Mehl, 2009). One reaction to this problem and the resulting controversies was the development of improved teacher training opportunities by serious teachers (Kendall, 1985; Mehl, 2009). This included the requirement that aspiring Suzuki teachers submit recorded instrumental performance examples along with teacher training application materials (S. Sinift, personal communication, January 12, 2016; Suzuki Association of the Americas, 2015).

Mimi Zweig’s curriculum and the string academies may have evolved in part as a reaction to dogmatic applications of Suzuki instruction. Sinift described her own exposure to Suzuki instruction in the late 1970s as formulaic and rigid (personal communication, July 11, 2013). Sinift was eventually drawn to the pedagogical contributions of Paul Rolland and especially Mimi Zweig. Yet she now strongly credits the Suzuki approach, noting increased flexibility in the realm of American Suzuki instruction today:

When I met Mimi Zweig, I immediately felt an affinity for how she went about things and for the combination of Suzuki and Rolland. What specifically had been taken from Suzuki was the repertoire, which was ingeniously constructed; the basic philosophy that music study develops the whole person and is important for everyone; that everyone has some musical capability; the importance of group lessons; and the involvement of the parent in attending lessons and practicing with the child at home. And the technical side of the Rolland approach just made sense, his approach to good setup, balance in the whole body and freedom of movement.
We are very indebted to Mr. Suzuki and we do believe in a lot of the tenets of the Suzuki approach even though we depart in some significant ways. … The Suzuki realm has become more flexible; they now teach improvisation, they teach note reading much earlier than they used to, they include supplemental repertoire, and the new versions of the Suzuki books are exhibiting some influences of pedagogues other than Suzuki. (S. Sinift, personal communication, July 11, 2013)

Surrounding the application of Suzuki instruction is a certain misinterpretation of Shinichi Suzuki’s pedagogical contribution, which is portrayal as the “Suzuki Method,” a term not coined by Suzuki but invented in the West (Mehl, 2009). This portrayal of Suzuki instruction is likely a result of the arbitrary manner in which Talent Education is presented. Suzuki did not provide a systematic description of his pedagogy; instead, his own writings, speeches, and essays were somewhat randomly structured and informal (Mehl, 2009). The literature on Suzuki, nearly all of which has been written by American Suzuki teachers, tends to venerate rather than evaluate him (Mehl, 2009). Furthermore, because Suzuki allowed others to take the lead in disseminating his approach, its diversification and highly structured global organization developed in many instances without Suzuki’s direct involvement (Mehl, 2009). However, portrayal of Talent Education as a method is contrary to Suzuki’s own thoughts on the matter (Starr, 2000). Additionally, as evidenced in the writing of several professionals with ties to Suzuki instruction (Barber, 1993; Kendall, 1985; Lee, 1992; Lo, 1993; Mehl, 2009; Starr, 2000), as well as in concepts related by Suzuki himself (Bauman, 1994; Shepheard, 2012; Starr, 2000; Suzuki, 1983), he valued both his own educational philosophy and the development of each teacher’s own creative approach to teaching far more than the repertoire he chose or the technical components he used to teach the violin.

Translation of a common pedagogical approach, whether from Suzuki, or Zweig, occurs at the level of each individual teacher (Mehl, 2009), leading to different dialects of
the approach (Brenner, personal communication, September 22, 2014). Researchers and proponents of Suzuki instruction have supported individuality and creative adaptation in teaching according to Suzuki principles (Lee, 1992; Lo, 1993; Starr, 2000); this is true for string academy curriculum as well. Specific evidence of creative adaptations of string academy curriculum appear in two web-based pedagogical resources created by site directors in Baltimore and Evanston (Freeman & Henry, 2015b; Northwestern University & Spencer, 2014). Additionally, site directors commented on the importance of individuality of teaching styles within a common framework, expressed their desire for teachers who will expand their teaching philosophy and knowledge of string pedagogy to include information from all sources, and warned against using string academy curriculum as a step-by-step formula.

In summary, the concern associated with the large-scale dissemination of a common pedagogical approach is dogmatism. In the case of Suzuki Talent Education, the point in which pedagogical consistency becomes dogmatism seems to be rooted in the superficial interpretations and enthusiasm of aspiring teachers who mean well but are ill informed. This problem arose from the arbitrary manner in which Suzuki’s pedagogical contribution was initially disseminated in America, broadly detached from Shinichi Suzuki himself. The remedy is teacher preparation, coupled with higher standards for the instrumental performance capabilities of aspiring teachers. Perhaps this is one underlying reason why teacher preparation is so prevalent in string academies. The overarching metaphor for string academy instruction is related to the injection of Shinichi Suzuki’s pedagogical contribution into American stringed instrument culture. The difference in the case of string academies is Mimi Zweig’s direct and continuous involvement in the
dissemination of her own approach through her relationship with other site directors, workshops, master classes, and stringpedagogy.com.

