Rural School String/Orchestra Programs: Profile and Recommendations

Dissertation

Presented in Partial Fulfillment of the Requirements for the Degree Doctor of Philosophy in the Graduate School of The Ohio State University

By
Blair Ashley Williams, M.M.
Graduate Program in Music

The Ohio State University
2016

Dissertation Committee:
Robert Gillespie, Advisor
Jan Edwards
Alan Green
Julia Shaw
Abstract

The purpose of this study was to examine the profile of rural string/orchestra programs and identify factors critical for successfully establishing new rural string/orchestra programs. Self-labeled rural survey respondents ($n=108$) were K-12, string/orchestra teachers and members of the National Association of Music Education (NAfME) from rural states. There were 343 total responses for a response rate of 12%.

The researcher discovered there was no way to directly contact rural string/orchestra teachers or isolate a representative sample using available means. Because of these limitations, the researcher concluded that serving not only rural string/orchestra teachers, but also all rural music teachers, is currently not possible. It is evident that a representative database of those teaching music in rural school districts does not exist. From the data gathered in the current study, rural music teachers acknowledge they need more support. Additional observations were made about the values and rationales for string/orchestra instruction, culturally responsive music instruction offered in rural areas, and the need for updated advocacy statements that reflect a more contemporary community of string instrument teachers and learners.

Special attention was given to creating a bibliography since one on teaching music in rural school districts did not previously exist.
Dedication

This document is dedicated to my grandmother who brought music to my heart.

“You are my sunshine…”

And to my parents who always believe in and support my dreams.
Acknowledgments

I am deeply grateful to my professors and colleagues who have offered support, assistance, guidance, and advice during my time at The Ohio State University and during the completion of this document during my first year as an assistant professor at Texas Tech University.

My sincerest appreciation is extended to my advisor, Dr. Robert Gillespie. Thank you for your time and assistance with this project and for your advice, wisdom, and daily inspiration that has helped to shape me into the string teacher I am today.

Thank you also to the members of my committee, Dr. Jan Edwards, Professor Alan Green, and Dr. Julia Shaw. I am indebted to you for your assistance, guidance during my coursework, and for providing models to which I will continue to aspire.

Thank you to Dr. Juliet White-Smith, Professor Mark Rudoff, Dr. Paul Robinson, Dr. Patricia Flowers, Dr. Anna Gawboy, and Dr. Daryl Kinney for your dedicated time of instruction and care during my time at OSU.

Thank you, Liubo (Ned) Li at the OSU Statistical Consulting Services, for your assistance in drafting the survey and for your survey and statistical insights.

Thank you, Rebecca Poorbaugh, Executive Assistant at the National Association for Music Education national office, for your assistance with the distribution of the survey. You were very helpful and I look forward to working with you again.
Thank you, Renee Wang, for being a supportive and thoughtful colleague! I appreciate the time you have taken to assist me with this study and for your assistance as I worked remotely from the OSU campus! You are a lifesaver!

Thank you to the students, faculty, and staff at the Texas Tech University School of Music. It is an honor to be a part of such an outstanding group of musicians, pedagogues, and scholars. Thank you for allowing me to be a part of it all!

Thank you, Matthew Bickley, for joining me on this crazy ride! You are my rock, my daily inspiration, my encourager, and at times, my prodder (!). I thank God each day for providing me with the perfect partner for this journey called our life.

Most importantly, I would like to thank my parents, Kent and Ruth Williams, for your love, prayers, understanding, and compassion over the miles and the years. You have been an unwavering foundation of support and I share this achievement with you.
Vita

May 2001 ........................................ Newton High School, Newton, Kansas

May 2006 ........................................ B.M.E. Music Education, Baylor University,
                                      Waco, Texas

2006 - 2008 .................................. Associate Director of Orchestras,
                                      Midway ISD, Waco, Texas

2008 - 2010 .................................. Director of Orchestras, Midway ISD,
                                      Waco, Texas

May 2012 .................................. M.M. Music Education, Kansas State
                                      University, Manhattan, Kansas

2012 - 2016 .................................. Graduate Teaching Associate, Department
                                      of Music, The Ohio State University,
                                      Columbus, Ohio

2015 to present .......................... Assistant Professor of String Music
                                      Education, Texas Tech University,
                                      Lubbock, Texas
Publication


Fields of Study

Major Field: Music

Minor Field: College and University Teaching
Table of Contents

Abstract........................................................................................................... ii
Dedication.......................................................................................................... iii
Acknowledgements........................................................................................ iv
Vita.................................................................................................................... vi
List of Tables.................................................................................................... xiii
List of Figures.................................................................................................. xv
Chapter 1: Introduction................................................................................... 1
  Background for the Study.............................................................................. 2
  Need for the Study....................................................................................... 3
  Purpose of the Study................................................................................... 5
  Significance of the Study............................................................................ 6
  Research Questions..................................................................................... 7
  Research Design.......................................................................................... 8
    Participants.............................................................................................. 8
    Survey Instrument.................................................................................... 9
    Data Collection Procedures................................................................... 11
  Definition of Key Terms............................................................................ 11
  Assumptions, Limitations, and Scope (Delimitations).............................12
<table>
<thead>
<tr>
<th>Title</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chapter Organization</td>
<td>12</td>
</tr>
<tr>
<td>Summary</td>
<td>13</td>
</tr>
<tr>
<td>Chapter 2: Review of Related Literature</td>
<td>14</td>
</tr>
<tr>
<td>Introduction</td>
<td>14</td>
</tr>
<tr>
<td>Methodology</td>
<td>15</td>
</tr>
<tr>
<td>Rationales and Values of String/Orchestra Programs in Public Schools</td>
<td>17</td>
</tr>
<tr>
<td>Associations</td>
<td>18</td>
</tr>
<tr>
<td>String Professionals and Other Advocates</td>
<td>25</td>
</tr>
<tr>
<td>Student/Parent/Community Rationales and Values of String/Orchestra</td>
<td>29</td>
</tr>
<tr>
<td>Program</td>
<td></td>
</tr>
<tr>
<td>Status and Profile of School String/Orchestra Programs in the United States</td>
<td>32</td>
</tr>
<tr>
<td>1960-1970</td>
<td>33</td>
</tr>
<tr>
<td>1970-1980</td>
<td>35</td>
</tr>
<tr>
<td>1980-1990</td>
<td>37</td>
</tr>
<tr>
<td>1990-2000</td>
<td>39</td>
</tr>
<tr>
<td>2000-2010</td>
<td>44</td>
</tr>
<tr>
<td>2010 to present</td>
<td>45</td>
</tr>
<tr>
<td>Impact of String Programs on Music Departments, Schools and Communities</td>
<td>47</td>
</tr>
<tr>
<td>Rural School Music/String/Orchestra Teaching</td>
<td>48</td>
</tr>
<tr>
<td>Unique Preparation and Continued Professional Development Needs for Rural School Teachers</td>
<td>49</td>
</tr>
<tr>
<td>Special Problems Encountered By Schools in Rural Areas</td>
<td>59</td>
</tr>
</tbody>
</table>
Appendix G: Study Introduction and Consent (2nd follow-up email) ..................... 241
Appendix H: Study Questionnaire ................................................................. 243
Appendix I: Recommendations for Starting a Rural String/Orchestra Program .... 278
List of Tables

Table 4.1: Estimated population range of respondent’s rural communities……………… 96
Table 4.2: Average distance traveled outside of the rural community, round trip, to take private string instrument lessons…………………………………………………………… 97
Table 4.3: Number of school buildings per rural school district by grade level……………… 99
Table 4.4: Number of students per district by grade level…………………………………… 100
Table 4.5: Indicated change in rural school district’s string/orchestra budget over the last 5 years…………………………………………………………………………………… 102
Table 4.6: Instructional space used for string/orchestra in Grades K-5, 6-8, and 9-12.. 103
Table 4.7: Music courses offered in rural school districts by grade level………………… 104
Table 4.8: Perceived level of support given to the overall school music program……… 106
Table 4.9: Differences in the perceived levels of support for Other music instruction compared to String/Orchestra instruction within the school district……………… 106
Table 4.10: Description of perceived support differences between Other school music instruction and String/Orchestra instruction……………………………………… 107
Table 4.11: Organization of string/orchestra classes by grade level…………………… 108
Table 4.12: Percentage of string/orchestra students on free or reduced lunch per grade level……………………………………………………………………………………… 121
Table 4.13: Attributes of critical factors according to the related literature……………… 126
Table 4.14: Rank average of critical factors in Any location and a Rural location…… 127

Table 4.15: Frequency of coded recommendations for starting a new rural string/orchestra program……………………………………………………………………………………………………… 128

Table 5.1: Current study coding of Gillespie and Hamann (2010) “Factors Important for Creating the New Program”…………………………………………………………………… 153

Table 5.2: Comparison of the Gillespie and Hamann (2010) factors to the current study……………………………………………………………………………………………………… 154

Table 5.3: Community similarities and differences between previous research and the current study………………………………………………………………………………………… 156

Table 5.4: Rural School District similarities and differences between previous research and the current study…………………………………………………………………… 157

Table 5.5: Rural String/Orchestra School Instruction similarities and differences between previous research and the current study………………………………………… 158

Table 5.6: Rural String/Orchestra Teachers similarities and differences between previous research and the current study…………………………………………………… 159

Table 5.7: Rural String/Orchestra Students similarities and differences between previous research and the current study…………………………………………………… 159
List of Figures

Figure 4.1: Total yearly budget for string/orchestra instruction......................... 101
Figure 4.2: Music courses offered in rural school districts by grade level.............. 105
Figure 4.3: Range of years string/orchestra instruction offered in rural schools...... 109
Figure 4.4: String/orchestra instruction offered by grade level.............................. 110
Figure 4.5: Full and part time string/orchestra teachers within each rural
school district.................................................................................................. 111
Figure 4.6: Number of concerts performed by rural string/orchestra programs by grade
level.................................................................................................................... 112
Figure 4.7: Average number of concerts by location performed per school year....... 113
Figure 4.8: Where school string/orchestra instruments and accessories
were purchased.................................................................................................. 114
Figure 4.9: Type and location of persons who maintained/serviced/repaired school and
student instruments.......................................................................................... 115
Figure 4.10: Where printed music and materials were purchased.......................... 116
Figure 4.11: Number of years taught by respondents in rural, suburban, and urban school
districts............................................................................................................. 118
Figure 4.12: Gender identified as majority for rural string/orchestra students by grade
level.................................................................................................................... 119
Figure 4.13: Ethnicity identified as majority for rural string/orchestra students by grade level…………………………………………………………………………………….. 120

Figure 4.14: Average percentage of string/orchestra students who take private lessons per grade level………………………………………………………………..…. 123

Figure 4.15: Percentage of string/orchestra students who pursue a music education degree………………………………………………………………………………..……… 124

Figure 4.16: Percentage of string/orchestra students who continue to play their string/orchestra instrument after graduation (alone or with others)……………. 125
Chapter 1: Introduction

Historians have documented both the history of music education and, more specifically, the history of string music education in the public schools (Birge, 1966; Keene, 1982; Abeles, Hoffer, & Klotman, 1994; Mark & Gary, 2007; Mark, 2013; Hamann & Gillespie, 2013). String class instruction in American schools began in 1911 with violin classes taught by Albert G. Mitchell in the Boston Public Schools. This modest beginning was followed by a period of growth in the number of string classes that were offered in public schools across the country. A brief decline occurred with the onset of the depression in the 1930s but was followed by a period of reawakened interest in the late 1940s and 1950s (Grover, 1960).

Researchers have documented descriptions of string programs located across the country, including within rural communities (Haack, 1981; Humphrey, 1989; Hamann, K.L., 2000). National music associations such as the American String Teachers Association and the Music Educators National Conference (now the National Association for Music Education) have created materials to help influence and encourage policy at the national, state, and local levels to promote the arts as a core component of a well-rounded education for all American students (Music Educators National Conference, 1999; Goodrich & Wagner, 2000; Music Educators National Conference, 2000; National String

**Background for the Study**

Previous studies have revealed that the number of school orchestra programs have increased since the 1970s (Leonhard, 1991; Smith, 1997a; Smith, 1997b; Gillespie & Hamann, 1998; Wendell, 1999; Hamann, Gillespie, & Bergonzi, 2002; Smith & Alexander, 2010; Gillespie, Russell, & Hamann, 2014). Advocates for string music education have encouraged the creation and promotion of new string music programs across the country in schools and communities (Dillon & Kreichbaum, 1978; Kjelland, 1987; Klotman, 2000; Moss, 2009). Most programs have begun in suburban areas (Gillespie & Hamann, 2010; Russell & Hamann, 2011; Gillespie, Hamann, & Russell, 2014). Additionally, administrators have indicated that they would add more string programs to their schools if money were available (Moss, 2002b).

Leaders in school string instruction (Dillon & Kreichbaum, 1978; Dillon-Krass & Straub, 1991; Klotman, 2000; Moss, 2002b; Moss, 2009; Brenner, 2010; Hamann & Gillespie, 2013) have used the following rationales to support string instruction in the schools:

1) Playing a string instrument blends multiple cognitive, physical, and creative processes that will benefit each individual musically, emotionally, socially, and culturally,

2) The string repertoire is one of the greatest contributions of Western civilization and string instruments are used the world over,
3) The symphonic literature provides additional performance opportunities for wind, brass, percussion, and vocal students already participating in their respective ensembles,

4) String instruments are available in fractional sizes to best accommodate a range of ages and body sizes,

5) String instruments can be taught heterogeneously, and

6) A string program can be a benefit to any school district by adding another performance experience to school band, choir, and general music curriculum.

Need for the Study


Attempts to increase string playing in rural areas have included symphonic education programs and the Rural Residencies Program (1994-2002), founded, funded, and administrated by the National Endowment for the Arts and Chamber Music America. The mission of these groups included performing on and teaching string instruments in
rural areas. Unfortunately, many of the ensembles simply performed in the communities and fewer taught students how to play a string instrument (Jacob, 1996; Romer, 1998; 25 years of CMA grant and award recipients, 2002; Rousso, 2006).

There is an increasing trend of string/orchestra class enrollment across the U.S. (Leonhard, 1991; Smith, 1997a; Smith, 1997b; Gillespie & Hamann, 1998; Wendell, 1999; Hamann, Gillespie, & Bergonzi, 2002; Smith & Alexander, 2010; Gillespie, Russell, & Hamann, 2014). Two studies have investigated the perceived impact of string instruction on music programs. Russell and Hamann (2011) found “a majority of music teachers felt that the string programs were beneficial and offered opportunities for student development as well as expanded opportunities within a music program” (Russell & Hamann, 2011, p. 49). Most recently, the Gillespie, Russell, and Hamann (2014) study found that the impact of the 150 identified string programs was positive on student outcomes, school music programs, and communities, as perceived by the string music educators involved in those programs. Additional benefits identified included “increased student participation in all music programs, more student collaborative opportunities, increased community and local business support, and the more comprehensive nature of the music curriculum” (Gillespie, Russell, & Hamann, 2014, p. 175).

It is important to note that the Gillespie, Russell, and Hamann (2014) study is one of the only investigations that contains data specifically on string instruction in rural areas. The investigators found that the impact of school setting (suburban, urban, rural) had no negative influence on existing programs for both students and curriculum. Those who enrolled in the new string programs were new students to music education classes in the schools. Therefore, this research suggests that the establishment of new string
instruction in rural settings would not negatively impact existing music education classes (Gillespie, Russell, & Hamann, 2014).

There is not an established or standardized definition of a rural school. The United States Department of Agriculture (USDA) relies on information from the U.S. Census Bureau, the Office of Management and Budget, and the U.S. Department of Agriculture Economic Research Services. Collectively, even these offices use different titles to label such areas. Rural areas have a population of less that 2,500 (U.S. Department of Agriculture & U.S. Rural Education Center, 2014). MTD Research (http://mtdresearch.com/) uses distance from an urbanized area or urban cluster to define rural in three specific categories (B. Yoder, personal communication, March 13, 2015). Previous research on the topic of string/orchestra program status has used self-labeled participants.

There is a need to examine the current profile of rural string/orchestra programs and the recommendations that current rural string/orchestra teachers suggest for successfully establishing and sustaining string programs in rural schools. Since previous research reveals benefits for music programs and those students enrolled in them, there is a need to determine effective strategies for creating more string/orchestra programs, specifically in rural areas. The data and findings may assist researchers, teachers, and administrators who strive to provide access to string instrument instruction to all students.

**Purpose of the Study**

The purpose of the study is to examine the current profile of rural string/orchestra programs and identify factors critical for successfully establishing new rural string/orchestra programs.
Significance of the Study

A large portion of schools (10,130 schools, 33.8%) in the country are labeled as rural while only 5,070 (21.5%) are urban or city and 4,780 (19.7%) are suburban. The National Center for Educational Statistics includes a fourth category labeled town that includes 3,280 schools (26.8%) (National Center for Educational Statistics, 2012).

Gillespie and Hamann (1998) found in their status report of school string programs, that most programs (56%) were located in suburban schools, about 30% were located in urban schools, and only 14% were located in rural schools. The metro-location with the least amount of students (suburban, 19.7%) contains the largest percentage of string programs.

Bergonzi (1995) found that when controlling for school characteristics, region, community size, school type, percentage of minority enrollment or of academic/remedial enrollment, or student-body socioeconomic status did not influence the likelihood of a school offering strings. These findings show that string programs can be started in any locale. However, “children in rural . . . school systems are often denied access to string programs, frequently because of the lack of qualified teachers, the cost of such programs, or the lack of interest culturally” (Brenner, 2010, p. 54). But it seems that while there have been increases in the number of string/orchestra programs across the country, growth is also occurring in some rural areas. Smith (1997a) found that 10% of all American string programs were located in rural communities. Gillespie and Hamann (1998) cite that string programs in rural communities contribute to 14% of the total number of string programs surveyed. Most recently, of the 150 newly created string programs between 1999-2009, 18% (or 27 programs) were located in rural settings (Gillespie, Russell, and Hamann, 2014).
Recently, there has been a renewed research interest in music in urban settings (Kindall-Smith, 2004; Albert, 2006; Lehmberg, 2008; Hunt, 2009; Bruenger, 2010; Kinney, 2010; Fitzpatrick, 2011; Shaw, 2015; Shaw, 2016), assisting researchers, teachers, and administrators to better understand the factors that contribute to nurturing a music program in urban schools. However, much less research has been done on the subject of rural music programs and even less specifically on rural string/orchestra music education programs.

String instrument instruction in K-12 schools is a necessary component of a complete music curriculum, including in rural schools. Equitable access to string/orchestra instruction is not only an issue in suburban and urban schools, but also in rural schools. In the end, it is the right of all students to have the opportunity to experience music through expressive awareness, personal involvement through musical participation, and music creativity (Pittman, 2003).

Research Questions

The following research questions were developed by the researcher for the successful completion of the study.

1. What is the current profile of rural string/orchestra programs as indicated by self-labeled, rural string/orchestra teachers?

2. What critical factors are integral to the success of a rural string/orchestra program based on those factors that have been discussed in the literature according to self-labeled rural string/orchestra teachers?

3. What suggestions do current self-labeled rural string/orchestra teachers have for the successful creation of new string/orchestra programs in rural schools?
Research Design

Participants

The current study used a quantitative survey design. A pre-pilot survey instrument was constructed. It was distributed to two graduate students in string music education and one graduate student from the Statistical Consulting Service at a university located in the Midwest. For the face validity of the survey instruments, participants were asked to comment on the clarity of ideas, instructions for respondents, timing of responses, and any additional suggestions (Niknafs, 2013). All three graduate students responded to the survey with constructive criticisms and suggested additional answer choices for some survey questions. In general, the respondents found the survey took between 15 to 25 minutes to complete, but that all questions included were relevant. The survey was revised accordingly with the assistance of the graduate student from the Statistical Consulting Service.

The revised survey instrument was distributed in the Midwest, Southeast, and Northeast. The first group of respondents consisted of 11 string/orchestra teachers participating in a national string teacher workshop that self-labeled the school at which they teach as rural. Participants were asked to comment on the clarity of ideas, instructions to respond, timing of responses, and to make any additional suggestions (Niknafs, 2013). Participants indicated that additional attention needed to be made in the questionnaire to address those school districts that may include both rural and suburban schools. Many of the teachers that participated in the pilot gave suggestions on how to include answer choices that would further clarify ideas as they pertained to current, rural string teachers. Again, the survey was revised with the assistance of a graduate student.
from the Statistical Consulting Service. The graduate student was able to assist the researcher in analyzing the value of each question toward the research questions and to categorize the critical factors in the second section of the questionnaire. This revised survey was piloted to single participants at summer string teacher in-services. Both participants indicated that the revised survey format was clear, concise, and easy to understand. They offered no additional suggestions for modification.

The respondents of the current study were 108 self-labeled rural, string/orchestra teachers who were current members of the National Association for Music Education (NAfME). Participants volunteered to participate in the survey via email solicitation from NAfME. Respondents were not compensated for their participation.

Survey Instrument

A questionnaire was developed and largely informed by findings from several studies on the status of string/orchestra programs in the United States. Accordingly, the instrument for the current study was adapted from survey instruments used in the following studies: *The Status of Orchestra Programs in the Public Schools* (Gillespie and Hamann, 1998), *Career Choice Among String Music Education Students in American Colleges and Universities* (Gillespie and Hamann, 1999), *Status of Orchestra Programs in the Public Schools* (Hamann, Gillespie, and Bergonzi, 2002), and *String Music Educators’ Perceptions of the Impact of New String Programs on Student Outcomes, School Music Programs, and Communities* (Gillespie, Russell, and Hamann, 2014).

The questionnaire was organized into sections based on the information the researcher intended to gather about the contributing factors towards a rural
string/orchestra program. The first section contained questions related to the profile of rural string/orchestra programs including questions in the following subcategories:

1. **Profile of rural string/orchestra communities** (municipality: size, business, parent, church, civic group, local fine arts organization, and college or university support, rapport of the community, invitations to string/orchestra ensembles to perform at events and community festivals),

2. **Profile of rural string/orchestra school districts** (school board, administration, counselor, athletics, and non-music teachers support, funding/budget, music or string-specific professional development, performance opportunities offered, instructional space, rapport of music department),

3. **Profile of rural non-string/orchestra school music instruction** (other music teachers support, mix of competitiveness and collegiality, collaboration, added instruction time/duties),

4. **Profile of rural string/orchestra school instruction** (specific instructional time, instructional space, class organization, start-year, number of string/orchestra staff, number of concerts/presentations, access to string instruments/accessories/repair),

5. **Profile of rural string/orchestra teachers** (state certified/licensed, organizational skills, administrative skills, communication skills, competitiveness, collaboration, inventive, variety of musical styles, contest success, experience teaching in a rural setting),
6. **Profile of rural string/orchestra students** (number involved, attrition, private lesson opportunities, class scheduling, job or chore responsibilities, balance of other activities and organizations),

7. **Profile of rural string/orchestra resources** (instrument shops, repair shops, printed music shops, online access, technology, school and personal instrument purchases, collaboration efforts with other string programs in the region), and

8. **Observed perceptions of string/instrument instruction** (string instruments fiddle, string instruments play in the symphony, learning to play a string instrument is difficult).

The second section contained questions related to the critical factors for successfully establishing new rural string/orchestra programs.

*Data Collection Procedures*

Survey data were collected using a NAfME membership list of self-labeled rural string/orchestra teacher membership.

**Definition of Key Terms**

The following terms are important in understanding the labels and groups that will be referenced in the present study.

**Rural schools:** Those schools identified by NAfME members as rural and the type of metro-location of the schools in which they teach.

**Strings or string instruments:** Bowed string instruments: the violin, viola, cello, and double bass.
**String/orchestra program:** A school district music curriculum that includes the teaching of the bowed string instruments including the violin, viola, cello, and double bass.

**String/orchestra instruction:** Instruction or teaching pertaining to the bowed string instruments, including the violin, viola, cello, and double bass.

**Assumptions, Limitations, and Scope (Delimitations)**

The current study is specifically concerned with the profile of self-labeled rural school string/orchestra programs and the recommendations that participant self-labeled rural school string/orchestra teachers have for the creation of rural string/orchestra programs. Self-labeled rural teachers were selected because the majority of string program research studies have used self-labeling as a means of identifying a description of the location. Although this study gathered valuable information from rural string teachers from across the country, the findings cannot be generalized to all rural string/orchestra programs. Each locale is unique.

The author may have a bias toward the subject of this study and every effort was been made to prevent any influence. The author is the product of a small string program in a public school system in what the USDA would label as a “town,” but has many characteristics of a rural area.

**Chapter Organization**

Chapter 1 is an introduction to the history and current profile of rural string programs. Additionally included is the purpose of the study, research questions, a brief methodological overview, and research design.
Chapter 2 is the Review of Literature. The lines of research that informed the current research appeared in the following themes: 1) Rationales and the Values of String Programs in Public Schools, 2) Status and Profile of String/Orchestra Programs in the United States, 3) Impact of String Programs on Music Departments, Schools, and Communities, and 4) Rural School Music/String/Orchestra Teaching.

Chapter 3 includes the methodology and design.

Chapter 4 includes the analysis of the quantitative data that was collected.

Chapter 5 includes the summary, conclusions, recommendations, and implications presented in Chapter 4. This chapter also includes implications for future research and recommendations for the advancement of rural string programs.

Summary

There is a need to gather profile information and recommendations from self-labeled rural school string/orchestra teachers so that researchers, teacher-educators, and current rural teachers can continue to develop their rural school string/orchestra programs. This study will determine the profile of current self-labeled rural string/orchestra programs in public schools across the United States as well as convey recommendations from rural string/orchestra teachers for the creation of additional rural string/orchestra programs. Currently, this study is the only one to examine the current profile of string instrument teaching in a specific metro-location (rural). It will provide a current picture to researchers, administrators, and teachers and will provide recommendations from current string teachers for the future creation and development of string programs in rural school districts across the United States.
Chapter 2: Review of Related Literature

Introduction

The purpose of the study is to examine the current profile of rural string programs and identify factors critical for successfully establishing new rural string programs.

In 1997, Smith found that string/orchestra instruction was not offered in 84% of school districts in the United States (Smith, 1997a, p. 40). Further, in rural areas with fewer than 2,500 people, only 10.4% of districts offered string/orchestra instruction (Smith, 1997b, p. 661). Gillespie and Hamann (1998) found that of string/orchestra programs, 56% were suburban, about 30% were urban, and only 14% were rural. However, a majority of schools (10,130 schools, 33.8%) in the country are labeled as rural, while only 5,070 (21.5%) are urban and 4,780 (19.7%) are suburban (National Center for Educational Statistics, 2012). The National Center for Education Statistics also includes a fourth category labeled town that includes 3,280 schools (26.8%).

There are few studies that investigate rural string music education programs. Bergonzi (1995) found that when controlling for school characteristics, region, community size, school type, percentage of minority enrollment or of academic/remedial enrollment, or student-body socioeconomic status did not influence the likelihood of a school offering strings. However, strings were more likely to be offered in high schools that were larger in size (Bergonzi, 1995, p. 37). Additionally, the Gillespie, Russell, and...
Hamann (2014) study found that the impact of school setting (suburban, urban, rural) had no influence on existing programs on either students or curriculum (Gillespie, Russell, & Hamann, 2014, p. 182). Those who enrolled in the new string programs were new students to music education classes in the schools (Gillespie, Russell, & Hamann, 2014, p. 184).

Additionally, rural schools are impacted by variables such as school size, multi-grade teaching, funding, technology, course offerings, quality of teachers, and cultural acceptance (Sur, 1941; Surwell, 1980; Reddick & Peach, 1984; Bonney, 1985; Jones, 1985; Stevens & Davis, 1988; Wohl, 1993; Dunbar, 1995; Wendell, 1999; Bouch, 2004; Isbell, 2005; Wilcox, 2005; Childress, 2006; Hunt, 2009; Hicks, 2010; Burkett, 2011; Cole, 2011; Spring, 2013).

Attempts to increase string playing in rural school districts have included symphonic education programs and the Rural Residencies Program (1994-2002) founded by the National Endowment for the Arts. These programs have served as musical outreach to rural areas, though many have shown effects in isolated areas only (Jacob, 1996; Romer, 1998; 25 years of CMA grant and award recipients, 2002; Rousso, 2006).

**Methodology**

The researcher created a controlled vocabulary list for searching databases. Databases included: *OCLC WorldCat, Music Index, Répertoire International de Littérature Musicale (RILM), Abstracts of Music Literature, Education Resource Information Center (ERIC), Education Research Complete, PsycINFO, Bibliographie des Musikschrifttums, Academic Search Complete, and International Index to Music*
Periodicals (IIMP). The A column contains the term associated with the setting of the current study. The B column contains words associated with the content area or instrument group of the current study. The C column contains words associated with the type of instruction term.

<table>
<thead>
<tr>
<th>A</th>
<th>B</th>
<th>C</th>
</tr>
</thead>
<tbody>
<tr>
<td>rural</td>
<td>music instrumental string</td>
<td>education class instruction</td>
</tr>
</tbody>
</table>

For column A, the research used the search term rural because that is the generally found term in the literature. When consulting other areas of academic study, a researcher may find terms such as nonmetropolitan or nonurban, but in the fields of music and education, the term most used is rural. For column B, music produced the most results, but did not always reflect a string aspect to the article content. Instrumental and string were better for producing results with content that was the most related to my topic. For column C, the researcher found that many times education was paired with music from column B. This seems reasonable because the topic is engrained within the larger topic of music education. The term class produced a few results, especially when paired with string from column B. Additionally, Library of Congress Subject Headings Rural schools, Rural, and Music were used to further the search.

To survey the literature related to the current study, the following studies are divided into four sections:

1. Rationales and Values of String/Orchestra Programs in the Public Schools
   a. Associations
   b. String Professionals and Other Advocates
c. Student/Parent/Community Rationales and Values of String/Orchestra Programs

2. Status and Profile of School String/Orchestra Programs in the United States
   a. 1960-1970
   b. 1970-1980
   c. 1980-1990
   d. 1990-2000
   e. 2000-2010
   f. 2010 to present

3. Impact of String/Orchestra Programs on Music Departments, Schools, and Communities

4. Rural School Music/String/Orchestra Teaching
   a. Unique Preparation and Continued Professional Development Needs for Rural School Teachers
   b. Special Problems Encountered By Schools in Rural Areas
   c. Music Programs in Rural Areas
   d. String/Orchestra Programs in Rural Areas

**Rationales and Values of String/Orchestra Programs in Public Schools**

Leaders in school string instruction (Dillon & Kreichbaum, 1978; Dillon-Krass & Straub, 1991; Klotman, 2000; Moss, 2002b; Moss, 2009; Brenner, 2010; Hamann & Gillespie, 2013) have used the following rationales to support string instruction in the schools:
1) Playing a string instrument blends multiple cognitive, physical, and creative processes that will benefit each individual musically, emotionally, socially, and culturally,

2) The string repertoire is one of the greatest contributions of Western civilization and string instruments are used the world over,

3) The symphonic literature provides additional performance opportunities for wind, brass, percussion, and vocal students already participating in their respective ensembles,

4) String instruments are available in fractional sizes to best accommodate a range of ages and body sizes,

5) String instruments can be taught heterogeneously, and

6) A string program can be a benefit to any school district by adding another performance experience to school band, choir, and general music curriculum.

Related research on these rationales and values fall into the following subcategories:

1. Associations

2. String Professionals and Other Advocates

3. Student/Parent/Community Rationales and Values of String/Orchestra Program

*Associations*

Organizations such as the American String Teachers Association, the National School Orchestra Association, and the Music Educators National Conference: String Instruction Committee spearheaded efforts to promote string education in American public schools.
Holmes (1957a) and Holmes (1957b) were two such reports. In *The Importance of Strings in Music Education*, Holmes listed values of school string instruction to include: Wealth of Musical Resources, Ensemble Playing, and Size is No Barrier. Holmes explained that there was an “infinite variety of shading and tone color produced by a well-trained string group” (p. 1) and that those who play string instruments could perform in the symphony, small duos or solos, and accompany other ensembles, such as the choir. Additionally, he encouraged the collaboration of strings with other instruments because, “Strings blend well with any and all instruments” (p. 2). Holmes also concluded that collaboration was a positive byproduct of string instrument performance. “The thrill of playing in a large ensemble is an experience not soon to be forgotten. Under proper conditions a spirit of cooperation and fair play, and an alert and sensitive attitude are developed to a high degree” (p. 2). No matter the size of the ensemble, organization, preparation, and teamwork were necessary. Finally, Holmes advocated that size of the community should not be a barrier for including string instruction. “The size of the community should not deter the establishment of a string program. Many a small school supports an excellent orchestra as well as a band” (p. 2).

Holmes outlined additional rationales and values in *Why Have a String Program*. “The music teacher or administrator who is content with a music program which provides for no string teaching may be, every year, denying worthy students the opportunity to develop what much ultimately become an important life factor” (p. 2). Holmes encouraged community engagement through the creation of a school string program and supported outreach to the community with the formation of a community orchestra. “From a string program, then, started in the public schools, could emerge this civic asset,
a project which offers the unique opportunity for life-long participation for students and players of all orchestral instruments” (p. 2-3). Holmes also promoted the performance of the greatest repertoire composed in the world as a value of string instruction. “The string repertoire is a repertoire of maturity, and the string student has more good music available to him on the way to maturity…” (p. 4).

Rolland (1957) also noted the rationale for the inclusion of strings in the school music program because, “Orchestra music has retained its supremacy” (p. 1). He argued that the wealth of repertoire composed for ensembles comprised of string instruments alone and ensembles that combine string instruments with woodwinds, brass, percussion, keyboard, and voice were works of art and a gift of humanity and culture (p. 3).

Together, the American String Teachers Association, the Music Educators National Conference, and the National School Orchestra Association published The Complete String Guide: Standards, Programs, Purchase, and Maintenance (1986). The authors maintained that all students should be given the opportunity participate in string instruction (p. 4). Included were rationales that supported string instruction in all school music education programs:

- Each student is entitled to the opportunity to explore classroom music activities, vocal activities, and the study of a band or orchestra instrument during his or her public school career.
- In addition to the school orchestra, many activities for stringed instrument performances exist.
- The orchestra’s literature is one of Western culture’s great treasures.
- Many students prefer the sound of an orchestra to that of a band and would rather participate in an orchestra program than a marching band program.
- It is important to remember that a school music program without orchestra activities seriously shortchanges those individuals that wish to study a stringed instrument and limits woodwind, brass, percussion, and vocal students.
• Many schools and communities support an orchestra program for utilitarian reasons, including memorial services, graduation ceremonies, and civic group performances.
• Playing a stringed instrument integrates a person’s physical, intellectual, and expressive qualities (p. 4-5).

Dillon-Krass and Straub (1991) wrote on behalf of the Music Educators National Conference. They restated the values outlined in The Complete String Guide: Standards, Programs, Purchase, and Maintenance, however they also added to the previous list. Those additions included:

• Many colleges and universities seek string players for their orchestras. Scholarships may be available to competent string players.
• Community orchestras welcome capable string players at a high school level or above. Music productions and performances of joint choral and orchestral works are popular in communities that support orchestra programs. Lifelong opportunities for playing stringed instruments abound (p. 2).

On behalf of the American String Teachers Association with the National School Orchestra Association, Goodrich and Wagner (2002) compiled materials on how to start a string program or save an existing one. Included in the guide was a list of values and benefits of string participation.

While we recognize and appreciate the study of music for its own beauty and value, many additional benefits exist that can be gained from playing a string instrument. When making a case to a school board or administration for adding or saving a string program, these values and benefits may help a non-musical audience buy into the program. They include the opportunity:

• to build critical thinking skills such as analysis, evaluation, and critical judgment: important facets of an aesthetic education.
• to receive a well-rounded education.
• to transmit cultural heritage and provide better cross-cultural understanding.
• to be aware of all facets of society through performance.
• for creative expression.
• for growth in self-discipline.
• for character growth, . . . learning to deal with successes, failures, joy.
• for personal reward, self-fulfillment, satisfaction.
• for personal achievement.
• for enhancement of self-esteem.
• for recognition.
• to grow in desire for perfection.
• to develop concentration.
• to develop physical coordination.
• to develop acute aural skills.
• to develop enhanced visual skills.
• to develop the ability to cope with stress in performance situations.
• for creative use of leisure time.
• for a social outlet.
• to have fun.
• for group playing at any age and any level of performance.
• for career choice.
• to become a connoisseur of an art form.
• for the development of unique talents and abilities.
• to play some of the finest music ever written.
• to learn about democratic and autocratic processes while playing in an ensemble.
• to gain leadership skills.
• to develop a sense of commitment and responsibility.
• to learn skills similar to those desired in a work place (p. 2).

Additionally, the authors outlined specific rationales for including string orchestra programs in the school music curriculum.

• A music program that does not have a string program is not a comprehensive music program.
• A school music program without a string program denies wind, brass, and percussion students the opportunity to perform as a full orchestra. A full orchestra experience will enhance the band student’s experience by giving them more solo responsibility. This in turn will turn them into better performers.
• A string program provides evidence of a school district’s commitment to quality education.
• Choral students may be given the opportunity to perform some of the great master works written for chorus and orchestra.
• Musicals can be performed using a full range of instrumentation in the pit.
• The orchestra literature, considered one of Western culture’s greatest treasures, can be programmed with a variety of types of music to give students a rich cultural experience.
• Some students prefer the sound of the string family, so they should be given the opportunity to play these instruments.
• Many colleges and universities recruit string students for the university orchestra. Often scholarship money is available.
• Many activities exist for string players in addition to their school program, including events sponsored by the state music association or the American String Teachers Association with National School Orchestra Association. These activities include solo recitals, solo and ensemble festivals, chamber music opportunities, musical production pit orchestras, youth symphonies, and summer camp programs.
• Non-traditional string classes provide opportunity to all students regardless of socioeconomic status, ethnicity, geographic location, school size, or regardless of talent.
• Many opportunities exist to continue playing after high school.
• Many schools use the orchestra for community performances including memorial services, graduations, receptions, and civic group performances.
• Students will have opportunities to play in churches and synagogues.
• Instruments are available in smaller sizes allowing students to start at an earlier age (p. 5).

The American String Teachers Association (2010) published a green paper entitled *The Future of Strings* prepared by the ASTA Executive Committee for Americans for the Arts. Values of string/orchestra programs that are included are similar to those previously identified. Additional values included: 1) opportunities and challenges in the performance and study of music of the world, and 2) the cultivation of life-long music making.

The Leagues of American Orchestras (2015) reported rationales for why a community supports an orchestra. Data was gathered from a survey of 800 random households in ten American cities. Those rationales included:

• Improves the quality of life
• Promotes understanding of other cultures
• Fosters pride in the community
• Contributes to the education and development of children and adults (p. 2).
The rationales were derived by community members and aligned with those that other string associations had previously recognized.