However, one could argue that the possibility of dogmatic application of string academy curriculum still exists, and indeed it may already be present in the United States and elsewhere. There exist “string academies” that have been created without Mimi Zweig’s direct involvement by people who have been introduced to the approach by other site directors, though not necessarily deeply immersed in it (S. Sinift, personal communication, January 12, 2016). Regardless of their quality of instruction, these programs may appear to be directly associated with Mimi Zweig and string academy curriculum, whether or not they have her approval to be listed on stringpedagogyconnect.com. It would also appear, based on (a) the presentation of string academy curriculum in many instances as “do it this way,” (b) the strong degree of pedagogical alignment across sites and among teachers, (c) the presence of courses designed to instruct college students “how to teach,” and (d) the fact that site directors and other closely associated colleagues represent a very tightly knit group of leaders, that although the string academy approach may actually value the development of teachers’ individuality, this feature is not readily apparent even to those in close contact with string academies through courses or workshops, and especially to individuals reviewing the curriculum online. Therefore, if dogmatic application of string academy curriculum is a concern for string academy proponents and administrators, then clearer statements of string academy values should be considered in order to impress such values on the musical community, especially for the interested but inexperienced or aspiring stringed instrument instructor.
The Pedagogical Approaches of Rolland and Suzuki, and the Architecture of String Academy Curriculum

Some prior studies have compared Rolland and Suzuki’s pedagogical contributions. Researchers highlight the uniqueness of Rolland’s teaching of technical components (Nelson, 1994; Perkins, 1993), specifically their high degree of adaptability to most other methods of stringed instrument instruction (Perkins, 1993), as well as to any stringed instrument instructional setting (Rolland as cited in Fischbach, 1972; Perkins, 1993). Suzuki’s teaching of technical components, however, is not unique (Rolland cited in Fischbach, 1972); some have recommended approaching it with caution (Perkins, 1993) or even described it as outdated (Nelson, 1994). Conversely, while Suzuki’s educational philosophy is frequently hailed as revolutionary, some seem to question whether or not Rolland’s contribution exhibits a philosophy at all (Perkins, 1993). As with Rolland’s technique, researchers and proponents of Suzuki Talent Education seem to agree that Suzuki’s educational philosophy can be applied to the teaching of any subject or skill (Barber, 1993; Lee, 1992; Lo, 1993; Nelson, 1994; Perkins, 1993). Therefore the key pedagogical contributions of Rolland and Suzuki are highly compatible.

This evidence points to the architecture of string academy curriculum, which seems to bring together the strongest elements of each pedagogue. An additional example of Rolland- and Suzuki-derived curricula notes a similar construction, using the physiology of Rolland’s approach as well as the Suzuki repertoire series (Romeo, 1986). The defining characteristics of string academy curriculum are adherence to several elements of Suzuki’s educational philosophy along with Zweig’s additional synthesis of
the violin pedagogies, musical visions, and teaching philosophies of Josef Gingold, Tadeusz Wronski, Janos Starker, and Jerry Horner (Wheeler & Zweig, 2007).

Implications

String academies are an eclectic and evolving form of community-based music education for stringed instruments. They operate with varying degrees of autonomy from larger institutions. They have also shown that they can adapt to different settings and institutional expectations. Their legacy connection to Mimi Zweig has not inhibited adjustments in string academy curriculum or the string academy model resulting from a particular site director’s proactive anticipation of local needs or a reactive response to unanticipated changes in circumstances. The consequence is that the various string academies adhere to Zweig’s pedagogical principles, but with some variation.

These string academies represent five distinct models of organization that are applicable to the creation or continuing development of string academies and other similar projects as divisional music schools in collegiate institutions or as independent community music schools, and in a multitude of communities of all types. String academies can be a reference point for curriculum development, apprenticeship-model studio teacher preparation in classroom and laboratory settings, program leadership, and a variety of other subjects, depending on local circumstances. Although I have primarily examined current programmatic characteristics of string academies, I believe that there are lessons to be learned from all stages of string academy development.

Recommendations for Future Research

Further research could be pursued along the following lines:
1. Replicate this study for other types of interrelated sites (such as String Projects, Suzuki or El Sistema programs) in which stringed instrument instruction occurs in both independent and divisional music schools.

2. Understand the process of apprenticeship studio teacher preparation models in string academies, the kinds of interactions that occur between apprentices and supervising teachers, and how graduates of the apprenticeship model view their effectiveness.

3. Examine the reasons why students come to string academies. Since the largest form of student recruitment cited by site directors is word of mouth, the best source of information on initial attraction to string academies should be parents.

4. Study the perceptions and experiences of students and parents at string academies regarding key features held up by the site directors, such as a nonjudgmental approach, parental involvement, and the integration of both individual and group instruction.

5. Assess the effectiveness of string academies by examining their impact on the lives of graduates and on local, national, and international communities.

6. Study the influence of stringpedagogy.com on stringed instrument teaching in the United States. This could include the independent studio teachers who have attended workshops on string academy curriculum. It would be especially valuable to study any string academy programs developed without Zweig’s direct oversight, to investigate whether string academy curriculum is applied dogmatically or where there are deviations from it, and whether their programmatic characteristics differ from those of the string academies tightly in the Zweig orbit.
Coda

The present study represents the first extensive documentation of the programmatic characteristics of string academies. It should serve as a valuable resource for those interested in pursuing similar projects on other instructional movements, as well as for people in leadership positions at string academies as this important form of stringed instrument instruction continues to evolve. It has been inspiring to see how the five site directors have developed their academies under very different circumstances. Their passion for teaching and educating youth is contagious and will greatly impact my own approach as a teacher and administrator.

My goal was not to provide a template of step-by-step instructions on how to develop a string academy, but instead a testament that will inspire innovation and creative problem solving in the pursuit of bringing music to our communities. I also hope to inspire what I witnessed so often during my experiences with site directors: their passion for teaching, fascination with their students, unwavering belief in their mission, and ceaseless dedication to bettering themselves and to continually enhance their pedagogies.

There is no point where we can say, “This is enough.” Always seek finer music, finer performance. Eventually this will change from a learning attitude to a joyful quest, which will last throughout our lives. ~ Attributed to Shinichi Suzuki
REFERENCES


Olsen, J. and Zweig, M. (Eds.). (1993, October). *Quarter Note, Opus 4, Number 1* [Newsletter]. String Academy of Wisconsin Archives, Milwaukee, WI.


String Academy of Wisconsin. (1996, November 17). Fall concert. String Academy of Wisconsin Archives, Milwaukee, WI.


Williams, R. (2011, March 1). Professor hunts for link between violin studies and high IQs. Strings, 20.


Zweig, M. [ca. 2013]. Violin/viola pedagogy I. Course syllabus. Copy in possession of Mimi Zweig. Jacobs School of Music at Indiana University, Bloomington, IN.
Zweig, M. [ca. 2014]. *Summer String Academy calendar 2014* [Electronic archive]. Copy in possession of Mimi Zweig. Jacobs School of Music at Indiana University, Bloomington, IN.

Zweig, M. [ca. 2014]. *Violin/viola pedagogy II*. Course syllabus. Copy in possession of Mimi Zweig. Jacobs School of Music at Indiana University, Bloomington, IN.
APPENDIX A: INTERVIEW QUESTIONS

Interviewee Background

a. What is your official title?
b. What are your official responsibilities?
c. How long have you held this position?
d. On what date was your String Academy program initiated?
e. What part did you play in the creation of your program?
f. What skills do you think are critical to being successful in your position?
g. What are the most significant influences that have led you to your current position?
h. What features do you think each of these five String Academy programs has in common?
i. What do you think are the most significant elements of your program as a whole that have led to your program’s success?
j. What sorts of evidence of success have come about that can be attributed (fully or in part) to your program?
   a. Things to consider: accomplishments of students, faculty, parents, or any other person related to the program; impact on other organizations, the surrounding community, country, or world; impact on string pedagogy as we know it today; anything else?

A. Instructional Program

a. How does the instructional design change as students get older?
   i. Things to consider: length of private lessons and group classes; instruction in theory, rhythm, and ear training; higher expectations for students; incorporation of chamber or orchestral ensembles; cooperation with other local arts organizations.

b. To what extent is the curriculum on stringpedagogy.com incorporated into your instructional method?

c. In what ways might your curriculum deviate from what is on stringpedagogy.com?

d. To what extent do teachers teach the same curriculum? To what extent might their individual practices differ?

e. Are students ever permitted to participate in private lessons only and not in group classes?

f. How often do students perform? What type of performances are they engaged in?

g. How often do you organize special events and what types of events are they (i.e., master classes, guest artist performances, workshops)?

h. Is part of your mission to train future teachers? If so, please describe how this is done.
   i. Pedagogy degree or pedagogy courses?
   ii. Observations, helper lessons, assisting with instruction, assignments, organizational duties? To what extent?
i. Is anything done to educate parents about your program and their involvement?

j. How has your class schedule been determined, and what factors were taken under consideration in scheduling?

   i. Possible considerations: conflicts for students (e.g., soccer practice, ballet, school events), better times for students to concentrate, teacher schedules, facility schedule.

k. Between what ages are beginning students typically accepted, and are exceptions ever made?

l. Do you ever have to turn students away? If so, for what reasons?

m. In what ways might you incorporate a transfer student into your program?

n. Do you have any students with special needs? How do you address them?

o. Have you ever expelled any student(s) and for what reason(s)?

B. Geographic and Physical Setting

a. Has the local setting of your program affected how your program is organized today? In what ways?

   i. Things to consider: population; large city, college town; tendency for people to stay in town or move in and out regularly; ease of transportation or parking for students; weather, climate; culture.

b. Please describe your facilities.

   i. Number and size of private teaching studios
   
   ii. Number and size of group classrooms
   
   iii. Equipment in the rooms (piano, chalkboard, chairs, metronome, music, stands, etc.)
   
   iv. Are all rooms in the same building or in different buildings?
   
   v. Do faculty members share any of the rooms or studios? Are any rooms or studios for exclusive use by certain faculty members?
   
   vi. Are your facilities adequate? Have there been any improvements to your facilities during your tenure or before? Is there anything that you would like to see improved?

c. Do you have relationships with any other local arts organizations? Possible examples: a youth orchestra; public school music programs; professional performing organizations; performance venues; art galleries; dance studios; additional programs offered by or in conjunction with the host institution.

C. Organizational Structure and Administration

a. How big is your program?

   i. Number of faculty and students
   
   ii. Number of different classes and ability levels
   
   iii. Number of additional employees not classified as faculty

b. Is there an advisory board that assists in the operations of your program? If so, may I see a copy of its bylaws?

c. Does your program have any specific tax classification (i.e., as a nonprofit organization)?
d. Are there any other members of your organization who hold titled positions? How many, and what are their titles?
e. Do you have a relationship with a host institution such as a college or university?
   i. What are the advantages of this relationship for your program?
   ii. What are the advantages of this relationship for the host institution?
f. How is your administration organized?
g. Does the host institution provide any administrative or instructional services for your program?
   i. Possible examples: teaching or administrative office space; phone; utilities; office supplies; postage; bookkeeping services; printing or copying services; janitorial services; rehearsal or performance space.
   ii. Are these services provided in-kind or for a fee?
h. Do any faculty members teach for both the program and the host institution?
i. How does the mission of your program relate to the mission of the host institution (if applicable)?