The *Why Strings* brochure published by the American String Teachers Association with National School Orchestra Association (n. d.) was a promotional brochure for string teachers to distribute along with their recruitment materials. On the brochure it stated, “A string and orchestral music education adds a unique dimension to a child’s life that cannot be fulfilled by any other type of instruction” (p.1). Other rationales and values of string/orchestra programs in the brochure included:

- Enhances a child’s quality of life. Provides creative, emotional, and social opportunities and can also lead to improvements in academic performance in other areas beyond music.
- All children are capable of learning to play a stringed instrument, regardless of “talent,” “giftedness,” or musical background. String classes have been successfully taught to diverse populations in diverse settings.
- String instruments come in a variety of sizes so that children as young as three years old can begin instruction.
- Orchestral music…cannot be performed without stringed instruments.
- Contemporary music increasingly relies on strings. Popular music genres that feature string instruments include jazz, country, pop, mariachi and Tejano. Other world cultures also use stringed instruments in their music making.
- Lifelong opportunities to perform on a stringed instrument abound. Greats in all fields have played stringed instruments for lifelong fulfillment counting among their number Thomas Jefferson, Benjamin Franklin, and Albert Einstein.
- Playing a stringed instrument enhances the enjoyment of music and leads to life-long appreciation of music.
- Colleges and universities often need string players for their orchestras and may offer scholarships to qualified students regardless of their intended academic major.
- Opportunities also abound for undergraduate string education and performance majors.
- A community benefits from area schools that offer a full complement of fine arts courses. Businesses often appraise the cultural climate of a region when making decisions about where to locate. Parents often base family relocation decisions on the strength of the arts programs offered by local school districts.
- Without a string program, a school district’s curriculum is incomplete and its students are underserved.
• In every school, there are students who are inherently attracted to the sound of stringed instruments. Without a string and orchestra program to provide access to string education, students are denied the possibility of realizing their potential (p. 2-3).

Additionally, string pedagogues and other advocates have contributed to the list of rationales and values supporting school string/orchestra programs.

*String Professionals and Other Advocates*

String/orchestra instruction is a necessary component of a complete school music curriculum (Dillon & Kreichbaum, 1978; Kjelland, 1987; Klotman, 2000; Moss, 2009). String professionals and other advocates have gathered data to expose further rationales and values of a string program in addition to those assembled by associations.

Chenoweth (1940) noted that just as the school bands and choirs have definitive functions, so too does the orchestra. He argued that this made the string ensemble and those that played string instruments valuable to the school and the community. The author listed string/orchestra performances in collaboration with the school operettas, junior and senior plays, vaudeville, and commencement as important events in that the school orchestra was vital. (p. 63). Chenoweth also noted that the value of wind students participating in the symphony orchestra and the choral students singing a masterwork alongside his or her instrumental colleagues was a unique musical experience (p. 64). Chenoweth corroborated with other string professionals and associations by acknowledging the importance of performing the wealth of musical literature written for orchestra. “…A student who never comes into contact with the orchestra and its literature is deprived of a vast tonal experience for which there is no substitute” (p. 64).
Dillon and Kreichbaum (1978) cited additional rationales and values in their manual for string/orchestra teachers.

Orchestra is a necessary part of the complete school program and should be included in the music curriculum for the following reasons:

1. Music cannot be taught properly and completely without an orchestra, as almost every great composer has spent a great deal of his time writing for orchestra.
2. Most state boards of education and accrediting agencies recognize that a music curriculum is not complete without an orchestral program.
3. Orchestras are more than ever the coming thing. We presently are experiencing a tremendous resurgence of interest in professional and school orchestras across the United States. Especially in smaller communities one finds new string programs. In the past ten years, sales of string instruments to school systems how more than doubled. In 1975 alone, the number of string instruments sold in the United States hit an all-time high as sales increased 43% over sales of 1974. (p. 3)

Kjelland (1987) provided suggestions to non-string music teachers to include strings as an option in schools. He argued that by continuing to grant access to the string/orchestra program all students were provided a more inclusive and collaborative music education experience.

Bona fide instrumental music educators must take equal responsibility for the string students in their programs…some of the more practical and immediate concern for doing so are to:

a. Keep string programs alive in the absence of full-time string specialist. Numbers are often not sufficient to employ a full-time string person in school systems that do not exploit traveling instrumental specialists (vertical staffing).

b. Preserve the existence and the integrity of school orchestras. Some of the best school string and orchestra programs are directed by non-string players.

c. Round out the band director’s teaching load in a given school or system which would then allow him or her to teach music (rather than math, English, etc.) full time.

d. Open up new areas of challenge and interest for the more experienced band directors who may be ready for a new dimension to their teaching experience and expertise.
e. Help promote a broader perspective as Music Educators rather than the traditional and narrowly specialized labels of band, orchestra and chorus. (p. 70)

Gillespie (1994) expressed the values of school orchestra programs based on experience and expertise. Those values included:

- Promotes hands-on learning.
- String repertoire is rich and rewarding.
- Having a string program showcases a school district’s commitment to quality education.
- String study affords children the opportunity to develop: unique talents, character, respect, teamwork, and quality of life.
- Future benefits of string study include: college scholarships, career options, and life-long music playing opportunities.
- Research indicates that string students are academically successful in school (p. 79-81).

Further, Gillespie encouraged, “If a string teacher does not understand the true values of strings in the schools, the orchestra program will not be around for long” (p. 82).

Klotman (2000) further endorsed that string instruction should be offered to all students. His rationales amplified those that had been previously reported and included:

- Strings are the only family, other than percussion instruments, that can be adapted entirely to the size of the child.
- The string instrument family has played a major role in the development of the world’s greatest musical culture.
- The music skills acquired through string playing contribute much toward the development of basic learning skills.
- The opportunities for an individual to produce a variety of expressive sounds on a string instrument exceed that of any other family of instruments.
- Whether one is playing in an ensemble or in a duet with another individual, personal and musical interaction in music is of the utmost importance.
- Participating in a string/orchestra program or in any music program contributes much toward an individual’s humanistic development through expressive, personal, creative outlets and through interaction with other players and cultures (p. 45).
Brenner (2010) reflected on the rationales that had been previously discussed in the literature and those that she ascertained from knowledge and experience. Additional rationales discussed by Brenner were:

- “The study of string instruments at a high level blends multiple cognitive, physical, and creative processes that will benefit each individual musically, emotionally, socially, and culturally” (p. 47).
- “String education has been successfully undertaken in many settings that do not necessitate high levels of talent, and is applicable to more than just the programs and students to whom it historically has been offered” (p. 54).
- “Instruments are available in fractional sizes, and therefore children can start instruction from a very young age. This opportunity to begin early supports the idea that children can begin to see themselves as artists or musicians in their initial education experience” (p. 54).
- “The active participation, physical movement, emotional expression, structured environment, and involvement in group activities often found in string classes may bring success to these children” (p. 56).
- “Strings are not limited to playing classical masterworks but are among the most versatile instruments stylistically and culturally, with music from virtually every style period from the late Renaissance to the present. Strings remain an important voice in contemporary music in both classical and popular genres” (p. 57).
- “String education has a unique contribution to make in terms of knowledge of string performing technique, as an example of a family of orchestral instruments that is integral to the European-Western classical tradition as well as multiple non-classical genres” (p. 62).

Benham (2011) found that performing a variety of repertoire helped students become interested in joining a string/orchestra program. “Increasingly, the string profession has seen an increase in interest in the performance of diverse musical styles from different cultural sources (such as the eclectic strings movement into the mainstream of string performance education), but access to string instruction does not reflect the same increasing diversity, and remains primarily limited to those students who are Caucasian living in suburban areas” (p. 29). Not only does the repertoire of old create avenues for student interest, so does musics of the world.
Mark (2013) also supported the value of a strong repertoire base for learning the instrument. “The ensembles most worthy of support are those possessing an authentic, wide-ranging repertory of the highest musical quality, such as the symphony, string, and chamber orchestras; the concert band; and choruses of all sizes” (p. 189). He acknowledged the diverse capabilities of the string instrument and the variety of repertoire that such ensembles perform.

Hamann and Gillespie (2013) provided information on how the presence of a string/orchestra program in a school system could be a positive addition stemming from the research of string professionals and advocacy organizations. They stated,

Not all school systems have orchestra programs. One that does shows the serious commitment to excellence in education. Schools with orchestra programs have a unique opportunity to touch their communities through performance. School orchestra performances in the community offer one way for the community to be reminded of the results of their support of their school system. The orchestra program brings recognition to the school system before the public. In addition, families often are attracted to particular communities because string instruction is available in the schools (p. 152).

The values stated above, along with those that students, parents, and communities deem valuable, combine to recognize the unique impact of string/orchestra programs have on school and the communities in which they reside.

Student/Parent/Community Rationales and Values of String/Orchestra Program

In every school there are students inherently attracted to the sound of string instruments (Moss, 2002b, p. 14). This has been further supported in the research of Gillespie, Russell, and Hamann (2014). Therefore the following rationales and values found in studies of students, parents, and community members help to understand the rationales and values of the string/orchestra program outside of the string/orchestra class.
Morehouse (1988) showed the relationship of selected attitudinal factors to dropout and retention in beginning string students. The researcher developed a questionnaire (String Student Attitude Measure, SSAM) to survey string students. Additionally, teachers were surveyed using the Minnesota Teacher Attitude Inventory (MTAI). Forty-seven Texas string teachers and their 1,229 beginning string students returned the questionnaires (p. vi). The following variables were found to be significant predictors of student retention and dropout in beginning string instruction:

- Attitude Toward Strings in a Class
- Attitude Toward Music Played
- Expected Overall School Grade
- Attitude Toward String Teacher
- Attitude Toward String Classmates
- String Teacher MTAI Raw Score
- Attitude Toward String Instrument Chosen
- Attitude Toward Playing in Concerts
- Ownership of Instrument
- General Overall Negative String Class Experience
- Perceived Parent Support
- Sex of Student
- Private String Lessons
- Attitude Toward Practicing
- Expected String Class Grade
- Perception of Improvement in Playing (p. 139).

Students placed a high value on access, repertoire, and grade received in the class.

Papinchak (1992) identified factors that influenced the retention of middle school string students in the commonwealth of Pennsylvania. String teachers, string students, parents, and peers completed a questionnaire. Significant predictors affecting middle school string student retention included:

- Student is satisfied with instrument selection
- Pride in playing a string instrument is encouraged
• Parent wants student to continue playing
• The student receives periodic progress reports at home
• The student feels good playing in concerts
• The teacher enjoys teaching strings
• Parents try to attend concerts
• Best friends are also in strings class
• Teacher provides individual help as needed
• The school has a good strings program (p. 103-106).

Parents and peers were found to affect the student retention as evidenced by the above list.

Hurley (1992/1993) identified factors that affected student motivations for beginning and continuing or discontinuing participation in string instruction. Hurley determined that students were motivated to begin string instruction if they felt that it would be valuable to them by their immediate social circle including friends, siblings, parents, and teachers. That value increased if that friend, sibling, parent, and/or teacher was themselves an instrumentalist in some capacity. Students reflected that the following factors ranked highest to lowest motivated them to continue string instrument instruction: 1) friends, 2) siblings, 3) parents, and 4) prior musical experiences (cited in Williams, 2012, p. 43).

Perkins (1998) explored factors relating to student participation in public school orchestra programs and the relationship and predictability of such factors in accordance with Maehr’s theory of personal investment. “The theory of personal investment (Braskamp & Maehr, 1986) is a comprehensive model of motivation that accounts for choices, values, and intentions within the school environment in an attempt to predict behavior” (p. 2). The main study was comprised of volunteer orchestra students (n = 1,315) in Grades 6 through 12 from three school districts. The measurement device was a
self-report where the subjects indicated personal incentives in four areas regarding their participation in orchestra: reasons for joining, membership, perceived available options, and the organizational culture. Results showed that students joined orchestra because of their desire to make music and the influence of the teacher.

Each entity that made contact with a string/orchestra program had a different set of rationales and values that was important to them. The rationales and values of the associations supported string/orchestra programs as a part of a larger whole (instrumental and music programs). The rationales and values of the string professionals and other advocates supported the associations’ list and added several that came from direct experience and expertise. The rationales and values of students, parents, and the community were more personal in nature.

While some rationales and values were quite dated, many were still relevant today. The evolution of these rationales and values from the groups that were surveyed in the literature outline the differences that are significant to each group.

**Status and Profile of School String/Orchestra Programs in the United States**

Historians have documented the history of music education and string music education in the public schools (Birge, 1966; Keene, 1982; Abeles, Hoffer, & Klotman, 1994; Mark & Gary, 2007; Mark, 2013; Hamann & Gillespie, 2013). String class instruction in American schools began with the first violin classes taught by Albert G. Mitchell in the Boston Public Schools in 1911. Initially, this modest beginning was followed by a period of growth in the number of string classes that were offered in public schools across the country. A brief decline occurred with the onset of the depression in
the 1930s but was followed by a period of reawakened interest in the late 1940s into the 1950s (Grover, 1960).

There has been an increase in the amount of string programs in American schools since the 1980s (Leonard, 1991; Smith, 1997; Gillespie and Hamann, 1998; Wendell, 1999; Hamann, Gillespie, & Bergonzi, 2002; Smith and Alexander, 2010). However, research shows that most students (particularly rural and urban students) still do not have access to curricular string instruction (NEA, 1962; Leonard, 1991; Horvath, 1993; Abeel, 1995; Bergonzi, 1995; Smith, 1997; Gillespie and Hamann, 1998; Smith, 2000; Moss, 2002).

Related research on the status and profile of school string/orchestra programs is arranged below by decade from the 1960s to the 2010s.

1960-1970

Before the 1960s, much of the string class instruction in the schools was being done in the “conservatory” style or in a one-to-one teaching style. This type of instruction did not help string teachers to quickly increase the numbers of students performing on string instruments and did little to produce the necessary amount of string instrument educators for the schools (Dillon and Kriechbaum, 1978). String educators needed to regain at least an equal standing with their instrumental colleagues and attempt to reestablish rapport with the public in general. Research was conducted to determine the status and profile of string/orchestra programs across the country. Studies also looked at factors that made string/orchestra programs successful to form models and recommendations for starting and sustaining programs.
Fergus (1960) investigated factors affecting the development of the orchestra programs in Minnesota public schools from 1940 to 1960. Data were collected from reports at the Minnesota State Department of Education. Additionally, secondary school administrators completed questionnaires and string teachers were interviewed. The top factors affecting the development of the orchestra and string programs were:

- Shortage of qualified teachers
- Popularity of the band
- Lack of parent interest
- Scheduling difficulties
- Lack of interest of music teachers
- Lack of modern teaching methods
- Difficulty of mastering strings (p. 190).

Maraffie (1961) looked at the critical elements associated with the development of effective string programs in Pennsylvania public schools. Some of the factors that were found to be influential in the development of strings programs were: (1) Parents’ and students’ interests and requests for string programs and orchestras to be developed or improved in the public schools; (2) Definite planning of the music budget to develop and improve the string department over a period of years; (3) Teachers’ and administrators’ interests and moral support toward the development of a string program and school orchestras; (4) Board of school directors’ interest in supporting and financing string instruction and school orchestras in the school district; (5) Availability of competent certified public school string teachers and orchestra directors (p. 106).

The National Education Association (1963) surveyed elementary and secondary teachers about their music and art class offerings, number of qualified teachers, school policies in place, amount of equipment available, and amount of budget allotted (p. 9).
Results from the elementary teacher surveys showed that in small districts, group instruction was most frequently offered on the brasses, woodwinds, and percussion, indicating that bands rather than orchestras were formed. However, in large districts, instruction on stringed instruments was offered in a large percentage of schools, so it is likely that the children in these districts had more opportunity to perform in orchestras (p. 16).

During the 1960s and 1970s the materials for heterogeneous string class teaching became more available to classroom teachers. These were publications by such pedagogues as Gilbert Waller (University of Illinois), J. Frederick Müller (later the Educational Director of the Scherl and Roth Company), Ralph Matesky, Ralph Rush, Elizabeth Green, Forest R. Etling, Thomas Wisniewski, John Higgins, and Samuel Applebaum. As an addition, Shinichi Suzuki, creator of the Mother Tongue Method of teaching musical instruments, also arrived in America in the 1960s. There were now several methods of learning for children in the developing heterogeneous school string classes and opportunities for supplemental learning through the Suzuki method (Dillon and Kriechbaum, 1978). Teaching methods and materials were more accessible and assisted teachers to reach more students in the classroom, however, most string/orchestra classes were offered in schools in larger metropolitan areas.

1970-1980

Many string pedagogues viewed the 1970s as a resurgence of interest in professional and school orchestras across the United States. Especially in smaller communities one found new string programs. From 1968-1978, sales of string instruments to school systems more than doubled. In 1975 alone, the number of string
instruments sold in the United States hit an all-time high as sales increased 42% over sales in 1974 (Dillon and Kriechbaum, 1978). Several studies at the state level were conducted at this time including North Carolina, Arkansas, and Kansas.

Anderson (1973) investigated the status of secondary instrumental music education in North Carolina public schools. There were 456 questionnaires mailed and 355 returned for a response rate of 78% (p. 89). “Of the reporting schools, 29 or 21% of the junior high schools offered orchestral programs. Of reporting senior highs, 25 or 18% offered this program. One junior high school had a student organized orchestra” (p. 96). The results also showed that string/orchestra programs continued to be offered mostly in cities. “Orchestra programs were found more prevalent in the metropolitan areas of the state” (p. 96).

Baggett (1974) examined the status of secondary instrumental music education (band and orchestra) in the state of Arkansas in 1970. There were 104 respondents from 149 secondary schools in Arkansas that offered instrumental music in the curriculum for a return rate of 69.8% (p. 51). The amount of orchestra programs from the responding schools was minimal. “Three schools responding in the study had orchestras [2.9% of the responding secondary schools]. Two of these orchestras had 12 members each, and the other orchestra had 30 members. The directors of these three groups, when asked whether the wind and percussion band members were allowed to participate in the orchestra, all answered affirmatively” (p. 74).

Corcoran (1976) surveyed the status of Kansas school music programs in relation to the standards outlined as “basic programs” established by the Music Educators National Conference (originally published in 1974 and updated in 1986). Questionnaires
were mailed to elementary, junior high or middle school, and high school principals, as well as the district superintendent. There were 2,227 questionnaires mailed and 1,830 questionnaires returned for a response rate of 82.2% (p. 6-7). Only 88 (21.4%) of the school districts surveyed had an orchestra or string orchestra (p. 83). This was similar to the status survey of North Carolina (Anderson, 1973). “It may be noted that the schools having an orchestra are heavily concentrated within the largest-sized districts and those with the lowest budgets per pupil” (p. 134).

The National Assessment of Educational Progress (1981) presented data from two national assessments of the attitudes, knowledge, and understandings of American students about music. The researchers drew the following conclusion, “More than 90% of the 13- and 17-year olds have never taken orchestra” (p. xiii).

Access to a string/orchestra program varied by state, but overall, was still minimal and usually isolated to larger school districts in more metropolitan areas.

1980-1990

Throughout the 1980s and 1990s the number of school orchestras and the quantity of students studying string instruments continued to increase (Hamann, Gillespie, and Bergonzi, 2002).

Wadsworth (1981) examined the status of public school music in the State of Iowa. The Iowa Criteria for Evaluation of Music Education Programs: Program Content and Sequence called for the inclusion of “an orchestra or chamber orchestra” in both junior high and high schools “should be an integral part of the instrumental program . . . All school districts should ideally offer instruction on violin, viola, cello, and string bass” (p. 17-18). However, not all Iowa school districts adhered to the recommendation.
“Orchestra offerings were reported in only about 13% of the elementary schools, 19% of the junior high schools, and 12% of the senior high schools” (p. 369).

The Music Educators National Conference (1986) consisted of recommendations for “superintendents and principals, state departments of education and state supervisors of music, music educators and laymen” (p. 7). It was first published in 1974 and was revised in 1986. Music programs were evaluated as Basic or Quality according to outlined criteria. To attain a Quality elementary music program status, string instruction was recommended to begin no later than grade 4 (p. 24). To attain a Quality middle/junior high school music program status, beginning and intermediate instruction was available on string instruments. Performance instruction classes met daily (p. 34). To attain a Quality high school music program status, instruction for beginning, intermediate, and advanced instrumental classes were available. Orchestra was scheduled so that all members of each ensemble met daily as a unit (p. 47).

Leonhard (1991) examined the effect of school size on access to music instruction, including string/orchestra instruction from 1987 to 1990. Using a stratified random sampling technique, 1,366 surveys were sent to public schools in the United States that represented varying school populations, in multiple geographic regions, and serving a varied background of people. Data reflected that over a third (35%) of small elementary schools reported having students that studied stringed instruments with the most common starting year being the 4th grade (p. 9). In small middle schools, 14.8% offered a string orchestra and 7.4% offered a string ensemble (p. 49). In small secondary schools, string orchestras were offered much less frequently than in larger secondary schools. Of small secondary schools, 5.5% offered string orchestra, 3.2% offered full
orchestra, and 2.8% offered string ensembles. (p. 108). In large secondary schools 36.9% offered string orchestra, 32.0% offered full orchestra, and 23.3% offered string ensembles (p. 143).

Stewart (1991) investigated access to high school music as a function of social and school factors during the 1980s. The researcher found that 10.2% of rural schools and 3.5% of small schools (< 500 students) offered string instruction (p. 105).

Strings are offered so much less often that comparisons with other offerings are not meaningful. Two points are worth noting. First, large schools offer strings with nearly the same probability that small schools offer band and chorus. Second, although strings, on average, are offered in 13% fewer schools than theory, these two courses are offered at similar rates in large schools. Students who attend large schools, then, have the greatest opportunity to take strings (p. 109-110).

The 1980s saw growth in the number of string programs offered across the country, but most increases were found in suburban areas.

1990-2000

Advocates for string music education have encouraged the creation and promotion of new string music programs across the country in schools and communities (Dillon & Kriechbaum, 1978; Kjelland, 1987; Payne 1990; Klotman, 2000; Moss, 2009). String access continued to grow, but mostly in larger schools in larger communities.

Horvath (1993) studied the state of string instruction in Ohio including teacher profile, program structure, and implications for the future. The Ohio String Teacher Task Force designed a survey to gather information. It was distributed statewide. One hundred string teachers responded. Six percent of the respondents indicated that they taught in a rural community, 54% in suburban communities, and 40% in urban communities (p. 36).
Seventy-six percent of teachers indicated their principal instrument was a stringed instrument. The data also showed that most string teachers taught at multiple levels. This “requires a thorough knowledge of materials and teaching techniques appropriate to each level and can fracture teachers’ schedules since they are required to serve in multiple environments” (p. 37).

Chenault (1993) examined public school music in the state of North Carolina for the 1990-1991 school year. There were 600 questionnaires sent out to elementary, middle/junior high, and high schools (200 each) and 398 or 66.3% were returned (p. iii). String instrument instruction was offered in 21.4% of small elementary schools surveyed (p. 41). String instrument instruction was offered in 19.7% of large elementary schools (p. 61). Of small middle/junior high schools, 14.7% offered string orchestra and 10.8% offered a string ensemble (p. 82). Additionally, 77.9% of middle/junior high schools offered beginning instruments. It was not indicated what types of beginning instruments were offered (p. 82). In large middle/junior high schools, 27.9% offered string orchestra and 13.2% offered string ensembles (p. 104). String orchestra was offered at 6.7% of small high schools (p. 130). In large high schools 13.3% had a full orchestra 26.7% had a string orchestra (p. 163).

Abeel (1995) surveyed all school districts in Virginia to determine the number and description of orchestra programs in the public schools. Results showed that thirty-eight percent of all high schools in Virginia offered strings. The Commonwealth’s strings teachers “reported an increase in student numbers due to: (a) increased community and administrative support, (b) hard work on recruiting and quality teaching, and (c)
population growth” (p. v). However, “only 3 out of 64 (4.7%) of the small districts had strings” (p. 22).

As the number of string programs continued to increase during the 1990s, so did the need for qualified string teachers. In some cases, non-string music teachers were hired to teach strings in the public schools. Jenkins (1995) investigated the job status, professional training, and attitudes of public school orchestra directors who came from a non-string music education background. Survey questionnaires were randomly sent to members of the National School Orchestra Association. The results showed that 28% of the orchestra teachers surveyed had not played a string instrument as their major instrument and that 32% had not gained proficiency on any string instrument as a secondary instrument (p. 135).

Bergonzi (1995) analyzed transcript data from 7,171 high school students who participated in the Base Year and First Year Followup survey High School and Beyond (1980) and the 1990 National Assessment of Educational Progress: Basic Math Assessment. The study found that string programs were offered in 31% of (public, Catholic, and other private) high schools (p. 36). School size was the most important predictor of the existence of string programs, with larger schools (greater than or equal to 1,500 students) being most likely to offer string instruction (p. 37). Additionally, Bergonzi stated, “String programs were more frequent in high schools that were in or near urban areas, but virtually nonexistent in those found in extremely rural areas” (p. 36). However, “when we control for school characteristics, we see that region, community size, school type, percentage of minority enrollment or of academic/remedial
enrollment, or student-body socioeconomic status did not influence the likelihood of a school offering strings” (p. 37).

Smith (1997b) examined access to string instruction in American public schools. Data was collected from: (1) reports from 18 state departments of education (1993-1994), (2) reports from 6 state music education associations (1993-1994), and (3) mail-outs and phone calls to individual districts in the other 26 states (p. 652). Findings showed that string programs in rural areas were still the least present in America.

Although the location-classification system used in this study differed from Bergonzi’s and Stewart’s, similar access patterns were identified. It was found that strings were offered most often in districts located near large cities and least often in rural districts. The obtained percentages for the total offerings by location in order of magnitude are as follows: (1) urban areas having 2,500 to 50,000 people (63.8%), (2) metropolitan areas with more than 50,000 people (25.8%), and (3) rural areas with fewer than 2,500 people (10.4%) (p. 661).

Gillespie and Hamann (1998) gathered descriptive information about orchestra programs that was used as baseline data when considering the needs of school string programs. A survey instrument was designed similar to those in Leonhard (1991) and Hamann (1992) (reported in Horvath, 1993). A systematic random-sampling technique was used to select the survey sample. Surveys were sent to 1,345 schools offering orchestra instruction and 652 were completed from 44 out of 50 states (p. 78-79).

Findings indicated a continued enrollment increase in school orchestras in the 1990s, although the number of orchestra teachers has remained relatively stable. Also, larger schools were more likely to offer orchestra instruction. The majority of orchestra students and their teachers are white. More than two-thirds of students who begin to play stringed instruments in the schools continue playing them until graduation. Twenty percent of orchestra students are in the upper 10% of their graduating class, even though they make up less than 5% of the student population. Respondents also reported that the majority of schools with orchestra programs were suburban (56%), with slightly less than one-third (30%) urban, and 14% rural (p. 75, 79).
Delzell and Doerksen (1998) showed a research-based overview of the factors that teachers may consider when reassessing the grade level to first offer beginning instrumental music in the schools (p. 17). The following factors were investigated: Grade Configurations in School Buildings; Musical Performance Achievement and Retention; Impact on Percentage of Students Who Begin; Academic Scheduling Conflicts; Instructional Time Allotments; Physical Maturation and Musical Readiness; Comparing Starting Grades for Strings and Band; Staffing, and Finances, and Classroom Environments. The researchers found that many school districts had moved their start years to later grade levels (from those suggested in Dillon and Kreichbaum, 1978 and MENC, 1984) and that each school district needed to give careful considerations to the advantages and disadvantages of proposed grade levels (p. 21).

Wendell (1999) examined factors and elements that assisted with the creation of a string program based on several case studies. The author stated,

One common thread among many of these programs is that they emerged through the sheer determination of a teacher who was willing to take on extra work in order to make the program become a reality, many times working for no pay in order to get the program established. Another commonality is the attention paid to recruiting and building support for the programs among parents and community leaders. Also, many of the school string programs started as privately funded initiatives, and once enrollment and grass roots support grew, the school board was approached to incorporate the program into the school curriculum (p. 56).

String programs discussed in the article were created in New York, Alabama, Connecticut, Texas, West Virginia, Tennessee, New Jersey, Michigan, Idaho, Missouri, Arkansas, North Carolina, Kansas, and Wyoming.
Doerksen and Delzell (2000) examined opportunities for beginning string and band programs by state and geographic region through their investigation of the *1997 National Study of Beginning Band and Orchestra Programs*. A random sampling of approximately 10% of public school districts across the United States was made and 1,385 surveys were sent. Results indicated that 18% of surveyed school districts offered string instruction. This finding closely resembles that of Smith (1997b) that found 15.9% of U.S. school districts offered string programs.

The last decade of the previous century showed continuous growth in the number of string/orchestra programs offered across the country. New programs were sprouting up in a variety of communities in many different states. Even though new string programs were providing access to string instruction in new areas of the country, lack of qualified string teachers remained a constant problem.

**2000-2010**

Growth continued into the new century. Teachers, administrators, and researchers continued to learn and grow from the research being done.

Hamann, Gillespie, and Bergonzi, (2002) monitored the status of string instruction in the United States. A sample of 2,139 schools was randomly selected to participate in the study. A total of 920 surveys were returned for a return rate of 42% (p. 5). The researchers found that the number of string teachers had declined, while string student enrollment had increased. Almost one-fourth of the schools in 1999-2000 were not able to find qualified teachers for their string programs. The percentage increased in 2000-2001 when 43% of the available string positions were not filled (p. 16).
Moss (2002b) reviewed literature that explored factors of advocacy, new string program development, and model building (p. 1). Findings of the review revealed that the process for creating a new string program is complex and political (p. 20). The researcher also revealed a concept for an hourglass-shaped model that he would like to develop as a response to the “skimpy and empirical” information he found through this project.

The National String Project Consortium and American String Teachers Association (2006) addressed teacher shortage and status. “The bad news is that the United States is still facing a shortage of string teachers. But the good news is that this shortage has decreased in the last eight years, even while the percentage of school districts with string programs has increased” (p. 1). Additionally, it was noted that there was an increase in string instruction across the country. “The number of school districts offering string instruction has increased from 18% in 1997 to 29% in 2009” (p. 2). Fourteen percent of the schools were located in rural areas, 25% in urban areas, and 61% in suburban areas (p. 2).

The number of rural string/orchestra programs remained constant while those in urban and suburban areas continued to increase.

2010 to present

Studies of new string/orchestra programs continue to provide information about successes and failures. Some of the new programs that have been created in recent years are in rural areas.

Gillespie (2010) investigated 150 new string programs that had been created in the United States between 1999-2009. “The programs were created in 33 states and represented 75 different school districts. They exist in all different settings, suburban,
rural, and urban: 60 percent are located in the suburbs, while 24 percent are rural and 15 percent urban” (p. 66). The respondents cited three challenges as the greatest in starting their new program: 1) adequate funding to support the program, 2) locating available space for teaching, and 3) finding a string teacher for the program (p. 68). Additionally, the researchers asked the respondents to suggest resources they considered the most helpful for others to establish a new program. A majority of the participants suggested: 1) grant money for start-up costs that would help fund teachers’ salaries for the first two years of the program, funding for program assessment and funding for music and instrument purchases, and 2) a manual to follow to help create the new program (p. 69).

More than 1 out of every 5 new string/orchestra programs created between 1999-2009 was in a rural area.

Smith and Alexander (2010) described the status of strings and orchestra programs in United States schools. Questionnaires were sent to 8,766 school string and orchestra teachers. A total of 794 questionnaires were returned for a 9% response rate (p. 3). The database included 14,556 school districts. Of those, 4,269 (29%) school districts contained orchestra programs (p. 3). A majority of elementary string teachers reported either an increase or a consistent number of students enrolled in their string classes. The same was true for middle school/junior high school teachers. A slight majority of high school teachers responded the same, but 42.6% did not respond (p. 4). Additionally, 13.9% of respondents indicated that they taught in a rural school, 61.4% in a suburban school, and 24.6% in an urban school (p. 6).

The data confirmed a 20-year growth trend in school string enrollments first documented by Leonhard (1991) in the late 1980’s, again in the 1990’s by Gillespie & Hamann (1998), and once again in 2000 (Hamann, Gillespie, &
In addition, the percentage of school districts offering string instruction has increased from 16% in 1997 (Smith, 1997), to 18% in 2000 (Delzell & Doerksen, 2000), to 29% in 2009 (Alexander & Smith, 2010).

Impact of String Programs on Music Departments, Schools, and Communities

Most recently, studies have examined the impact of string programs on music departments, schools, and communities. Findings have shown that string programs have enhanced music programs, created new performance outlets, and provided music instruction to a new population of students.

Russell and Hamann (2011) examined music teacher perceptions regarding the impact of string programs on overall music programs for K-12 schools. The researchers created a questionnaire (String Program Questionnaire Revised, SPQR) and sent it to 2,193 music educators who were members of MENC in two Southwestern MENC states. There were 308 questionnaires returned for a response rate of 14% (p. 52).

The researchers found that music teachers assessed the value/benefit of an added string program as very strong and positive. Other items that were perceived to benefit the music programs as a result of the added string program were: a more comprehensive music curriculum, more musical course offerings, expanded repertoire, greater overall participation, increased overall performance standard, jobs for string teachers, greater community visibility, collaborations with other ensembles, earlier skills development, greater community support, and increased parental involvement (p. 62). The researchers also found that,

String programs, at least as perceived by music teachers, do offer expanded opportunities for student musical, social, and interpersonal growth as well as enhanced interaction and programmatic development among all music/arts
programs, potentially leading to increased community, parental and administration support for music and arts programs (p. 64).

Additionally, Gillespie, Russell, and Hamann (2014) examined the impact of newly initiated string programs on teachers, schools, districts, communities, and existing music program administration and students. The researchers created a questionnaire (String Program Impact Questionnaire, SPIQ). Email invitations were sent to 130 potential participants. Sixty-four individuals completed the questionnaire for a response rate of 49% (p. 177-178). Researchers found that a majority of respondents “believed the new string program contributed to the music program very much and benefited overall student learning very much” (p. 180). Benefits identified included “increased student participation in all music programs, more student collaborative opportunities, increased community and local business support, and the more comprehensive nature of the music curriculum” (p. 175).

It is important to note that the Gillespie, Russell, and Hamann (2014) study is the only investigation that contained data specifically on the impact of string instruction in rural areas. Investigators found that the impact of school setting (suburban, urban, rural) had no influence on existing programs for both students and curriculum. Those who enrolled in the new string programs were new students to music education classes in the schools. Therefore, this research suggests that the establishment of new string instruction in rural settings would not negatively impact existing music education classes (Gillespie, Russell, & Hamann, 2014).

Rural School Music/String/Orchestra Teaching
Bates (2011a and 2011b) advocated that teaching music in rural areas should be viewed as a unique opportunity and not a temporary or starter job. He called for teacher trainers to assist in this process by encouraging pre-service teachers to prepare to teach in many different types of communities throughout their training. In so doing, he also called for training of pre-service teachers in non-Western art music and towards “inclusivity and away from cultural elitism” (Bates, 2011b, p. 112). However, rural schools are impacted by variables such as school size, multi-grade teaching, funding, technology, course offerings, quality of teachers, and cultural acceptance (Sur, 1941; Christiansen, 1948; Fergus, 1960; Livingston-Steuben-Wyoming Board of Cooperative Educational Services, 1971; Surwell, 1980; Reddick & Peach, 1984; Bonney, 1985; Jones, 1985; Stevens & Davis, 1988; Wohl, 1993; Dunbar, 1995; Wendell, 1999; Bouck, 2004; Maltas, 2004; Isbell, 2005; Wilcox, 2005; Childress, 2006; Hunt, 2009; Hicks, 2010; Burkett, 2011; Cole, 2011; Prest, 2011; Spring, 2013). Those same variables affect the music programs in such locales, especially string/orchestra programs.

Related research on rural school music/string/orchestra teaching fall into the following subcategories:

1. Unique Preparation and Continued Professional Development Needs for Rural School Teachers
2. Special Problems Encountered By Schools in Rural Areas
3. Music Programs in Rural Areas
4. String/Orchestra Programs in Rural Areas

Unique Preparation and Continued Professional Development Needs for Rural School Teachers
The literature suggests that rural teachers need preparation different from that of suburban and urban teachers (Charles, 1969; Oelschlager, 1979; Bandy, 1980; Horn, 1981; Gardener & Edington, 1982; Meier & Edington, 1982; Oelshlager & Guenther, 1983; Reed & Seyfarth, 1984; Traugh, 1984). Because each area of the United States is unique in its cultural heritage, those planning to teach in a rural environment must be aware of the cultural, social, and economic factors present in those rural areas (Woofter, 1917; Sher, 1977; Gjelten, 1978; Ivey, 1979; Jones, 1985).

Woofter (1917) provided practical suggestions in a guidebook for rural teachers written by the Dean of the School of Education at the University of Georgia, Thomas Jackson Woofter. He defined living in rural conditions using the United States Census Bureau statistics including “all persons living in the open country and in towns and villages having less than 2,500 inhabitants” (p. v). The aims of the guidebook were to:

1. Bring to attention the needs of rural life, the broadening version of rural life, and the possible contributions of the rural school to this life.
2. Unfold in a clear and helpful way some introductory guiding principles of education.
4. Direct such a teacher to the most helpful aids in educational literature in connection with the various phases of theory and practice (p. ix).

The author listed characteristics that the rural teacher should embody: (1) Natural Teaching Equipment including Teaching Personality, Important teacher-qualities such as Good health and being well preserved, Pleasing personality, Imagination, Appreciation of rural life, Character, and Other Qualities; and (2) Preparation including Scholastic preparation, Professional preparation, Efficiency maintained, The teacher in service, and
Teachers’ salaries (p. 26-35). Even in 1917, the need for the special training of rural teachers was evident.

Charles (1969) examined the preparation of teachers for small rural schools. A questionnaire was evenly distributed to rural teachers in ten rural states. For the study, rural school was defined as “schools which exist in sparsely populated areas and rural communities, usually less than 2,500 population. The schools generally enrolled less than 75 students per grade (p. 8-9). The term rural state was defined as, “a state with a population density of seventy-five persons or less per square mile, except in New England, where it will have fifty persons or less per square mile. It will have no more than two Standard Metropolitan Statistical Areas (SMSA’s: a population unit in and around a city . . . contains a minimum of 50,000 inhabitants (p. 11)), as determined in the most recent United States census of population” (p. 10). There were 1,511 questionnaires originally sent out. Of the 1,148 questionnaires that were returned, 1,120 were deemed usable (p. xi).

The purpose of the study was six-fold: (1) What are those areas of pre-service preparation which rural teachers think should either be improved upon or initiated? (2) What are the areas of pre-service preparation in which rural teachers think they were most adequately prepared? (3) In what civic and recreational activities do rural teachers participate? (4) In what extra-curricular activities do rural teachers participate? (5) What percent of rural teachers come from rural communities? and (6) What do rural teachers perceive as advantages and disadvantages of teaching in the rural school? (p. 3-4).

Conclusions indicated: (1) Teachers did not feel adequately prepared and they almost unanimously indicated they needed a course in practical methods, guidance and
counseling, exceptional children, practical rural living, and creativity and creative thinking, (2) Teachers felt adequately prepared in psychological background, pupil discipline, and had an acquaintance with the various educational media, (3) Teachers had a broad offering of activities available, but they did not participate extensively except in religious activities and hobby or recreation groups, (4) Sixty-four percent of teachers oversaw one or two extra-curricular activities including supervising playgrounds or lunchrooms, (5) Sixty-nine percent came from rural communities, and (6) The advantage of teaching in a rural school was the interaction of the student-teacher-parent community and the disadvantages were the inadequacy of equipment and buildings (p. 95-97).

Edington (1976) argued that the common practice of consolidation of small schools had proven less satisfactory as a means to improve curriculum (p. 24). However, positive attempts had been made for small schools to remain separate, but to share resources.

The most promising of the new structures has been the development of a program which allows a number of small districts to share services by virtue of an intermediate district or unit, thus enabling a district to maintain its identity and still provide the advantages inherent in a larger consolidated organization. Such a program is accomplished by: (1) a cooperative agreement between the schools; (2) shared school resources; or (3) imposition of a larger administrative unit upon the small school for purposes of coordinating the activities of each school (p. 24).