D. Finances
a. Sources of funding
   i. Tuition: What is the cost of tuition? Does the cost change as students progress?
   ii. Do you receive any individual, corporate, foundation, or government support? What types of donations have you received (e.g., cash, services, materials)?
   iii. Have you received any grants? If yes, please explain.
   iv. Is any revenue generated from fundraising?
   v. Is any revenue generated from ticket sales?
   vi. Are there any budget allocations from the host institution?
   vii. Do you have an endowment?
   viii. Is there any income from investments?
   ix. Do you ever rent out your facilities or provide services that generate revenue for your program?
   x. Are there any other miscellaneous sources of funding?
b. What percentage of total revenue does each source represent?
c. Does the host institution generate any revenue from your program?
d. What percentage of your budget is allocated to each of the following?
   i. Faculty salaries and/or benefits; professional development funds
   ii. Facility overhead costs (i.e. rent, utilities, insurance)
   iii. Financial aid
   iv. Professional services: legal, fiduciary oversight
   v. Administrative salaries and benefits
   vi. Marketing/advertising
   vii. Supplies and equipment
e. Does the host institution incur any expenses as a result of your program?
f. Do you offer financial assistance, work study, and/or scholarships for students (full or partial)?
   i. What criteria are used to award financial assistance or scholarships (e.g., audition, competitions, ability, progress, financial need, teacher recommendation, performance excellence)?
   ii. What are financial assistance awards and/or scholarships used for (e.g., full or partial tuition, instrument rental or purchase, transportation costs, etc.)?
   iii. How are scholarships funded?

E. Student Recruitment
   a. How do you market your program in order to attract new students?
   b. Do you survey families or students about why they enrolled in your program? How they heard about your program?
   c. Are your promotions ever targeted to specific audiences in any way (e.g., preschools, daycare centers, libraries, inner-city schools, etc.)?

F. Personnel
   a. How are faculty members recruited, and based on what criteria are they selected?
   b. Do you describe job expectations for each faculty member before their hire, as part of the notice of a faculty vacancy, or upon their hiring, as a job description or description of duties?
   c. Is there an evaluation system tied to the description of duties?
   d. Do you have any other policies and/or procedures in place related to hiring and/or evaluating faculty members?
   e. What duties do new faculty members have? How might this change over the length of their tenure here?
      i. How many private students and group classes taught?
      ii. Other duties such as required faculty performances, recruitment, administrative, etc.?
      iii. Do certain duties vary between faculty members?
   f. Are faculty paid on an hourly basis or do they receive a salary?
   g. Are faculty provided any health benefits as part of their employment?
   h. Once a faculty member has been hired, does he or she participate in any training, formal or informal?
   i. Are faculty members encouraged to engage in any ongoing professional development and in what ways?
APPENDIX B: INSTITUTIONAL REVIEW BOARD LETTER

May 9, 2013

Louis Bergonzi
Music
318 Music Education Annex
M/C 056

RE: The Organizational Structure and Development of String Academies in the United States
IRB Protocol Number: 13806

EXPIRATION DATE: May 8, 2016

Dear Dr. Bergonzi:

Thank you for submitting the completed IRB application form for your project entitled The Organizational Structure and Development of String Academies in the United States. Your project was assigned Institutional Review Board (IRB) Protocol Number 13806 and reviewed. It has been determined that the research activities described in this application meet the criteria for exemption at 45CFR46.101(b)(2).

This determination of exemption only applies to the research study as submitted. Please note that additional modifications to your project need to be submitted to the IRB for review and exemption determination or approval before the modifications are initiated.

We appreciate your conscientious adherence to the requirements of human subjects research. If you have any questions about the IRB process, or if you need assistance at any time, please feel free to contact me or the IRB Office, or visit our website at http://www.irb.illinois.edu.

Sincerely,

Dustin L. Yocum, Human Subjects Research Exempt Specialist, Institutional Review Board
c: Aaron Jacobs
APPENDIX C: BALTIMORE OFFERINGS

The Baltimore site has seen a unique evolution compared to the other string academy sites, resulting in the creation of three distinct programs. This evolution began in 1987 with the initiation of the Young People’s String Program (YPSP), which is organized much in the same way as the other sites. The two additional programs discussed in this study are the Performance Academy for Strings (PAS, initiated in 2010) and the Pre-Conservatory Violin Program (PCVP, initiated in 2007).

However, the String Department of The Peabody Preparatory has designed a large assortment of programs that were not discussed in this study. Those offered during the 2012-2013 academic year were as follows:

- Chamber Music Program: this is outside the PAS and is open to anyone in the area. One does not need to study privately at Peabody in order to participate in this program.
- Prep Elementary String Group (Grades 2-6)
- Prep String Ensemble (Grades 4-8)
- Young Artists Orchestra (Grades 6-12)
- Peabody Youth Orchestra (Grades 7-12)
- Teen String Club (age 12 and up): weekly class to explore nontraditional repertoire such as folk music, jazz, ragtime, and popular music in an informal ensemble setting.
- Introduction to Viola (ages 7-10)
- Cello for Adults: Beginner, 1, 2, 3, and 4
- Violin for Adults: 1, 2, and a final class not numbered
- Repertoire Classes are offered at the downtown and Towson campuses weekly. Students in YPSP, PAS, and PCVP are expected to perform within their own programs, but may also participate in repertoire classes if there is room.
- Viola Power Performance Class (Johns Hopkins Peabody Institute, n.d.-m)

This assortment of programs was created and are offered in accordance with the twofold mission of The Peabody Preparatory:

[The Preparatory] offers gifted children and adolescents the opportunity to realize their highest potential as leaders of the next generation of performing artists. In addition, it provides an education in music and dance to all members of the community who desire it, regardless of age, professional intention, or previous
training. This dual mission is based upon the notion that every individual has the capacity for artistic expression at some appropriate level of understanding and skill. (Johns Hopkins Peabody Institute, n.d.-a)

The three programs (YPSP, PAS, and PCVP) discussed in this study are largely aligned with the first portion of this dual mission, and they were chosen due to the influence drawn from Mimi Zweig and the string academy model.

Figure C1, taken from The Peabody Preparatory String Department’s student information packet, provides a good visual representation of the various programs offered.
Young People’s String Program

A unique feature of the YPSP in comparison to programs at other sites is the way in which beginners are incorporated into the program; special introductory classes called “Fiddlers Four” and “Cello Fun” arrange students ages 4-5 in groups of two to four students at a time. A similar “Introduction to Cello” class is offered year-round (the equivalent violin class is only offered in the summer) to beginning cello students ages 7-9, which the cello faculty has used as an effective recruiting tool (R. Henry, personal communication, July 7, 2013; Johns Hopkins Peabody Institute, n.d.-p). Students in these beginning classes do not receive individually scheduled private lessons; however, both private and group experiences are incorporated into the structure of class meetings, in which students participate until they are ready to be incorporated into YPSP beginners classes (Johns Hopkins Peabody Institute, n.d.-p). YPSP students progress through about Suzuki book 6 to 8 in violin or book 3 or 4 on the cello before they are eligible to participate in more advanced programs (R. Henry, personal communication, July 7, 2013).

Performance Academy for Strings

The Performance Academy for Strings (PAS) was initiated in 2010 for the 2010–2011 academic year (R. Henry, personal communication, May 6, 2014). It is a program for serious string students, grades 7-12, at the upper intermediate and advanced levels, who must audition in order to enroll: “This program is for students who want to pursue a career in music, and for students with other professional aspirations, playing and working seriously, and for whom music is their major non-academic endeavor” (Johns Hopkins Peabody Institute, n.d.-d). PAS includes a weekly musicianship class, which includes
work in eurythmics, ear-training, solfège, and basic theory (Johns Hopkins Peabody Institute, n.d.-d). PAS small ensembles include the Peabody Violin Choir, Peabody Cello Choir, and Performance Academy Chamber Music (Johns Hopkins Peabody Institute, n.d.-d). Younger PAS students have an hour of violin or cello choir followed by an hour musicianship class (first semester) or work in chamber ensembles such as string quartets (second semester) (R. Henry, personal communication, May 6, 2014). Older PAS students do not attend violin/cello choir or musicianship classes. Instead, they work in a small chamber ensemble for two hours (R. Henry, personal communication, May 6, 2014). The Academy Performance Class includes all students:

It provides students an opportunity for students to perform for both Peabody faculty and guest artists. Students will also receive training in master classes with guest artists on a variety of enrichment topics including movement, injury prevention, theory/history, improvisation, and more. (Johns Hopkins Peabody Institute, n.d.-m)

The Academy Performance Class is usually separated by instrument into different sections, but sometimes these sections are combined for special presentations. PAS large ensembles include the Peabody Youth Orchestra (PYO) and the Young Artists Orchestra (YAO). Participation in an orchestra is open to anyone but is required for PAS students and included in their tuition (Johns Hopkins Peabody Institute, n.d.-d). Every year a String Orchestra Festival, in which PAS students collaborate with violin students from the Pre-Conservatory Violin program, is held for three weeks in January in lieu of other PAS activities (Johns Hopkins Peabody Institute, n.d.-d). Additionally, PAS students are provided an accompanist for PAS master classes and events, and they receive six hours of private rehearsal time per year as part of their tuition (Johns Hopkins Peabody Institute, n.d.-d).
Rebecca Henry described the evolution of the PAS as follows:

Violin Choir used to be under the YPSP but was moved out of the YPSP not only to give students the psychological benefit of feeling that they were in something separate and had graduated from the YPSP, but also to create more inclusion for serious students in middle school and early high school who were moving into town and had not grown up in a modified Suzuki program. Later, when the PAS was created, the Violin Choir was incorporated into it. Now students need to audition for the PAS to participate in Violin Choir. … We like the fact that you can audition for the Performance Academy and that means that you and the family have decided that you would like to do more, but if you get to the end of the YPSP and you don’t want to commit the time needed to be in the Performance Academy, you can take ensembles and classes a la carte in addition to your lessons. (R. Henry, personal communication, July 7, 2013)

Pre-Conservatory Violin Program

The Pre-Conservatory Violin Program (PCVP), created and directed by Rebecca Henry, was initiated in 2007 for the 2007–2008 academic year (Johns Hopkins Peabody Institute, n.d.-g).

The Pre-Conservatory Violin Program supports and challenges the most advanced, serious, and gifted violinists at the Preparatory. Young artists in this program are playing at the advanced level and display the artistic potential to pursue a performance career in music. (Johns Hopkins Peabody Institute, n.d.-g)

The PCVP is underwritten by the Dorothy Richard Starling Foundation, which covers the full cost of tuition for the PCVP program-specific class (details below). However, students are still billed for individual private instruction. Students are also required to register for at least one other ensemble, such as Performance Academy Chamber Music, or the Peabody Youth Orchestra (Johns Hopkins Peabody Institute, n.d.-g). Eight violin students, selected by audition, participate in this program, studying privately with Peabody Conservatory faculty. During the program-specific class, called the Pre-Conservatory Violin Class, students work on technique, solo performance in a master class setting, and ensemble performance of two- to four-part violin music (Johns
Hopkins Peabody Institute, n.d.-g). Often, cellists and violists from the PAS join them for special performance projects. Members receive 12 hours per year of rehearsal time with a pianist, career guidance, and performance opportunities; special performances, collaborations and trips are arranged for this group (Johns Hopkins Peabody Institute, n.d.-g).
APPENDIX D: SEQUENCES OF GROUP INSTRUCTION

Figure D1. Baltimore sequence of group instruction (2013–2014).