Dreier (1977) examined the attention given to the specific preparation of educators for rural schools since 1966 by surveying two professional journals and a sample of colleges and universities (Iowa, Kansas, Missouri, and Nebraska) that prepared teachers (p. 2). The two journals the researcher surveyed were *Journal for Teacher Education* and *Rural/Regional Education News*. He found that the major journal, *Journal*
for Teacher Education had only published one major article and just a few lesser ones that spoke of rural education. There were more state reports of progress in Rural/Regional Education News including that some colleges and universities had recognized the need to prepare rural teachers and administrators (p. 4).

The researcher drew the sample on colleges and universities from the 92 members of the American Association of Colleges for Teacher Education (AACTE) in Iowa, Kansas, Missouri, and Nebraska. Only about one third of those AACTE members were located in places of less than 10,000 people. Additionally, “a good number, 13 or 14.3 percent of the AACTE members were located in towns with a population of less than 2,500, which the U.S. Census identifies as rural non-farm” (p. 5).

The researcher analyzed how many and in what size community secondary students lived, “…there is a large percent of NCA (North Central Association of Schools) member high schools with enrollments of fewer than 500 students (31.9%) and schools located in towns of less than 5,000 population (38.2%) and more of a need for rural educators…” (p. 7). The researcher argued that because of the large percentage of students, rural teacher education should be more of a focus.

A random sample of the AACTE member institutions listed alphabetically in the four states was selected. There were 46 colleges and universities invited to complete a questionnaire. Twenty-eight returned the questionnaire for a response rate of 60.9%. The results showed that there was a need for rural educators, institutions located in the rural environment, and rurally specific teacher/administrator preparation.

Gjelten (1978) examined the case of the North Haven Community School in Penobscot Bay, offshore from Rockland, Maine. The island had a year-round population
of 400 residents and a summer population of nearly one thousand. The community maintained a K-12 school with 84 students and 8 full-time instructional staff, including a teaching principal. The goal of the study was to share a more detailed career development program with other small schools. The researcher wrote,

It is important to see this whole scene, because one of the more characteristic features of the rural experience is the interconnectedness throughout it. To be a successful teacher in a rural community requires integration of personal, cultural, professional, and social dimensions. A report of a program which claims to be successful must suggest the need for that perspective. It must tell the story of the program, as well as describe its official activity (p. 6).

The report included The Setting (meeting the community), The Model (a school to fit the place), The Curriculum (key themes), Modern Methods (for rural teaching), Moving Out (old ways and another way), Switching Places (the use of student exchanges), It’s O.K. to Stay (the hometown option), The Teacher, and Resources. The researcher outlined the key characteristics of a rural teacher based on the model the career development program included: (1) Positive personal traits, (2) Willingness to learn, (3) Flexibility, (4) Creativity and ingenuity, (5) Cooperativeness, (6) Commitment to the community and to rural life, and (7) Ability to survive and be happy (p. 96-97).

Oelschlager (1980) distributed a questionnaire to 200 principals of the smallest rural, public schools (grades 9-12) in Kansas. The total number of questionnaires returned was 148 (74%). Of those, there were 140 (or 70%) useable questionnaires. The results indicated that less than one percent (0.79%) of teachers in rural Kansas schools had received specialized training to prepare them for teaching in rural areas. However, 66.7% of the principals surveyed indicated that such training was necessary. Those factors that the principals indicated were necessary for effective rural teachers were an understanding
of rural culture, the expectation of extra duty responsibilities, and previous experience living in a rural area.

Bandy (1980) sought to “identify any skills or characteristics which teachers need in order to be successful in rural schools” (p. 4). Fifty questionnaires were sent to each Provincial Minister of Education in Canada and College of Education in Canada to seek information about their preparation of teachers for rural schools. Only one university offered a program specifically for the training of rural teachers (p. 27).

Surwell (1980) surveyed rural schoolteachers, principals, and superintendents as a part of a continuous review process of the teacher preparation program at Eastern Montana College. Telephone calls were made to 10 rural school superintendents requesting participation in answering a brief questionnaire. Permission was also sought from the superintendents to meet personally with their teachers and principals to answer a second questionnaire. The schools were located in four counties. Nine superintendents responded for a 90% return rate. Seventy-five of the second questionnaires were distributed personally to 65 rural classroom teachers and 10 school principals. Three teachers and two principals did not return the questionnaires. Seventy questionnaires were returned for a 93% response rate (p. 2).

Respondents strongly agreed with the need for specialized preparation for rural teachers. Recommendations included: 1) training for teaching multi-grade classes; 2) a strong background in teaching reading; 3) methods courses and practicum experiences in teaching art, music, health, physical education, and dramatics; 4) specialized training in more than one academic discipline; 5) better training in handling classroom discipline with various age groups; 6) training in utilizing rural community resources for classroom
enrichment; 7) multi-grade level curriculum planning; 8) diagnostic and planning skills to identify and meet student needs; 9) sociological implications for teachers living and working in rural communities; and 10) preparation for school record maintenance (p. 3-5).

Horn (1981) found that, “Although school districts with under 2,500 students represent three-quarters of all school districts and enroll about 19% of all students, few institutions of higher education have programs designed specifically for rural education” (p. 1). A survey was administered to the administrative heads of the department/school/college of education of 24 institutions in 23 states with a substantial rural population. Responses showed little evidence of availability of progress for teaching in small or rural schools and that there were limited numbers of institutions that addressed the specific needs of rural educators (p. 5). The researcher suggested that institutions should:

1. commit themselves to the development of personnel; 2. assign the overall responsibility for a rural education effort to a person or unit within the institution; 3. internally redirect resources; and (4) foster cooperative relationships and mutual support among colleges of education, state departments of education, teacher and administrator organizations, school boards, and other school/community-based organizations (p. 10-13).

Gardener and Edington (1982) recommended the following to better prepare teachers for teaching in rural America, based on their review of related literature.

The first general set [of recommendations] is in the area of teacher education, both the in-service and pre-service programs:

1. As part of both the general education and the pre-service education of teachers and other school personnel, classes must be developed or organized that relate to the problems of the rural school. Part of the general education program of the
teacher entering rural America could be in the area of rural sociology. Such courses could replace some of the other general education requirements.

2. Classes in methods and techniques should recognize the specialized problems of the teacher in the small school.

3. In-service experiences, both before student teaching and during student teaching, should be in a small, isolated school where the student could live as well as teach and work within that particular community.

4. Colleges of education should maintain a direct liaison with the personnel from the small, rural communities. They should develop an ongoing advisory board from which they could have input as to the needs of the educational personnel going to those areas.

5. Teacher education programs should provide experiences at the primary and intermediate levels in multi-grade situations so those teachers who will teach in small, rural schools will be prepared to teach students in two, three, four, and even five grade levels.

The second set of recommendations centers around the certification programs in the state departments of education:

1. Certification at the secondary level should allow a teacher to be certified in a number of areas with less in-depth emphasis than is required for certification in only one or two areas. A teacher may have a combination of three, four, or five minors rather than one major and minor.

2. Specialized in-service programs should be developed to help the teachers in the small, rural schools be better able to teach many of the courses which they are required to teach.

3. Certification for elementary teachers should require that they be exposed to teaching at both primary and intermediate grade levels (p. 20-21).

Oelschlager and Guenther (1983) outlined the practices, perceptions, and needs of rural teachers based on a review of related literature. They addressed three important areas of concern: (1) Use of Innovative Practices, (2) Need for Specialized Teacher Training, and (3) Major Sources of Information/Dissemination.

The researchers highlighted one study by the Texas Education Agency where rural teachers indicated that improvement was needed in their pre-service education in the following areas:

1. More practical methods courses.
2. Learning to teach with minimum facilities.
5. Added courses in rural culture and sociology.
6. Ability to teach several grades in the same classroom (p. 96).

The authors concluded that “the current status of rural education in America demands more attention than it has been given in the past 20 to 30 years” (p. 98-99).

Reed and Seyfarth (1984) examined all school personnel directly related to instructional services in a remote, rural school system in the mid-Atlantic region of the United States. There was a total of 242 classroom teachers, counselors, curriculum specialists, librarians, administrators, and others contacted. Two hundred and twenty-six (93%) responded to the questionnaire, 42 (17%) were interviewed, and 72 (29%) were observed in the classroom setting. In the questionnaire, teachers indicated that rural teachers perceived their needs to be in the general areas of: (1) contact with others outside the classroom, (2) supply and use of instructional materials, (3) relating to students on an affective level, (4) relating to parents, (5) teaching exceptional students, (6) classroom management and discipline, and (7) self-improvement, including time and stress management (p. 13).

Jones (1985) studied three purposes: 1) examine the availability of pre-service or certification programs for rural teaching in the 27 states defined as rural based on persons per square mile, 2) examine the pre-service components that meet rural teacher needs, based on the belief that there are unique competencies necessary for successful teaching in rural schools, and 3) suggest ways to upgrade existing programs and to recommend
curriculum components for those who might select to implement a new pre-service training program for rural environments (p. 1).

There were 456 directors of student teachers at public and private institutions in those 27 rural states contacted. There were 208 respondents. Twenty-six unique competencies were included in the questionnaire. Results indicated that 21 of 208 public and private institutions in 27 rural states prepared students specifically for teaching in a rural environment (p. 6). Fourteen of the 26 competencies necessary for successful teaching in rural schools were currently available in over half of the institutions surveyed. Eight of the competencies were available in less than half of the institutions surveyed.

Training for teaching physical education, music, art, and/or community recreation was available at most institutions (p. 6-7).

Jones summarized,

Program planners and administrators need to understand the unique skills and competencies necessary for teaching in a rural environment, the unique circumstances of a rural community, the professional and social isolation experiences by teachers in some rural areas, and the supplemental support services provided in some states...It is recommended that some special training be offered for nontraditional students preparing to teach in a rural area (p. 13-14).

As is suggested above, continued emphasis is needed on teacher training for rural areas. Rural teachers have also specified areas in which they need professional development.

Special Problems Encountered By Schools in Rural Areas

Based on the research conducted to evaluate professional development and training of teachers for positions in rural areas, the need to understand further the problems encountered by schools in rural areas must also be measured. Montana
Governor Ted Schwinden stated,

The backbone of our rural schools is the quality of our rural teachers; teachers equipped to do more than teach. Teacher quality is critically important in rural areas because rural students are exposed to fewer teachers than students in urban schools. A rural teacher must bring the outside world to his or her students – to inspire curiosity among students and to expand their educational horizons far beyond the classroom walls (Schwinden, 1983, p. 5) (cited in Sietsema, 1988, p. 2).

Tillman (1983) called for educators in rural and small schools to continue to pursue quality teaching, regardless of their geographic location. “There are four conditions that impede, but do not prevent the pursuit of quality education for rural and small schools. They are: (1) isolation, (2) sparsity, (3) smallness, and (4) differentness” (p. 22). The author encouraged teachers to find ways to make those conditions positive and engaging for all students. Additionally, the author gave five conditions that he believed were necessary and vital for giving rural students a quality education:

- An attractive, comfortable and pleasant building with a school climate conducive to learning
- Strong leadership from teaching and administrative personnel
- A core curriculum which reflects the culture and values of rural communities
- High academic expectations for all, not just some, students
- The use of standardized tests to measure progress and make plans for improvement (p. 22).

Gardener (1984) surveyed 161 small rural Montana schools to assess the status of rural education. His findings were:

1. Due to lack of funds many schools have very poor facilities.
2. Due to lack of funds several schools have books that are out of date.
3. Salaries for teachers in rural areas are minimal; therefore, there are very few incentives for teachers to remain in rural areas.
4. Due to lack of benefits for teachers in rural areas there are very few male teachers.
5. Over 50 percent of the teachers responding to the survey indicated that they had
taken no college courses that specifically prepared them for teaching in a rural setting.
6. Several of the small rural schools in Montana do not comply with the state’s minimum standards of accreditation nor are they checked to see if they are in compliance.
7. The curriculum in the rural schools has not been adequately developed to fit the needs of the students.
8. Rural educators lack the expertise and the time to effectively develop curriculum changes (p. 19-21).

Reddick and Peach (1984) studied attitudes toward curriculum issues among rural educators in Tennessee. The researchers stated, “Rural education poses unique concerns and opportunities because of size, philosophy, and oftentimes, a scarcity of resources and support personnel” (p. 1). Counties in Tennessee with a population of less than 40,000 were categorized as rural. A questionnaire was distributed to 996 educators in 83 counties. Topics that were addressed in the survey concerned curriculum development, course content, school environment, individualized instruction, philosophical parameters, student evaluation, and extracurricular activities. More teachers than administrators indicated that course content should be determined by the teacher or cooperatively by teachers and students and that art and music were as important as other academic subjects (p. 5-6).

Bandy (1980), in addition to surveying the universities and colleges in Canada to investigate their rural program offerings, also distributed a questionnaire to 40 rural school principals and 220 rural school teachers to identify skills and characteristics that teachers needed to be successful in rural schools. Interviews of 32 teachers in 13 rural schools and 27 rural trustees were conducted as well. The researcher reported that principals agreed that advantages of rural schools were to know students well, belong to a
rural community, and have opportunities to individualize instruction (p. 29). Teachers felt close cooperation was essential, counted community involvement as a satisfier, and agreed that communities expected to be involved in the school (p. 68). Disadvantages for both principals and teachers were isolation and lack of privacy. Principals, teachers, and trustees felt that student teachers training for positions in rural schools should be adaptable, tactful, and self-reliant. They should like the isolation of rural areas, have experienced rural community living, and be trained in planning their materials, teaching specialist courses, and handling of multi-grade classes (p. 99-100).

Bouck (2004) discussed how size and setting impact education in rural schools. The author stated, “Rural education matters – rural schools serve over 40% of the nations students, but do not receive as much federal funding (NEA, 2003)” (p. 38). The researcher concluded:

Rural schools and their educational offerings are impacted by many variables. The poverty faced by rural schools and its students is a large component. Rural schools get less than their fair share of the education funding (NEA, 2003), which then impacts the technology and level of technological sophistication available to students in these districts. It can also then impact the type of course offerings available at rural schools—from choices to Advanced Placement, and even vocational. Rural schools, by the nature of being rural, also face challenges with quality of teachers. This can impact the expectations for students and their future outlooks. Overall, rural schools must attend to several factors—from financial to curriculum, from teacher quality to community. All these factors impact and interact to create an educational experience for students in rural schools (p. 41).

Johnson, et al. (2014) was the biannual report of the Rural School and Community Trust, a national nonprofit organization addressing the crucial relationships between good schools and thriving communities, entitled Why Rural Matters. The report examined descriptive statistics about who lived in rural areas and attended rural schools.
“More than two in five of those rural students live in poverty, more than one in four is a child of color, and one in eight has changed residence in the previous 12 months” (p. 27). These social factors were also problems that rural schools face. Additionally, “The scale and the scope of rural education in the United States continues to grow. We have reported increases in the total rural student population in the past five editions of Why Rural Matters, with growth rates that exceed those of non-rural districts as measured by both short term and longer range trends” (p. 27). The student population in rural schools was continually becoming more diverse. “Growth in rural school enrollment continues to outpace non-rural enrollment growth in the United States, and rural schools continue to grow more complex with increasing rates of poverty, diversity, and students with special needs” (p. 28).

Rural schools encounter problems based on their location (isolation and sparsity) and the population that lives there (poverty and population growth in diverse areas). These factors contribute to the curricular challenges that rural schools face each day.

Music Programs in Rural Areas

The curricular decision to include music is unique to each school district. Supervision and implementation of teaching music varies to fit each school district, depending on local, state, and national guidelines. Music programs in rural areas have been studied across the country to compare musical achievement with or without a music supervisor, musical achievement compared to suburban and/or urban music programs, musical attitudes based on socio-economic status, access to various performance ensemble experiences, outreach from a community college, and others.
Sur (1941) discussed problems in rural music programs. The researcher spent five years in contact with students in the Agriculture Short Course at the University of Wisconsin. The students were products of rural schools and therefore “certainly indicate what is being done and what needs to be done in our rural work” (p. 20). The course was created for those students who were to be farmers, citizens, and community leaders. The aim was to blend the vocational emphasis with science, culture, and citizenship. Therefore, the students took courses in “music, drama, citizenship, history, law, speech, and public discussion…interspersed with the courses in agriculture” (p. 20). Among the courses offered was Orchestra. Unfortunately, orchestra was a very foreign subject to these students:

Orchestra seems to be the most neglected musical activity of the rural school. In the past five years there never have been enough string players available to start an orchestra. Interest in and knowledge about the possibilities of orchestra music are at a rather low ebb (p. 20).

The researcher reflected that most of the communities that these students came from did not have the funds to hire music specialists or to purchase instrumental equipment (p. 21).

Christiansen (1948) involved the relation of supervision and other factors to musical achievement in rural schools of Utah. The researcher selected six contiguous school districts where three had musical supervision and three did not. Data was gathered using a series of tests, questionnaires, and observations. The results showed that “in all except one minor test, [there were] significant differences in favor of the supervised schools” (p. 61). Additionally, the researcher summarized, “The argument that
supervision is the determining factor in higher musical achievement appears reasonable in view of the results” (p. 62).

Watson (1968) looked at musical attitudes and their relationship to environment among rural, socio-economically deprived high school students in central Oklahoma. The researcher surveyed students in grades 10, 11, and 12 in five central Oklahoma high schools. There were 618 possible participants due to enrollment and on the day of completion, 537 questionnaires were returned for a response rate of 82.2% (p. 47). Of those questionnaires returned, 502 were deemed usable for an actual response rate of 92.2% (p. 50). Of those students in a school music group, 5.3% of the economically deprived students and 28.6% of the economically non-deprived students participated (p. 56). The researcher concluded, “The lack of opportunities to participate in quality musical functions at school and in the community contributes to a negative attitude toward music by all students tested” (p. 78).

Bonney (1985) observed the conditions of music education in schools with less than 800 students in Oregon and Washington. The music teachers reported that their teacher preparatory programs did little to prepare them for the circumstances they would encounter in a small, rural district (p. 91). They also reported that the advantages to working in a small district were “(a) large amounts of contact with students, staff, and community members, (b) easy access to the administration, (c) obvious influence of the music educator on the community, and (d) a wider opportunity for students to participate in a variety of activities” (p. 71). The disadvantages the music teachers indicated were “(a) limited numbers of students for activities, (b) teaching position demands extensive time commitment to a variety of activities, and (c) to many obligations for musical
support of athletics” (p. 72). The researcher noted the absence of string instruction offered in the schools surveyed and suggested that “strings [are] no more inaccessible than any other instruments. This option for small schools should be considered and prepared for in pre-service training. If one is already teaching in small schools, this option could be prepared for during a summer session or perhaps evenings” (p. 84).

Sietsema (1988) assessed the music background and music achievement of 178 thirteen-year old rural students in southwestern Montana living in six counties. Rural schools were defined as 1-, 2-, or 3-teacher K-8 schools. Town schools were defined as anything larger than the rural definition. Data was collected using selected music exercises found in the Second National Music Assessment component of the National Assessment of Educational Progress (NAEP) (p. 35). The researcher reported:

No significant difference in the cognitive and affective musical response patterns was found between rural student and town students…Although most of the rural students did not have a band and chorus available in their curriculum, they understood the sampled elements of music as well as their counterparts in town schools (p. xx).

Stevens and Davis (1988) examined a small school district in Texas that, because of budget constraints and limited staffing, was only able to offer limited junior high and high school instrumental classes. Music was taught by the classroom teachers at the elementary school (p. 19). Together, the music instructor and the curriculum director developed a plan to expand the music offerings and enlarge the population of students that could be served. Their goal included twelve available secondary course units as well as a comprehensive general music foundation to be offered at the elementary level. Their plan also included the employment of two full-instructors in addition to the current
instructor and one part time instructor. They also devised a four-phase implementation plan that would be implemented within five to seven years (p. 19). The authors came to the following conclusions,

The issue is that, if we are to have progressive music programs in our schools, we must take a more careful look at the present situation and begin to form realistic solutions to the problems that are found. The solution for another district may not follow this plan; there are many possible solutions. We music teachers can no longer limit our involvement in music programs to our specific job areas. We must expand our vision of the future of music in the schools so that it encompasses all areas of music education. It is up to us to provide our school districts with viable alternatives for the continuation of worthwhile music programs in the public schools (p. 43).

Fetchen and Heimer (1989) was an article on shaping the aesthetic mind of the rural community chronicled by the outreach performances of the Jacksonville Symphony Orchestra to students from rural schools. The writers reflected,

Community colleges in rural areas play an important role in introducing audiences to the arts and influencing their tastes. In many rural areas, community colleges are the only higher education institutions or organizations of size with the resources to offer arts programs. As a visible societal force, a rural community college can and does shape the aesthetic mind of the community it serves (p. 32).

The Lake City Community College set up guidelines for arts advocacy as follows:

- Establishment of an office of community cultural services, which will coordinate and develop programs and serve as a liaison with arts advocates within and outside the district.
- Development of agreements with local arts advocates such as arts advocates, such as arts councils, local school, dance academies, community choirs or orchestras, and other available resources in the district.
- Formation of alliances with regional and statewide advocates, such as other community colleges, other arts councils, and art agencies.
- Cultivation of grants-funding network with state, regional, and national resource agencies.
- Encouragement or private or corporate support for specific projects.
- Implementation of special educational arts programming independently or in cooperation with other arts advocates (p. 32-33).
Wohlfeil (1989) identified characteristics that contributed to the success of three, single teacher, K-12 music programs in rural areas. Three Midwest programs were observed and the three K-12 music teachers were interviewed.

Characteristics identified were:

- Autonomy.
- A master schedule, which is flexible and avoids conflicts.
- Strong community support.
- A high percentage of student participation.
- An area of particular strength.
- High expectations for students.
- Consistent enforcement of rules.
- Immediate feedback to students.
- High regard for students.
- An emphasis on solos and small ensembles.
- Use of high quality literature (p. 27).

The researcher isolated three of the characteristics listed above as being particularly critical for developing an effective music program in a rural school: autonomy, a favorable schedule, and community support (p. 27).

Wohl (1993) examined the life of a small town band director. The purpose was to “thoroughly describe and interpret aspects of this professional status in a setting commonly filled by one Euro-American male in the United States, a position known in professional and administrative circles as Instrumental Music Instructor” (p. 7-8). A few general themes that the researcher isolated were: socio-historical foundations, musicianship and “marginality,” lesson plans, and rehearsal preparation. Additionally, the researcher acknowledged that the subject joined local churches and civic organizations as a part of his high profile job (p. 334).
Dunbar (1995) examined the impact of federal education policy on rural music programs and specifically how that policy had affected Wisconsin farm communities. Dunbar prefaced her arguments with:

Music education rarely has been the direct target of federal policy initiatives. Rather, it has been impacted indirectly as a result of initiatives intended for other educational areas. This indirect effect is felt uniquely in the nation’s rural schools, where federal mandates are not adequately financed and where unique cultural and social functions of a community traditionally have not been acknowledged by the federal government. As a result of the neglect of the special needs of rural communities, music education in rural schools sometimes has been negatively affected by federal policy (p. 46).

The researcher also shared her difficulties in defining the term rural. She stated, “Over time, there has been no widely accepted national definition of the term” (p. 47). For the purpose of this article, the researcher defined rural as “farm communities that support high schools containing less than 400 students” (p. 47).

The researcher concluded:

Music education in the public schools has had to rely on community support for its existence since its inception. In rural schools, in particular, music for community functions, service projects and entertainment continue to be provided by school performance groups. Local musical traditions are the heartbeat of most music programs, rural and urban, and while music educators continue to teach musical concepts and aesthetic goals, many have successfully learned to work within the framework of the community in which they teach in order to retain their programs. Without attention given to regional differences and community traditions, music education, like education on the whole, will become a standardized, non-personal phenomenon. Without the support of local communities, and in light of the fact that the federal government continues to delegate relatively few funds to local education, music programs in low tax base areas will be drastically cut or lost. Music education disjointed from regional traditions and community functions is unlikely to last for very long in settings where there are budget constraints (p. 57).

Pohland (1995) stated, “The band director in a rural community is often expected not only to lead the school band but to become a community server” (p. iii). A Band
Director/Community Service Questionnaire Form A and Form B were mailed “to the band directors, principals, and school board chairs of 219 high schools in Minnesota classified as rural by the state department of education. There were significant differences found between the directors and the other respondents, i.e., the school board chairs and the principals. “These differences prove useful in defining the overall community role perceived, expected significant others, and performance by the band directors employed in these types of communities” (p. 124). The researcher concluded, “the community role of the band director in rural high schools in Minnesota is marked by diversity of perceptions among members of the role set” (p. 124).

Maltas (2004) investigated the relationship between socialization factors and career satisfaction of the rural music teacher. The purpose was “to examine the socialization process of rural music educators in the areas of professional, occupational and cultural socialization” (p. 37). A survey was sent to rural music teachers in Oklahoma and Nebraska who were members of the state affiliates of the National Education Association. The researcher used the following to define rural:

A rural teacher is also understood to be one who teaches in a school that has an average daily attendance (ADA) of six hundred students or fewer and/or a Johnson locale code of a 7 or 8. The Johnson locale code is a scale that was developed by the United States government to measure a community’s population size, proximity to metropolitan areas and density of the community (p. 42).

One hundred and eleven teachers were sent surveys by email or mail and after a process only 54 questionnaires were analyzed. Additionally, a qualitative research instrument was created for semi-structured interviews. Ten teachers were chosen from the participants of the quantitative survey.
Conclusions included indicators of professional, occupational, and cultural socialization factors along with career satisfaction. Indicators of professional socialization included: education, membership in professional organizations, participation in contests, limited resources, lack of musical colleagues, and the creation of virtual communities (p. 138). Indicators of occupational socialization and cultural socialization included: music program visibility and community demands, demands on the student time, morality, expectations for community involvement, and judgment of the music program (p. 144). Overall, career satisfaction as a music educator was high, but current position in a rural school did not rank as well.

Teachers in the survey and follow-up interviews reported high levels of satisfaction with the choice of music education as a career. However, their commitment to their individual school district was significantly weaker. Only 13% of the teachers surveyed indicated that they were likely to remain in their current school district for the balance of their career. The rest would leave for professional gain (like better salary or duties) or for family considerations (like a better job for the spouse) (p. 154).

Additionally, participants provided recommendations to better prepare rural music educators. “The youngest music teacher in the study talked about how his college education did little to prepare him for the reality of teaching in a rural setting” (p. 155). The researcher called for college course work to include a study of rural community and school topics and the examination of those issues in a rural music program.

The researcher challenged current music teacher-educators:

Colleges and universities located in rural areas of the country . . . to identify those students who would be most likely to succeed in a rural setting. Some characteristics that may be compatible with rural lifestyle include coming from a rural education system, a willingness to participate in the whole life of the school and to teach multiple music assignments and sponsor a variety of extra-curricular activities. By identifying these students, colleges can increase the likelihood of
rural schools matching the needs of their districts with the skills of potential music teachers (p. 160).

Isbell (2005) provided keys to successful music teaching in rural areas based on his experiences as a rural music educator. The author reflected, “There is a substantial lack of literature to help teachers who choose to work in rural schools. This is surprising, since two-thirds of all public schools in this country are, by some definitions, considered rural and are responsible for educating one-quarter to one-third of all school-age children” (p. 30). Additionally, Isbell offered suggestions to rural music educators to improve their programs:

- Combine two or more existing music groups.
- Encourage experienced students to mentor, direct rehearsals, and give private lessons.
- Suggest students try different instruments and vocal parts.
- Form small ensembles to perform traditional and nontraditional music.
- Provide both simple and challenging music pieces.
- Rewrite music to fit the needs of a particular group.
- Arrange trips for your ensembles.
- Ask parents to help with fund-raising, chaperoning, concert duties, and other tasks.
- Foster a good relationship with school administration.
- Encourage music students to give extra performances for the school and community.
- Learn about the school’s master schedule and how you can influence its structure and contents (p. 33).

Isbell also acknowledged that not every rural music teacher has grown up in a rural community and therefore must learn how to understand their new rural environment.

Rural teachers need to be sensitive to the concerns of their communities. This means that work on the farm sometimes takes priority over school. When it’s calving season, the family may need extra hands at home. The livelihood of a family could depend on it. A new teacher from the suburbs may have difficulty
understanding this rural concept (p. 34).

Finally, the author encouraged rural music teachers to “maintain a sense of humor and remain patient” to “help ensure that students in rural communities receive a rich music education” (p. 34).

Wilcox (2005) chronicled the daily life of rural music teacher, Stan Johnson, in Shickley, Nebraska (population 380). “Of the forty-five high school kids at Shickley, thirty-eight are in band and twenty-six are in the chorus” (p. 28). Johnson indicated that he attributed his programs’ success to his “relationship with his students and his appreciation of their ideas” (p. 28). Additionally, there was a great amount of support from the school administration, staff, and members of the community. Johnson stated, “I receive outstanding support from our administration—they back me and the music program 110 percent and will do whatever I need to help the program run smoothly” (p. 29). Wilcox also interviewed the executive director of the Nebraska Music Educators Association, Joyce Patch. Wilcox asked her what makes rural music teachers special? “You have to be even more organized than the average. These teachers are usually well respected in their community, and it is not uncommon for community members to go way beyond the norm to help the teacher if needed. The support group is very strong” (p. 29).

Johnson shared his tips for teaching in a rural setting:

- Be prepared for each class.
- Be a good listener. Appreciate the musical potential of all your students, and make a difference in their lives.
- Project an enthusiastic and positive image to the class, but share with students if you’re having a “down” day and they’ll do the same for you!
- Don’t let challenges overwhelm you. What you don’t do today, you’ll get to tomorrow.
• Talk to fellow teachers, both in your field and in other fields. All good teachers share the goal of doing their best for the students.
• Visit and swap experiences with fellow music directors and music dealers. Find things that they’ve tried that may work for you.
• Recharge by attending clinics and conventions and by always looking for new ideas and materials.
• Communicate with parents by email or messages home via students, especially before scheduled events! Network with area school music teachers to get information about feedback on classroom situations.
• New teachers: Don’t spread yourself too thin, and don’t get discouraged when things don’t go as you planned. Find a peer to visit with. Don’t try to do too many things at first; work into the job.
• Remember that today’s crises will be your best stories later! (p. 30).

Shand and Spring (2007) also profiled the daily life of a rural music teacher. The author shared that “As a music educator in a rural setting, I feel that my environment influences my…music repertoire choices” (p. 19). Since the author was also a teacher-librarian and a social studies teacher, the author included songs and listening exercises that provided the students with cross-curricular knowledge. “Songs can be used to facilitate further understanding, discussion, reflection, and later study” (p. 20).

Hunt (2009) gathered perspectives on the role of music programs and teachers in rural and urban school districts. There were nine interview participants including music teachers, administrators, and parents from four rural and urban locations. The participants were purposefully selected based on “their support of music education in the state; the population of their districts; their rural or urban geographical locations; their genders, ages, and ethnicities; and their occupations or relationships to the music program” (p. 36). The definition of rural the researcher chose came from the Department of Agriculture’s Rural Business Opportunity Grants Program which says that a rural area is “any area of a state with a population of less that 50,000 not within the boundaries of a city” (Rural
Business Opportunity Grants, 2002). The researcher further limited the definition to be used with a population of less that 10,000 to “maximize differences between rural and urban” (p. 36).

Four themes emerged from the interviews: Defining the Music Teacher’s Role: Community Interaction and Awareness; Understanding Advantages and Challenges; Preparing Music Teachers; and Recruiting and Retaining Music Teachers. Additionally, the participants identified these traits of rural music programs:

- High community involvement: bands/choirs performing at community events
- Fishbowl effect, lack of privacy, community scrutiny
- Music teachers travel to several schools and sometimes lack a home base
- Community support, caring and involved parents, interested citizenry
- Importance of teachers’ musical, general education, advocacy, and organizational skills
- Difficulty recruiting new teachers
- Demanding teachers’ schedule
- Importance of understanding cultural diversity (p. 42).

The researcher concluded, “The results imply that although there were shared perspectives on what music teachers should understand and be able to do, the participants’ perspectives were influenced by the contextual factor of geographical location” (p. 44).

Hicks (2010) examined the factors that influenced the teaching of instrumental music in rural Ohio school districts. One survey question asked teachers if their licensure program prepared them to teach in a rural environment. Participants indicated that their program prepared them more for suburban teaching (p. 129). Another question asked what common factors teachers report as affecting their work in rural school districts. The themes that emerged from both Phase I and Phase II data were: program size or
modifications, support, and teachers’ professional development (p. 131-135).

Additionally, the researcher sought characteristics that teachers reported as necessary to be successful instrumental music teachers in rural school districts. The themes that emerged from both Phase I and Phase II data were: Versatility and Flexibility (p. 137-139). The researcher found that string/orchestra involvement in rural Ohio school districts was minimal (p. 99).

Bates (2011a) focused on the preparation of rural music teachers through the lens of critical social theory. The research showed several instances that were different in the culture of music education due to geographic location. Bates stated, “the professional focus on large ensemble performance seems to benefit suburban schools, students, and teachers more than it does in their rural counterparts” (p. 90). He attributed this differing focus on access to private instruction. “Proficiency is greatly affected by geographical or financial access to private instruction; rural students are more likely to be poor than students living in metropolitan areas with the poorest rural students living in the most rural counties . . . ” (p. 90).

Bates acknowledged that teachers in small rural communities “wear many hats; they serve in multiple roles especially when teaching K-12 music (and sometimes additional subjects) or serving in leadership positions within the school or district” (p. 92). Advantages that the researcher shared included local flexibility, autonomy, small class size, interest in transformation and innovation, and close long-term relationships with students, parents, and community members (p. 92). Bates had this to say about preparing and supporting rural music teaching:
Teaching in a rural school, rather than being a temporary or starter job, can be and ought to be viewed as a unique opportunity with substantial professional respect. Rather than try to help teachers do the impossible and out of place, we might prepare them to work within unique situations and settings. As a music teacher education community, there is much we can do to better prepare, validate, and support rural music teachers and students. To this end, I will give seven specific suggestions:

1. We need to critically examine and attempt to transform our own visions as music teacher educators. I believe that, as a profession, we still have deep-seated prejudices and misconceptions about rural students.

2. It is likely that prospective teachers, recruited primarily from large ensembles in suburban areas may need to come to terms with their own musical biases in order to teach successfully and ethically in rural schools. We, as music educator teachers, can help them understand that people value music and musicking for multiple reasons, one of which is not necessarily higher or more worthy than another.

3. In the interest of maintaining the viability of our profession and preparing our students for diverse teaching situations, we need to acknowledge that giving priority to Western art music privileges specific groups of people.

4. We can teach our students to think critically—to step back and observe patterns of privilege and exploitation and ask what really is important musically for students to know and be able to do now and long term. We cannot provide all the answers or even generally applicable situations, however. Rurality is diverse. But, we can help students develop affective and cognitive skills for working in unique and diverse contexts.

5. We could improve our efforts to recruit rural students to become teachers—teachers who will have a strong understanding of and commitment to rural places.

6. University professors are in a unique position, I believe, to affect change in how we approach and view rural music education and rural music teachers. We could offer alternative festivals and develop open-access, regional ensembles to replace auditioned honor groups.

7. I believe that those who recruit and prepare music teacher educators have even greater responsibility and opportunities to encourage transformative, equity-enhancing practices and perspectives. At this level, there ought to be ample focus on recruiting outstanding music teachers with the understanding that great music teachers do not always have the best sounding ensembles. Just as doctoral programs might recruit racial minorities, they might also encourage rural music teachers as representatives of a potentially underserved and underrepresented group (p. 94-96).

Burkett (2011) investigated issues concerning professional development for rural
instrumental music teachers. The researcher used a qualitative case study design during a 2-year series of professional development workshops, seminars, and individual coaching sessions to address the needs of the rural instrumental music teachers (p. 54). Fifty-six teachers (elementary, general, choral, and instrumental) were invited to participate on a voluntary basis from several offerings (p. 55). Twenty-six instrumental music teachers out of the possible population of 32 in the region participated (p. 57). The researcher concluded:

Data revealed that as a whole, the activities appeared to stimulate and improve teachers’ personal self-development of music and teaching skills. Ninety-six percent responded that they were satisfied with the Professional Development (PD) activities and that these would be applicable to future teaching positions. As a result this has the potential to increase the teachers’ positive attitudes toward teaching. In several cases, comments indicated that although attendance at the state music education meeting helped teachers reconnect with colleagues and provided information on newer or less well-known repertoire, most of the workshops or clinics focused on elementary teaching materials and strategies; few offerings addressed issues (musical and pedagogical) faced by secondary-level ensemble directors (p. 61).

Prest (2011) surveyed the state of music education rural school districts of British Columbia. At the time of the report, the researcher had received twenty-five completed surveys from the forty total school districts. In addition, eighteen of those agreed to an in-depth interview for further study (p. 1). The conference report contained the researchers initial findings regarding the delivery of music instruction and some place-based possible solutions the teachers shared that had arisen from their challenges in funding, staffing, and scheduling music in the day-to-day curriculum from the first impressions of the researcher (p. 1).

Prest found these issues: (1) Elementary generalist teachers were expected to
teach music with minimal access to ongoing music professional development, (2) Teacher Recruitment, (3) Structural Impediments, and (4) Community Connections (p. 1-2). Additionally, the researcher outlined these themes from her interviews: (1) Several interviewees felt that education was not equitable in rural areas despite receiving more ‘per student’ funding than urban areas, (2) Districts that were led by senior administrators who valued music strived to find solutions to deliver some music instruction despite financial constraints, (3) Schools that had passionate music teachers who were committed to the community tended to have more vibrant music programs, (4) Place was important and schools reflected what the community deemed was important, (5) Technological innovations related to the internet did not work in all rural settings because some rural communities did not have enough bandwidth or even the stable telephone connections urban areas take for granted, (6) Student retention in remote communities was linked to elective choices and when those choices were limited because of budgetary restraints, students sometimes lost interest in school and dropped out (p. 4-5).

Spring (2013) investigated the “lived experiences of one rural [music] educator from a place-based lens” (p. 30). The researcher interviewed the participant over the span of four months. The questions were open-ended in nature. In addition, emails between the researcher and the participant were logged as journaling throughout the data-gathering period (p. 30). The themes that emerged from the interviews were: (1) Rural Definitions, (2) Functioning in a Rural Place, and (3) Role of the Music Educator (p. 31-33).

One conclusion the researcher drew from the participant’s reflections on her role as a music educator was:

There seems to be little or no continuity in music education in her rural place and
in other schools in the area. Thus programs vary from school to school depending on the availability of a qualified and/or interested teacher who is willing to assume the role. There seems also to be a lack of school board initiative to provide music to all students on a regular basis and a lack of place-based programs that exemplify and promote the positive aspects of the rural area in all subject areas. In her situation, she defines her music education identity as opportunistic and unstable because her position is circumstantial. As a result, the participant suggests that a place-based educational perspective would connect her rural place with the school community and the curriculum to eliminate these gaps in rural education (p. 33).

Thus, rural music programs are diverse and exhibit a variety of support systems and values. Many of the constraints that music programs encountered were similar to those experienced by rural schools.

*String/Orchestra Programs in Rural Areas*

String/orchestra programs are rare in rural areas. Very few studies and articles were uncovered that discussed the topic. Those that were found shared characteristics of successful rural string/orchestra programs, outreach programs that have contributed to the start of string/orchestra instruction in rural areas, and other case studies of developing work in providing access to string instrument instruction to students in rural areas.