Note. YPSP = Young People’s String Program; PAS = Performance Academy for Strings; PCVP = Pre-Conservatory Violin Program; PAC = Performance Academy Class; CM = chamber music; MU = musicianship class; CC = cello choir; VC = violin choir; YO = youth orchestra. Participation in group instruction requires enrollment in private lessons. Numbers in parenthesis indicate the number of group sections where there was more than one. Corresponding figures for the other sites have only one section per group. Sources: R. Henry, personal communication, July 7, 2013; Johns Hopkins Peabody Institute (2013a).
Figure D2. Bloomington sequence of group instruction (spring 2014).

Note. Participation in group instruction requires enrollment in private lessons. Because sections changed from fall 2013 to spring 2014, this figure represents the sequence for spring 2014 only. During the entire 2013–2014 academic year, the Cello Virtuosi and Violin Virtuosi sections were combined to form chamber ensembles and a chamber orchestra that met weekly, but were separated for master classes (MC). However, during both the 2012–2013 and 2014–2015 academic years, Cello Virtuosi and Violin Virtuosi sections were separate for weekly meetings, although combinations of academic-year-long chamber ensembles and scattered chamber orchestra performance projects were still present. Sources: Indiana University Jacobs School of Music (n.d.-d); M. Zweig, personal communication, July 27, 2013 and September 22, 2014; Wheeler & Zweig (2007), p. 15.
Figure D3. Evanston sequence of group instruction (2013–2014).

Figure D4. Laramie sequence of group instruction (2013–2014).

Figure D5. Milwaukee sequence of group instruction (2013–2014).

APPENDIX E: MASTER CLASS PRESENTERS AND ARTISTIC ADVISORS

Data for specific master class presenters at the Baltimore, Bloomington, and Milwaukee sites were provided to varying degrees.

In Baltimore, for the 2013–2014 academic year, four guest artists and one Peabody Conservatory faculty member were engaged to work with students in the PCVP program, including Soovin Kim, Donald Weilerstein, Markus Placci, Roy Sonne, and Elisabeth Adkins (Johns Hopkins Peabody Institute, n.d.-g). Other recent guests have included Igor Yuzefovich, Stefan Jackiw, Jonathan Carney, Nicholas Kendall, and Mimi Zweig, and other Peabody Conservatory faculty members such as Herbert Greenberg, Violaine Melancon, Keng-Yuen Tseng, and Victor Danchenko, are engaged regularly (Johns Hopkins Peabody Institute, n.d.-g).

For Bloomington, the following list of presenters applies to the 2014 Summer String Academy only: Richard Aaron, Atar Arad, Sara Caswell, Eric Edberg, Amir Eldan, Mauricio Fuks, Mark Kaplan, Jenryk Kowalski, Kevork Mardirossian, Clancy Newman, Stephen Shipps, Melia Watras, Steve Wyrczynski, and Mimi Zweig ([Zweig?], ca. 2014).

For Milwaukee, a larger and more comprehensive list of guest master class artists could be compiled: Richard Aaron, Frank Almond, Adele Anthony, Joshua Bell, Corey Cerovsek, Emilio Colon, Steven Doane, Rostislav Dubinsky, Nicolo Eugelmi, Rodney Ferrur, Pamela Frank, Jennifer Frautschi, Matt Haimovitz, Lynn Harrell, Gary Hoffman, Jerry Horner, Juliette Kang, Myron Kartman, Leonidas Kavakos, Mark Kosower,
Wolfgang Laufer, Midori, Johannes Moser, Pacifica String Quartet, Vadim Repin, Kim Scholes, Gil Shaham, Dmitry Sitkovetsky, Lucy Stolzman, Saeunn Thorsteinsdottir, Trio Sonnerie, Uri Vardi, Ying Quartet, the Yukimi Kambe Consort (Japan), Pinchas Zukerman, and Mimi Zweig ([Drexler], ca. 2000; [Drexler], ca. 2010; [Drexler], ca. 2011; [Drexler], ca. 2012).

The String Academy of Wisconsin (Milwaukee) Artistic Advisors include:

Frank Almond
Carl Becker
Joshua Bell
James Oliver Buswell
David Cerone
Eileen Tate Cline
Fine Arts Quartet
Miriam Fried
Kim Kashkashian
Donald McInnes
Janos Starker
Yo Yo Ma
Pinchas Zukerman
Mimi Zweig
(String Academy of Wisconsin, n.d.-a)
APPENDIX F: FIGURE 2 CALCULATIONS

Adjusting rates to 15 weeks in Figure 2 enabled for the most accurate calculations when comparing the five sites. In making these calculations, I needed to account for several factors. For example, the amounts calculated for Laramie and Milwaukee are only very close approximations, not exact, since the number of private and group lessons offered is not the same, and since private and group lesson costs cannot be separated out due to the combined rates offered at each site. Baltimore amounts are also very close approximations since different combinations of private lesson and group class durations can occur. For example, for students taking 30-minute lessons, group classes of 45 minutes and 60 minutes are both possible, and the two time lengths are billed at different rates. Therefore the mean cost of 45- and 60-minute group classes was added to the cost of 30-minute private lessons to determine the amounts used in Figure 2. Performance opportunities for students present another variable, as participation in these events is covered by tuition. However, despite these variables, Figure 2 represents an extremely close approximation of overall tuition rates.

Amounts for Baltimore in Figure 2 apply only to the Young People’s String Program (YPSP) of The Peabody Preparatory, which has the highest tuition rates by far, but has a lower rate for beginners than the other two applicable sites, Bloomington and Milwaukee. This is because the YPSP offers special introductory programs for beginners that are unique to the site, which include both private and group experiences. Students remain in these introductory programs for varying lengths of time based on their individual progress and are then integrated into the full YPSP, which bills private lessons
and groups separately.\textsuperscript{30} Students enrolled in the Performance Academy for Strings (PAS) incurred a tuition fee of $1,260 per semester during the 2012–2013 academic year in addition to private lesson fees (Johns Hopkins Peabody Institute, 2013a). The Pre-Conservatory Violin Program (PCVP), on the other hand, is underwritten by a grant from the Dorothy Richard Starling Foundation; however, PCVP students still pay for the cost of private lessons and any other activities in which they may engage at Peabody Preparatory, such as orchestral or chamber music (R. Henry, personal communication, July 7, 2013).

Bloomington and Milwaukee also offer a beginning rate, which includes 30-minute private lessons and group classes, that students can take advantage of during their first two full semesters of study. Beginning rates at all three sites (Baltimore, Bloomington, and Milwaukee) are offered as an enrollment incentive and to aid recruiting. Baltimore and Milwaukee are similar in the fact that rates for 90-minute lessons are advertised in their offerings, whereas Evanston and Laramie are the only two sites that do not advertise a beginner’s rate or a 90-minute rate.

Beginning rates and 90-minute lesson rates have not been incorporated into Figure 2. Also excluded are the additional fees collected by three programs: a $50 one-time registration fee and a $10 yearly activities fee in Baltimore, a $15 registration fee per semester in Bloomington, and a $15 materials fee per semester in Milwaukee.

\textsuperscript{30} See Appendix C for additional explanation of beginner programs in the YPSP.
APPENDIX G: SITE DIRECTOR PROFILES

Baltimore

Rebecca Henry

- Site: The Strings Department of The Peabody Preparatory of The Johns Hopkins University; Baltimore, Maryland
- Scott Bendann Chair in Classical Music: The Peabody Institute of The Johns Hopkins University
  - Peabody Preparatory: Chair of the String Department; Director of the Pre-Conservatory Violin Program; Co-Director of the Peabody Chamber Camp; private instructor of violin and viola
  - Peabody Conservatory: Faculty in Violin and Viola Pedagogy; teaches violin and viola minor applied lessons; teaches pedagogy courses; mentors students in the Masters of Performance/Pedagogy degree
- Assistant Professor of Viola: Gettysburg College Sunderman Conservatory
- Lecturer, String Pedagogy: University of Maryland School of Music, College Park, MD
- Faculty: Summer String Academy and Retreat for Professional Violinists and Violists, Indiana University Jacobs School of Music
  - Private instructor of violin and viola for the Summer String Academy; teaches classes and meets with teachers individually for the Retreat for Professional Violin and Viola Teachers
- Co-Owner, ViolinPractice.com. (R. Henry, personal communication, November 9, 2015; Johns Hopkins Peabody Institute, n.d.-j)

Rebecca Henry is on the faculty at The Peabody Institute of Johns Hopkins University in Baltimore, where she helped to create the Performance/Pedagogy master’s degree program and teaches Violin Pedagogy and a series of Pedagogy Workshops. As chair of The Peabody Preparatory String Department, she has guided the development of one of the premier precollege string programs in the country, teaches violin and viola, and directs the Peabody Pre-Conservatory Violin Program.

Ms. Henry is also Assistant Professor of Viola at the Gettysburg College Sunderman Conservatory of Music and teaches string pedagogy at the University of Maryland. She is in the Washington Chamber Orchestra and performs regularly in faculty chamber ensembles. During the summers she returns to her alma mater and teaches at the Indiana University Summer String Academy and the Retreat for Professional Violinists and Violists.

Ms. Henry has presented master classes and workshops throughout U.S and in Canada and Turkey, co-edited two series of contemporary music for violin ensembles, and does consulting work for music studios and schools. She is co-founder of www.ViolinPractice.com, which provides an integrated method for
young violinists and pedagogical videos for teachers and advanced players as well as other resources that provide support to students, parents, and teachers in their journey towards effective and creative practice. Her former students are performing and teaching around the world. (R. Henry, personal communication, November 9, 2015)

Bloomington

Mimi Zweig

- Site: The Jacobs School of Music String Academy at Indiana University Jacobs School of Music; Bloomington, Indiana
- Professor of Music, violin and viola: Indiana University Jacobs School of Music
  - Applied instructor for university violin and viola students; teaches string pedagogy courses for undergraduate and graduate students
- Director: Jacobs School of Music String Academy, Summer String Academy and Retreat for Professional Violin and Viola Teachers
  - Private instructor of violin and viola; teaches group classes and the Jacobs School of Music Virtuosi, mentors String Academy teachers and graduate students; oversees all operations and artistic decisions
- Owner: StringPedagogy.com (Indiana University Jacobs School of Music, n.d.-a; M. Zweig, personal communication, November 9, 2015)

Mimi Zweig is currently Professor of Violin at the Jacobs School of Music and Director of the Indiana University String Academy. She is currently in her 40th year of teaching at Indiana University. Since 1972 she has developed precollege string programs across the United States. She has given master classes and pedagogy workshops in the United States, Mexico, Canada, Israel, Japan, Argentina, Brazil and Europe. She has produced Mimi Zweig StringPedagogy.com, an innovative web-based teaching tool, which is being accessed worldwide. In the spring of 2006, American Public Television released the Emmy-nominated documentary, Circling Around: The Violin Virtuosi, featuring String Academy students. Her students have won numerous competitions and teach and perform worldwide. Her teaching and the String Academy are supported by the Dorothy Richard Starling Foundation. (M. Zweig, personal communication, December 1, 2015)