Davis (1974) studied the characteristics of successful string instrument programs in selected school districts in northern Indiana and southern Michigan. Personal interviews were used to gather data using four interview guides that were developed by the researcher. They included one each for the string teachers, music supervisors, superintendent of schools, and principals (p. 21). Four school districts were chosen because of their successful string programs and a fifth was chosen because it was judged not to have had a successful program. The populations of the school districts ranged from 12,000 to 35,000 (p. 23). The researcher found that “The smaller school systems with a
more rural population tended to be more successful in terms of numbers of students involved and in lower rates of attrition” (p. 93). The successful string programs had the following factors in common:

- Parent support
- Community support
- Classroom teacher support
- Adequate budget
- Schedule that gave sufficient rehearsal time during school hours
- Effective recruiting practices
- Adequate performance outlets
- Effective teaching by competent and interested teachers
- High level of interest among middle and upper middle Caucasian population (p. 92).

Jacob (1996) shared that a residency program could be successful in inspiring students to want to learn how to play a string instrument in a rural area.

In residence in California’s Salinas Valley for their second year, the Rackham String Quartet—winners of the Cleveland, Yellow Springs, Coleman, and Carmel chamber music competitions—are teaching three hundred children of Hispanic agricultural workers to play string instruments. The goal is to establish a youth symphony that will serve South Monterey County. This year, the dedicated and bilingual Rackhams are redoubling their efforts with both adult audiences and community leaders. Encouraged by community response to this residency, the superintendent of schools is taking steps to reintroduce a formal music program in area schools (p. 15).

Today, their initial goal has become a reality. The program, Youth Music Monterey South County Strings, brings free string instrument instruction and low-cost rental instruments to students in south Monterey County, California. “Through partnerships with the local school districts in these rural South Monterey Communities, Youth Music Monterey provides students in grades 3-8 the ability to study cello, viola,
and violin in areas where music education and performance opportunities are sparse or nonexistent” (Youth Music Monterey County, 2015).

Romer (1998) profiled participants in Chamber Music America’s program to “include education as part of their career development in various communities and educational institutions across the country” (p. 70). The Ying Quartet did a three-year residency in Jesup, Iowa in 1992.

The group was placed in Jesup as one of the first groups in the Rural Residencies Program, a program founded by the National Endowment for the Arts and managed by Chamber Music America. In the Rural Residencies Program, promising young ensembles are paired with small rural communities. The ensembles receive time, space, and funding for rehearsal and repertoire development. In exchange, they serve the community as performers, teachers, and musical ambassadors (p. 70).

Unlike the rural string/orchestra program created in California as the result of Rackham String Quartet residency, the Jesup, Iowa school district does not currently house a string/orchestra program (Instrumental Music-Jesup, IA, 2016).

Childress (2006) received and restored a large number of violins and decided to establish a string music program for the youth of his rural Kansas community. The author shared, “During the annual summer music festival, which is traditionally held on our farm, I asked the audience members whether they would contribute toward the establishment of a string music program for our youth. They gave generously!” (p. 44).

The author knew that the local school system did not offer string/orchestra instruction. His goal was to make this opportunity accessible to all students in the area. “The next step was to approach the local superintendent of schools with my vision of establishing such a program and to make a determination of whether or not such a
program could be offered in our schools or must remain private” (p. 44). The superintendent invited him to offer the music program “within the framework of the newly established after school program” (p. 44). Access was granted to students that had not been given such a gift before. “Approximately 30 fifth- and sixth-grade students, many of them foster children and ‘at risk’ academically, were introduced to the violin during this first year” (p. 44).

To continue to provide access for all children, the author requested that the school administration move the program into the regular school day. The request was granted and 25 new students were granted access to learning the violin (p. 45). The author questioned “Why not make it possible for children everywhere to experience the joy of playing a stringed instrument, there should be the opportunity” (p. 45).

Rousso (2006) chronicled the outreach education concerts presented free to schoolchildren throughout rural and urban areas of North Carolina. “Nearly 60,000 children will benefit from the program. Since its inception in 1946, the program has reached more than three million children in North Carolina, many of whom otherwise may not have been exposed to orchestral music” (p. 36). Prior to the concert presentation, teachers were invited to attend a workshop where they learn about “techniques to instruct their students in the fundamentals of rhythm, musical terminology, the instruments of the orchestra and concert etiquette. Teachers also receive an instruction handbook, recordings of the concert repertoire, and student guidebooks to assist them in preparing children for the concert experience” (p. 36). The article did not discuss the formation of string programs that may have been a product of their outreach performances.

Cole (2011) looked at a new nonprofit rural county string project in Maryland.
“The Carroll County String Project can be viewed as an archetype for other string programs starting out in rural or underfunded areas, where there is a need to build a program from the beginning” (p. 44). The article outlined suggestions from the project’s director, Peggy Motter Ward, for building a string program in similar conditions:

- Have a clear picture of the deficiencies of string instruction in the area and figure out how your project can fill the gaps
- Have perseverance, dedication, and vision—because there may be obstacles
- Financially contribute to the program initially or find grant money to cover initial costs
- Have a staff willing to work for lower wages at your budget level
- Work together with parents who are dedicated and committed to their child’s music education
- Provide numerous performance opportunities for students to motivate them to be committed to their instrument and to excite them about music
- Know the parents and get them involved
- Allow teachers and musical parents to perform with students to create unity and commitment on all sides (p. 45-46).

Additionally, the author suggests: To build enrollment, offer lessons in different locations; Partner with your public school system when advertising your program; Offer summer courses to build enrollment and to keep students playing; and Work together with talented composers in your area to expand student repertoire (p. 47).

New string programs have been created in rural areas (Gillespie, Russell, & Hamann, 2014). These additional programs also show an interest in expanding string instruction into rural areas.

**Implications for the Current Study**

Evidence reveals the complexity and uniqueness of string/orchestra programs, as well as music in rural schools and rural schools. Characteristics of successful programs
and suggestions from current rural music and string/orchestra teachers were included. However, there is a need for more extensive study of rural string/orchestra programs.

There are few studies that profile rural string/orchestra programs. Much can be learned from teachers, students, administrators, and communities of current string programs in rural schools to serve as models and to encourage the establishment of string/orchestra instruction in other rural areas. Results of the current study also will help teacher-educators better prepare pre-service teachers to teach in rural settings and provide school administrators and their communities more evidence of current rural string programs. Perhaps review of this evidence may encourage rural communities and their local school administrators to add string instruction to their school curricula.
Chapter 3: Research Design and Methodology

Purpose of the Study

The purpose of the study was to examine the current profile of rural string programs and identify factors critical to establish new rural string programs.

Research Questions

The following research questions were developed by the researcher for the successful completion of the study.

1. What is the current profile of rural string/orchestra programs as indicated by self-labeled, rural string teachers?
2. What critical factors are integral to the success of a rural string program based on those factors that have been discussed in the literature according to self-labeled rural string/orchestra teachers?
3. What suggestions do current self-labeled rural string/orchestra teachers have for the successful creation of new string/orchestra programs in rural schools?

Pre-Pilot and Pilot Studies

The current study used a quantitative survey design. A pre-pilot survey instrument was constructed to test wording, timing, and validity. It was distributed to
two graduate students in string music education and one graduate student from the
Statistical Consulting Service at a large, land-grant research university located in the
Midwest. To determine the face validity of the survey instruments, graduate students
were asked to comment on the clarity of ideas expressed in the questions on the
survey, instructions for respondents, timing of responses, and any additional
suggestions (Niknafs, 2013). All three graduate students responded to the survey with
constructive criticisms and suggested additional answer choices for some survey
questions. In general, the respondents found that the survey took between 15 to 25
minutes to complete and that all questions included were relevant. The survey was
revised accordingly.

The revised survey instrument was then distributed as a second pilot test to
self-labeled rural string/orchestra teachers from the Midwest, Southeast, and
Northeast regions of the country in three different settings. The first group of
respondents consisted of eleven string/orchestra teachers participating in a national
string teacher workshop that self-labeled their school as rural. An introductory letter
was included on the front of each printed questionnaire packet explaining the purpose
of the survey and inviting them to participate. It can be found in Appendix B.
Participants were asked to comment on the clarity of ideas, instructions to respond,
timing of responses, and to make any additional suggestions (Niknafs, 2013).
Participants indicated that additional attention was needed on the questionnaire to
address those school districts that may include both rural and suburban schools in the
same district. Several of the teachers that participated in the pilot then gave
suggestions on how to include answer choices that would further clarify ideas as they pertained to current, rural string teachers.

Again, the survey was revised with the assistance of a graduate student from the Statistical Consulting Service. The graduate student was able to assist the researcher in analyzing the value of each question toward the research questions and to further categorize the critical factors in the second section of the questionnaire for easier ranking purposes. The revised survey was then piloted again to two participants at two summer string teacher in-services. Both participants concluded that the revised survey format was clear, concise, and easy to understand. They offered no additional suggestions for modification. Pre-pilot and Pilot surveys can be found in Appendix C and D, respectively.

**Current Study**

**Participants**

The respondents in the current study involved 108 people who were self-labeled rural, K-12, string/orchestra teachers and members of the National Association for Music Education (NAfME). Participants volunteered to participate in the survey via email solicitation from NAfME. The email solicitation included a letter of introduction and a web link to the online survey. Participants clicked on the web link in the body of the email to begin taking the survey. Participants were first asked to consent to participating in the survey before being allowed to enter the survey. Respondents were not compensated for their participation.

Surveys were sent to possible participants in specific rural states. Originally when NAfME was consulted about disseminating the survey for this study, the
researcher was assured that the survey could be sent to self-labeled rural string teachers that were members of NAfME. However, at the time of administration of the survey, there was a new administrator in the national NAfME office who was placed in charge of assisting the investigator. This administrator discovered, in fact, that NAfME did not have the technology to administer the study survey to rural NAfME members only. Therefore, the researcher needed to determine a different method for identifying rural music teachers.

Individual states were chosen using data from the National Center for Educational Statistics (NCES) and the U.S. Census Bureau as reported in the most recent biannual publication of Why Rural Matters 2013-2014: The Condition of Rural Education in the 50 States by the Rural School and Community Trust. The researcher used the data in this document to select the rural states because it was collected from the National Center for Educational Statistics (NCES) and the U.S. Census Bureau. This particular publication further analyzed the government agency collected data and then ranked each state based on several indicators. The investigator then used the NCES and U.S. Census Bureau data within the report to determine the number of states that the questionnaire should be sent to for the purposes of the study.

Twenty-one states were identified by the NCES and the U.S. Census Bureau for which at least half of all school districts have fewer students enrolled than the national rural median of 533 students (Johnson, et al, 2014, p. 6). The states identified were: North Dakota, Vermont, Nebraska, South Dakota, Oklahoma, Colorado, New Mexico, Maine, Alaska, California, New Hampshire, Oregon, Kansas, Arizona, Missouri, Idaho, Washington, Illinois, Massachusetts, and Texas. Montana was
inadvertently left off the list by researcher error. These twenty states were surveyed for the purposes of the study.

Using the NAfME email distribution list, surveys were sent via email to all NAfME members who taught K-12 Orchestra in the identified twenty states. There were 2,801 possible participants contacted. Thirty-four email invitations were returned as non-operative, making the total possible participants 2,767. Participants volunteered to complete the survey by clicking on the web link in the introduction email sent by NAfME and consenting to participate in the survey. Additionally, participants were required to indicate whether they taught in a rural, suburban, or urban school district. There were 343 total responses received, to the survey for a response rate of 12%. Of the 343 total responses collected, 228 or 66% were deemed usable because those 228 respondents answered the survey question to classify their school programs as being rural, suburban, or urban. The other 115 respondents or 34% did not answer the school classification question. Of the 228 usable surveys, 108 or 47% were rural, 89 or 39% were suburban, and 31 or 14% were urban. For this study, only the 108 responses by those who identified themselves as teaching in a rural school district were examined.

**Survey Instrument**

A questionnaire was developed and largely informed by findings from several studies on the status of string programs in the United States. Accordingly, the instrument for the current study was adapted from survey instruments used in the following studies: *The Status of Orchestra Programs in the Public Schools* (Gillespie and Hamann, 1998), *Career Choice Among String Music Education Students in...*
American Colleges and Universities (Gillespie and Hamann, 1999), Status of Orchestra Programs in the Public Schools (Hamann, Gillespie, and Bergonzi, 2002), and String Music Educators’ Perceptions of the Impact of New String Programs on Student Outcomes, School Music Programs, and Communities (Gillespie, Russell, and Hamann, 2014).

The questionnaire was organized into sections based on the data the researcher needed to identify critical factors for a successful string program in a rural school district. The first section included questions relating to the profile of rural string/orchestra programs including questions in the following subcategories: profile of rural string/orchestra communities (municipality), profile of rural string/orchestra school districts, profile of rural non-string/orchestra school music instruction, profile of rural string/orchestra school instruction, profile of rural string/orchestra teachers, profile of rural string/orchestra students. The second section contained questions relating to the critical factors for successfully establishing new rural string/orchestra programs. The study questionnaire can be found in Appendix H.

For all survey participants, an introductory letter was included within the body of the email, prior to the survey link, explaining the purpose of the survey and inviting possible participants to complete the survey. The letter can be found in Appendix E. Two follow-up emails were also sent inviting those who had not responded to the questionnaire to complete and submit the survey. They can be found in Appendix F and G.

Data Collection Procedures
The final version of the survey instrument was distributed to participants using Survey Monkey (www.surveymonkey.com). Data gathered were entered into Excel where descriptive statistics were used to analyze the results of the survey.

Initial emails requesting participation in the survey were sent January 14, 2016. A follow-up email was sent January 28, 2016. The follow-up email was delayed due to a large blizzard on the east coast that prevented NAfME staff from being able to be at their offices, but was sent out as soon as they were back in the office. A second follow-up email was sent on February 1, 2016. The survey was closed on February 5, 2016.

Survey Monkey compiled and saved all responses online, with the option of reporting a summary of collected data in a variety of forms. All survey responses remained anonymous. Findings are reported in full in Chapter 4, followed by a discussion of the conclusions and implications for future research in Chapter 5.
Chapter 4: Results

Introduction

The purpose of the study was to examine the current profile of rural string programs and identify factors critical to establish new rural string programs.

Research Questions

The following research questions were developed by the researcher for the successful completion of the study.

1. What is the current profile of rural string/orchestra programs as indicated by self-labeled, rural string teachers?

2. What critical factors are integral to the success of a rural string program based on those factors that have been discussed in the literature according to self-labeled rural string/orchestra teachers?

3. What suggestions do current self-labeled rural string/orchestra teachers have for the successful creation of new string/orchestra programs in rural schools?

Respondents

The respondents to the current study involved 108 people who were self-labeled rural, K-12, string/orchestra teachers and members of the National Association for Music Education (NAfME). Participants volunteered to participate in the survey via email.

93
solicitation from NAfME. The email solicitation included a letter of introduction and a web link to the online survey, both created by the researcher. Participants were first asked to consent to participating in the survey before being allowed to enter the survey. Participants clicked on the web link in the body of the email to begin taking the survey. Respondents were not compensated for their participation.

**Data Collection Procedures**

Surveys were sent to possible participants in specific states with rural school districts. Originally when NAfME was consulted about disseminating the survey for this study, the researcher was assured the survey could be sent to self-labeled rural string teachers who were members of NAfME. However, at the time of administration of the survey, there was a new administrator in the national NAfME office who was placed in charge of assisting the investigator. This administrator discovered, in fact, that NAfME did not have the technology to administer the study survey to rural NAfME members only. Therefore, the researcher needed to determine a different method for identifying rural music teachers.

Individual states were chosen using data from the National Center for Educational Statistics (NCES) and the U.S. Census Bureau as reported in the most recent biennial publication of *Why Rural Matters 2013-2014: The Condition of Rural Education in the 50 States* by the Rural School and Community Trust. The researcher used the data in this document to select the rural states because it was collected from the National Center for Educational Statistics (NCES) and the U.S. Census Bureau. This particular publication further analyzed the government agency collected data and then ranked each state based on several indicators. The investigator only used the raw NCES and U.S. Census Bureau
data within the report to determine the number of states the questionnaire would be sent to for the purposes of the study.

Twenty-one states were identified by the NCES and the U.S. Census Bureau that in which at least half of all school districts have fewer students enrolled than the national rural median of 533 students (Johnson, et al, 2014, p. 6). The states identified were: North Dakota, Vermont, Nebraska, South Dakota, Oklahoma, Colorado, New Mexico, Maine, Alaska, California, New Hampshire, Oregon, Kansas, Arizona, Missouri, Idaho, Washington, Illinois, Massachusetts, and Texas. Montana was inadvertently left off the list by researcher error. These twenty states were surveyed for the purposes of the study.

Using the NAfME email distribution list, surveys were sent via email to all NAfME members who taught K-12 Orchestra in the identified twenty states. There were 2,801 possible participants contacted. Thirty-four email invitations were returned as non-operative, making the total possible participants 2,767. Participants volunteered to complete the survey by clicking on the web link in the introduction email sent by NAfME and consenting to participate in the survey. Additionally, participants were required to indicate whether they taught in a rural, suburban, or urban school district. There were 343 total responses received, to the survey for a response rate of 12%. Of the 343 total responses collected, 228 or 66% were deemed usable because those 228 respondents answered the survey question to classify their school programs as being rural, suburban, or urban. The other 115 respondents or 34% did not answer the school classification question. Of the 228 usable surveys, 108 or 47% were rural, 89 or 39% were suburban, and 31 or 14% were urban. For this study, only the 108 responses by those who identified themselves as teaching in a rural school district were examined.
Survey Data

Community

A community was defined as a locality inhabited by a group of any size whose members reside in a specific locality, share a government, and often have a common cultural and historical heritage (Community, n.d.) The estimated population of these rural communities varied drastically and appears in Table 4.1.

Table 4.1

Estimated population range of respondents’ rural communities

<table>
<thead>
<tr>
<th>Population Range</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-1,000</td>
<td>5</td>
<td>5%</td>
</tr>
<tr>
<td>1,001-2,000</td>
<td>2</td>
<td>2%</td>
</tr>
<tr>
<td>2,001-3,000</td>
<td>7</td>
<td>6%</td>
</tr>
<tr>
<td>3,001-4,000</td>
<td>10</td>
<td>9%</td>
</tr>
<tr>
<td>4,001-5,000</td>
<td>6</td>
<td>6%</td>
</tr>
<tr>
<td>5,001-6,000</td>
<td>5</td>
<td>5%</td>
</tr>
<tr>
<td>6,001-7,000</td>
<td>1</td>
<td>1%</td>
</tr>
<tr>
<td>7,001-8,000</td>
<td>5</td>
<td>5%</td>
</tr>
<tr>
<td>8,001-9,000</td>
<td>1</td>
<td>1%</td>
</tr>
<tr>
<td>9,001-10,000</td>
<td>2</td>
<td>2%</td>
</tr>
<tr>
<td>10,001-11,000</td>
<td>12</td>
<td>11%</td>
</tr>
<tr>
<td>11,001-12,000</td>
<td>2</td>
<td>2%</td>
</tr>
<tr>
<td>12,001-13,000</td>
<td>6</td>
<td>6%</td>
</tr>
<tr>
<td>13,001-14,000</td>
<td>1</td>
<td>1%</td>
</tr>
<tr>
<td>14,001-15,000</td>
<td>6</td>
<td>6%</td>
</tr>
<tr>
<td>&gt;15,000</td>
<td>37</td>
<td>34%</td>
</tr>
</tbody>
</table>

Most respondents (n = 77 or 71%) indicated there was an amateur symphony, such as a community or regional orchestra, located within 30 miles of their rural community. Many respondents (n = 51 or 47%) indicated their string/orchestra students were invited to perform with this ensemble.
Other opportunities for string/orchestra instrument performance were shared within the churches of the community. Sixty-three or 58% of respondents indicated string instruments were played in churches within the community.

Private string instrument instruction was available to students within the community for 78 or 72% of respondents. Additionally, many respondents indicated several students drove an average, round trip distance of more than 61 miles (26 or 24%) if they took string instrument lessons outside of the community. Other distances are recorded in Table 4.2.

Table 4.2

*Average distance traveled outside of the rural community, round trip, to take private string instrument lessons*

<table>
<thead>
<tr>
<th>Average distance, round trip (miles)</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-10 mi</td>
<td>10</td>
<td>9%</td>
</tr>
<tr>
<td>11-20 mi</td>
<td>15</td>
<td>14%</td>
</tr>
<tr>
<td>21-30 mi</td>
<td>13</td>
<td>12%</td>
</tr>
<tr>
<td>31-40 mi</td>
<td>12</td>
<td>11%</td>
</tr>
<tr>
<td>41-50 mi</td>
<td>5</td>
<td>5%</td>
</tr>
<tr>
<td>51-60 mi</td>
<td>8</td>
<td>7%</td>
</tr>
<tr>
<td>&gt; 61 mi</td>
<td>26</td>
<td>24%</td>
</tr>
<tr>
<td>Do not know</td>
<td>6</td>
<td>6%</td>
</tr>
<tr>
<td>Students do not travel outside of the rural community to take private string instrument lessons</td>
<td>13</td>
<td>12%</td>
</tr>
</tbody>
</table>

Other instruction and performance opportunities for rural string/orchestra students were occasionally available from junior colleges, community colleges, colleges, and/or universities (including satellite campuses) located in or within 30 miles of the rural community. These institutions offered courses, workshops, camps, lessons, and/or performances. Nearly all respondents (n = 102 or 94%) indicated there was at least one of
the previously listed types of institutions in or within 30 miles of their rural community. Forty-seven respondents or 44% indicated their local institution offered music opportunities. Thirty-eight respondents or 35% indicated there were specific string/orchestra opportunities. Twenty-six respondents or 24% acknowledged that high school string/orchestra students were invited to participate in those offerings. Additionally, twenty respondents or 19% indicated that even if string/orchestra offerings were not available at that institution, high school string/orchestra students still were invited to participate with the collegiate wind students to form a full symphony orchestra at the institution.

*Rural School District*

Each rural school district was comprised of a number of individual school buildings that housed several grade levels. For grades K-5, most respondents \( n = 54 \) or 50% indicated their school district had more than 3 schools in their district. For grades 6-8, most respondents \( n = 61 \) or 56% indicated their school district had only one school building. For grades 9-12, most respondents \( n = 74 \) or 69% indicated their school district had only one school building. Complete results are shown in Table 4.3.
Table 4.3

*Number of school buildings per rural school district by grade level*

<table>
<thead>
<tr>
<th>Number of school buildings per district</th>
<th>Grades K-5</th>
<th></th>
<th>Grades 6-8</th>
<th></th>
<th>Grades 9-12</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Frequency</td>
<td>Percent</td>
<td>Frequency</td>
<td>Percent</td>
<td>Frequency</td>
<td>Percent</td>
</tr>
<tr>
<td>0</td>
<td>3</td>
<td>3%</td>
<td>3</td>
<td>3%</td>
<td>5</td>
<td>5%</td>
</tr>
<tr>
<td>1</td>
<td>24</td>
<td>22%</td>
<td>61</td>
<td>56%</td>
<td>74</td>
<td>69%</td>
</tr>
<tr>
<td>2</td>
<td>8</td>
<td>7%</td>
<td>20</td>
<td>19%</td>
<td>8</td>
<td>7%</td>
</tr>
<tr>
<td>3</td>
<td>8</td>
<td>7%</td>
<td>4</td>
<td>4%</td>
<td>6</td>
<td>6%</td>
</tr>
<tr>
<td>&gt; 3</td>
<td>54</td>
<td>50%</td>
<td>11</td>
<td>10%</td>
<td>6</td>
<td>6%</td>
</tr>
<tr>
<td>Do not know</td>
<td>2</td>
<td>2%</td>
<td>0</td>
<td>0%</td>
<td>0</td>
<td>0%</td>
</tr>
<tr>
<td>No response</td>
<td>9</td>
<td>8%</td>
<td>9</td>
<td>8%</td>
<td>9</td>
<td>8%</td>
</tr>
</tbody>
</table>

Most respondents indicated student enrollments were over 500 students for grades K-5 (*n* = 45 or 42% of respondents), grades 6-8 (*n* = 44 or 41% of respondents), and grades 9-12 (*n* = 59 or 55% of respondents). Respondents were instructed to combine enrollments for multiple schools in the given grade level ranges for one grade level total. See Table 4.4 for complete results.
Table 4.4

Number of students per district by grade level

<table>
<thead>
<tr>
<th>Number of students per district</th>
<th>Grades K-5</th>
<th></th>
<th>Grades 6-8</th>
<th></th>
<th>Grades 9-12</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Frequency</td>
<td>Percent</td>
<td>Frequency</td>
<td>Percent</td>
<td>Frequency</td>
<td>Percent</td>
</tr>
<tr>
<td>0-25</td>
<td>2</td>
<td>2%</td>
<td>3</td>
<td>3%</td>
<td>2</td>
<td>2%</td>
</tr>
<tr>
<td>26-50</td>
<td>1</td>
<td>1%</td>
<td>3</td>
<td>3%</td>
<td>1</td>
<td>1%</td>
</tr>
<tr>
<td>51-100</td>
<td>1</td>
<td>1%</td>
<td>1</td>
<td>1%</td>
<td>2</td>
<td>2%</td>
</tr>
<tr>
<td>101-150</td>
<td>2</td>
<td>2%</td>
<td>2</td>
<td>2%</td>
<td>2</td>
<td>2%</td>
</tr>
<tr>
<td>151-200</td>
<td>1</td>
<td>1%</td>
<td>7</td>
<td>6%</td>
<td>3</td>
<td>3%</td>
</tr>
<tr>
<td>201-250</td>
<td>5</td>
<td>5%</td>
<td>1</td>
<td>1%</td>
<td>2</td>
<td>2%</td>
</tr>
<tr>
<td>251-300</td>
<td>6</td>
<td>6%</td>
<td>5</td>
<td>5%</td>
<td>3</td>
<td>3%</td>
</tr>
<tr>
<td>301-350</td>
<td>5</td>
<td>5%</td>
<td>7</td>
<td>6%</td>
<td>3</td>
<td>3%</td>
</tr>
<tr>
<td>351-400</td>
<td>2</td>
<td>2%</td>
<td>6</td>
<td>6%</td>
<td>6</td>
<td>6%</td>
</tr>
<tr>
<td>401-450</td>
<td>2</td>
<td>2%</td>
<td>7</td>
<td>6%</td>
<td>3</td>
<td>3%</td>
</tr>
<tr>
<td>451-500</td>
<td>7</td>
<td>6%</td>
<td>3</td>
<td>3%</td>
<td>4</td>
<td>4%</td>
</tr>
<tr>
<td>&gt; 500</td>
<td>45</td>
<td>42%</td>
<td>44</td>
<td>41%</td>
<td>59</td>
<td>55%</td>
</tr>
<tr>
<td>Do not know</td>
<td>20</td>
<td>20%</td>
<td>10</td>
<td>9%</td>
<td>9</td>
<td>8%</td>
</tr>
<tr>
<td>No response</td>
<td>9</td>
<td>8%</td>
<td>9</td>
<td>8%</td>
<td>9</td>
<td>8%</td>
</tr>
</tbody>
</table>

Budget amounts varied for rural string/orchestra programs. Twenty or 19% of respondents indicated they did not have a string/orchestra budget. Seventeen or 16% indicated they did not know the amount in their string/orchestra budget. Forty-seven or 44% indicated they had $5,000 or less in their string/orchestra budget. Nine or 8% indicated they had $5,001 to $10,000 in their string/orchestra budget. Further information can be found in Figure 4.1.
Additionally, respondents were asked if they were allotted an additional budget for the purchase of instruments or large equipment. A majority of respondents (n = 54 or 50%) did not have this type of additional budget, however a few did (n = 30 or 28%). Other respondents did not know if they had an additional budget (n = 15 or 14%).

The total yearly budget amount for string/orchestra instruction in the school district had changed for several respondents in the previous 5 years as shown in Table 4.5.

Figure 4.1: Total yearly budget for string/orchestra instruction
Table 4.5

*Indicated change in rural school district’s string/orchestra budget over the last 5 years*

<table>
<thead>
<tr>
<th></th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Budget increased</td>
<td>20</td>
<td>19%</td>
</tr>
<tr>
<td>Budget stayed the same</td>
<td>31</td>
<td>29%</td>
</tr>
<tr>
<td>Budget decreased</td>
<td>19</td>
<td>18%</td>
</tr>
<tr>
<td>First year for a budget, trends not established</td>
<td>5</td>
<td>5%</td>
</tr>
<tr>
<td>Do not know</td>
<td>24</td>
<td>22%</td>
</tr>
<tr>
<td>Did not respond</td>
<td>9</td>
<td>8%</td>
</tr>
</tbody>
</table>

Respondents indicated string/orchestra class instruction occurred in different types of rooms (regular academic classrooms, music classrooms, and/or multi-purpose rooms) within each school building. In some cases, string/orchestra class instruction at the same grade level used more than one type of room. Respondents were asked to indicate all types of rooms string/orchestra class instruction was offered specifically by grade level. Complete results are shown in Table 4.6.
Table 4.6

*Instructional space used for string/orchestra in Grades K-5, 6-8, and 9-12*

<table>
<thead>
<tr>
<th>Instructional space used for string/orchestra class instruction</th>
<th>Grades K-5 Frequency</th>
<th>Grades 6-8 Frequency</th>
<th>Grades 9-12 Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>Devoted exclusively to string/orchestra instruction</td>
<td>12</td>
<td>20</td>
<td>21</td>
</tr>
<tr>
<td>Band and string/orchestra instruction</td>
<td>10</td>
<td>23</td>
<td>24</td>
</tr>
<tr>
<td>Choir and string/orchestra instruction</td>
<td>10</td>
<td>13</td>
<td>15</td>
</tr>
<tr>
<td>Band, choir, and string/orchestra instruction</td>
<td>8</td>
<td>13</td>
<td>7</td>
</tr>
<tr>
<td>Guitar and string/orchestra instruction</td>
<td>2</td>
<td>7</td>
<td>9</td>
</tr>
<tr>
<td>General music and string/orchestra instruction</td>
<td>22</td>
<td>15</td>
<td>9</td>
</tr>
<tr>
<td>Gymnasium or Gymnasium stage</td>
<td>7</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>Cafeteria or Cafeteria stage</td>
<td>12</td>
<td>5</td>
<td>3</td>
</tr>
<tr>
<td>Auditorium or Auditorium stage</td>
<td>11</td>
<td>7</td>
<td>11</td>
</tr>
<tr>
<td>Temporary building</td>
<td>5</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>Regular classroom shared with other academic subjects (i.e. Math, English)</td>
<td>4</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>String/orchestra class instruction is not offered in this grade range</td>
<td>27</td>
<td>12</td>
<td>10</td>
</tr>
<tr>
<td>I do not teach this grade range and therefore do not know</td>
<td>13</td>
<td>8</td>
<td>10</td>
</tr>
</tbody>
</table>

*Note.* Respondents were allowed to select multiple locations.

Those who indicated *Other* entered responses such as: fifth graders travel to the Middle School for after-school instruction, room also shared with after school program and used for testing on days/times we do not use it, room is a multi-purpose room shared with gym/dance/music, room used for band/general music/strings/art/after school program, room is also teacher’s lounge and computer lab, and room is rented out to the community church.

Some respondents indicated that their school districts offered a variety of music courses in Grades K-12. Respondents were asked to indicate if their school districts offered music courses such as *General Music, Music Appreciation, Band, Choir, Guitar,*
Piano, Music Theory, Music History, and Other. Additionally, respondents were asked to indicate in which grade levels those courses were offered. Many respondents indicated their district did not offer several of the choice courses as a part of their district music curriculum. See Table 4.7.

Table 4.7

Music courses offered in rural school districts by grades level

<table>
<thead>
<tr>
<th>Grade Level</th>
<th>General Music</th>
<th>Music Appreciation</th>
<th>Band</th>
<th>Choir</th>
<th>Guitar</th>
<th>Piano</th>
<th>Music Theory</th>
<th>Music History</th>
<th>Other</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kindergarten</td>
<td>9</td>
<td>68</td>
<td>5</td>
<td>2</td>
<td>46</td>
<td>74</td>
<td>58</td>
<td>81</td>
<td>74</td>
</tr>
<tr>
<td>1st grade</td>
<td>66</td>
<td>1</td>
<td>0</td>
<td>2</td>
<td>0</td>
<td>0</td>
<td>4</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>2nd grade</td>
<td>75</td>
<td>1</td>
<td>0</td>
<td>3</td>
<td>0</td>
<td>0</td>
<td>4</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>3rd grade</td>
<td>77</td>
<td>2</td>
<td>0</td>
<td>5</td>
<td>0</td>
<td>0</td>
<td>4</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>4th grade</td>
<td>78</td>
<td>1</td>
<td>0</td>
<td>11</td>
<td>1</td>
<td>0</td>
<td>4</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>5th grade</td>
<td>76</td>
<td>1</td>
<td>13</td>
<td>27</td>
<td>1</td>
<td>0</td>
<td>4</td>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td>6th grade</td>
<td>69</td>
<td>1</td>
<td>51</td>
<td>45</td>
<td>4</td>
<td>2</td>
<td>3</td>
<td>1</td>
<td>5</td>
</tr>
<tr>
<td>7th grade</td>
<td>42</td>
<td>5</td>
<td>80</td>
<td>59</td>
<td>12</td>
<td>3</td>
<td>4</td>
<td>1</td>
<td>11</td>
</tr>
<tr>
<td>8th grade</td>
<td>11</td>
<td>6</td>
<td>83</td>
<td>74</td>
<td>19</td>
<td>4</td>
<td>5</td>
<td>1</td>
<td>12</td>
</tr>
<tr>
<td>9th grade</td>
<td>13</td>
<td>7</td>
<td>82</td>
<td>71</td>
<td>23</td>
<td>4</td>
<td>4</td>
<td>1</td>
<td>12</td>
</tr>
<tr>
<td>10th grade</td>
<td>4</td>
<td>19</td>
<td>82</td>
<td>81</td>
<td>32</td>
<td>14</td>
<td>21</td>
<td>9</td>
<td>16</td>
</tr>
<tr>
<td>11th grade</td>
<td>4</td>
<td>18</td>
<td>82</td>
<td>81</td>
<td>32</td>
<td>15</td>
<td>23</td>
<td>9</td>
<td>15</td>
</tr>
<tr>
<td>12th grade</td>
<td>4</td>
<td>18</td>
<td>83</td>
<td>82</td>
<td>33</td>
<td>15</td>
<td>30</td>
<td>10</td>
<td>15</td>
</tr>
</tbody>
</table>

Note. Data indicated in respondent frequency

In comparison to the data above, respondents indicated that string/orchestra class instruction was offered in grades 1 through 12, but most reported their school district offered string/orchestra instruction consistently in grades 6 through 12. See Figure 4.4 below.

Responses showed General Music was most often offered in grades K-6. Band and Choir courses were offered as early as the 4th grade for some school districts and
generally continued through 12th grade. String/Orchestra instruction was offered less than band or choir. Additional music class choices were offered to students beginning in the 7th grade. However, General Music course offerings declined beginning in the 7th grade. Figure 4.2 shows a graphic representation of the matriculation from General Music offered in the early grade levels to other music course offerings in the middle grades.

![Figure 4.2: Music courses offered in rural school districts by grade level, with string/orchestra instruction included](image)

Respondents that indicated Other music courses reported: Folk or World Music (African Drumming, Ukulele, Steel Drums, World Drumming, Mariachi, World Percussion), Electronic Music (Digital DJ, Audio Production, Advanced Topics in Electronic Music), “Music” (which the respondent defined as supervision for individual musical interests or independent study), Jazz, and Music Technology.
Generally, respondents perceived the level of support given to their school music programs to be High ($n = 49$ or 45%). Support was defined as being from the community, school administration, district administration, parents, and others. See Table 4.8.

Table 4.8

*Perceived level of support given to the overall school music program*

<table>
<thead>
<tr>
<th>Perceived Support Level</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Very High</td>
<td>21</td>
<td>19%</td>
</tr>
<tr>
<td>High</td>
<td>49</td>
<td>45%</td>
</tr>
<tr>
<td>Neutral</td>
<td>16</td>
<td>15%</td>
</tr>
<tr>
<td>Low</td>
<td>5</td>
<td>5%</td>
</tr>
<tr>
<td>Very Low</td>
<td>2</td>
<td>2%</td>
</tr>
<tr>
<td>No response</td>
<td>15</td>
<td>14%</td>
</tr>
</tbody>
</table>

Even though most respondents initially indicated they perceived a high or very high level of support for the local school music program, a large number of respondents indicated they perceived different levels of support for other music instruction in their school district compared to string/orchestra instruction. See Table 4.9.

Table 4.9

*Differences in the perceived levels of support for Other music instruction compared to String/Orchestra instruction within the school district*

<table>
<thead>
<tr>
<th>Perceived difference of levels of support</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>49</td>
<td>45%</td>
</tr>
<tr>
<td>No</td>
<td>35</td>
<td>32%</td>
</tr>
<tr>
<td>Do not know</td>
<td>9</td>
<td>8%</td>
</tr>
<tr>
<td>No response</td>
<td>15</td>
<td>14%</td>
</tr>
</tbody>
</table>
When asked to describe the different level of support, respondents generally perceived an equal (42 or 39%) or lower (41 or 38%) degree of support for string/orchestra instruction compared to the support given to other music instruction in their school districts. See Table 4.10.

Table 4.10

Description of perceived support differences between Other school music instruction and String/Orchestra instruction

<table>
<thead>
<tr>
<th>Description of perceived support difference</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>More support for String/Orchestra instruction</td>
<td>5</td>
<td>5%</td>
</tr>
<tr>
<td>Equal support for String/Orchestra instruction</td>
<td>42</td>
<td>39%</td>
</tr>
<tr>
<td>Less support for String/Orchestra instruction</td>
<td>41</td>
<td>38%</td>
</tr>
<tr>
<td>Do not know</td>
<td>5</td>
<td>5%</td>
</tr>
<tr>
<td>No response</td>
<td>15</td>
<td>14%</td>
</tr>
</tbody>
</table>

Rural String/Orchestra School Instruction

Most respondents ($n = 48$ or 44%) indicated there was no printed string/orchestra curriculum for their school district. However, eighteen or 17% indicated they did have a printed curriculum. Of those with a printed string/orchestra curriculum for their school district, thirteen or 72% indicated they used the string/orchestra curriculum to guide their instruction.

There were 47 respondents that reported their districts had a string/orchestra program in grades K-5. The current total student enrollment in these programs was 3,383 students for an average of 72 students per school district in grades K-5. The number of actual students enrolled in each of the 47 programs ranged from 6 to 300.
There were 63 respondents that indicated their districts had a string/orchestra program in grades 6-8. The current total student enrollment in these programs was 5,046 students for an average of 80 students per school district in grades 6-8. The number of actual students enrolled in each of the 63 programs ranged from 1 to 700.

There were 62 respondents who revealed they had a string/orchestra program in grades 9-12. The current total student enrollment in these programs was 4,262 students for an average of 69 students per school district in grades 9-12. The number of actual students enrolled in each of the 62 programs ranged from 2 to 1,000.

String/orchestra classes were organized homogeneously (violin class, viola class, cello class, bass class), heterogeneously (mixed violin, viola, cello, and/or bass class in any configuration), or a mixture of both homogeneously and heterogeneously. Most respondents indicated their string/orchestra classes were organized heterogeneously in grades K-5, 6-8, and 9-12. The number of classes that were organized heterogeneously rose as the grade level increased. See Table 4.11.

Table 4.11

<table>
<thead>
<tr>
<th>Organization of string/orchestra classes by grade level</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
</tr>
<tr>
<td>Grades K-5</td>
</tr>
<tr>
<td>---------------</td>
</tr>
<tr>
<td>Homogeneously</td>
</tr>
<tr>
<td>Heterogeneously</td>
</tr>
<tr>
<td>Mixed</td>
</tr>
<tr>
<td>Not offered</td>
</tr>
<tr>
<td>No response</td>
</tr>
</tbody>
</table>
Respondents indicated they represented 71 rural string/orchestra programs. Those string/orchestra programs had been in existence on average for 28 years of instruction per district. These rural string programs had been in place from 1 to 140 years. See Figure 4.3.

![Bar chart showing the range of years string/orchestra instruction offered in rural schools. The chart indicates that 30% of respondents offer instruction for 11-20 years, with smaller percentages for other intervals.]

**Figure 4.3:** Range of years string/orchestra instruction offered in rural schools

The start year for string/orchestra class instruction varied by school district. Respondents reported string/orchestra class instruction was offered first to students as early as Kindergarten when the program was first began, however, most school districts first provided string/orchestra class instruction in grades 4 (n = 14 or 13%), 5 (n = 21 or 19%) and 6 (n = 16 or 15%). Those grade levels were housed in elementary, intermediate, and middle schools. Respondents were asked when string/orchestra class instruction was
currently offered. Most reported their school district currently offered string/orchestra instruction consistently in grades 6 through 12. See Figure 4.4.

![Figure 4.4: String/orchestra instruction offered by grade level](image)

Respondents indicated their rural string/orchestra programs primarily offered instruction during the school day, one to 5 days a week, for 20 to 59 minutes per class meeting. Of those grade K-5 programs that met during the school day, they generally met 1, 2, or 3 days per week for 20-39 minutes per class meeting. Programs in grades 6-8 mostly met 5 days per week for 40-59 minutes. Programs in grades 9-12 mostly met 5 days per week for 40-59 minutes per class meeting. Additionally, a majority of respondents (n = 60 or 56%) indicated their students were able to register for string/orchestra instruction throughout the school year.
A majority of the respondents were certified to teach music in their state ($n = 58$ or 54%). Additionally, most respondents indicated they were the only string/orchestra teacher in their school district. Figure 4.5 shows the percentage of respondents and the number of full and part time string/orchestra teachers in their districts.

![Figure 4.5: Full and part time string/orchestra teachers within each rural school district](image)

Overall, the number of full and part time string/orchestra teachers for these rural school districts had stayed the same ($n = 50$ or 46%) in the last five years. More school districts had increased their number of full and half time string/orchestra teachers ($n = 10$ or 9%) than had decreased their number ($n = 6$ or 6%) in the last five years.

In school districts that had multiple string/orchestra teachers, those additional teachers’ primary instrument was mostly string ($n = 12$ or 13%), woodwind ($n = 12$ or 13%), or brass ($n = 11$ or 12%). Two respondents indicated their primary instrument as Other. Their statements included, “I am a flutist. They are getting me private lessons as
professional development to teach violin” and another shared, “Our elementary string program is taught by classroom (non-music) teachers.”

Respondents were asked to indicate the average number of concerts (including small and large performing ensembles) that their student orchestras performed per school year at each grade level. Most orchestras in grades K-5 performed 1-2 concerts per year \((n = 34\ or\ 31\%)\). Most orchestras in grades 6-8 performed 3-4 concerts per year \((n = 32\ or\ 30\%)\). Most orchestras in grades 9-12 performed 5-6 concerts per year \((n = 28\ or\ 26\%)\). Additionally, 38 or 35% of respondents indicated they also presented 1-2 concerts per year of combined grade levels. See Figure 4.6.

![Figure 4.6: Number of concerts performed by rural string/orchestra programs by grade level](image_url)

The concerts these rural string/orchestra programs performed took place in a variety of locations. Respondents were asked to categorize the locations of their rural
string/orchestra performances into one of three general locations: on school grounds, off school grounds within the community, and off school grounds outside the community. See Figure 4.7.

![Figure 4.7: Average number of concerts by location performed per school year](image)

Respondents were asked to indicate where they obtained string/orchestra instruments and accessories (strings, mutes, shoulder rests, rock stops, etc.). Respondents were encouraged to record all types and locations for purchases. Most respondents indicated that they purchased items from music stores that were located outside of their community \((n = 57 \text{ or } 48\%)\). Respondents were also given the option to choose *Other* and then asked to indicate what other ways they obtained these items. Those *Other* options indicated by the respondents included: donations from community, donations from students who have graduated, purchased through grants, representatives from music
stores visit the school weekly/bi-weekly, and local school/community funds that were raised to purchase needed items. Full results are shown in Figure 4.8.

![Figure 4.8: Where school string/orchestra instruments and accessories were purchased](image)

Respondents were asked to categorize the types and locations of persons that maintained, serviced, and repaired their school and student instruments. Respondents were encouraged to report all types and locations of persons involved. Most respondents indicated they sent work to a repairperson located outside of the community (n = 44 or 40%).

Respondents were also given the option to choose Other and then asked to indicate who else provided these services for their program. Those that indicated Other types and locations of persons that maintain, service, and repair their school and student instruments included: 1) I do basic repairs myself, 2) I do what I can. Store does rest, 3) I
repair many instruments to the best of my ability, and 4) Music store repairperson from 74 miles away does pickup and delivery. Full results are shown in Figure 4.9.

Figure 4.9: Type and location of persons who maintained/serviced/repai red school and student instruments

Respondents were asked where they acquire printed music and materials for their classroom teaching. Respondents were encouraged to indicate all types of merchants they used. Most respondents indicated they purchased their printed materials through the Internet \( n = 52 \) or 48%.

Respondents were also given the option to choose Other and then asked to indicate how else they acquire printed music and materials for their classroom teaching. Those that indicated Other acquired printed music and materials for their classroom teaching from: 1) music subscription on-line, 2) original compositions from myself and
community members, and 3) representative from music stores visits weekly/bi-weekly. Full results are shown in Figure 4.10.

![Figure 4.10: Where printed music and materials were purchased](image)

The final questions in this section of the survey focused on the opportunity for string/orchestra students to participate in full orchestra (symphonic orchestra with strings, woodwinds, brass, and percussion) in the school district. Twenty-eight or 26% percent of respondents currently offered full orchestra, 21 or 19% did not, and 22 or 20% currently did not but hoped to in the future. Of those who currently provided full orchestra instruction, most offered the ensemble at the high school level (n = 57 or 48%).

**Rural String/Orchestra Teachers**

Respondents were from 16 of the selected 20 states. They were from Arizona (n = 7 or 6%), California (n = 8 or 7%), Colorado (n = 4 or 4%), Idaho (n = 3 or 3%), Illinois
(n = 1 or 1%), Kansas (n = 9 or 8%), Massachusetts (n = 1 or 1%), Missouri (n = 2 or 2%), Nebraska (n = 1 or 1%), New Hampshire (n = 5 or 5%), New Mexico (n = 3 or 3%), North Dakota (n = 2 or 2%), Oklahoma (n = 1 or 1%), Oregon (n = 8 or 7%), Vermont (n = 3 or 3%), and Washington (n = 13 or 12%). Thirty-seven respondents (n = 34%) did not answer the questions.

A majority of the respondents were female (n = 44 or 41%), Caucasian (n = 66 or 61%), and indicated strings was their primary instrument family (n = 39 or 36%). Additionally, most were certified to teach music in their state (n = 65 or 60%). A majority of respondents taught only string/orchestra courses (n = 31 or 29%), but several also taught general music (n = 14 or 13%), band (n = 21 or 19%), and choir (n = 18 or 17%). Most were not certified to teach subjects other than music (n = 55 or 51%). Of those that responded, most had completed their student teaching in string instrument classes (n = 38 or 35%). However, the number of respondents who had not completed their student teaching with string instrument classes was also high (n = 33 or 31%). Respondents indicated they had student-taught in rural schools (n = 27 or 25%), suburban schools (n = 28 or 26%), and urban schools (n = 16 or 15%).

Respondents had taught in rural, suburban, and urban programs. Most had taught primarily in rural schools. See Figure 4.11.
Figure 4.11: Number of years taught by respondents in rural, suburban, and urban school districts

*Rural String/Orchestra Students*

Respondents indicated a majority of their students were female in grades K-5 (n = 42 or 39%), grades 6-8 (n = 51 or 47%), and grades 9-12 (n = 53 or 49%). See Figure 4.12.
Figure 4.12: Gender identified as majority for rural string/orchestra students by grade level

Respondents indicated a majority of their students were Caucasian in grades K-5 \((n = 40\text{ or } 37\%)\), grades 6-8 \((n = 46\text{ or } 43\%)\), and grades 9-12 \((n = 49\text{ or } 45\%)\). Several respondents indicated a majority of their students were Hispanic in grades K-5 \((n = 6\text{ or } 6\%)\), grades 6-8 \((n = 13\text{ or } 12\%)\), and grades 9-12 \((n = 10\text{ or } 9\%)\). One respondent from Oklahoma indicated a majority of his/her students in grades 9-12 were Native American. See Figure 4.13.
Respondents indicated their students participated in a free and reduced lunch program at each grade level. See Table 4.12.
Table 4.12

Percentage of string/orchestra students on free or reduced lunch per grade level

<table>
<thead>
<tr>
<th></th>
<th>Grades K-5</th>
<th></th>
<th>Grades 6-8</th>
<th></th>
<th>Grades 9-12</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Frequency</td>
<td>Percent</td>
<td>Frequency</td>
<td>Percent</td>
<td>Frequency</td>
</tr>
<tr>
<td>0-15%</td>
<td>4</td>
<td>4%</td>
<td>7</td>
<td>6%</td>
<td>6</td>
</tr>
<tr>
<td>16-30%</td>
<td>2</td>
<td>2%</td>
<td>1</td>
<td>1%</td>
<td>5</td>
</tr>
<tr>
<td>31-45%</td>
<td>6</td>
<td>6%</td>
<td>7</td>
<td>6%</td>
<td>6</td>
</tr>
<tr>
<td>46-60%</td>
<td>5</td>
<td>5%</td>
<td>10</td>
<td>9%</td>
<td>6</td>
</tr>
<tr>
<td>61-75%</td>
<td>3</td>
<td>3%</td>
<td>4</td>
<td>4%</td>
<td>5</td>
</tr>
<tr>
<td>&gt; 76%</td>
<td>6</td>
<td>6%</td>
<td>6</td>
<td>6%</td>
<td>3</td>
</tr>
<tr>
<td>Do not teach so</td>
<td>6</td>
<td>6%</td>
<td>5</td>
<td>5%</td>
<td>6</td>
</tr>
<tr>
<td>do not know</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Do not know</td>
<td>21</td>
<td>19%</td>
<td>23</td>
<td>21%</td>
<td>27</td>
</tr>
<tr>
<td>Do not offer at</td>
<td>16</td>
<td>15%</td>
<td>6</td>
<td>6%</td>
<td>5</td>
</tr>
<tr>
<td>this grade level</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No response</td>
<td>39</td>
<td>36%</td>
<td>39</td>
<td>36%</td>
<td>39</td>
</tr>
</tbody>
</table>

Fifty or 46% of respondents indicated more than 50% of their students continue string/orchestra instruction after the first year. Only 7 or 6% indicated that less than 50% of their students continue string/orchestra instruction after the first year. Ten or 9% did not know, 2 or 2% did not teach that level and therefore did not know, and 39 or 36% did not respond.

If string/orchestra instruction was offered in grades K-5, twenty-six or 24% indicated that more than 50% of their students continued string/orchestra instruction into grades 6-8. Nine or 8% indicated that less than 50% of their students continued string/orchestra instruction into grades 6-8. Nine or 8% did not know how many students continued string/orchestra instruction into grades 6-8. Twenty or 19% did not offer string/orchestra instruction in grades K-5 and one or 1% did not offer string/orchestra instruction in grades 6-8. Four or 4% indicated the first time string instruction was offered in their district is in grades 6-8. Thirty-nine or 36% did not respond.
Thirty-eight or 35% of respondents indicated that more than 50% of their students that participated in string/orchestra instruction in grades 6-8 continued string/orchestra instruction into grades 9-12. Ten or 9% indicated that less than 50% of those students who had participated in string/orchestra instruction in grades 6-8 continued string/orchestra instruction in grades 9-12. Eleven or 10% did not know how many students continued string/orchestra instruction into grades 9-12. Six or 6% did not offer string/orchestra instruction in grades 6-8 and two or 2% did not offer string/orchestra instruction in grades 9-12. Two or 2% indicated that the first time string instruction was offered in their district is in grades 9-12. Thirty-nine or 36% did not respond.

A majority of respondents indicated that between 1-10% of their students participated in private string instrument lessons (grades K-5, n = 22 or 20%; grades 6-8, n = 29 or 27%; and grades 9-12, n = 31 or 29%). A large number of respondents indicated their students did not take private string instrument lessons (grades K-5, n = 18 or 17%; grades 6-8, n = 15 or 14%; and grades 9-12, n = 8 or 7%). See Figure 4.14.
Respondents were asked what percentage of their string/orchestra student graduates went to college to pursue a degree in music education. Most respondents ($n = 34$ or 31%) indicated that 1-10% of their string/orchestra student graduates pursued a degree in music education. Two respondents indicated that 11-20% of their graduates seek a degree in music education. See Figure 4.15.
Respondents indicated that many of the students who graduate from their string/orchestra programs continued to play their instruments after graduation (alone or with others). All reported that some graduates continued to play their string instrument after high school graduation. Ten or 9% of respondents indicated 21-30% of their string/orchestra graduates continued to play their string instruments after graduation. Full results shown in Figure 4.16.
Figure 4.16: Percentage of string/orchestra students who continue to play their string/orchestra instrument after graduation (alone or with others)

Critical Factors

Eight critical factors were found in literature related to the current study: Community, School District, Non-String/Orchestra School Music Instruction, String/Orchestra School Music Instruction, String Teachers, String Students, Resources, and Perception. Attributes of the factors are listed based on information gathered from the related literature. Critical factors and those attributes are listed in Table 4.13.
Table 4.13

*Attributes of critical factors according to the related literature*

<table>
<thead>
<tr>
<th>Critical Factor</th>
<th>Attributes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Community</td>
<td>Size, business, parent, church, civic group, local fine arts organization, and college or university support, rapport of the community, invitations to string/orchestra ensembles to perform at events and community festivals</td>
</tr>
<tr>
<td>School District</td>
<td>School board, administration, counselor, athletics, and non-music teachers support, funding/budget, music or string-specific professional development, performance opportunities offered, instructional space, rapport of music department</td>
</tr>
<tr>
<td>Non-String/Orchestra Music Instruction</td>
<td>Other music teachers support, mix of competitiveness and collegiality, collaboration, added instruction time/duties</td>
</tr>
<tr>
<td>String/Orchestra School Music Instruction</td>
<td>Specific instructional time, instructional space, class organization, start-year, number of string/orchestra staff, number of concerts/presentations, access to string instruments/accessories/repair</td>
</tr>
<tr>
<td>String Teachers</td>
<td>State certified/licensed, organizational skills, administrative skills, communication skills, competitiveness, collaboration, inventive, variety of musical styles, contest success, experience teaching in a rural setting</td>
</tr>
<tr>
<td>String Students</td>
<td>Number involved, attrition, private lesson opportunities, class scheduling, job or chore responsibilities, balance of other activities and organizations</td>
</tr>
<tr>
<td>Resources</td>
<td>Instrument shops, repair shops, printed music shops, online access, technology, school and personal instrument purchases, collaboration efforts with other string programs in the region</td>
</tr>
<tr>
<td>Perception</td>
<td>String instruments fiddle, string instruments play in the symphony, learning to play a string instrument is difficult</td>
</tr>
</tbody>
</table>

Forty-eight or 44% of respondents believed the factors critical for the success of a string/orchestra program were different by location (rural, suburban, urban). However,
when asked to rank the critical factors for all locations and again for rural locations, the overall ranks of the critical factors were identical. See Table 4.14.

Table 4.14

*Rank average of critical factors in Any location and a Rural Location*

<table>
<thead>
<tr>
<th>Critical Factors</th>
<th>ANY Location</th>
<th>RURAL Location</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Rank Average</td>
<td>Overall Rank</td>
</tr>
<tr>
<td>School District</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>String/Orchestra Instruction</td>
<td>3.4</td>
<td>2</td>
</tr>
<tr>
<td>String Teachers</td>
<td>3.4</td>
<td>2</td>
</tr>
<tr>
<td>Community</td>
<td>4.3</td>
<td>3</td>
</tr>
<tr>
<td>String Students</td>
<td>4.4</td>
<td>4</td>
</tr>
<tr>
<td>Resources</td>
<td>5.5</td>
<td>5</td>
</tr>
<tr>
<td>Non-String/Orchestra Instruction</td>
<td>6</td>
<td>6</td>
</tr>
<tr>
<td>Perception</td>
<td>6.8</td>
<td>7</td>
</tr>
</tbody>
</table>

Respondents were then asked to recommend the first three steps for establishing a new string/orchestra program in a rural area based on their experiences from the critical factors listed and include any additional factors they considered important. This was a free/open response question. The investigator coded the responses according to the eight critical factors determined from the related literature and tracked additional factors offered by the respondents. See Table 4.15.
Table 4.15  

*Frequency of coded recommendations for starting a new rural string/orchestra program*

<table>
<thead>
<tr>
<th>Step One Critical Factors</th>
<th>Frequency</th>
<th>Step Two Critical Factors</th>
<th>Frequency</th>
<th>Step Three Critical Factors</th>
<th>Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>String Teachers</td>
<td>23</td>
<td>String Teachers</td>
<td>19</td>
<td>String/Orchestra School Music Instruction</td>
<td>17</td>
</tr>
<tr>
<td>School District Community</td>
<td>17</td>
<td>School District Community</td>
<td>18</td>
<td>String Teachers</td>
<td>13</td>
</tr>
<tr>
<td>String/Orchestra School Music Instruction</td>
<td>4</td>
<td>Community</td>
<td>11</td>
<td>School District</td>
<td>12</td>
</tr>
<tr>
<td>Non-String/Orchestra School Music Instruction Resources</td>
<td>3</td>
<td>String Students</td>
<td>2</td>
<td>Community</td>
<td>6</td>
</tr>
<tr>
<td>Resources</td>
<td>2</td>
<td>String/Orchestra School Music Instruction</td>
<td>1</td>
<td>Non-String/Orchestra School Music Instruction</td>
<td>1</td>
</tr>
<tr>
<td>String Students</td>
<td>1</td>
<td>Non-String/Orchestra School Music Instruction</td>
<td>0</td>
<td>Perception</td>
<td>1</td>
</tr>
<tr>
<td>Perception</td>
<td>1</td>
<td>Perception</td>
<td>0</td>
<td>String Students</td>
<td>0</td>
</tr>
</tbody>
</table>

Respondent recommendations can be found in full in Appendix I.
Chapter 5: Summary, Conclusions, Recommendations, and Implications

Summary

The purpose of the study was to examine the current profile of rural string programs and identify factors critical to establish new rural string programs.

The study was a quantitative survey design. The respondents in the current study involved 108 people who were self-labeled rural, K-12, string/orchestra teachers and members of the National Association for Music Education (NAfME). Participants volunteered to participate in the survey via email solicitation from NAfME.

The following research questions were developed by the researcher for the successful completion of the study.

1. What is the current profile of rural string/orchestra programs as indicated by self-labeled, rural string teachers?
2. What critical factors are integral to the success of a rural string program based on those factors that have been discussed in the literature according to self-labeled rural string/orchestra teachers?
3. What suggestions do current self-labeled rural string/orchestra teachers have for the successful creation of new string/orchestra programs in rural schools?
Surveys were sent to possible participants in specific rural states. Individual states were chosen using data from the National Center for Educational Statistics (NCES) and the U.S. Census Bureau as reported in the most recent biannual publication of *Why Rural Matters 2013-2014: The Condition of Rural Education in the 50 States* by the Rural School and Community Trust. The investigator used the NCES and U.S. Census Bureau data within to determine the states to be included in the study.

Twenty-one states were identified by the NCES and the U.S. Census Bureau that in which at least half of all school districts had fewer students enrolled than the national rural median of 533 students (Johnson, et al, 2014, p. 6). The states identified were: North Dakota, Vermont, Nebraska, South Dakota, Oklahoma, Colorado, New Mexico, Maine, Alaska, California, New Hampshire, Oregon, Kansas, Arizona, Missouri, Idaho, Washington, Illinois, Massachusetts, and Texas. Montana was inadvertently left off the list by researcher error. These twenty states were surveyed for the purposes of the study.

Using the NAfME email distribution list, surveys were sent via email to all NAfME members who taught K-12 Orchestra in the identified twenty states. There were 2,801 possible participants contacted. Thirty-four email invitations were returned as non-operative, making the total possible participants 2,767. Participants volunteered to complete the survey by clicking on the web link in the introduction email sent by NAfME and consenting to participate in the survey. Additionally, participants were required to indicate whether they taught in a rural, suburban, or urban school district. There were 343 total responses received to the survey for a response rate of 12%. Of the 343 total responses collected, 228 or 66% were deemed usable because those 228 respondents answered the survey question to classify their school programs as being rural, suburban,
or urban. The other 115 respondents or 34% did not answer the school classification question. Of the 228 usable surveys, 108 or 47% were rural, 89 or 39% were suburban, and 31 or 14% were urban. For this study, only the 108 responses by those who identified themselves as teaching in a rural school district were examined.

The final version of the survey instrument was distributed to participants using Survey Monkey (www.surveymonkey.com). Data gathered were entered into MS Excel software and descriptive statistics were used to analyze survey results.

**Limitations**

It was unusually challenging to obtain a pool of rural respondents for this study. The definition of rural is not consistent from study to study within rural research, educational research, or music research. Examples are cited in Chapter 2 of this document. As has been done in previous string status research, the investigator was forced to allow teachers to self-label their programs. However, previous string status research has solicited respondents from all string/orchestra programs located in rural, suburban, and urban areas.

The data collected in the current study is from an extremely small sample and is therefore not representative of rural string/orchestra programs across the country. When attempting to locate rural string/orchestra programs by distance from an urban center or urban cluster, the research firm, MTD Research, found that the most rural string/orchestra programs were located in Pennsylvania. When this was reported to a university string education expert in Pennsylvania, the data was deemed inaccurate. Additionally, the NAfME list includes NAfME members only. One rural state that was identified by NCES and U.S. Census bureau as being rural was Texas. However, in the State of Texas, music
teachers are not required to be a member of the NAfME, but only the Texas Music Educators Association (TMEA). The list that the researcher obtained from NAfME only contained a total of 11 string/orchestra teachers only in Texas, regardless of geographic location. This is clearly inaccurate.

National music associations can only distribute surveys based on the information they capture through their annual membership forms. To assist in future research, the researcher recommends that professional music organizations expand their membership forms. Members could identify the type of program (rural, suburban, or urban) in which they teach. This additional data would prove valuable as more research is done in each of these individual area classifications.

As the researcher was unable to reach a sizable sample of string/orchestra teachers in rural areas, it is highly circumspect that we as a music education profession are doing all that we can to serve teachers in rural areas. It appears that rural teachers, regardless of music discipline, are unrepresented. From the small amount of data that was gathered in this study, rural music teachers acknowledge that they do need support, in fact. Those self-labeled rural teachers that were able to respond to the survey in the current study noted that they need assistance in drafting curriculum, preparing to live and work in rural areas, and aid in other areas as well.

Because the survey questionnaire was only able to reach 12% of the possible 2,767 NAfME members who taught K-12, string/orchestra in the selected rural states, the sample exhibits selection bias due its limited size. Data gathered may not be valid. Means to identify a larger and a more representative sample size of music education in rural
school districts must be found. If not, rural music teachers and their students will continue to be under served.

**Conclusions**

*Community*

Data revealed that most respondents lived in communities of 15,000 people or more \((n = 37 \text{ or } 34\%)\). Respondents, while self-labeled as rural, taught in municipalities with a variety of populations. As shown in multiple previous string/orchestra program status studies, smaller schools, especially those located in rural areas, have fewer string programs (Anderson, 1973; Baggett, 1974; Corcoran, 1976; Leonhard, 1991; Stewart, 1991; Horvath, 1993; Chenault, 1993; Abeel, 1995; Bergonzi, 1995; Smith, 1997b; Hamann & Gillespie, 1998; Doerksen & Delzell, 2000; Hamann, Gillespie, & Bergonzi, 2002; Gillespie, 2010; Smith & Alexander, 2010). However Holmes (1957b) argued, “the size of the community should not deter the establishment of a string program. Many a small school supports an excellent orchestra as well as a band” (p. 2). Additionally, in future studies, one could inquire whether the school string/orchestra teacher lived in the rural community that housed the rural school district or elsewhere.

But schools in rural areas face special problems that are unique to their geographic area and impact the creation of rural school string programs. Factors involve school size, multi-grade teaching, funding, technology, course offerings, quality of teachers, and cultural acceptance (Sur, 1941; Christiansen, 1948; Fergus, 1960; Livingston-Steuben-Wyoming Board of Cooperative Educational Services, 1971; Surwell, 1980; Reddick & Peach, 1984; Bonney, 1985; Jones, 1985; Stevens & Davis, 1988; Wohl, 1993; Dunbar, 1995; Wendell, 1999; Bouck, 2004; Maltas, 2004; Isbell,
2005; Wilcox, 2005; Childress, 2006; Hunt, 2009; Hicks, 2010; Burkett, 2011; Cole, 2011; Prest, 2011; Spring, 2013).

Most respondents (n = 77 or 71%) in the current study indicated there was an amateur symphony in the rural community (or within 30 miles) in which they teach. Also many (n = 63 or 58%) shared that string instruments were performed within the community churches. A community orchestra performance, performance in a local church, a local community college, another type institution of higher education performance, or a traveling symphonic ensemble can serve as a model for students and provide them with a string instrument timbre reference, even if a professional symphony is not housed in a community (Fetchen & Heimer, 1989; Jacob, 1996; Romer, 1998; Childress, 2006; Rousso, 2006).

Private string lessons were available within the community for 78 or 71% of the respondents in the current study. However, 26 or 24% of respondents indicated that students also drove over 61 miles, round trip, to take private string instrument lessons outside of their community. Isbell (2005) includes having access to private lesson instruction as a factor leading to the success of a rural music program. He encourages older students in his program to mentor their peers in the school string program and even offer private lessons for younger students (p. 33). Additionally, Fetchen and Heimer (1989) encourage forming alliances with local community colleges, area art councils, and art agencies to cultivate relationships with secondary schools to provide access to the arts (including private lesson resources) for rural music students (p. 32-33).

Respondents in the current study indicated additional learning and performance opportunities for rural string/orchestra students were occasionally available from local
junior colleges, community colleges, colleges, and/or universities (including satellite campuses) located in or within 30 miles of the rural community. Nearly all respondents \((n = 102 \text{ or } 94\%)\) indicated there was at least one of the previously listed types of institutions located in or within 30 miles of their rural community. However, only about a third of the respondents indicated there were available specific string/orchestra opportunities such as courses, workshops, camps, lessons, and/or performances offered by the institutions. Information was not collected about why there were so few string/orchestra opportunities. This could be done in future investigations on rural school string/orchestra programs. For current research, Fetchen and Heimer (1989) greatly encouraged such institutions to embrace the role of arts advocate in rural areas and stated,

> Community colleges in rural areas play an important role in introducing audiences to the arts and influencing their tastes. In many rural areas, community colleges are the only higher education institutions or organizations of size with the resources to offer arts programs. As a visible societal force, a rural community college can and does shape the aesthetic mind of the community it serves (p. 32).

Others call for more direct assistance from institutions of higher education to provide rural music programs with specific tools and resources for music teacher pre-service preparation, rural music teacher in-service professional development, and opportunities for rural music students (Sur, 1941; Bonney, 1985; Fetchen & Heimer, 1989; Maltas, 2004; Hunt, 2009; Bates, 2011a; Burkett, 2011). As mentioned above, more productive avenues support should also be examined from music associations.

*Rural School District*

Each rural school district analyzed in the current study was comprised of a number of individual school buildings that housed several grade levels. For grades K-5,
most respondents ($n = 54$ or $50\%$) indicated their school district had more than 3 schools in their district. For grades 6-8, most respondents ($n = 61$ or $56\%$) indicated their school district had only one school building. For grades 9-12, most respondents ($n = 74$ or $69\%$) indicated their school district had only one school building. As Delzell and Doerkesen (1998) found, grade configurations in school buildings can have an impact, not only on the start-year, but also on the other grade levels in which string instruction is offered in the school curriculum. A rural school district with one building that encompasses grades 6-8 and one building that houses grades 9-12 may be able to offer string/orchestra instruction at its schools more easily than providing string/orchestra instruction at multiple elementary schools. Future research can determine if this hypothesis is true. Depending on the distance between the building housing grades 6-8 and the building housing grades 9-12, the hiring of one teacher may suffice to provide string/orchestra instruction at those grade levels.

Additionally, in rural school districts, music teachers commonly encounter inadequacy of instructional space in the grade-level building (Charles, 1969; Edington, 1976; Tillman, 1983; Gardener, 1984; Reddick & Peach, 1984; Bouck, 2004, Isbell, 2005). Data from the current study indicated that string instruction in rural school districts already takes place in a wide variety of room types. This problem is something that string/orchestra teachers encounter in other locations as well. Hamann, Gillespie, and Bergonzi (2010) found that “42 percent felt their accommodations were less than adequate” (p. 10). Additionally “67 percent of the teachers (615 subjects) said they shared a room” and concluded that “In general, teachers who had a separate room were more satisfied with their rehearsal facilities than those who shared a room” (p. 10).
Most respondents reported that student enrollments in their rural districts involved over 500 students in grades K-5 \((n = 45\) or 42% of respondents), 6-8 \((n = 44\) or 41% of respondents), and 9-12 \((n = 59\) or 55% of respondents). However, respondents also indicated enrollments in their school districts as small as 1 to 25 students. A greater number of larger schools than smaller schools reported that they had a string/orchestra program, even when located in a rural area. As shown in previous status studies, smaller schools, especially those located in rural areas, had fewer string programs (Anderson, 1973; Baggett, 1974; Corcoran, 1976; Leonhard, 1991; Stewart, 1991; Horvath, 1993; Chenault, 1993; Abeel, 1995; Bergonzi, 1995; Smith, 1997b; Hamann & Gillespie, 1998; Doerksen & Delzell, 2000; Hamann, Gillespie, & Bergonzi, 2002; Gillespie, 2010; Smith & Alexander, 2010).

Budget amounts varied for string/orchestra programs involved in the current study. Most respondents \((n = 47\) or 44%) indicated they had $5,000 or less in their string/orchestra budget. Sadly, 20 or 19% of respondents indicated they did not have a string/orchestra budget. Seventeen or 16% indicated they did not know the amount in their string/orchestra budget. Nine or 8% indicated they had $5,001 to $10,000 in their string/orchestra budget.

Respondents were also asked how their budgets for string/orchestra instruction had changed in the last five years. Most respondents indicated the budgets had either increased \((n = 20\) or 19%) or had stayed the same \((n = 31\) or 29%). Nineteen or 18% indicated their budgets had decreased in the previous five years. Smith and Alexander (2010) found that 47% of programs reported their funding had somewhat decreased and 28% of programs reported their funding had somewhat increased (p. 5). Respondents
from the current study reported that more programs were maintaining or increasing their string/orchestra program budgets than was reported in Smith and Alexander (2010).

A majority of respondents \((n = 54 \text{ or } 50\%)\) in the current study did not have an additional budget allotment that allowed for large purchases (instruments, equipment, etc.), however, some did have such an additional budget \((n = 30 \text{ or } 28\%)\). Other respondents did not know if they had an additional budget \((n = 15 \text{ or } 14\%)\). Budget constraints exist in most schools, particularly in rural areas where funding resources were already low. Therefore, data suggest that rural music teachers may need to be creative by writing grants and seeking donations from local or regional businesses and arts organizations (Maraffie, 1961; Davis, 1974; Stevens & Davis, 1988; Dunbar, 1995, Cole, 2011; Prest, 2011).

Respondents in the current study indicated string/orchestra class instruction occurred in different types of rooms (regular academic classrooms, music classrooms, and/or multi-purpose rooms) within the school building. In some cases, string/orchestra class instruction at the same grade level used multiple types of rooms. Respondents were asked to indicate all types of rooms string/orchestra class instruction was offered specifically by grade level. Findings showed that in many cases, rural string/orchestra programs are taught in a shared classroom. Hamann, Gillespie, and Bergonzi (2002) found that “67% of the teachers said they shared a room [whether with another music class or a regular academic class]” (p. 10). Additionally, Smith and Alexander (2010) showed similar results.

The respondents indicated general music classes most often were offered in grades K-6. Band and Choir courses were offered as early as the 4th grade for some
school districts and generally continued through 12th grade. Additional music class choices were provided to students beginning in the 7th grade. General Music course offerings declined beginning in the 7th grade. Respondents reported that indicated Other music courses included: Folk or World Music (African Drumming, Ukulele, Steel Drums, World Drumming, Mariachi, World Percussion), Electronic Music (Digital DJ, Audio Production, Advanced Topics in Electronic Music), General Music (“music,” supervision for individual musical interests or independent study), Jazz, and Music Technology. These additional, non-mainstream courses may have been an answer to student interest, teacher strengths, or even community cultures and traditions (culturally responsive in nature). Future research could determine if this is true. For example, Bates (2011a) suggested that research shows several instances that were different in the culture of music education due to geographic location. He stated, “that the professional focus on large ensemble performance seems to benefit suburban schools, students, and teachers more than it does in their rural counterparts” (p. 90).

Generally, respondents in the current study perceived the level of support for their school music programs to be high ($n = 49$ or 45%). Support was found from the community, school administration, district administration, parents, and others. Hamann, Gillespie, and Bergonzi (2002) also found that “orchestra teachers felt strong support from their music teaching colleagues, parents of students, building principals, private teachers, school counselors, district administrators, and non-music teaching colleagues, respectively” (p. 11). However, community was not a factor included in the Hamann, Gillespie, and Bergonzi survey.
A large number of respondents in the current study \((n = 49\) or \(45\%\)) indicated they perceived there to be different levels of support for other music instruction in their school district compared to string/orchestra instruction. When asked to describe that difference of support, respondents generally perceived that there was an equal \((42\) or \(39\%\)) or lower \((41\) or \(38\%\)) degree of support for string/orchestra instruction compared to that given to other music instruction in their school districts. What specific factors contributed to the perceived difference was not investigated in this study, but could be in future studies.

Current data reveal that in a rural community the ties that the school has to everyday life of the municipal community are strong. Likewise, the impact the community makes on the school is also deep. Dunbar (1995) stated,

> Music education in the public schools has had to rely on community support for its existence since its inception. In rural schools, in particular, music for community functions, service projects and entertainment continue to be provided by school performance groups. Local musical traditions are the heartbeat of most music programs, rural and urban, and while music educators continue to teach musical concepts and aesthetic goals, many have successfully learned to work within the framework of the community in which they teach in order to retain their programs. Without attention given to regional differences and community traditions, music education, like education on the whole, will become a standardized, non-personal phenomenon. Without the support of local communities, and in light of the fact that the federal government continues to delegate relatively few funds to local education, music programs in low tax base areas will be drastically cut or lost. Music education disjointed from regional traditions and community functions is unlikely to last for very long in settings where there are budget constraints (p. 57).

Literature reveals that string/orchestra instruction must be relevant to the community and the students/families that are a part of it. Support is necessary for a successful string/orchestra program (Maraffie, 1961; Davis, 1974; Morehouse, 1988; Fetchen & Heimer, 1989; Wohlfel, 1989; Dillon-Krass & Straub, 1991; Abeel, 1995;
Dunbar, 1995; Wilcox, 2005; Hunt, 2009; Hicks, 2010; Hamann & Gillespie, 2013; Spring 2013; The Leagues of American Orchestras, 2015). Future research may investigate if community support for a school string/orchestra program in a rural setting may be even more critical for success than in schools in other areas.

Because of this shift towards more culturally responsive teaching in rural areas, perhaps the values and rationales of string instrument instruction are also evolving. “Strings are not limited to playing classical masterworks but are among the most versatile instruments stylistically and culturally, with music from virtually every style period from the late Renaissance to the present. Strings remain an important voice in contemporary music in both classical and popular genres” (Brenner, 2010). Additional technologies and models are also available in nontraditional materials, shapes, and volumes to meet the growing need for string instrument inclusion in a variety of ensembles, both classical and non-classical. Respondents in the current study shared that they taught a variety of music genres in their string/orchestra classes. Perhaps revisions are needed to advocacy materials to better reflect these culturally responsive values, showcase more current beliefs, and enhance those previously held by our profession.

*Rural String/Orchestra School Instruction*

Most respondents (*n* = 48 or 44%) in the current study indicated there was no printed string/orchestra curriculum for their school district. However, eighteen or 17% indicated there was a printed curriculum. Of those that did have a printed string/orchestra curriculum in their school district, thirteen or 72% indicated they used the string/orchestra curriculum to guide their instruction. Hamann, Gillespie, and Bergonzi (2002) showed that 62% of the respondents reported they had a printed orchestra
of a printed orchestra curriculum or course of study, 73% used their curriculum to plan instruction and evaluation. Only 38% indicated they did not have a printed orchestra curriculum or course of study (p. 10). Smith and Alexander (2010) found that 67% of respondents indicated they had a printed curriculum or course of study and 33% did not. Eighty percent indicated they used the curriculum to plan instruction (p. 6). Data reveal that fewer rural string/orchestra programs operate from a printed string/orchestra curriculum than in other school settings. Future research could investigate the impact of the string-specific curricula on the success rate of string programs located in rural school districts.

There were 47 or 44% of respondents that indicated they had a string/orchestra program in grades K-5 in the present study. Findings from the study reveal that in rural programs there are 3,383 students for an average of 72 students per school district in grades K-5. The number of actual students enrolled in each of the 47 programs ranged from 6 to 300.

There were 63 or 58% of respondents in the researcher’s investigation that indicated they had a string/orchestra program in grades 6-8. The current total enrollment in these programs was 5,046 students for an average of 80 students per school district in grades 6-8. The number of actual students enrolled in each of the 63 programs ranged from 1 to 700.

There were 62 or 57% of respondents who indicated they had a string/orchestra program in grades 9-12. The current total enrollment in these programs was 4,262 students for an average of 69 students per school district in grades 9-12. The number of actual students enrolled in each of the 62 programs ranged from 2 to 1,000.
Most respondents indicated their string/orchestra classes were organized heterogeneously in grades K-5, 6-8, and 9-12. The number of classes that were organized heterogeneously rose as the grade level increased. Hamann, Gillespie, and Bergonzi (2002) found that over 50% of beginning classes were taught heterogeneously (p. 8). Additionally, of the 95% of classes that were taught in group settings, 88% were taught heterogeneously (p. 15). Smith and Alexander (2010) also reported that most classes were organized heterogeneously (p. 7). Future research could investigate if rural string classes organized homogeneously or heterogeneously are more or less successful.

A majority of the rural string/orchestra programs ($n = 62$ or 87%) in this study had existed for 50 years or less. Two programs (3%) had existed for more than 100 years. Though the number of rural string/orchestra programs is small compared to suburban programs, some have been resilient in their locations and have become traditions of their people. Future research could determine if this is, in fact, the case.