Evanston

Stacia Spencer

- Site: The Strings Division of the Music Academy at Northwestern University Bienen School of Music; Evanston, Illinois
- String Division Coordinator: Northwestern University Music Academy
  - Private instructor of violin and viola; teaches group classes; directs Northwestern Strings; organizes trips and special performances for Northwestern Strings; supervises String Division faculty; administration
Stacia Spencer is a senior lecturer in string pedagogy at Northwestern University Bienen School of Music and string coordinator for the Northwestern Music Academy. She also has been on the faculty of the Northwestern National High School Music Institute, teaching violin, viola, and chamber music. Prior to moving to the Chicago area, Ms. Spencer was an assistant professor of music at Indiana University School of Music, where she taught classes in violin and viola pedagogy and was the assistant to Mimi Zweig at the IU String Academy. Ms. Spencer has a special interest in contemporary music and has worked with composers in performing new pieces. An eclectic musician and performer, she has been a vocalist and jazz singer in the Jon Eaton Pocket Opera Company in Chicago and New York. As a singer and electric violist, she has also performed and recorded in the rock genre and was the singer and co-songwriter for the band Eggs @ 8:14.

Ms. Spencer is a founding artist and co-creator of NON:op, an experimental, multi-arts, non-opera collective that produces site-specific works for non-traditional venues. Ms. Spencer also designed and created “Teaching the Violin; Creating a Healthy Foundation,” the first MOOC (massive open online course) dedicated to teaching the beginning stages of violin pedagogy. The project was funded by Northwestern University and published on Coursera. She received her bachelors and master’s degrees in viola from Indiana University School of Music, where she studied with Mimi Zweig, Kim Kashkashian, and George Janzer. Ms. Spencer’s students have won many competitions and have been featured on “From the Top.” They also participate in their school orchestras as well as the Chicago Youth Orchestras and the Midwest Young Artists Orchestras. (S. Spencer, personal communication, December 1, 2015)

Laramie

Sherry Sinift

- Site: The String Academy of Wyoming; Laramie, Wyoming
- Director: String Academy of Wyoming
  - Private instructor of violin and viola; teaches group classes; manages all financial, administrative, and instructional aspects of the program; hiring, management, and supervision of personnel
- Academic Professional Lecturer: University of Wyoming
  - Teaches studio violin; teaches pedagogy courses; supervising teacher for the UW String Project; performances with the Summit Chamber Players.
• Faculty: Summer String Academy and Retreat for Professional Violinists and Violists, Indiana University Jacobs School of Music
  o Private instructor of violin for the IU Summer String Academy; teaches classes and meets with teachers individually for the Retreat for Violin and Viola Teachers. (S. Sinift, personal communication, November 15, 2015; String Academy of Wyoming, n.d.-b)

Sherry Sinift has been a devoted violin and viola teacher of beginning through professional-level students and a passionate advocate for string education for more than 30 years. She is currently founder and director of the String Academy of Wyoming and a supervising teacher for the UW String Project. The String Academy of Wyoming and the UW String Project serve approximately 150 young string players in Southeast Wyoming. The UW String Project has additionally provided teacher training to UW students for 13 years, many of whom are now impacting string education in the state and region. Former String Academy students have gone on to study at major music schools and have integrated music into their lives as professionals or as passionate amateurs.

Ms. Sinift is on the faculty of the University of Wyoming, where she teaches studio violin and a sequence of pedagogy classes designed to develop future teachers. She also performs with the Summit Chamber Players, a faculty chamber ensemble.

In the summer Ms. Sinift serves on the faculty of the Indiana University Summer String Academy and the Retreat for Professional Violinists and Violists. The IU Summer String Academy attracts advanced junior high and high school students from around the world who come together to practice and study intensively for four weeks. The retreat offers pedagogical training and individual lessons to teachers and professionals from the U.S. and many other countries.

Ms. Sinift has served as a guest teacher, clinician, adjudicator, and presenter nationally and internationally. As a performer she has also appeared regionally, nationally, and internationally as a soloist, orchestral musician, and chamber musician. (S. Sinift, personal communication, November 20, 2015)

**Milwaukee**

Darcy Drexler
• Site: The String Academy of Wisconsin, Milwaukee, WI
• Executive Director and Faculty: String Academy of Wisconsin
  o As Executive Director: Leads the school artistically; programming; hiring, leading the faculty; reports to the board of directors; management; fundraising
- As String Academy Faculty: private instructor of violin and viola; teaches Violin Virtuosi, advanced master class; “Teaching the Violin to Children” workshop for teachers
- Associate Lecturer in Violin and String Pedagogy: University of Wisconsin-Milwaukee (UWM) Peck School of the ArtsHeads up the Master of Music in String Pedagogy degree program at UWM; teaches master’s string pedagogy courses in violin and viola; teaches undergraduate courses in fundamentals of violin, fundamentals of viola, and string pedagogy. (String Academy of Wisconsin, n.d.-c)

Violinist Darcy Drexler is Director of the String Academy of Wisconsin (www.stringacademyofwisconsin.org) and leads the Master of Music in String Pedagogy degree program at UW-Milwaukee, where she teaches string pedagogy courses in violin and viola. Her students are playing in symphony orchestras and teaching throughout the United States, Brazil and China. She also is director of the popular Teaching the Violin to Children workshop, which takes place each July in Milwaukee. She has been a member of the Dallas Chamber Orchestra, Dallas Ballet Orchestra, Sinfonia da Camera, Hawthorne Quartet, Illinois Symphony, and the Killington (VT) Music Festival and plays with the Milwaukee Ballet Orchestra. She has previously taught at the Indiana University Summer String Academy, Wisconsin Conservatory of Music, and Illinois Wesleyan University Pre-College. Ms. Drexler holds degrees in violin performance from Southern Methodist University (B.M.) and University of Illinois-Urbana (M.M). (D. Drexler, personal communication, December 8, 2015)