The start year for string/orchestra class instruction varied by school district, data revealed. Respondents reported string/orchestra class instruction was offered first to students as early as Kindergarten, but most school districts first provided string/orchestra class instruction in grades 4 ($n = 14$ or 13%), 5 ($n = 21$ or 19%) and 6 ($n = 16$ or 15%). Those grade levels were housed in elementary, intermediate, and middle schools. Respondents indicated string/orchestra class instruction was offered in grades 1 through 12, but most respondents indicated their school district offered string/orchestra instruction in grades 6 through 12. Data from the current study were comparable to those found in Delzell and Doerksen (1998) in that start year had been moved to later grade levels than had initially been suggested by Dillon and Kreichbaum (1978) and MENC
Additionally, Hamann, Gillespie, and Bergonzi (2002) found that beginning class instruction most often occurred in 4th grade (31%) (p. 15). Therefore, as Delzell and Doerksen (1998) also suggest, each school district must give careful considerations to the advantages and disadvantages of each proposed instructional grade level.

Respondents in the current study indicated their rural string/orchestra programs primarily offered instruction during the school day, from one to 5 days a week, for 20 to 59 minutes per class meeting. Hamann, Gillespie, and Bergonzi (2002) found that 95% of string classes were offered during the regular school day (p. 15). Gillespie, Russell, and Hamann (2014) found that “students participated in string instruction most often during the regular school day: 1 to 2 days per week at the elementary level (K-5) and daily at the middle schools and high schools. The duration of instruction in a majority (52%) of elementary string classes was between 30 to 45 minutes, between 30 to 60 minutes at the middle school, and between 45 to 60 minutes at the high school (p. 179). Results of the current study were similar to these past two studies. Thus, the frequency of string instruction in rural schools appears to be the same as schools in other settings.

A majority of the respondents were certified to teach music in their state (n = 58 or 54%). Gillespie, Russell, and Hamann (2014) found that the vast majority of respondents (96%) were certified to teach music in their state as well (p. 179).

Overall, the number of full and part time string/orchestra teachers for these rural school districts in the study had remained the same (n = 50 or 46%) during the last five years. More school districts had increased their number of full and half time string/orchestra teachers (n = 10 or 9%) than had decreased their number (n = 6 or 6%) in the last five years. Hamann, Gillespie, and Bergonzi (2002) reported 40% of respondents
had an increase in the number of string teachers in their district. Fifty percent had stayed the same and 10% indicated there was a decline (p. 11). Results were similar. In school districts that had multiple string/orchestra teachers, those additional teachers’ primary instrument was mostly string \( (n = 12 \text{ or } 13\%) \), woodwind \( (n = 12 \text{ or } 13\%) \), or brass \( (n = 11 \text{ or } 12\%) \). Smith and Alexander (2010) found that overall, 72% of respondents played a string primary instrument. The other instrument families represented were brass (9%), woodwind (11%), keyboard (5%), voice (2%) and other or no response (3%) (p. 7).

Results were similar.

Most orchestras in grades K-5 performed 1-2 concerts per year \( (n = 34 \text{ or } 31\%) \). Most orchestras in grades 6-8 performed 3-4 concerts per year \( (n = 32 \text{ or } 30\%) \). Most orchestras in grades 9-12 performed 5-6 concerts per year \( (n = 28 \text{ or } 26\%) \). Additionally, 38 or 35% of respondents indicated they also presented 1-2 concerts per year of combined grade levels.

Most respondents indicated their orchestras gave 3 to 4 performances \( (n = 35 \text{ or } 32\%) \) on school grounds per year. However, 35 or 32% of respondents indicated their orchestras gave 1 to 2 performances off school grounds within the community per year. However, 32 or 30% of respondents indicated their orchestras gave 1 to 2 performances off school grounds outside the community per year. Hamann, Gillespie, and Bergonzi (2002) found,

The average number of concerts given on school grounds was 5 per year. . . The average number of concerts given off school grounds within the community was 3. . . The average number of concerts presented off school grounds and outside the community was 3 (p. 9).
Generally, the respondents from the current study showed they gave fewer concerts per school year than respondents in previous studies, but the frequency of those concerts by location were similar. Perhaps, rural school string/orchestra programs should attempt to schedule more performances, both small and large ensembles. Isbell (2005) encouraged rural music programs to give extra performances for the school and the community to help those populations see the program and encourage participation (p. 33). Additionally, *The Complete String Guide: Standards, Programs, Purchase, and Maintenance* (1986) encouraged string ensembles to establish their niche in the school and community for utilitarian performances as well, such as memorial services, graduation ceremonies, and civic group performances (p. 5). Performing makes students feel good about their accomplishments, parents have a chance to see their student’s progress, and performing can be a positive factor toward retention (Morehouse, 1988 and Papinchak, 1992). Future research could examine the number of performances given by rural string/orchestra programs in comparison to their retention rates.

Generally, rural string/orchestra teachers acquire necessary materials for their classroom instruction from outside the community. Rural teachers suggested developing relationships with instrument dealers in their region and speaking with regional colleagues about their experiences in dealing with different music businesses. Wilcox (2005) featured an interview with a rural music director that encouraged those others teaching in rural areas to “swap experiences with fellow music directors and music dealers” and to “recharge by attending clinics and conventions and by always looking for new ideas and materials” (p. 30). One could meet new instrument dealers, printed materials distributors and speak with colleagues about their experiences with those
companies. Future research could examine the rural outreach initiatives of string
instrument dealers, music and resource vendors, and repairpersons.

Twenty-eight or 26% of respondents currently offered full orchestra, 21 or 19%
did not, and 22 or 20% currently did not but hoped to in the future. Of those who
currently offered full orchestra instruction, most offered the ensemble at the high school
level. Hamann, Gillespie, and Bergonzi (2002) showed that 44% of those surveyed taught
full orchestra. Of those 44%, 65% taught full orchestra at the high school level, 30%
taught full orchestra at the middle/junior high school level, and 6% taught full orchestra
at the elementary level (p. 8). The percentage of respondents in the current study was
lower than the percentage of respondents who offered full orchestra instruction in the
study by Hamann, Gillespie, and Bergonzi (2002). Additionally, not offering full
orchestra instruction denies wind, brass, and percussion students the opportunity to
perform as a full orchestra (Goodrich & Wagner, 2002). Future research could investigate
the successful collaborative efforts of full orchestras in rural school music programs as it
relates to retention, school, and community involvement.

*Rural String/Orchestra Teachers*

Most respondents in the study were female (n = 44 or 41%), Caucasian (n = 66 or
61%), and indicated strings was their primary instrument family (n = 39 or 36%).
Gillespie and Hamann (1998) found that a majority of orchestra teachers were white
(Caucasian) as well (p. 75). Hamann, Gillespie, and Bergonzi (2002) also noted that a
majority of string teachers were female (58%) (p. 14). Smith and Alexander (2010) found
that 65% of respondents were female and 35% were male (p. 7). Those results were from
status studies included participants in all locations. For rural areas, Gardener (1984)
found that “due to the lack of benefits for teachers in rural areas there are very few male teachers” in any discipline (p. 20). Future research could look at diversity issues in teacher recruitment in rural areas.

Most respondents in the study had completed their student teaching in string instrument classes ($n = 38$ or 35%). However, the number of respondents who had not completed their student teaching with string instrument classes was also high ($n = 33$ or 31%). Additionally, 27 or 25% of respondents indicated they had student-taught in rural schools, 28 or 26% in suburban schools, and 16 or 15% in urban schools. Without the experience of observing or student teaching in rural schools, new music teachers that earn a music position in a rural school will have much to learn about their new environment.

Gardener and Edington (1982) recommended that pre-service teachers should have the opportunity to student teach in “a small, isolated school where the student could live as well as teach and work within that particular community (p. 20). As Gjelten (1978) described, “to be a successful teacher in a rural community requires integration of personal, cultural, professional, and social dimensions” (p. 6). Isbell (2005) acknowledged, too, that not every rural music teacher has grown up in a rural community and therefore must learn how to understand their new rural environment.

Rural teachers need to be sensitive to the concerns of their communities. This means that work on the farm sometimes takes priority over school. When it’s calving season, the family may need extra hands at home. The livelihood of a family could depend on it. A new teacher from the suburbs may have difficulty understanding this rural concept (p. 34).

Respondents of the current study had been teaching from 0 to 41 years, primarily in rural areas. Smith and Alexander (2010) found respondents had been teaching strings
from 0 to 42 years (p. 9). Future research could investigate teacher-education programs that allow pre-service teachers to gain classroom understanding through observation, practicum, and/or student-teaching experiences in a variety of settings including string, band, choir, general and/or elementary and in rural, suburban, and urban settings.

*Rural String/Orchestra Students*

Respondents in the study indicated a majority of their students were female in grades K-5 \( (n = 42 \text{ or } 39\%) \), grades 6-8 \( (n = 51 \text{ or } 47\%) \), and grades 9-12 \( (n = 53 \text{ or } 49\%) \). Hamann, Gillespie, and Bergonzi (2002) also found that a majority of string/orchestra students were female (p. 14). Respondents of the current study indicated a majority of their students identified as Caucasian in grades K-5 \( (n = 40 \text{ or } 37\%) \), grades 6-8 \( (n = 46 \text{ or } 43\%) \), and grades 9-12 \( (n = 49 \text{ or } 45\%) \). Gillespie and Hamann (1998) and Hamann, Gillespie, and Bergonzi (2002) also showed that a majority of string/orchestra students were white (p. 75 and p. 14, respectively).

Respondents in the current study indicated their students participated in a free and reduced lunch program at each grade level. Johnson, et al. (2014) stated, “More than two in five of those rural students live in poverty, more than one in four is a child of color, and one in eight has changed residence in the previous 12 months” (p. 27). Rural schools typically do not receive as much federal funding as other schools (Dunbar, 1995; Bouck, 2004; Prest, 2011). “Rural education matters – rural schools serve over 40% of the nations students, but do not receive as much federal funding (NEA, 2003)” (Bouck, 2004, p. 38). Knowing this, there is much to be learned from string/orchestra programs like Youth Music Monterey South County Strings that brings free string instrument instruction and low-cost rental instruments to students in south Monterey County,
California (Jacob, 1996 and Youth Music Monterey County, 2015). Future research could investigate successful strategies, as seen in south Monterey County, for assisting a greater number of students on free or reduced lunch to access string instrument instruction.

Fifty or 46% of respondents indicated more than 50% of their students continue string/orchestra instruction after the first year. If string/orchestra instruction was offered in grades K-5, twenty-six or 24% of respondents in the current study indicated that more than 50% of their students continued string/orchestra instruction into grades 6-8. Thirty-eight or 35% of respondents indicated that more than 50% of their students that participated in string/orchestra instruction in grades 6-8 continued string/orchestra instruction into grades 9-12. Gillespie and Hamann (1998) indicated “more than two-thirds of students who begin to play stringed instruments in the school continue playing them until graduation” (p. 75). Hamann, Gillespie, and Bergonzi (2002) showed that retention rates were “high from first to second year of instruction, elementary to middle/junior high school, and middle/junior high school to high school. The average retention rate at each of these points was approximately 73 percent” (p. 15). Future research could examine the retention and attrition factors that may be more common in rural school districts than in other locations.

A majority of respondents indicated that between 1-10% of their students participated in private string instrument lessons (grades K-5, n = 22 or 20%; grades 6-8, n = 29 or 27%; and grades 9-12, n = 31 or 29%). Hamann, Gillespie, and Bergonzi (2002) found that nearly 22% of orchestra students studied privately (p. 14). Generally, fewer rural students participate in private string instrument lessons. Isbell (2005) recommends
encouraging older students to mentor their peers in the school string program and even offer private lessons for younger students (p. 33).

**Critical Factors**

Eight critical factors were found in literature related to the current study: Community, School District, Non-String/Orchestra School Music Instruction, String/Orchestra School Music Instruction, String Teachers, String Students, Resources, and Perception. Attributes of the factors were listed based on information gathered from the related literature (See Table 4.13). Forty-eight or 44% of respondents believed the factors critical for the success of a string/orchestra program were different by location (rural, suburban, urban). However, when asked to rank the critical factors for all locations and again for rural locations, the overall ranks of the critical factors were identical.

As ranked by the respondents of this survey, the critical factors for the creation of a new string/orchestra program for any location and a rural location were: School District, String/Orchestra Instruction, String Teachers, Community, String Students, Resources, Non-String/Orchestra Instruction, and Perception. Implications for rural string-teacher education include the necessity of instruction in:

1) Developing drafts of program proposals, budgets, inventory, instruments and materials needed for baseline instruction and above.

2) Developing drafts of curriculum that includes community functions and holidays and culturally relevant repertoire.

3) Recognizing the benefits of teaching in rural areas.

4) Implementing strategies for building relationships with community organizations.
5) Understanding rural students.
6) Locating and acquiring available resources.
7) Developing professional relationships with other non-string and non-music colleagues.
8) Recognizing perception of string instrument instruction and the place for music in a rural community.

Gillespie and Hamann (2010) listed the following factors important for creating a new program in any location (that respondents indicated were extremely important):
Available faculty to teach, Effectiveness of student recruitment, Parent support, Superintendent support, School board support, Level of student interest, Building principal(s) support, Money for instruments and music, Support of music teaching colleague(s), Other, Instructional Space, Support of school counselors, Local music business support, Local PTA or PTO support, Support of non-music teaching colleague(s), Local music organization support, Local youth symphony, and Local church/civic organization support. Below the researcher has coded this list with the factors from the current study in Table 5.1.
Table 5.1

*Current study coding of Gillespie and Hamann (2010) Factors Important for Creating the New Program*

<table>
<thead>
<tr>
<th>Gillespie and Hamann (2010) Factor</th>
<th>Current Study coding</th>
</tr>
</thead>
<tbody>
<tr>
<td>Available faculty to teach</td>
<td>String Teachers</td>
</tr>
<tr>
<td>Effectiveness of student recruitment</td>
<td>String Teachers</td>
</tr>
<tr>
<td>Parent support</td>
<td>Community</td>
</tr>
<tr>
<td>School board support</td>
<td>School District</td>
</tr>
<tr>
<td>Level of student interest</td>
<td>String Students</td>
</tr>
<tr>
<td>Building principal(s) support</td>
<td>School District</td>
</tr>
<tr>
<td>Money for instruments and music</td>
<td>School District</td>
</tr>
<tr>
<td>Support of music teaching colleague(s)</td>
<td>Non-String/Orchestra Music Instruction</td>
</tr>
<tr>
<td>Other</td>
<td>--</td>
</tr>
<tr>
<td>Instructional space</td>
<td>School District</td>
</tr>
<tr>
<td>Support of school counselors</td>
<td>School District</td>
</tr>
<tr>
<td>Local music business support</td>
<td>Resources</td>
</tr>
<tr>
<td>Local PTA or PTO support</td>
<td>Community</td>
</tr>
<tr>
<td>Support of non-music teaching colleague(s)</td>
<td>School District</td>
</tr>
<tr>
<td>Local music organization support</td>
<td>Community</td>
</tr>
<tr>
<td>Local youth symphony</td>
<td>Community</td>
</tr>
<tr>
<td>Local church/civic organization support</td>
<td>Community</td>
</tr>
</tbody>
</table>

The new rank order for the Gillespie and Hamann (2010) factors after being coded for the current study was: String Teachers, Community, School District, String Students, Non-String/Orchestra Instruction, Resources (with no codes for String/Orchestra School Music Instruction or Perception). See Table 5.2.
Table 5.2

Comparison of the Gillespie and Hamann (2010) factors to the current study

<table>
<thead>
<tr>
<th>Gillespie and Hamann (2010) factors</th>
<th>Current study</th>
</tr>
</thead>
<tbody>
<tr>
<td>String Teachers</td>
<td>School District</td>
</tr>
<tr>
<td>Community</td>
<td>String/Orchestra Instruction</td>
</tr>
<tr>
<td>School District</td>
<td>String Teachers</td>
</tr>
<tr>
<td>String Students</td>
<td>Community</td>
</tr>
<tr>
<td>Non-String/Orchestra Instruction</td>
<td>String Students</td>
</tr>
<tr>
<td>Resources</td>
<td>Resources</td>
</tr>
<tr>
<td></td>
<td>Non-String/Orchestra Instruction</td>
</tr>
<tr>
<td></td>
<td>Perception</td>
</tr>
</tbody>
</table>

Respondents in Gillespie and Hamann (2010) listed the most critical factor as String Teacher (using the critical factors from the current study). Respondents in the current study listed the most critical factor as being the School District. Overall, the comparison shed new light on the importance of the critical factors by teaching experience location of the teachers who ranked them.

Each location is unique and may require a different hierarchy of factors for the creation of a new string programs. Perhaps School District is ranked lower in the Gillespie and Hamann (2010) study than in the current study because those rural, suburban, and urban teachers believed more greatly that their school districts were already convinced of the importance of string music education and the focus was moved to the necessity of hiring a strong String Teacher. However, rural teachers may have experienced much more need to convince their School Districts of those values. Using the coding for the current study, Community is ranked much higher in the Gillespie and Hamann study (2010) data than the current study. Perhaps since the School District is such a pillar in the rural community, those two factors are interchangeably critical.
More significantly, a majority of the responses from the Gillespie and Hamann (2010) study were from string teachers in new string programs in suburban areas, perhaps skewing the rank of the critical factors. Sixty percent of the respondents in the Gillespie and Hamann (2010) represented school districts with new string programs in suburban locations, 24% in rural, and 15% in urban (p. 32). Furthermore, many of the teachers in the current study had taught in one or two locations. Their perceptions of the critical factors towards starting a string program in any location would be equally influenced by their experiences teaching in rural locations and any others.

Further research is needed to systematically investigate the factors that are most critical to creating new string programs specifically in each location: rural, suburban, and urban. This information would assist string teachers and supporters of string instruction in the schools to better target those factors for the successful creation of new programs in each locale.

Additionally, respondents were asked to share their recommendations for establishing a new string/orchestra program using the critical factors listed and any additional factors they considered important. Responses were informative as shown in Table 4.15. The most responses for both step one and step two fell under the category of String Teachers, School District, and Community, respectively. For the third step, respondents shared more String/Orchestra School Music Instruction factors than other categories. String Teachers and School District were still in the top three. As Wendell (1999) shared,

One common thread among many of these programs is that they emerged through the sheer determination of a teacher who was willing to take on extra work in order to make the program become a reality, many times working for no pay in
order to get the program established. Another commonality is the attention paid to recruiting and building support for the programs among parents and community leaders. Also, many of the school string programs started as privately funded initiatives, and once enrollment and grass roots support grew, the school board was approached to incorporate the program into the school curriculum (p. 56).

A complete list of the responses can be found in Appendix I.

**Summary of Findings Compared to Previous Research**

The current study was unique in that it specifically examined rural string/orchestra programs. Much of the previous research that examined the status of string/orchestra programs in the United States showed data collected from rural, suburban and urban string/orchestra programs. Similarities and differences were found between the two sets of data. They are summarized below in Tables 5.3 through 5.7.

Table 5.3

*Community similarities and differences between previous research and the current study*

<table>
<thead>
<tr>
<th>Similarities</th>
<th>Differences</th>
</tr>
</thead>
<tbody>
<tr>
<td>String programs are more likely found in larger school districts</td>
<td>Private lessons were available within the community for 78 or 71% of the respondents of the current study.</td>
</tr>
<tr>
<td>The existence of an amateur symphony brings a model to potential students</td>
<td>There were less string-specific opportunities at institutions of higher education in rural areas.</td>
</tr>
</tbody>
</table>
Table 5.4

*Rural School District similarities and differences between previous research and the current study*

<table>
<thead>
<tr>
<th>Similarities</th>
<th>Differences</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inadequacy of instructional space</td>
<td>More respondents from the current study indicated they were maintaining or</td>
</tr>
<tr>
<td></td>
<td>increasing their budget than previous research.</td>
</tr>
<tr>
<td>Number of students enrolled per school</td>
<td></td>
</tr>
<tr>
<td>raises the likelihood of the presence of a</td>
<td></td>
</tr>
<tr>
<td>string/orchestra program</td>
<td></td>
</tr>
<tr>
<td>Most string/orchestra instruction occurs</td>
<td></td>
</tr>
<tr>
<td>in a shared instructional space</td>
<td></td>
</tr>
<tr>
<td>Perceived support for their school music</td>
<td></td>
</tr>
<tr>
<td>programs being high</td>
<td></td>
</tr>
</tbody>
</table>
Table 5.5

*Rural String/Orchestra School Instruction similarities and differences between previous research and the current study*

<table>
<thead>
<tr>
<th>Similarities</th>
<th>Differences</th>
</tr>
</thead>
<tbody>
<tr>
<td>Student enrollment in string/orchestra courses in grades K-5</td>
<td>Fewer rural programs had a printed string/orchestra curriculum</td>
</tr>
<tr>
<td>Most classes were organized heterogeneously at all levels</td>
<td>Student enrollment in string/orchestra courses in grades 6-8 and 9-12 was slightly larger in rural programs</td>
</tr>
<tr>
<td>String/Orchestra class instruction first offered in grades 4, 5, and 6.</td>
<td>Rural string/orchestra programs performed fewer concerts per school year</td>
</tr>
<tr>
<td>String/Orchestra class instruction primarily offered in grades K-5 one to 2 days per week 20-59 minutes, during the school day</td>
<td>Fewer rural string/orchestra programs offer full orchestra</td>
</tr>
<tr>
<td>String/Orchestra class instruction primarily offered in grades 6-8 and 9-12 five days per week, 40-59 minutes, during the school day</td>
<td></td>
</tr>
<tr>
<td>String teachers are certified to teach in their state.</td>
<td></td>
</tr>
<tr>
<td>Number of full and part time string/orchestra teachers were similar</td>
<td></td>
</tr>
<tr>
<td>String/Orchestra teachers that were not primary string players were woodwind or brass.</td>
<td></td>
</tr>
<tr>
<td>Location of concerts per year</td>
<td></td>
</tr>
</tbody>
</table>
Table 5.6

*Rural String/Orchestra Teachers similarities and differences between previous research and the current study*

<table>
<thead>
<tr>
<th>Similarities</th>
<th>Differences</th>
</tr>
</thead>
<tbody>
<tr>
<td>String teachers are mostly female, Caucasian, and primarily play strings</td>
<td><em>none</em></td>
</tr>
<tr>
<td>String teachers had been teaching between 0 and 40 years</td>
<td></td>
</tr>
</tbody>
</table>

Table 5.7

*String/Orchestra Students similarities and differences between previous research and the current study*

<table>
<thead>
<tr>
<th>Similarities</th>
<th>Differences</th>
</tr>
</thead>
<tbody>
<tr>
<td>Majority of string/orchestra students are</td>
<td>Fewer rural string/orchestra students</td>
</tr>
<tr>
<td>female and Caucasian</td>
<td>participated in private lessons</td>
</tr>
</tbody>
</table>

**Recommendations for Further Research**

Before any further research can begin, better access to rural string/orchestra teachers is needed. An investigation or task force from one or more national music associations is needed to look into the services that are being provided and not provided to rural music teachers. This way our associations can better serve all music teachers, no matter their geographic location.

However, much further research is needed to assist current rural string teachers in providing recommendations by their colleagues from across the country to continue to build and retain current rural string/orchestra programs. Additional recommendations need to be gathered and a model drafted for starting new string/orchestra programs in rural areas to allow all students access to string instrument instruction. A summary of recommendations for future research based upon the findings in the current study include:
1. Determine different pathways to better serve the rural string/orchestra teacher population.

2. Qualitative case studies involving rural string/orchestra programs.

3. Comparison of significance factors in rural, suburban, and urban string/orchestra programs.

4. Comparison case studies of rural string/orchestra teachers perceived success and their professional development activities.

5. Comparison case studies of community factors between urban and rural communities that offer school string/orchestra instruction.

6. Analysis of string teacher-educator institutions and their music teacher preparation courses and/or instruction for teaching in rural areas (including continuing education credits).

7. A collection of new, rural string teachers’ recommendations on how to attract current pre-service teachers to consider rural string/orchestra teaching.

8. Career choice of rural string/orchestra program graduates as they enter collegiate music programs.


**Implications**

Each child deserves access to a complete curriculum in all school subjects. No math department would offer courses in only calculus and geometry, neglecting to teach algebra. Therefore, a complete music education curriculum includes instruction on the string instruments as well as woodwind, brass, and percussion instruments and choir.
Gillespie, Russell, and Hamann (2014) determined that of the newly initiated string programs across the country, 18% were located in rural areas. The addition of a string program was perceived to have benefitted overall student learning and resulted in more students participating in music and the creation of a more comprehensive music program. Russell and Hamann (2011) found that music teachers perceived the value/benefit of an added string program as very strong and positive.

Rural communities should be allowed the same benefits of education as suburban and urban communities. Innovations and partnerships with local businesses and institutions of higher learning to help prepare current string pre-service teachers to instruct strings in rural, suburban, and urban school districts is key. Music education graduates can make informed decisions related to what locale they would like to teach, when provided opportunities of observation and student teaching in varied locations.

Additional research is needed in the area of rural string programs. Valuable wisdom, data and recipes for success can be gained from those who have effectively directed these rural programs for decades.

**Conclusion**

The current study was the first to examine rural string programs specifically. Future studies will include involvement with our national associations for further membership detail requirements to better assist researchers in isolating rural, suburban, or urban teachers. Additionally, future studies will involve qualitative observations and interviews in rural programs.

Significant discoveries from the current study included:
1. There is currently no way to directly contact rural string/orchestra teachers or isolate a representative sample using available means.

2. Because we cannot access rural string/orchestra teachers, we do not clearly know how or in what ways we can offer specific support for rural programs.

3. From this small sample, observations were made about the evolution of values and rationales for string/orchestra instruction, culturally responsive music instruction offered in some rural areas, and the need for updated advocacy statements that reflect a more contemporary community of string instrument teachers and learners.

4. Forty-eight or 44% of respondents believed the factors critical to the success of a string/orchestra program were different by location (rural, suburban, urban). However, when asked to rank the critical factors for all locations and again for rural locations, the overall ranks of the critical factors were identical. When compared to the previous study, Gillespie and Hamann (2010), the rankings were different. Further study is needed, keeping in mind, however, that each rural community is unique and may require different factors or alternate orders.

5. Critical factor comparison shed new light on the importance of the critical factors by location of the teachers who ranked them. Further research is needed to systematically investigate the factors that are most critical to creating new string programs specifically in each location: rural, suburban, and urban.

The current study originally intended to examine the profile and recommendations of rural string/orchestra teachers. However, through the research process, more was
discovered than was originally estimated. While a variety of factors that are uniquely present in a rural community, school district, string program, string teacher, and string student were observed, the responses should not be generalized to the larger community of rural string/orchestra programs since the data gathered in the current study was from a very limited number of participants. The researcher discovered that collaboration is needed to establish a more direct way of contacting rural string/orchestra teachers so that researchers can learn more about rural music programs and offer rural teachers and students better support. Additionally, information provided by respondents began to show other areas for improvement in our profession including the evolution of values and rationales for string/orchestra instruction, culturally responsive music instruction offered in rural areas, and the need for undated advocacy statements that reflect a more contemporary community of string instrument teachers and learners.
Bibliography


Appendix A: Institutional Review Board Approval Letter
Dear Robert Gillespie,

The Office of Responsible Research Practices has determined the above referenced project exempt from IRB review.

Staff note: determination regarding pilot work send under separate email.

Please note the following about this determination:

- Retain a copy of this correspondence for your records.
- Only the Ohio State staff and students named on the application are approved as Ohio State investigators and/or key personnel for this study.
- Simple changes to personnel that do not require changes to materials can be submitted for review and approval through Buck-IRB.
- No other changes may be made to exempt research (e.g., to recruitment procedures, advertisements, instruments, protocol, etc.). If changes are needed, a new application for exemption must be submitted for review and approval prior to implementing the changes.
- Records relating to the research (including signed consent forms) must be retained and available for audit for at least 5 years after the study is closed. For more information, see university policies, Institutional Data and Research Data.
- It is the responsibility of the investigators to promptly report events that may represent unanticipated problems involving risks to subjects or others.

This determination is issued under The Ohio State University’s OHRP Federalwide Assurance #00006378. Human research protection program policies, procedures, and guidance can be found on the ORRP website.

Please feel free to contact the Office of Responsible Research Practices with any questions or concerns.

Cheri Pettey
pettey.6@osu.edu
(614) 688-0389
Appendix B: Pre-Pilot and Pilot Study Introductory Letter and Consent
Rural School String/Orchestra Programs: Profile and Recommendations
Blair Williams, The Ohio State University

Profile of Rural String/Orchestra Programs and Critical Factors for Successfully Establishing New Rural String/Orchestra Programs

Participation in this pilot study involves research. Participation is completely voluntary and participants may withdraw at any time without penalty or loss of benefits.

You are being asked to participate in this research pilot study because you have indicated that you are a string teacher in a self-labeled rural area. Your insights will assist the researcher in modifying the survey as needed before distributing nationally.

The purpose of the study is to examine the current profile of rural string/orchestra programs and identify factors critical for successfully establishing new rural string/orchestra programs.

Your participation will assist professional string teachers, administrators, students, and researchers across the country better understand string programs in rural areas, work to better prepare future string teachers for placements in rural areas, and better equip current string teachers in rural areas with tools to assist their programs.

Together string professionals will also gain insights that will assist in the future creation of other string programs in rural areas.

Do you consent to participating in the pilot study?

  o  Yes
  o  No

Participant Signature  Date
Appendix C: Pre-Pilot Study Questionnaire
Profile of Rural String/Orchestra Programs and Critical Factors for Successfully Establishing New Rural String/Orchestra Programs

Please note the beginning time: ____________________________________________

I. Profile of Rural STRING/ORCHESTRA Programs

A. Community (6 questions)

A community is defined as a locality inhabited by a group of any size (in this case, self-labeled as rural) whose members reside in a specific locality, share a government, and often have a common cultural and historical heritage.

1. Please check your best estimate of the population range of your community.
   - 0-500
   - 501-1000
   - 1,001-1,500
   - 1,501-2,000
   - 2,001-2,500
   - 2,501-3,000
   - 3,001-3,500
   - 3,501-4,000
   - 4,001-4,500
   - 4,501-5,000
   - 5,001-5,500
   - 5,501-6,000
   - 6,001-6,500
   - 6,501-7,000
   - 7,001-7,500
   - 7,501-8,000
   - 8,001-8,500
   - 8,501-9,000
   - 9,001-9,500
   - 9,501-10,000
   - 10,001-10,500
   - 10,501-11,000
   - 11,001-11,500
   - 11,501-12,000
   - 12,001-12,500
   - 12,501-13,000
   - 13,001-13,500
   - 13,501-14,000
   - 14,001-14,500
   - 14,501-15,000
   - greater than 15,000
2. a. Is there an amateur symphony orchestra in your community?
   - Yes
   - No
   - Do not know

   b. If yes, are high school string/orchestra students invited to play in it?
      - Yes
      - No
      - Do not know

3. Are string instruments played in the local churches?
   - Yes
   - No
   - Do not know

4. Are private string instrument lessons available within the community?
   - Yes
   - No
   - Do not know

5. If students drive outside of the community to take private string instrument lessons, how far do they drive on average?
   - 1-10 miles
   - 11-20 miles
   - 21-30 miles
   - 31-40 miles
   - 41-50 miles
   - 51-60 miles
   - Greater than 61 miles
   - Do not know

6. a. Is there a college or university in or within 30 miles of your community?
    - Yes
    - No
    - Do not know

   b. If yes, does the college or university offer courses in MUSIC available to high school students?
      - Yes
      - No
      - Do not know

   c. If MUSIC instruction is offered at the college or university, is STRING/ORCHESTRA instruction available to high school students?
      - Yes
      - No
      - Do not know
d. If STRING/ORCHESTRA instruction is offered at the college or university, are high school students invited to perform in the STRING/ORCHESTRA ensemble (could include full symphony orchestra as well)?
   o Yes
   o No
   o Do not know

B. Rural School Districts (3 questions)

7. a. How many school buildings does your district have at each level indicated?
   a. Elementary School(s) (grades K-5)
      o 0
      o 1
      o 2
      o 3
      o More than 3
      o Do not know
   b. Middle/Junior High School(s) (grades 6-8)
      o 0
      o 1
      o 2
      o 3
      o More than 3
      o Do not know
   c. High School(s) (grades 9-12)
      o 0
      o 1
      o 2
      o 3
      o More than 3
      o Do not know
   b. How many students are enrolled in the following schools? (If there is more than one school building of the same level, i.e. two elementary schools, please combine for one Elementary School total.)
   a. Elementary School (grades K-5)
      o 0-25
      o 26-50
      o 51-100
      o 101-150
      o 151-200
      o 201-250
      o 251-300
      o 301-350
      o 351-400
      o 401-450
8. a. What is the total yearly budget for STRING/ORCHESTRA instruction in the school district? (If your district operates on a building budget, please combine buildings into one district budget figure.)

<table>
<thead>
<tr>
<th>Range</th>
<th>Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>$0-500</td>
<td>1</td>
</tr>
<tr>
<td>$501-1000</td>
<td>2</td>
</tr>
<tr>
<td>$1001-1500</td>
<td>3</td>
</tr>
<tr>
<td>$1501-2000</td>
<td>4</td>
</tr>
<tr>
<td>$2001-2500</td>
<td>5</td>
</tr>
<tr>
<td>$2501-3000</td>
<td>6</td>
</tr>
<tr>
<td>$3001-3500</td>
<td>7</td>
</tr>
<tr>
<td>$3501-4000</td>
<td>8</td>
</tr>
<tr>
<td>$4001-4500</td>
<td>9</td>
</tr>
<tr>
<td>$4501-5000</td>
<td>10</td>
</tr>
</tbody>
</table>
o more than $5000
o Do not know

b. How has the total yearly budget for STRING/ORCHESTRA instruction in the school district changed in the last five years?
o It has increased
o It has stayed the same
o It has decreased
o Do not know

9. Where is STRING/ORCHESTRA class instruction usually offered?
a. Elementary School (grades K-5)?
o Rehearsal room devoted exclusively to STRING/ORCHESTRA instruction
o Rehearsal room used for both band and STRING/ORCHESTRA instruction
o Rehearsal room used for both choir and STRING/ORCHESTRA instruction
o Rehearsal room used for band, choir and STRING/ORCHESTRA instruction
o Gymnasium
o Cafeteria
o Auditorium
o Temporary Building
o Regular classroom shared with other academic subjects (i.e. Math, English)
o Other
o STRING/ORCHESTRA class instruction is not offered at the Elementary School (grades K-5)
b. Middle/Junior High School (grades 6-8)?
c. Rehearsal room devoted exclusively to STRING/ORCHESTRA instruction
d. Rehearsal room used for both band and STRING/ORCHESTRA instruction
e. Rehearsal room used for both choir and STRING/ORCHESTRA instruction
f. Rehearsal room used for band, choir and STRING/ORCHESTRA instruction
o Gymnasium
o Cafeteria
o Auditorium
o Temporary Building
o Regular classroom shared with other academic subjects (i.e. Math, English)
o Other
o STRING/ORCHESTRA class instruction is not offered at the Middle/Junior High School (grades 6-8)
c. High School (grades 9-12)?
d. Rehearsal room devoted exclusively to STRING/ORCHESTRA instruction
e. Rehearsal room used for both band and STRING/ORCHESTRA instruction
f. Rehearsal room used for both choir and STRING/ORCHESTRA instruction
g. Rehearsal room used for band, choir and STRING/ORCHESTRA instruction
o Gymnasium
o Cafeteria
o Auditorium
o Temporary Building
C. Rural Non-STRING/ORCHESTRA School Music Instruction  

10. What MUSIC instruction is currently offered in the school district, in addition to STRING/ORCHESTRA? (Check all that apply)
   - Band
   - Choir
   - Guitar
   - Piano
   - Other: Please describe: ____________________________________________________________

11. At which grade level is beginning instruction first offered as a class for (Please check one answer per category):
   a. Band?
      - Kindergarten
      - 1st grade
      - 2nd grade
      - 3rd grade
      - 4th grade
      - 5th grade
      - 6th grade
      - 7th grade
      - 8th grade
      - 9th grade
      - 10th grade
      - 11th grade
      - 12th grade
      - Do not know
      - Do not offer
   b. Choir?
      - Kindergarten
      - 1st grade
      - 2nd grade
      - 3rd grade
      - 4th grade
      - 5th grade
      - 6th grade
      - 7th grade
      - 8th grade
      - 9th grade
      - 10th grade
      - 11th grade
      - 12th grade
      - Do not know
      - Do not offer
c. Guitar?
   - Kindergarten
   - 1st grade
   - 2nd grade
   - 3rd grade
   - 4th grade
   - 5th grade
   - 6th grade
   - 7th grade
   - 8th grade
   - 9th grade
   - 10th grade
   - 11th grade
   - 12th grade
   - Do not know
   - Do not offer

d. Piano?
   - Kindergarten
   - 1st grade
   - 2nd grade
   - 3rd grade
   - 4th grade
   - 5th grade
   - 6th grade
   - 7th grade
   - 8th grade
   - 9th grade
   - 10th grade
   - 11th grade
   - 12th grade
   - Do not know
   - Do not offer

e. Other?
   - Kindergarten
   - 1st grade
   - 2nd grade
   - 3rd grade
   - 4th grade
   - 5th grade
   - 6th grade
12. Does instruction continue through grade 12 for:
   a. Band?
      o Yes
      o No
      o Do not know
      o Do not offer
   b. Choir?
      o Yes
      o No
      o Do not know
      o Do not offer
   h. Guitar?
      o Yes
      o No
      o Do not know
      o Do not offer
   e. Piano?
      o Yes
      o No
      o Do not know
      o Do not offer
   f. Other?
      o Yes
      o No
      o Do not know
      o Do not offer

13. For the OVERALL school music program, what is the perceived level of support given to MUSIC instruction in the schools?
   o Very Low
   o Low
   o Neutral
   o High
   o Very High
   o Do Not Know
14. a. Do you perceive that there are different levels of support for other music instruction compared to STRING/ORCHESTRA instruction?
   - Yes
   - No
   - Do not know
b. If yes, please indicate which description you perceive to be true:
   - There is LESS support for STRING/ORCHESTRA instruction than other music instruction
   - There is MORE support for STRING/ORCHESTRA instruction than other music instruction

D. Rural String/Orchestra School Instruction (18 questions)

15. a. Is there a printed district STRING/ORCHESTRA curriculum?
   - Yes
   - No
   - Do not know
b. Is it used to guide instruction?
   - Yes
   - No
   - Do not know

16. How many students are enrolled in STRING/ORCHESTRA classes at the following school buildings? (If there is more than one school building per level, please combine for one total enrollment at that level.)
   - Elementary School (grades K-5), ______
   - Middle/Junior High School (grades 6-8), ______
   - High School (grades 9-12), ______

17. STRING/ORCHESTRA classes are organized in what way at the following school buildings:
a. Elementary School?
   - Homogeneously
   - Heterogeneously
   - A mix of homogeneously and heterogeneously
b. Middle/Junior High School?
   - Homogeneously
   - Heterogeneously
   - A mix of homogeneously and heterogeneously
c. High School?
   - Homogeneously
   - Heterogeneously
   - A mix of homogeneously and heterogeneously
18a. Do you know when STRING/ORCHESTRA instruction first began in your district?
   o Yes
   o No
   o Do not know
b. If yes, in what school year was STRING/ORCHESTRA instruction first offered in your school district? (i.e. 2001-2002) _______ - _______

19. a. At which grade level is beginning STRING/ORCHESTRA instruction first offered as a class? (Please only mark one choice.)
   o Kindergarten
   o 1st grade
   o 2nd grade
   o 3rd grade
   o 4th grade
   o 5th grade
   o 6th grade
   o 7th grade
   o 8th grade
   o 9th grade
   o 10th grade
   o 11th grade
   o 12th grade
   o Do not know
   o Students are allowed to join the STRING/ORCHESTRA class at any grade level. No finite grade level is deemed the start year for STRING/ORCHESTRA.
b. The grade level answered in question 19. a. is housed in your school district at the:
   o Elementary School
   o Middle/Junior High School
   o High School

20. In what grades is STRING/ORCHESTRA instruction currently offered in the school district? (Please check all that apply.)
   o Kindergarten
   o 1st grade
   o 2nd grade
   o 3rd grade
   o 4th grade
   o 5th grade
   o 6th grade
   o 7th grade
   o 8th grade
   o 9th grade
   o 10th grade
   o 11th grade
   o 12th grade
21. On average, how many times per week are STRING/ORCHESTRA classes offered during the regular school day at the following school buildings:
   a. Elementary School (grades K-5)?
      - 1 time
      - 2 times
      - 3 times
      - 4 times
      - 5 times
      - Our district does not offer STRING/ORCHESTRA class at the Elementary School (grades K-5)
   b. Middle/Junior High School (grades 6-8)?
      - 1 time
      - 2 times
      - 3 times
      - 4 times
      - 5 times
      - Our district does not offer STRING/ORCHESTRA class at the Middle/Junior High School (grades 6-8)
   c. High School (grades 9-12)?
      - 1 time
      - 2 times
      - 3 times
      - 4 times
      - 5 times
      - Our district does not offer STRING/ORCHESTRA class at the High School (grades 9-12)

22. On average, how many minutes does a STRING/ORCHESTRA class meet per class when offered during the regular school day at the following school buildings:
   a. Elementary School (grades K-5)?
      - 0-19 minutes
      - 20-29 minutes
      - 30-44 minutes
      - 45-60 minutes
      - longer than 61 minutes
      - Do not know
      - Our district does not offer STRING/ORCHESTRA class at the Elementary School (grades K-5)
   b. Middle/Junior High School (grades 6-8)?
      - 0-19 minutes
      - 20-29 minutes
      - 30-44 minutes
      - 45-60 minutes
o longer than 61 minutes
o Do not know
o Our district does not offer STRING/ORCHESTRA class at the Middle/Junior High School (grades 6-8)

c. High School (grades 9-12)?
o 0-19 minutes
o 20-29 minutes
o 30-44 minutes
o 45-60 minutes
o longer than 61 minutes
o Do not know
o Our district does not offer STRING/ORCHESTRA class at the High School (grades 9-12)

23. a. Is STRING/ORCHESTRA class offered during the school day?
o Yes
o No
o Both during the school day and at a non-school day time (not including special rehearsals)
b. If STRING/ORCHESTRA classes are NOT offered during the regular school day, when are they offered? (Please check all that apply.)
o Before School
o After School
o Evenings
o Weekends
o Other: Please describe: ______________________________________________

24. a. How many STRING/ORCHESTRA teachers are employed full time by the district, including yourself?
o 1
o 2
o 3
o More than 3
b. How many STRING/ORCHESTRA teachers are employed part time by the district, including yourself?
o 1
o 2
o 3
o More than 3
c. Are all STRING/ORCHESTRA teachers employed by your district (full or part time) certified (licensed) to teach MUSIC in your state?
o Yes
o No
o Do not know
25. If there are others teaching STRING/ORCHESTRA in your district, what family of instruments best describes their primary instrument? (Choose all that apply; one per STRING/ORCHESTRA teacher in the district NOT including yourself.)
   - STRING/ORCHESTRA
   - Woodwind
   - Brass
   - Percussion
   - Keyboard/Piano
   - Voice
   - Guitar
   - Other

26. How has the number of STRING/ORCHESTRA teachers in your school district (full or part time) changed in the last five years?
   - Has increased
   - Has stayed the same
   - Has decreased
   - Do not know

27. On average, how many concerts (including small and large group) do your student orchestras perform per school year at each grade level:
   a. Elementary (grades K-5)?
      - 0
      - 1-2
      - 3-4
      - 5-6
      - more than 6
   b. Middle/Junior High (grades 6-8)?
      - 0
      - 1-2
      - 3-4
      - 5-6
      - more than 6
   c. High School (grades 9-12)?
      - 0
      - 1-2
      - 3-4
      - 5-6
      - more than 6

28. What is the average number of concerts (including large and small groups) your student groups perform:
   a. on school grounds per school year?
      - 0
      - 1-2
29. From whom do you obtain STRING/ORCHESTRA instruments and accessories (strings, mutes, shoulder rests, rock stops, etc.) for the school STRING/ORCHESTRA program? (Check all that apply.)
   o Music store located within the community
   o Music store outside of the community
   o Internet

30. Who maintains/services/repairs your school and student instruments? (Check all that apply.)
   o Independent local string instrument repairperson
   o Local music store repairperson
   o Repairperson from outside the community
   o Do not know

31. From whom do you obtain printed music and materials for your school STRING/ORCHESTRA program? (Check all that apply.)
   o Music store located within the community
   o Music store outside of the community
   o Internet

32. a. Does the STRING/ORCHESTRA curriculum provide the opportunity for STRING/ORCHESTRA students to participate in full orchestra (symphonic orchestra with woodwind, brass, and percussion)?
   o Yes
   o No
   o Not currently, but we hope to in the future
   o Do not know
b. If yes, at which levels does the STRING/ORCHESTRA curriculum provide the opportunity for STRING/ORCHESTRA students to participate in full orchestra? (Check all that apply.)
   o Elementary School (grades K-5)
   o Middle/Junior High School (grades 6-8)
   o High School (grades 9-12)

E. Rural STRING/ORCHESTRA Teachers (10 questions)

33. In what state do you teach? ____________________________________________

34. What is your gender?
   o Male
   o Female

35. What is your racial identity?
   o Caucasian
   o African American
   o Asian
   o Native American
   o Hispanic
   o Other

36. To what family of instruments does your primary instrument belong?
   o String
   o Woodwind
   o Brass
   o Percussion
   o Keyboard/Piano
   o Voice
   o Guitar
   o Other

37. Are you certified (licensed) by your state to teach MUSIC?
   o Yes
   o No

38. What MUSIC courses, in addition to STRING/ORCHESTRA, are you currently teaching?
   o Band
   o Choir
   o Guitar
   o Piano
39. a. Are you certified (licensed) by your state to teach SUBJECTS OTHER THAN MUSIC?
   o Yes
   o No

   b. If yes, are you currently teaching SUBJECTS OTHER THAN MUSIC?
   o Yes
   o No

40. Did you teach STRING/ORCHESTRA classes during your student teaching experience?
   o Yes
   o No

41. The school district where you student taught is best described as which of the following?
   o Rural
   o Suburban
   o Urban

42. Please indicate the number of years (including this school year) you have taught STRING/ORCHESTRA in the following locations. (Write 0 if you have not taught in that location):
   a. Rural Schools: _______ years
   b. Suburban Schools: _______ years
   c. Urban Schools: _______ years

F. Rural String/Orchestra Students (9 questions)

43. The majority (more than 50%) of STRING/ORCHESTRA students at the following school buildings are:
   a. Elementary School (grades K-5):
      o Male
      o Female
   b. Middle/Junior High School (grades 6-8)
      o Male
      o Female
   c. High School (grades 9-12)
      o Male
      o Female
44. The majority (more than 50%) of STRING/ORCHESTRA students at the following school buildings are:

a. Elementary School (grades K-5):
   - Caucasian
   - African American
   - Asian
   - Native American
   - Hispanic
   - Other

b. Middle/Junior High School (grades 6-8):
   - Caucasian
   - African American
   - Asian
   - Native American
   - Hispanic
   - Other

c. High School (grades 9-12):
   - Caucasian
   - African American
   - Asian
   - Native American
   - Hispanic
   - Other

45. What percentage of STRING/ORCHESTRA students are on free or reduced lunch at the following school buildings:

a. Elementary School (grades K-5)?
   - 0-15%
   - 16-30%
   - 31-45%
   - 46-60%
   - 61-75%
   - Greater than 76%
   - Do not know

b. Middle/Junior High School (grades 6-8)?
   - 0-15%
   - 16-30%
   - 31-45%
   - 46-60%
   - 61-75%
   - Greater than 76%
   - Do not know

c. High School (grades 9-12)?
   - 0-15%
   - 16-30%
46. a. What is the average percentage of STRING/ORCHESTRA students who continue STRING/ORCHESTRA instruction after the first year?
   o less than 50%
   o 50-69%
   o 70-84%
   o 85-100%
   o Do not know

   b. What is the average percentage of STRING/ORCHESTRA students who DO NOT continue STRING/ORCHESTRA instruction after the first year?
   o less than 50%
   o 50-69%
   o 70-84%
   o 85-100%
   o Do not know

47. a. If the first year STRING/ORCHESTRA is offered as a class is during Elementary School (grades K-5), what is the average percentage of STRING/ORCHESTRA students who continue to enroll in STRING/ORCHESTRA instruction in the Middle/Junior High School (grades 6-8)?
   o less than 50%
   o 50-69%
   o 70-84%
   o 85-100%
   o Do not know
   o STRING/ORCHESTRA instruction is not offered in the Elementary School.

   b. If the first year STRING/ORCHESTRA is offered as a class is during Elementary School (grades K-5), what is the average percentage of STRING/ORCHESTRA students who DO NOT continue to enroll in STRING/ORCHESTRA instruction in the Middle/Junior High School (grades 6-8)?
   o less than 50%
   o 50-69%
   o 70-84%
   o 85-100%
   o Do not know
   o STRING/ORCHESTRA instruction is not offered in the Elementary School.

48. a. What is the average percentage of STRING/ORCHESTRA students who continue to enroll in STRING/ORCHESTRA instruction when transitioning from the Middle/Junior High School to the High School?
b. What is the average percentage of STRING/ORCHESTRA students who DO NOT continue to enroll in STRING/ORCHESTRA instruction when transitioning from the Middle/Junior High School to the High School?
   - less than 50%
   - 50-69%
   - 70-84%
   - 85-100%
   - Do not know

49. What is the average percentage of STRING/ORCHESTRA students who take private lessons:
a. Elementary School students (grades K-5)?
   - 0-10%
   - 11-20%
   - 21-30%
   - 31-40%
   - 41-50%
   - 51-60%
   - 61-70%
   - 71-80%
   - 81-90%
   - 91-100%
   - Do not know

b. Middle/Junior High School students (grades 6-8)?
   - 0-10%
   - 11-20%
   - 21-30%
   - 31-40%
   - 41-50%
   - 51-60%
   - 61-70%
   - 71-80%
   - 81-90%
   - 91-100%
   - Do not know

c. High School students (grades 9-12)?
   - 0-10%
   - 11-20%
   - 21-30%
   - 31-40%
50. What percentage of STRING/ORCHESTRA students who graduate from your district go to college to seek a music education degree?
   - 0-10%
   - 11-20%
   - 21-30%
   - 31-40%
   - 41-50%
   - 51-60%
   - 61-70%
   - 71-80%
   - 81-90%
   - 91-100%
   - Do not know

51. What percentage of STRING/ORCHESTRA students who graduate from your school system continue to play their STRING/ORCHESTRA instrument after graduation?
   - 0-10%
   - 11-20%
   - 21-30%
   - 31-40%
   - 41-50%
   - 51-60%
   - 61-70%
   - 71-80%
   - 81-90%
   - 91-100%
   - Do not know

II. Critical Factors for Successfully Establishing New Rural String/Orchestra Programs

1. Do you believe that factors critical for the success of a String/Orchestra program are different by location (urban, suburban, rural)?
   - Yes
   - No
2. Research indicates the following factors as critical for the success of a String/Orchestra program in any location. Please rank these factors for a String/Orchestra program in any location. (1 = most critical, 8 = least critical)
   o **Community** (size, business support, parent support, church support, civic group support, local fine arts organization support, college or university support, report of community, use of string/orchestra ensembles in functions)
   o **School District** (school board support, administration support, counselor support, athletics support, non-music teachers support, funding/budget, music or string specific professional development, opportunities offered/supported, instructional space, report of music department, marketing to potential families, use of string/orchestra ensembles in functions)
   o **Non-String/Orchestra School Music Instruction** (other music teachers support, competitiveness, collaboration, added-instruction time/duties)
   o **String/Orchestra School Music Instruction** (instructional time, instructional space, class organization, start-year, number of string/orchestra staff, number of concerts/presentations, access to string instruments/accessories/repair, competitiveness, collaboration)
   o **String Teachers** (state certified/licensed, organization skills, administration skills, communication skills, competitiveness, collaborative, inventive, influence, variety of musical styles, contest success, experience in rural setting)
   o **String Students** (number involved, attrition, private lessons, class scheduling, job or chore responsibilities)
   o **Resources** (instrument shops, repair shops, printed music shops, online access, technology, school or personal instrument purchases)
   o **Perception** (strings are for fiddling or symphonies)

3. Research indicates the following factors as critical for the success of a STRING/ORCHESTRA program in any location. Please rank these factors for a STRING/ORCHESTRA program located in a rural area. (1 = most critical, 8 = least critical)
   o **Community** (size, business support, parent support, church support, civic group support, local fine arts organization support, college or university support, report of community, use of string/orchestra ensembles in functions)
   o **School District** (school board support, administration support, counselor support, athletics support, non-music teachers support, funding/budget, music or string specific professional development, opportunities offered/supported, instructional space, report of music department, marketing to potential families, use of string/orchestra ensembles in functions)
   o **Non-String/Orchestra School Music Instruction** (other music teachers support, competitiveness, collaboration, added-instruction time/duties)
   o **String/Orchestra School Music Instruction** (instructional time, instructional space, class organization, start-year, number of string/orchestra staff, number of concerts/presentations, access to string instruments/accessories/repair, competitiveness, collaboration)
- **String Teachers** (state certified/licensed, organization skills, administration skills, communication skills, competitiveness, collaborative, inventive, influence, variety of musical styles, contest success, experience in rural setting)
- **String Students** (number involved, attrition, private lessons, class scheduling, job or chore responsibilities)
- **Resources** (instrument shops, repair shops, printed music shops, online access, technology, school or personal instrument purchases)
- **Perception** (strings are for fiddling or symphonies)

4. Keeping these factors in mind, what do you recommend the first three steps are in beginning to establish a new STRING/ORCHESTRA program in a rural area based on your experiences teaching STRING/ORCHEATRA in a rural area?
   a. Step one:
      ______________________________________________________________
      ______________________________________________________________
      ______________________________________________________________
      ______________________________________________________________
      ______________________________________________________________
      ______________________________________________________________
      ______________________________________________________________
      ______________________________________________________________
   b. Step two:
      ______________________________________________________________
      ______________________________________________________________
      ______________________________________________________________
      ______________________________________________________________
      ______________________________________________________________
      ______________________________________________________________
      ______________________________________________________________
      ______________________________________________________________
   c. Step three:
      ______________________________________________________________
      ______________________________________________________________
      ______________________________________________________________
      ______________________________________________________________
      ______________________________________________________________
      ______________________________________________________________
      ______________________________________________________________
      ______________________________________________________________

Please note your completion time: ________________________________________________

*Thank you for your input and the gift of your time and insights towards my research. Your participation is important and your contributions are invaluable.*
Appendix D: Pilot Study Questionnaire
I. Profile of Rural STRING/ORCHESTRA Programs

Throughout the survey, please only mark ONE choice from the list given unless otherwise noted.

B. Community (6 questions)

A community is defined as a locality inhabited by a group of any size (in this case, self-labeled as rural) whose members reside in a specific locality, share a government, and often have a common cultural and historical heritage.

1. Please mark the best location description of the school district in which you provide STRINGS/ORCHESTRA instruction.
   - The district is located completely in a rural area
   - The district is located in a mixed rural and suburban area. There are schools that are primarily in rural areas and there are schools that are primarily in suburban areas.

2. Please check your best estimate of the population range of your community that is located in a rural area, only.
   - 0-1000
   - 1,001-2,000
   - 2,001-3,000
   - 3,001-4,000
   - 4,001-5,000
   - 5,001-6,000
   - 6,001-7,000
   - 7,001-8,000
   - 8,001-9,000
   - 9,001-10,000
   - 10,001-11,000
   - 11,001-12,000
   - 12,001-13,000
   - 13,001-14,000
   - 14,001-15,000
   - greater than 15,000
3. a. Is there an amateur symphony orchestra (community or regional orchestra; NOT youth symphony) in your rural community (within 30 miles)?
   - Yes
   - No
   - Do not know

b. If yes, are STRING/ORCHESTRA students invited to play in it?
   - Yes
   - No
   - Do not know

c. Do community members who play string instruments participate in the STRING/ORCHESTRA classes in your district?
   - Yes
   - No
   - Do not know

4. Are string instruments played in the local churches?
   - Yes
   - No
   - Do not know

5. Are private string instrument lessons available within the rural community?
   - Yes
   - No
   - Do not know

6. If students drive outside of the rural community to take private string instrument lessons, how far do they drive, round trip, on average? (Combine multiple students to calculate one average).
   - 1-10 miles
   - 11-20 miles
   - 21-30 miles
   - 31-40 miles
   - 41-50 miles
   - 51-60 miles
   - Greater than 61 miles
   - Do not know
   - Students do not travel outside of the rural community to take private string instrument lessons

7. a. Is there a junior college, college, or university (including satellite campuses) in or within 30 miles of your rural community?
   - Yes
   - No
   - Do not know
b. If yes, does the junior college, college, or university (including satellite campuses) offer courses/workshops/camps/lessons/performance opportunities in MUSIC that are available to your STRING/ORCHESTRA students?
   o Yes
   o No
   o Do not know

c. If MUSIC instruction is offered at the junior college, college, or university (including satellite campuses), are STRING/ORCHESTRA courses/workshops/camps/lessons/performance opportunities available to your STRING/ORCHESTRA students?
   o Yes
   o No
   o Do not know

e. If STRING/ORCHESTRA instruction is offered at the junior college, college, or university (including satellite campuses), are high school students invited to perform in the STRING/ORCHESTRA ensemble (could include full symphony orchestra as well)?
   o Yes
   o No
   o Do not know

f. If STRING/ORCHESTRA instruction is NOT offered at the junior college, college, or university (including satellite campuses), are high school STRING/ORCHESTRA students invited to participate with college wind/brass/percussion players to form a FULL ORCHESTRA?
   o Yes
   o No
   o Do not know

B. Rural School Districts  (3 questions)

8. a. How many school buildings/campuses does your district have that are located in a RURAL area at each level indicated?
   a. Elementary School(s) (grades K-5)
      o 0
      o 1
      o 2
      o 3
      o More than 3
      o Do not know

   b. Middle/Junior High School(s) (grades 6-8)
      o 0
      o 1
      o 2
      o 3
c. High School(s) (grades 9-12)
   - 0
   - 1
   - 2
   - 3
   - More than 3
   - Do not know

9. How many students are enrolled in your district’s RURAL schools? (If there is more than one school building/campus of the same level in a rural area, i.e. two elementary schools, please combine for one Elementary School total.)
   a. Elementary School (grades K-5)
      - 0-25
      - 26-50
      - 51-100
      - 101-150
      - 151-200
      - 201-250
      - 251-300
      - 301-350
      - 351-400
      - 401-450
      - 451-500
      - more than 500
      - Do not know
   b. Middle/Junior High School (grades 6-8)
      - 0-25
      - 26-50
      - 51-100
      - 101-150
      - 151-200
      - 201-250
      - 251-300
      - 301-350
      - 351-400
      - 401-450
      - 451-500
      - more than 500
      - Do not know
   c. High School (grades 9-12)
      - 0-25
      - 26-50
      - 51-100
10. a. What is the total yearly budget for STRING/ORCHESTRA instruction for your district’s rural schools? (If your district operates on a building/campus budget, please combine buildings/campuses into one district budget figure.)
   - We do not receive a budget for STRING/ORCHESTRA instruction
   - $1-1000
   - $1001-2000
   - $2001-3000
   - $3001-4000
   - $4001-5000
   - $5001-6000
   - $6001-7000
   - $7001-8000
   - $8000-9000
   - $9000-10,000
   - more than $10,000
   - Do not know

b. Do you have an additional budget allotment that allows for large purchases (instruments, large equipment, etc.) that is only available every few years?
   - Yes
   - No
   - Do not know

c. How has the total yearly budget for STRING/ORCHESTRA instruction in the school district changed in the last five years?
   - It has increased
   - It has stayed the same
   - It has decreased
   - This was the first year for a budget, so trends have not been established
   - Do not know

11. Where is STRING/ORCHESTRA class instruction offered? (Mark all that apply)
  g. Elementary School (grades K-5)?
   - Rehearsal room devoted exclusively to STRING/ORCHESTRA instruction
   - Rehearsal room used for both band and STRING/ORCHESTRA instruction
   - Rehearsal room used for both choir and STRING/ORCHESTRA instruction
Rehearsal room used for band, choir and STRING/ORCHESTRA instruction
Rehearsal room used for guitar and STRING/ORCHESTRA instruction
Rehearsal room used for general music and STRING/ORCHESTRA instruction
Gymnasium or Gymnasium stage
Cafeteria or Cafeteria stage
Auditorium or Auditorium stage
Temporary Building
Regular classroom shared with other academic subjects (i.e. Math, English)
Other: Please describe
STRING/ORCHESTRA class instruction is not offered at the Elementary School (grades K-5)
I do not teach at the Elementary School (grades K-5) and therefore do not know

Middle/Junior High School (grades 6-8)?
Rehearsal room devoted exclusively to STRING/ORCHESTRA instruction
Rehearsal room used for both band and STRING/ORCHESTRA instruction
Rehearsal room used for both choir and STRING/ORCHESTRA instruction
Rehearsal room used for band, choir and STRING/ORCHESTRA instruction
Rehearsal room used for guitar and STRING/ORCHESTRA instruction
Rehearsal room used for general music and STRING/ORCHESTRA instruction
Gymnasium or Gymnasium stage
Cafeteria or Cafeteria stage
Auditorium or Auditorium stage
Temporary Building
Regular classroom shared with other academic subjects (i.e. Math, English)
Other: Please describe
STRING/ORCHESTRA class instruction is not offered at the Middle/Junior High School (grades 6-8)
I do not teach at the Middle/Junior High School (grades 6-8) and therefore do not know

High School (grades 9-12)?
Rehearsal room devoted exclusively to STRING/ORCHESTRA instruction
Rehearsal room used for both band and STRING/ORCHESTRA instruction
Rehearsal room used for both choir and STRING/ORCHESTRA instruction
Rehearsal room used for band, choir and STRING/ORCHESTRA instruction
Rehearsal room used for guitar and STRING/ORCHESTRA instruction
Rehearsal room used for general music and STRING/ORCHESTRA instruction
Gymnasium or Gymnasium stage
Cafeteria or Cafeteria stage
Auditorium or Auditorium stage
Temporary Building
Regular classroom shared with other academic subjects (i.e. Math, English)
Other: Please describe
STRING/ORCHESTRA class instruction is not offered at the High School (grades 9-12)
I do not teach at the High School (grades 9-12) and therefore do not know
C. Rural Non-STRING/ORCHESTRA School Music Instruction  (5 questions)

12. What MUSIC instruction is currently offered in the school district, in addition to STRING/ORCHESTRA? (Check all that apply)
   o General Music
   o Music Appreciation
   o Band (Marching, Jazz, Concert, etc.)
   o Choir (Madrigal, Show, Concert, etc.)
   o Guitar
   o Piano
   o Music Theory or Aural Skills
   o Music History
   o Other: Please describe: ______________________________________________

13. At which grade level is beginning instruction first offered as a class for (Please mark one answer per category):
   a. Band?
      o Kindergarten
      o 1st grade
      o 2nd grade
      o 3rd grade
      o 4th grade
      o 5th grade
      o 6th grade
      o 7th grade
      o 8th grade
      o 9th grade
      o 10th grade
      o 11th grade
      o 12th grade
      o Do not know
      o Do not offer
   b. Choir?
      o Kindergarten
      o 1st grade
      o 2nd grade
      o 3rd grade
      o 4th grade
      o 5th grade
      o 6th grade
      o 7th grade
      o 8th grade
      o 9th grade
d. Guitar?
  o Kindergarten
  o 1st grade
  o 2nd grade
  o 3rd grade
  o 4th grade
  o 5th grade
  o 6th grade
  o 7th grade
  o 8th grade
  o 9th grade
  o 10th grade
  o 11th grade
  o 12th grade
  o Do not know
  o Do not offer

d. Piano?
  o Kindergarten
  o 1st grade
  o 2nd grade
  o 3rd grade
  o 4th grade
  o 5th grade
  o 6th grade
  o 7th grade
  o 8th grade
  o 9th grade
  o 10th grade
  o 11th grade
  o 12th grade
  o Do not know
  o Do not offer

e. Other? (from Question #12)
  o Kindergarten
  o 1st grade
  o 2nd grade
  o 3rd grade
  o 4th grade
  o 5th grade
  o 6th grade
14. Does instruction continue through grade 12 for:
   a. Band?
      o Yes
      o No
      o Do not know
      o Do not offer
   b. Choir?
      o Yes
      o No
      o Do not know
      o Do not offer
   j. Guitar?
      o Yes
      o No
      o Do not know
      o Do not offer
   e. Piano?
      o Yes
      o No
      o Do not know
      o Do not offer
   f. Other? (from Question #12)
      o Yes
      o No
      o Do not know
      o Do not offer

15. For the OVERALL school music program, what is the perceived level of support (community, school administration, district administration, parents, etc.) given to MUSIC instruction in the schools?
   o Very Low
   o Low
   o Neutral
   o High
   o Very High
   o Do Not Know
16. a. Do you perceive that there are different levels of support (community, school administration, district administration, parents, etc.) for OTHER MUSIC instruction compared to STRING/ORCHESTRA instruction?
   - Yes
   - No
   - Do not know

b. If yes, please indicate which description you perceive to be true:
   - There is LESS support for STRING/ORCHESTRA instruction than other music instruction
   - There is MORE support for STRING/ORCHESTRA instruction than other music instruction

D. Rural String/Orchestra School Instruction (18 questions)

17. a. Is there a printed district STRING/ORCHESTRA curriculum in addition to the State and National curriculum guides?
   - Yes
   - No
   - Do not know

b. If yes, is the district STRING/ORCHESTRA curriculum used to guide instruction?
   - Yes
   - No
   - Do not know

18. Estimate the number of students that are enrolled in STRING/ORCHESTRA classes at the following RURAL school buildings/campuses in your district? (If there is more than one school building/campus per level, please combine for one total enrollment at that level. Mark “0” if STRING/ORCHESTRA class instruction is not offered at that school building/campus.)
   - Elementary School (grades K-5), ______
   - Middle/Junior High School (grades 6-8), ______
   - High School (grades 9-12), ______

19. STRING/ORCHESTRA classes are organized in what way at the following RURAL school buildings/campuses:
   a. Elementary School (grades K-5)?
      - Homogeneously (violin class, viola class, cello class, bass class)
      - Heterogeneously (mixed violin, viola, cello, and/or bass class in any configuration)
      - Some homogeneously and heterogeneously
      - STRING/ORCHESTRA class instruction is not offered at the Elementary School (grades K-5)
   b. Middle/Junior High School (grades 6-8)?
Homogeneously (violin class, viola class, cello class, bass class)
Heterogeneously (mixed violin, viola, cello, and/or bass class in any configuration)
Some homogeneously and heterogeneously
STRING/ORCHESTRA class instruction is not offered at the Middle/Junior High School (grades 6-8)

20. a. Do you know when STRING/ORCHESTRA instruction first began in your district?
   o Yes
   o No
   o I have an idea but do not know the exact year: Approximately before ____________ (i.e. 1950)

   b. If yes, in what school year was STRING/ORCHESTRA instruction first offered in your school district? (i.e. 2001-2002) _______ - _______

   c. At what grade levels was STRING/ORCHESTRA instruction offered during the first year it was offered? (Mark all that apply)
   o Kindergarten
   o 1st grade
   o 2nd grade
   o 3rd grade
   o 4th grade
   o 5th grade
   o 6th grade
   o 7th grade
   o 8th grade
   o 9th grade
   o 10th grade
   o 11th grade
   o 12th grade
   o Do not know

   d. Were these string programs also started in the RURAL schools located in your district at the same time?
   o Yes
   o No
   o Do not know

   e. Approximately how many years has a STRING/ORCHESTRA program been offered in the RURAL schools of your school district? ____________ years.
21. a. At which grade level is beginning STRING/ORCHESTRA instruction first offered as a class? (Please only mark one choice.)
   - Kindergarten
   - 1st grade
   - 2nd grade
   - 3rd grade
   - 4th grade
   - 5th grade
   - 6th grade
   - 7th grade
   - 8th grade
   - 9th grade
   - 10th grade
   - 11th grade
   - 12th grade
   - Do not know
   - Students are allowed to join the STRING/ORCHESTRA class at any grade level. No finite grade level is deemed the start year for STRING/ORCHESTRA.

b. The grade level answered in question 19. a. is housed in your school district at the:
   - Elementary School
   - Middle/Junior High School
   - High School
   - N/A

22. In what grades is STRING/ORCHESTRA instruction currently offered in the school district? (Please check all that apply.)
   - Kindergarten
   - 1st grade
   - 2nd grade
   - 3rd grade
   - 4th grade
   - 5th grade
   - 6th grade
   - 7th grade
   - 8th grade
   - 9th grade
   - 10th grade
   - 11th grade
   - 12th grade
   - Do not know

23. On average, how many times per week does a STRING/ORCHESTRA student attend STRING/ORCHESTRA class (excluding special or extra rehearsals):
   a. Elementary School (grades K-5)?
      - Before the school day
• Our district does not offer STRING/ORCHESTRA class at the Elementary School (grades K-5)
  • During the school day
    o 0 times
    o 1 time
    o 2 times
    o 3 times
    o 4 times
    o 5 times
    o Our district does not offer STRING/ORCHESTRA class at the Elementary School (grades K-5)
  • After the school day
    o 0 times
    o 1 time
    o 2 times
    o 3 times
    o 4 times
    o 5 times
    o Our district does not offer STRING/ORCHESTRA class at the Elementary School (grades K-5)

b. Middle/Junior High School (grades 6-8)?
  • Before the school day
    o 0 times
    o 1 time
    o 2 times
    o 3 times
    o 4 times
    o 5 times
    o Our district does not offer STRING/ORCHESTRA class at the Middle/Junior High School (grades 6-8)
  • During the school day
    o 0 times
    o 1 time
    o 2 times
    o 3 times
    o 4 times
    o 5 times
    o Our district does not offer STRING/ORCHESTRA class at the Middle/Junior High School (grades 6-8)
• After the school day
  o 0 times
  o 1 time
  o 2 times
  o 3 times
  o 4 times
  o 5 times
  o Our district does not offer STRING/ORCHESTRA class at the Middle/Junior High School (grades 6-8)

c. High School (grades 9-12)?
• Before the school day
  o 0 times
  o 1 time
  o 2 times
  o 3 times
  o 4 times
  o 5 times
  o Our district does not offer STRING/ORCHESTRA class at the High School (grades 9-12)

• During the school day
  o 0 times
  o 1 time
  o 2 times
  o 3 times
  o 4 times
  o 5 times
  o Our district does not offer STRING/ORCHESTRA class at the High School (grades 9-12)

• After the school day
  o 0 times
  o 1 time
  o 2 times
  o 3 times
  o 4 times
  o 5 times
  o Our district does not offer STRING/ORCHESTRA class at the High School (grades 9-12)

24. On average, how many minutes does a STRING/ORCHESTRA student attend STRING/ORCHESTRA class (excluding special or extra rehearsals) per class meeting:
a. Elementary School (grades K-5)?
  • Before the school day
    o STRING/ORCHESTRA classes do not meet before the school day
    o 1-19 minutes
o 20-39 minutes
o 40-59 minutes
o 60 minutes or more
o Do not know
o Our district does not offer STRING/ORCHESTRA class at the Elementary School (grades K-5)

• During the school day
  o STRING/ORCHESTRA classes do not meet during the school day
  o 1-19 minutes
  o 20-39 minutes
  o 40-59 minutes
  o 60 minutes or more
  o Do not know
  o Our district does not offer STRING/ORCHESTRA class at the Elementary School (grades K-5)

• After the school day
  o STRING/ORCHESTRA classes do not meet after the school day
  o 1-19 minutes
  o 20-39 minutes
  o 40-59 minutes
  o 60 minutes or more
  o Do not know
  o Our district does not offer STRING/ORCHESTRA class at the Elementary School (grades K-5)

b. Middle/Junior High School (grades 6-8)?

• Before the school day
  o STRING/ORCHESTRA classes do not meet before the school day
  o 1-19 minutes
  o 20-39 minutes
  o 40-59 minutes
  o 60 minutes or more
  o Do not know
  o Our district does not offer STRING/ORCHESTRA class at the Middle/Junior High School (grades 6-8)

• During the school day
  o STRING/ORCHESTRA classes do not meet during the school day
  o 1-19 minutes
  o 20-39 minutes
  o 40-59 minutes
  o 60 minutes or more
  o Do not know
  o Our district does not offer STRING/ORCHESTRA class at the Middle/Junior High School (grades 6-8)

• After the school day
  o STRING/ORCHESTRA classes do not meet after the school day
25. At the buildings/campuses that STRING/ORCHESTRA classes are offered, are students able to register to participate in STRING/ORCHESTRA instruction throughout the school year?
   o Yes
   o No

26. a. How many STRING/ORCHESTRA teachers are employed full time by the district, including yourself, to teach in RURAL schools?
   o 0
b. How many STRING/ORCHESTRA teachers are employed part time by the district, including yourself, to teach in RURAL schools?
   ○ 0
   ○ 1
   ○ 2
   ○ 3
   ○ More than 3

c. Are all STRING/ORCHESTRA teachers who are currently teaching in RURAL schools in your district (full or part time) certified (licensed) to teach MUSIC in your state?
   ○ Yes
   ○ No
   ○ Do not know

27. If there are others teaching STRING/ORCHESTRA in the RURAL schools in your district, what family of instruments best describes their primary instrument? (Choose all that apply; one per STRING/ORCHESTRA teacher in the district NOT including yourself.)
   ○ STRING/ORCHESTRA
   ○ Woodwind
   ○ Brass
   ○ Percussion
   ○ Keyboard/Piano
   ○ Voice
   ○ Guitar
   ○ Other
   ○ There are no others teaching STRING/ORCHESTRA in my district

28. How has the number of STRING/ORCHESTRA teachers in your school district (full or part time) changed in the last five years?
   ○ Has increased
   ○ Has stayed the same
   ○ Has decreased
   ○ Do not know

29. On average, how many concerts (including small and large group) do your RURAL student orchestras perform per school year at each grade level:
   a. Elementary (grades K-5)?
      ○ 0
      ○ 1-2
      ○ 3-4
We do not offer STRING/ORCHESTRA instruction at the Elementary School (grades K-5)
b. Middle/Junior High (grades 6-8)?
  o 0
  o 1-2
  o 3-4
  o 5-6
  o more than 6
  o We do not offer STRING/ORCHESTRA instruction at the Middle/Junior High School (grades 6-8)
c. High School (grades 9-12)?
  o 0
  o 1-2
  o 3-4
  o 5-6
  o more than 6
  o We do not offer STRING/ORCHESTRA instruction at the High School (grades 9-12)
e. Combined grade level performances
  o 0
  o 1-2
  o 3-4
  o 5-6
  o more than 6
  o We do not offer combined grade level performances

30. What is the average number of concerts (including large and small groups) your student groups from rural schools perform:

a. on school grounds per school year?
  o 0
  o 1-2
  o 3-4
  o 5-6
  o more than 6

b. off school grounds WITHIN the community per school year?
  o 0
  o 1-2
  o 3-4
  o 5-6
  o more than 6

c. off school grounds OUTSIDE the local community per school year?
  o 0
  o 1-2
31. From whom do you obtain STRING/ORCHESTRA instruments and accessories (strings, mutes, shoulder rests, rock stops, etc.) for the school STRING/ORCHESTRA program? (Check all that apply)
   - Music store located within the community
   - Music store outside of the community
   - Internet
   - Other: Please describe: __________________________________________________________

32. Who maintain/services/repairs your school and student instruments? (Check all that apply)
   - Independent local string instrument repairperson
   - Local music store repairperson
   - Repairperson from outside the community
   - I or another string teacher does all repairs
   - Other: Please describe: __________________________________________________________
   - Do not know

33. From whom do you obtain printed music and materials for your school STRING/ORCHESTRA program? (Check all that apply)
   - Music store located within the community
   - Music store outside of the community
   - Internet
   - Other: Please describe: __________________________________________________________

34. a. Does the STRING/ORCHESTRA curriculum provide the opportunity for STRING/ORCHESTRA students to participate in full orchestra (symphonic orchestra with woodwind, brass, and percussion)?
   - Yes
   - No
   - Not currently, but we hope to in the future
   - Do not know
   c. If yes, at which levels does the STRING/ORCHESTRA curriculum provide the opportunity for STRING/ORCHESTRA students to participate in full orchestra? (Check all that apply.)
      - Elementary School (grades K-5)
      - Middle/Junior High School (grades 6-8)
      - High School (grades 9-12)

E. Rural STRING/ORCHESTRA Teachers (10 questions)
35. In what state do you teach? ____________________________________________

36. What is your gender?
   o Male
   o Female

37. What is your racial identity? (Check all that apply)
   o Caucasian (non-Hispanic)
   o African American
   o Asian
   o Native American
   o Hispanic
   o Other

38. To what family of instruments does your primary instrument belong? (Check only ONE)
   o String
   o Woodwind
   o Brass
   o Percussion
   o Keyboard/Piano
   o Voice
   o Guitar
   o Other: Please describe: _______________________________________________

39. Are you certified (licensed) by your state to teach MUSIC?
   o Yes
   o No
   o No, but I am currently certified (licensed) in another state. I am working on transferring my certification (license) to my current state.

40. What MUSIC courses, in addition to STRING/ORCHESTRA, are you currently teaching? (Mark all that apply)
   o General Music
   o Music Appreciation
   o Band (Marching, Jazz, Concert, etc.)
   o Choir (Madrigal, Show, Concert, etc.)
   o Guitar
   o Piano
   o Music Theory or Aural Skills
   o Music History
   o Other: Please describe: _______________________________________________
   o I only teach STRING/ORCHESTRA classes
41. a. Are you certified (licensed) by your state to teach SUBJECTS OTHER THAN MUSIC?
   o Yes
   o No
b. If yes, are you currently teaching SUBJECTS OTHER THAN MUSIC?
   o Yes
   o No

42. a. Did you teach STRING/ORCHESTRA classes during your student teaching experience?
   o Yes
   o No
b. The school district where you student taught is best described as which of the following?
   o Rural
   o Suburban
   o Urban

43. Please indicate the number of years (including this school year) you have taught STRING/ORCHESTRA in the following locations. (Write 0 if you have not taught in that location):
   a. Rural Schools: _______ years
   b. Suburban Schools: _______ years
   c. Urban Schools: _______ years

F. Rural String/Orchestra Students (9 questions)

44. The majority (more than 50%) of STRING/ORCHESTRA students at the following school buildings/campuses are:
   a. Elementary School (grades K-5):
      o Male
      o Female
      o Our district does not offer STRING/ORCHESTRA class at the Elementary School (grades K-5)
      o I do not teach at the Elementary School (grades K-5) and therefore do not know
b. Middle/Junior High School (grades 6-8)
   o Male
   o Female
   o Our district does not offer STRING/ORCHESTRA class at the Middle/Junior High School (grades 6-8)
   o I do not teach at the Middle/Junior High School (grades 6-8) and therefore do not know
c. High School (grades 9-12)
   o Male
Female
Our district does not offer STRING/ORCHESTRA class at the High School (grades 9-12)
I do not teach at the High School (grades 9-12) and therefore do not know

45. The majority (more than 50%) of STRING/ORCHESTRA students at the following school buildings/campuses are:

a. Elementary School (grades K-5):
   - Caucasian (non-Hispanic)
   - African American
   - Asian
   - Native American
   - Hispanic
   - Other: Please describe: ____________________________________________

   Our district does not offer STRING/ORCHESTRA class at the Elementary School (grades K-5)

   I do not teach at the Elementary School (grades K-5) and therefore do not know

b. Middle/Junior High School (grades 6-8):
   - Caucasian (non-Hispanic)
   - African American
   - Asian
   - Native American
   - Hispanic
   - Other: Please describe: ____________________________________________

   Our district does not offer STRING/ORCHESTRA class at the Middle/Junior High School (grades 6-8)

   I do not teach at the Middle/Junior High School (grades 6-8) and therefore do not know

c. High School (grades 9-12):
   - Caucasian (non-Hispanic)
   - African American
   - Asian
   - Native American
   - Hispanic
   - Other: Please describe: ____________________________________________

   Our district does not offer STRING/ORCHESTRA class at the High School (grades 9-12)

   I do not teach at the High School (grades 9-12) and therefore do not know

46. What percentage of STRING/ORCHESTRA students are on free or reduced lunch at the following school buildings/campuses:

a. Elementary School (grades K-5)?
   - 0-15%
   - 16-30%
   - 31-45%
o 46-60%
  o 61-75%
  o Greater than 76%
  o Do not know
  o Our district does not offer STRING/ORCHESTRA class at the Elementary School (grades K-5)
  o I do not teach at the Elementary School (grades K-5) and therefore do not know
b. Middle/Junior High School (grades 6-8)?
  o 0-15%
  o 16-30%
  o 31-45%
  o 46-60%
  o 61-75%
  o Greater than 76%
  o Do not know
  o Our district does not offer STRING/ORCHESTRA class at the Middle/Junior High School (grades 6-8)
  o I do not teach at the Middle/Junior High School (grades 6-8) and therefore do not know
c. High School (grades 9-12)?
  o 0-15%
  o 16-30%
  o 31-45%
  o 46-60%
  o 61-75%
  o Greater than 76%
  o Do not know
  o Our district does not offer STRING/ORCHESTRA class at the High School (grades 9-12)
  o I do not teach at the High School (grades 9-12) and therefore do not know

47. What is the average percentage of STRING/ORCHESTRA students who continue STRING/ORCHESTRA instruction after the first year?
  o less than 50%
  o 50-69%
  o 70-84%
  o 85-100%
  o Do not know
  o I do not teach at the Elementary School (grades K-5) and therefore do not know

48. If the first year STRING/ORCHESTRA is offered as a class is during Elementary School (grades K-5), what is the average percentage of STRING/ORCHESTRA students who continue to enroll in STRING/ORCHESTRA instruction in the Middle/Junior High School (grades 6-8)?
  o less than 50%
49. a. What is the average percentage of STRING/ORCHESTRA students who continue to enroll in STRING/ORCHESTRA instruction when transitioning from the Middle/Junior High School to the High School?
   - less than 50%
   - 50-69%
   - 70-84%
   - 85-100%
   - Do not know
   - STRING/ORCHESTRA instruction is not offered in the Middle/Junior High School (grades 6-8)
   - STRING/ORCHESTRA instruction is not offered in the High School (grades 9-12)

50. What is the average percentage of STRING/ORCHESTRA students who take private lessons:
   a. Elementary School students (grades K-5)?
      - No Elementary School students take private lessons
      - 1-10%
      - 11-20%
      - 21-30%
      - 31-40%
      - 41-50%
      - 51-60%
      - 61-70%
      - 71-80%
      - 81-90%
      - 91-100%
      - Do not know
      - STRING/ORCHESTRA instruction is not offered in the Elementary School (grades K-5).
   b. Middle/Junior High School students (grades 6-8)?
      - No Middle/Junior High School students take private lessons
      - 1-10%
      - 11-20%
      - 21-30%
      - 31-40%
41-50%
51-60%
61-70%
71-80%
81-90%
91-100%
Do not know
STRING/ORCHESTRA instruction is not offered in the Middle/Junior High School (grades 6-8).

C. High School students (grades 9-12)?
No High School students take private lessons
1-10%
11-20%
21-30%
31-40%
41-50%
51-60%
61-70%
71-80%
81-90%
91-100%
Do not know
STRING/ORCHESTRA instruction is not offered in the High School (grades 9-12)

51. What percentage of STRING/ORCHESTRA students who graduate from your district go to college to seek a music education degree?
No STRING/ORCHESTRA graduates pursue a music education degree
1-10%
11-20%
21-30%
31-40%
41-50%
51-60%
61-70%
71-80%
81-90%
91-100%
We have not had a STRING/ORCHESTRA graduating class from our program yet
Do not know

52. What percentage of STRING/ORCHESTRA students who graduate from your school system continue to play their STRING/ORCHESTRA instrument after graduation?
- No STRING/ORCHESTRA students continue to play their instrument after graduation
  - 1-10%
  - 11-20%
  - 21-30%
  - 31-40%
  - 41-50%
  - 51-60%
  - 61-70%
  - 71-80%
  - 81-90%
  - 91-100%
- We have not had a graduating STRING/ORCHESTRA class from our program yet
- Do not know

### III. Critical Factors for Successfully Establishing New Rural String/Orchestra Programs

1. Do you believe that factors critical for the success of a String/Orchestra program are different by location (urban, suburban, rural)?
   - Yes
   - No

2. Research indicates the following factors as critical for the success of a String/Orchestra program in any location. Please **RANK** (not rate) these factors for a String/Orchestra program in **ANY LOCATION**. (1 = most critical, 2 = second most critical…8 = least critical)

   - **Community** (size, business support, parent support, church support, civic group support, local fine arts organization support, college or university support, report of community, use of string/orchestra ensembles in functions)
   - **School District** (school board support, administration support, counselor support, athletics support, non-music teachers support, funding/budget, music or string specific professional development, opportunities offered/supported, instructional space, report of music department, marketing to potential families, use of string/orchestra ensembles in functions)
   - **Non-String/Orchestra School Music Instruction** (other music teachers support, competitiveness, collaboration, added-instruction time/duties)
   - **String/Orchestra School Music Instruction** (instructional time, instructional space, class organization, start-year, number of string/orchestra staff, number of concerts/presentations, access to string instruments/accessories/repair, competitiveness, collaboration)
3. Research indicates the following factors as critical for the success of a STRING/ORCHESTRA program in any location. Please RANK (not rate) these factors for a STRING/ORCHESTRA program located in a RURAL AREA. (1 = most critical, 2 = second most critical...8 = least critical)

- **Community** (size, business support, parent support, church support, civic group support, local fine arts organization support, college or university support, report of community, use of string/orchestra ensembles in functions)
- **School District** (school board support, administration support, counselor support, athletics support, non-music teachers support, funding/budget, music or string specific professional development, opportunities offered/supported, instructional space, report of music department, marketing to potential families, use of string/orchestra ensembles in functions)
- **Non-String/Orchestra School Music Instruction** (other music teachers support, competitiveness, collaboration, added-instruction time/duties)
- **String/Orchestra School Music Instruction** (instructional time, instructional space, class organization, start-year, number of string/orchestra staff, number of concerts/presentations, access to string instruments/accessories/repair, competitiveness, collaboration)
- **String Teachers** (state certified/licensed, organization skills, administration skills, communication skills, competitiveness, collaborative, inventive, influence, variety of musical styles, contest success, experience in rural setting)
- **String Students** (number involved, attrition, private lessons, class scheduling, job or chore responsibilities)
- **Resources** (instrument shops, repair shops, printed music shops, online access, technology, school or personal instrument purchases)
- **Perception** (strings are for fiddling or symphonies)

4. Keeping these factors in mind, what do you recommend the first three steps are in beginning to establish a new STRING/ORCHESTRA program in a rural area based on your experiences teaching STRING/ORCHESTRA in a rural area?

   a. Step one:

      ______________________________________________________________
      ______________________________________________________________
      ______________________________________________________________
      ______________________________________________________________
      ______________________________________________________________
b. Step two:

________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________


c. Step three:

________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________

Please note your completion time: ____________________________________________

Thank you for your input and the gift of your time and insights towards my research.
Your participation is important and your contributions are invaluable.
Appendix E: Study Introduction and Consent (Initial email)
Dear K-12 Rural String/Orchestra Music Educator,

You are vital to the current and future of teaching strings in America. We are writing to invite you to participate in a survey to examine the current profile of rural string/orchestra programs and identify factors critical for successfully establishing new rural string/orchestra programs.

Little research has examined rural school orchestra programs. Few students enrolled in rural schools have access to string instrument instruction. You currently hold a very unique professional position as a string educator in rural schools. You are one of the most important resources to help build a model to create more rural string/orchestra programs for students. Your insights and recommendations are vital to the future of string music education in rural areas. Your survey responses will assist string teachers, administrators, students, and researchers to better understand the uniqueness of rural string teaching. You are the only one who has this information. The results of the survey will help school districts offer string instruction and enable universities to better prepare future string teachers for teaching in rural areas. We need you.

The survey must be completed on/by February 1.
The survey should take between 15-25 minutes to complete.

Please click on the following link to access the survey:
https://www.surveymonkey.com/r/CV9HTPJ

You are key to the future of teaching string students in rural schools. Please help by completing the survey.

Thank your for all that you do for children and our great string teaching profession.

Sincerely,

Robert Gillespie, PhD
Professor of Music
The Ohio State University

Blair Williams, Doctoral Candidate, ABD
The Ohio State University
Appendix F: Study Introduction and Consent (1st follow-up email)
Dear K-12 Rural String/Orchestra Music Educator,

You are vital to the current and future of teaching strings in America. We are writing to, again, invite you to participate in a survey to examine the current profile of rural string/orchestra programs and identify factors critical for successfully establishing new rural string/orchestra programs.

Little research has examined rural school orchestra programs. Few students enrolled in rural schools have access to string instrument instruction. You currently hold a very unique professional position as a string educator in rural schools. You are one of the most important resources to help build a model to create more rural string/orchestra programs for students. Your insights and recommendations are vital to the future of string music education in rural areas. Your survey responses will assist string teachers, administrators, students, and researchers to better understand the uniqueness of rural string teaching. You are the only one who has this information. The results of the survey will help school districts offer string instruction and enable universities to better prepare future string teachers for teaching in rural areas. We need you.

The survey must be completed on/by February 1.
The survey should take between 15-25 minutes to complete.

Please click on the following link to access the survey:
https://www.surveymonkey.com/r/CV9HTPJ

You are key to the future of teaching string students in rural schools. Please help by completing the survey.

Thank you for all that you do for children and our great string teaching profession.

Sincerely,

Robert Gillespie, PhD
Professor of Music
The Ohio State University

Blair Williams, Doctoral Candidate, ABD
The Ohio State University
Appendix G: Study Introduction and Consent (2nd follow-up email)
Dear K-12 String/Orchestra Music Educator,

Survey Closing Extended!

In order to achieve a more accurate picture of the geographic locations that you teach in, we are asking that you take LESS THAN 30 SECONDS to:

1. Consent to participating in the survey, and
2. Indicate the geographic location of your school district (rural, suburban, or urban) in the first question of the Community section.

If you teach in a rural area, we would like to ask that you complete the survey. You are vital to the current and future of teaching strings in America. We are writing to, again, invite you to participate in a survey to examine the current profile of rural string/orchestra programs and identify factors critical for successfully establishing new rural string/orchestra programs.

Little research has examined rural school orchestra programs. Few students enrolled in rural schools have access to string instrument instruction. You currently hold a very unique professional position as a string educator in rural schools. You are one of the most important resources to help build a model to create more rural string/orchestra programs for students. Your insights and recommendations are vital to the future of string music education in rural areas. Your survey responses will assist string teachers, administrators, students, and researchers to better understand the uniqueness of rural string teaching. You are the only one who has this information. The results of the survey will help school districts offer string instruction and enable universities to better prepare future string teachers for teaching in rural areas. We need you.

The survey must be completed on/by February 5.

The complete survey should take between 15-25 minutes to complete.

Again, if you are not a rural string teacher, please complete ONLY the first question (school district location in a rural, suburban, or urban location).

Please click on the following link to access the survey:
https://www.surveymonkey.com/r/CV9HTPJ

You are key to the future of teaching string students in rural schools. Please help by completing the survey.

Thank you for all that you do for children and our great string teaching profession.

Sincerely,

Robert Gillespie, PhD
Professor of Music
The Ohio State University

Blair Williams, Doctoral Candidate, ABD
The Ohio State University
Profile of Rural String/Orchestra Programs and Critical Factors for Successfully Establishing New Rural String/Orchestra Programs

Consent Page

* 1. Participation in this study involves research. Participation is completely voluntary and participants may withdraw at any time without penalty or loss of benefits. You are being asked to participate in this research study because you have indicated that you are a string teacher in a self-labeled rural area.

The purpose of the study is to examine the current profile of rural string/orchestra programs and identify factors critical for successfully establishing new rural string/orchestra programs. Your participation will assist professional string teachers, administrators, students, and researchers across the country better understand string programs in rural areas, work to better prepare future string teachers for placements in rural areas, and better equip current string teachers in rural areas with tools to assist their programs. Together string professionals will also gain insights that will assist in the future creation of other string programs in rural areas.

The survey should take between 15-25 minutes to complete.

Contacts and Questions:
For questions, concerns, or complaints about the study, contact,
Principal Investigator: Dr. Robert Gillespie, gillespie.5@osu.edu, (614) 292-2336
Co-Investigator: Blair Williams, williams.4270@osu.edu, (254) 749-7001

For questions about your rights as a participant in this study or to discuss other study-related concerns or complaints with someone who is not part of the research team, you may contact Ms. Sandra Meadows in the Office of Responsible Research Practices at 1-800-678-6251, 1-614-688-4792, or meadows.8@osu.edu.

Do you consent to participating in the study?

☐ Yes
☐ No
A community is defined as a locality inhabited by a group of any size (in this case, self-labeled as rural) whose members reside in a specific locality, share a government, and often have a common cultural and historical heritage.

* 1. Do you consider your school district RURAL?
   - [ ] Yes
   - [ ] No
2. What is your best estimate of the population range of your community that is located in a RURAL area?

- 0-1,000
- 1,001-2,000
- 2,001-3,000
- 3,001-4,000
- 4,001-5,000
- 5,001-6,000
- 6,001-7,000
- 7,001-8,000
- 8,001-9,000
- 9,001-10,000
- 10,001-11,000
- 11,001-12,000
- 12,001-13,000
- 13,001-14,000
- 14,001-15,000
- Greater than 15,000

3. Is there an amateur symphony orchestra (community or regional orchestras; NOT youth symphony) in your rural community (within 30 miles)?

- Yes
- No
- Do not know

4. Are STRING/ORCHESTRA students invited to play in the amateur symphony orchestra (community or regional orchestra; NOT youth symphony)?

- Yes
- No
- Do not know

- There is not an amateur symphony orchestra (community or regional orchestra; NOT youth symphony) within 30 miles of my rural community.
5. Are string instruments played in local churches?
   - Yes
   - No
   - Do not know

6. Are private string instrument lessons available within the community?
   - Yes
   - No
   - Do not know

7. If students drive outside of the rural community to take private string instrument lessons, how far do they drive, round trip, on average? (Combine multiple students to calculate one average).
   - 1-10 miles
   - 11-20 miles
   - 21-30 miles
   - 31-40 miles
   - 41-50 miles
   - 51-60 miles
   - Greater than 61 miles
   - Do not know
   - Students do not travel outside of the rural community to take private string instrument lessons.

8. Is there a junior college, community college, college, or university (including satellite campuses) in or within 30 miles of your rural community?
   - Yes
   - No
   - Do not know
9. Does the junior college, community college, college, or university (including satellite campuses) offer courses/workshops/camps/lessons/performance opportunities in MUSIC that are available to your STRING/ORCHESTRA students?

☐ Yes
☐ No
☐ Do not know
☐ There is not a junior college, community college, college, or university (including satellite campuses) in or within 30 miles of my rural community.

10. If MUSIC instruction is offered at the junior college, community college, college, or university (including satellite campuses), are STRING/ORCHESTRA courses/workshops/camps/lessons/performance opportunities available to your STRING/ORCHESTRA students?

☐ Yes
☐ No
☐ Do not know
☐ MUSIC instruction is not offered
☐ There is not a junior college, community college, college, or university (including satellite campuses) in or within 30 miles of my rural community.

11. If STRING/ORCHESTRA instruction is offered at the junior college, community college, college, or university (including satellite campuses), are high school students invited to perform in the STRING/ORCHESTRA ensemble (could include full symphony orchestra as well)?

☐ Yes
☐ No
☐ Do not know
☐ STRING/ORCHESTRA instruction is not offered
☐ There is not a junior college, community college, college, or university (including satellite campuses) in or within 30 miles of my rural community.
* 12. If STRING/ORCHESTRA instruction is NOT offered at the junior college, community college, college, or university (including satellite campuses), are high school STRING/ORCHESTRA students invited to participate with collegiate wind/brass/percussion players to form a FULL ORCHESTRA?

- Yes
- No
- Do not know
- FULL ORCHESTRA instruction is not offered

- There is not a junior college, community college, college, or university (including satellite campuses) in or within 30 miles of my rural community.
I. Profile of Rural String/Orchestra Programs

B. Rural School Districts

1. How many schools does your district have?

<table>
<thead>
<tr>
<th></th>
<th>0</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>More than 3</th>
<th>Do not know</th>
</tr>
</thead>
<tbody>
<tr>
<td>grades K-5</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>grades 6-8</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>grades 9-12</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

2. How many students are enrolled in those schools? (If there is more than one school building/campus of the same level, i.e. two school buildings/campuses that offer grades K-5 instruction, please combine for one grades K-5 total).

<table>
<thead>
<tr>
<th></th>
<th>0-25</th>
<th>26-50</th>
<th>51-100</th>
<th>101-150</th>
<th>151-200</th>
<th>201-250</th>
<th>251-300</th>
<th>301-350</th>
<th>351-400</th>
<th>401-450</th>
<th>451-500</th>
<th>more than 500</th>
<th>Do not know</th>
</tr>
</thead>
<tbody>
<tr>
<td>grades K-5</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>grades 6-8</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>grades 9-12</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
* 3. What is the total yearly budget for STRING/ORCHESTRA instruction for your district? (If your district operates on a building/campus budget, please combine buildings/campuses into one district budget figure.)

☐ We do not receive a budget for STRING/ORCHESTRA instruction

☐ $1-1000

☐ $1,001-2,000

☐ $2,001-3,000

☐ $3,001-4,000

☐ $4,001-5,000

☐ $5,001-6,000

☐ $6,001-7,000

☐ $7,001-8,000

☐ $8,001-9,000

☐ $9,001-10,000

☐ more than $10,000

☐ Do not know

* 4. Do you have an additional budget allotment that allows for large purchases (instruments, large equipment, etc.) that is only available every few years?

☐ Yes

☐ No

☐ Do not know

* 5. How has the total yearly budget for STRING/ORCHESTRA instruction in the school district changed in the last FIVE years?

☐ It has increased

☐ It has stayed the same

☐ It has decreased

☐ This was the first year for a budget, so trends have not been established

☐ Do not know
* 6. In what type of room is STRING/ORCHESTRA class instruction offered in grades K-5? (Mark all that apply.)

- ☐ Rehearsal room devoted exclusively to STRING/ORCHESTRA instruction
- ☐ Rehearsal room used for both band and STRING/ORCHESTRA instruction
- ☐ Rehearsal room used for both choir and STRING/ORCHESTRA instruction
- ☐ Rehearsal room used for band, choir, and STRING/ORCHESTRA instruction
- ☐ Rehearsal room used for guitar and STRING/ORCHESTRA instruction
- ☐ Rehearsal room used for general music and STRING/ORCHESTRA instruction
- ☐ Gymnasium or Gymnasium stage
- ☐ Cafeteria or Cafeteria stage
- ☐ Auditorium or Auditorium stage
- ☐ Temporary Building
- ☐ Regular classroom shared with other academic subjects (i.e. Math, English)
- ☐ STRING/ORCHESTRA class instruction is not offered in grades K-5
- ☐ I do not teach grades K-5 and therefore do not know
- ☐ Other (please specify)

[ ]
* 7. In what type of room is STRING/ORCHESTRA class instruction offered in grades 6-8? (Mark all that apply.)

- [ ] Rehearsal room devoted exclusively to STRING/ORCHESTRA instruction
- [ ] Rehearsal room used for both band and STRING/ORCHESTRA instruction
- [ ] Rehearsal room used for both choir and STRING/ORCHESTRA instruction
- [ ] Rehearsal room used for band, choir, and STRING/ORCHESTRA instruction
- [ ] Rehearsal room used for guitar and STRING/ORCHESTRA instruction
- [ ] Rehearsal room used for general music and STRING/ORCHESTRA instruction
- [ ] Gymnasium or Gymnasium stage
- [ ] Cafeteria or Cafeteria stage
- [ ] Auditorium or Auditorium stage
- [ ] Temporary Building
- [ ] Regular classroom shared with other academic subjects (i.e. Math, English)
- [ ] STRING/ORCHESTRA class instruction is not offered in grades 6-8
- [ ] I do not teach grades 6-8 and therefore do not know
- [ ] Other (please specify)
8. In what type of room is STRING/ORCHESTRA class instruction offered in grades 9-12? (Mark all that apply.)

- Rehearsal room devoted exclusively to STRING/ORCHESTRA instruction
- Rehearsal room used for both band and STRING/ORCHESTRA instruction
- Rehearsal room used for both choir and STRING/ORCHESTRA instruction
- Rehearsal room used for band, choir, and STRING/ORCHESTRA instruction
- Rehearsal room used for guitar and STRING/ORCHESTRA instruction
- Rehearsal room used for general music and STRING/ORCHESTRA instruction
- Gymnasium or Gymnasium stage
- Cafeteria or Cafeteria stage
- Auditorium or Auditorium stage
- Temporary Building
- Regular classroom shared with other academic subjects (i.e. Math, English)
- STRING/ORCHESTRA class instruction is not offered in grades 9-12
- I do not teach grades 9-12 and therefore do not know
- Other (please specify)
I. Profile of Rural String/Orchestra Programs

C. Rural Non-String/Orchestra School Music Instruction

*1. Indicate the grade level(s) that instruction is currently offered for each music class indicated? (Please mark all that apply.)

<table>
<thead>
<tr>
<th>Music Class</th>
<th>Kindergarten</th>
<th>1st Grade</th>
<th>2nd Grade</th>
<th>3rd Grade</th>
<th>4th Grade</th>
<th>5th Grade</th>
<th>6th Grade</th>
<th>7th Grade</th>
<th>8th Grade</th>
<th>9th Grade</th>
<th>10th Grade</th>
<th>11th Grade</th>
<th>12th Grade</th>
</tr>
</thead>
<tbody>
<tr>
<td>General Music</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Music Appreciation</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Band</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Choir</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Guitar</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Piano</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Music Theory and/or Aural Skills</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(Musicianship)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Music History</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Other (please specify)
* 2. For the OVERALL school music program, what is the perceived level of support (including from the community, school administration, district administration, parents, etc.) given to MUSIC instruction in the schools?

- Very low
- Low
- Neutral
- High
- Very High
- Do not know

* 3. Do you perceive that there are different levels of support (including from the community, school administration, district administration, parents, etc.) for OTHER MUSIC instruction compared to STRING/ORCHESTRA instruction?

- Yes
- No
- Do not know

* 4. Indicate which description of support you perceive to be true in your district:

- There is LESS support for STRING/ORCHESTRA instruction than other music instruction.
- There is MORE support for STRING/ORCHESTRA instruction than other music instruction.
- There is EQUAL support for STRING/ORCHESTRA instruction and other music instruction.
- Do not know
I. Profile of Rural String/Orchestra Programs

D. Rural String/Orchestra School Instruction

* 1. Is there a printed district STRING/ORCHESTRA curriculum in addition to the State and National curriculum guides?
   - Yes
   - No
   - Do not know

* 2. Is the district STRING/ORCHESTRA curriculum used to guide instruction?
   - Yes
   - No
   - Do not know
   - There is not a printed district STRING/ORCHESTRA curriculum

* 3. Estimate the number of students that are enrolled in STRING/ORCHESTRA classes in the following grade levels in your district. (Please combine for one total enrollment for each category. Mark “0” if STRING/ORCHESTRA class instruction is not offered to the grade levels in that category.)
   - grades K-5
   - grades 6-8
   - grades 9-12
**4. STRING/ORCHESTRA classes are organized in what way in the following grade levels?**

<table>
<thead>
<tr>
<th></th>
<th>Homogeneously (i.e., mixed violin, viola, cello, and/or bass class in any configuration)</th>
<th>Heterogeneously (i.e., mixed violin, viola, cello, and/or bass class in any configuration)</th>
<th>Some homogeneously and some heterogeneously</th>
<th>STRING/ORCHESTRA class instruction is not offered in these grade levels</th>
</tr>
</thead>
<tbody>
<tr>
<td>grades K-5</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>grades 6-8</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>grades 9-12</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
</tbody>
</table>

**5. In what school year was STRING/ORCHESTRA instruction first began in your district?**

- ☐ Do not know
- ☐ I have an idea but I do not know the exact year
- ☐ It was started in (i.e. 2001-2002) school year. Please enter the school year below.

[Enter school year]

**6. Approximately how many years has a STRING/ORCHESTRA program been offered in your district?**

[Enter number of years]
* 7. At what grade levels was STRING/ORCHESTRA instruction offered during the first year of instruction? (Mark all that apply.)

- [ ] Kindergarten
- [ ] 1st grade
- [ ] 2nd grade
- [ ] 3rd grade
- [ ] 4th grade
- [ ] 5th grade
- [ ] 6th grade
- [ ] 7th grade
- [ ] 8th grade
- [ ] 9th grade
- [ ] 10th grade
- [ ] 11th grade
- [ ] 12th grade
- [ ] Do not know
8. At which grade level is beginning STRING/ORCHESTRA instruction first offered as a class, currently? (Please only mark one choice.)

- Kindergarten
- 1st grade
- 2nd grade
- 3rd grade
- 4th grade
- 5th grade
- 6th grade
- 7th grade
- 8th grade
- 9th grade
- 10th grade
- 11th grade
- 12th grade
- Do not know

Students are allowed to join the STRING/ORCHESTRA class at any grade level. No finite grade level is deemed the start year for STRING/ORCHESTRA.

9. The grade level you answered in the previous question is housed in what type of school in your district?

- Elementary School
- Intermediate School
- Middle/Junior High School
- High School
- Other (please specify)
**10. In what grades is STRING/ORCHESTRA instruction currently offered in the school district? (Please mark all that apply.)**

- Kindergarten
- 1st grade
- 2nd grade
- 3rd grade
- 4th grade
- 5th grade
- 6th grade
- 7th grade
- 8th grade
- 9th grade
- 10th grade
- 11th grade
- 12th grade
- Do not know

**11. On average, how many times per week does a STRING/ORCHESTRA student attend STRING/ORCHESTRA class (excluding special or extra rehearsals):**

<table>
<thead>
<tr>
<th>Grades K-5</th>
<th>Before the school day</th>
<th>During the school day</th>
<th>After the school day</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Answer choices:</td>
<td>Answer choices:</td>
<td>Answer choices:</td>
</tr>
<tr>
<td></td>
<td>Does not meet before school</td>
<td>Does not meet during school</td>
<td>Does not meet after school</td>
</tr>
<tr>
<td>grades 6-8</td>
<td>1 time</td>
<td>1 time</td>
<td>1 time</td>
</tr>
<tr>
<td></td>
<td>2 times</td>
<td>2 times</td>
<td>2 times</td>
</tr>
<tr>
<td></td>
<td>3 times</td>
<td>3 times</td>
<td>3 times</td>
</tr>
<tr>
<td>grades 9-12</td>
<td>4 times</td>
<td>4 times</td>
<td>4 times</td>
</tr>
<tr>
<td></td>
<td>5 times</td>
<td>5 times</td>
<td>5 times</td>
</tr>
<tr>
<td></td>
<td>Does not offer</td>
<td>Does not offer</td>
<td>Does not offer</td>
</tr>
</tbody>
</table>

**12. On average, how many minutes does a STRING/ORCHESTRA student attend STRING/ORCHESTRA class (excluding special or extra rehearsals) per class meeting:**

<table>
<thead>
<tr>
<th>Grades K-5</th>
<th>Before the school day</th>
<th>During the school day</th>
<th>After the school day</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Answer choices:</td>
<td>Answer choices:</td>
<td>Answer choices:</td>
</tr>
<tr>
<td></td>
<td>Does not meet before school</td>
<td>Do not meet during school</td>
<td>Do not meet after school</td>
</tr>
<tr>
<td>grades 6-8</td>
<td>1-19 minutes</td>
<td>1-19 minutes</td>
<td>1-19 minutes</td>
</tr>
<tr>
<td></td>
<td>20-39 minutes</td>
<td>20-39 minutes</td>
<td>20-39 minutes</td>
</tr>
<tr>
<td>grades 9-12</td>
<td>40-59 minutes</td>
<td>40-59 minutes</td>
<td>40-59 minutes</td>
</tr>
<tr>
<td></td>
<td>60 minutes or more</td>
<td>60 minutes or more</td>
<td>60 minutes or more</td>
</tr>
<tr>
<td></td>
<td>Do not know</td>
<td>Do not know</td>
<td>Do not know</td>
</tr>
<tr>
<td></td>
<td>Does not offer</td>
<td>Does not offer</td>
<td>Does not offer</td>
</tr>
</tbody>
</table>

261
* 13. At the buildings/campuses that STRING/ORCHESTRA classes are offered, are students able to register to participate in STRING/ORCHESTRA instruction throughout the school year?

☐ Yes
☐ No

* 14. How many STRING/ORCHESTRA teachers are employed full time by the district, including yourself, to teach in RURAL schools?

☐ 0
☐ 1
☐ 2
☐ 3
☐ More than 3

* 15. How many STRING/ORCHESTRA teachers are employed part time by the district, including yourself, to teach in RURAL schools?

☐ 0
☐ 1
☐ 2
☐ 3
☐ More than 3

* 16. Are all STRING/ORCHESTRA teachers who are currently teaching in your district (full or part time) certified (licensed) to teach MUSIC in your state?

☐ Yes
☐ No
☐ Do not know
* 17. If there are others teaching STRING/ORCHESTRA classes in your district, what family of instruments best describes their primary instrument? (Choose all that apply; one per STRING/ORCHESTRA teacher in the district NOT including yourself.)

☐ String
☐ Woodwind
☐ Brass
☐ Percussion
☐ Keyboard/Piano
☐ Voice
☐ Guitar
☐ There are no others teaching STRING/ORCHESTRA in my district
☐ Other: Please describe.

* 18. How has the number of full time STRING/ORCHESTRA teachers in your district changed in the last FIVE years?

☐ Has increased
☐ Has stayed the same
☐ Has decreased
☐ Do not know

* 19. How has the number of part time STRING/ORCHESTRA teachers in your district changed in the last FIVE years?

☐ Has increased
☐ Has stayed the same
☐ Has decreased
☐ Do not know
### 20. On average, how many concerts (including small and large groups) do orchestras perform per school year at each grade level?

<table>
<thead>
<tr>
<th>Grades</th>
<th>0</th>
<th>1-2</th>
<th>3-4</th>
<th>5-6</th>
<th>More than 6</th>
</tr>
</thead>
<tbody>
<tr>
<td>Grades K-5</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Grades 6-8</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Grades 9-12</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Combined grade level performances</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

We do not offer STRING/ORCHESTRA instruction at this grade level.

### 21. What is the average number of concerts (including large and small groups and including all grade levels) your student orchestras perform:

<table>
<thead>
<tr>
<th>Performance Type</th>
<th>0</th>
<th>1-2</th>
<th>3-4</th>
<th>5-6</th>
<th>More than 6</th>
</tr>
</thead>
<tbody>
<tr>
<td>On school grounds per year</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Off school grounds</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>OFF the school grounds WITHIN the community per school year</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Off school grounds</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>OUTSIDE the local community per school year</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### 22. From whom do you obtain STRING/ORCHESTRA instruments and accessories (strings, mutes, shoulder rests, rock stops, etc.) for the school STRING/ORCHESTRA program? (Mark all that apply.)

- [ ] Music store located within the community
- [ ] Music store located outside the community
- [ ] Internet
- [ ] Other: Please describe

[Please describe other sources here]
### 23. Who maintains/services/repairs your school and student instruments? (Please mark all that apply.)

- [ ] Independent local string instrument repair-person
- [ ] Local music store repair-person
- [ ] Repair-person from outside the community
- [ ] I or another string teacher does all repairs
- [ ] Do not know
- [ ] Other: Please describe.

- Enter other details here.

### 24. From whom do you obtain printed music and materials for your school STRING/ORCHESTRA program? (Please mark all that apply.)

- [ ] Music store located within the community
- [ ] Music store located outside the community
- [ ] Internet
- [ ] Other: Please describe:

- Enter other details here.

### 25. Does the STRING/ORCHESTRA curriculum provide the opportunity for STRING/ORCHESTRA students to participate in full orchestra (symphonic orchestra with strings, woodwinds, brass, and percussion)?

- [ ] Yes
- [ ] No
- [ ] Not currently, but we hope to in the future
- [ ] Do not know

### 26. If yes, at which levels does the STRING/ORCHESTRA curriculum provide the opportunity for STRING/ORCHESTRA students to participate in full orchestra? (Please mark all that apply.)

- [ ] grades K-5
- [ ] grades 6-8
- [ ] grades 9-12
I. Profile of Rural String/Orchestra Programs

E. Rural STRING/ORCHESTRA Teachers

1. In what state do you teach?

2. What is your gender?
   - Male
   - Female

3. What is your racial identity? (Please mark all that apply.)
   - Caucasian (non-Hispanic)
   - African-American
   - Asian
   - Native American
   - Hispanic
   - Other


* 4. To what family of instruments does your primary instrument belong? (Please mark only ONE.)

- String
- Woodwind
- Brass
- Percussion
- Keyboard/Piano
- Voice
- Guitar
- Other: Please describe:

* 5. Are you certified (licensed) by your state to teach MUSIC?

- Yes
- No
- No, but I am currently certified (licensed) in another state. I am working on transferring my certification (license) to my current state.

* 6. What MUSIC courses, in addition to STRING/ORCHESTRA, are you currently teaching? (Please mark all that apply.)

- General Music
- Music Appreciation
- Band (Concert, Marching, Jazz, etc.)
- Choir (Concert, Show, Madrigal, etc.)
- Guitar
- Piano
- Music Theory and/or Aural Skills (Musicianship)
- Music History
- I only teach STRING/ORCHESTRA classes
- Other: Please describe:


* 7. Are you certified (licensed) by your state to teach SUBJECTS OTHER THAN MUSIC?
   ○ Yes
   ○ No

* 8. If yes, are you currently teaching SUBJECTS OTHER THAN MUSIC?
   ○ Yes
   ○ No
   Please list courses.
   
* 9. Did you teach STRING/ORCHESTRA classes during your student teaching experience?
   ○ Yes
   ○ No

* 10. The school district where you student taught is best described as which of the following?
   ○ Rural
   ○ Suburban
   ○ Urban

* 11. Please indicate the number of years (including this school year) you have taught STRING/ORCHESTRA in the following locations. (Type "0" if you have not taught in that location.)

   Rural Schools: 
   Suburban Schools: 
   Urban Schools: 

268
# Profile of Rural String/Orchestra Programs and Critical Factors for Successfully Establishing New Rural String/Orchestra Programs

## I. Profile of Rural String/Orchestra Programs

### F. Rural String/Orchestra Students

**1. The majority (more than 50%) of STRING/ORCHESTRA students in the following grade levels are:**

<table>
<thead>
<tr>
<th>Grades</th>
<th>Male</th>
<th>Female</th>
<th>Our district does not offer STRING/ORCHESTRA instruction at these grade levels</th>
<th>I do not teach these grade levels and therefore do not know</th>
</tr>
</thead>
<tbody>
<tr>
<td>K-5</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>6-8</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>9-12</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
</tbody>
</table>

**2. The majority (more than 50%) of STRING/ORCHESTRA students in the following grade levels are:**

<table>
<thead>
<tr>
<th>Grades</th>
<th>African-American</th>
<th>Asian</th>
<th>Caucasian (non-Hispanic)</th>
<th>Hispanic</th>
<th>Native American</th>
<th>Other</th>
<th>Our district does not offer STRING/ORCHESTRA class at these grade levels</th>
<th>I do not teach at these grade levels and therefore do not know</th>
</tr>
</thead>
<tbody>
<tr>
<td>K-5</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>6-8</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>9-12</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
</tbody>
</table>
### 3. What percentage of STRING/ORCHESTRA students are on free or reduced lunch in the following grade levels?

<table>
<thead>
<tr>
<th>Grades</th>
<th>0-15%</th>
<th>16-30%</th>
<th>31-45%</th>
<th>46-60%</th>
<th>61-75%</th>
<th>Greater than 76%</th>
<th>Do not know</th>
<th>STRING/ORCHESTRA in these grade levels</th>
<th>Our district does not offer these grade levels and therefore do not know</th>
</tr>
</thead>
<tbody>
<tr>
<td>Grades K-5</td>
<td>〇</td>
<td>〇</td>
<td>〇</td>
<td>〇</td>
<td>〇</td>
<td>〇</td>
<td>〇</td>
<td>〇</td>
<td>〇</td>
</tr>
<tr>
<td>Grades 6-8</td>
<td>〇</td>
<td>〇</td>
<td>〇</td>
<td>〇</td>
<td>〇</td>
<td>〇</td>
<td>〇</td>
<td>〇</td>
<td>〇</td>
</tr>
<tr>
<td>Grades 9-12</td>
<td>〇</td>
<td>〇</td>
<td>〇</td>
<td>〇</td>
<td>〇</td>
<td>〇</td>
<td>〇</td>
<td>〇</td>
<td>〇</td>
</tr>
</tbody>
</table>

### 4. What is the average percentage of STRING/ORCHESTRA students who continue STRING/ORCHESTRA instruction after the first year?

- ○ less than 50%
- ○ 50-59%
- ○ 60-69%
- ○ 70-79%
- ○ 80-89%
- ○ 90-100%
- ○ Do not know
- ○ I do not teach the first or second year STRING/ORCHESTRA classes and therefore do not know
* 5. If the first year STRING/ORCHESTRA is offered as a class is in grades K-5, what is the average percentage of STRING/ORCHESTRA students who continue to enroll in STRING/ORCHESTRA instruction in grades 6-8?

- less than 50%
- 50-59%
- 60-69%
- 70-79%
- 80-89%
- 90-100%
- Do not know
- STRING/ORCHESTRA instruction is not offered in grades K-5
- STRING/ORCHESTRA instruction is not offered in grades 6-8
- STRING/ORCHESTRA instruction is offered as a class for the first time in grades 6-8

* 6. If STRING/ORCHESTRA instruction is offered in grades 6-8, what is the average percentage of STRING/ORCHESTRA students who continue to enroll in STRING/ORCHESTRA instruction in grades 9-12?

- less than 50%
- 50-59%
- 60-69%
- 70-79%
- 80-89%
- 90-100%
- Do not know
- STRING/ORCHESTRA instruction is not offered in grades 6-8
- STRING/ORCHESTRA instruction is not offered in grades 9-12
- STRING/ORCHESTRA instruction is offered as a class for the first time in grades 9-12
**7. What is the average percentage of STRING/ORCHESTRA students who take private lessons in the following grade levels?**

<table>
<thead>
<tr>
<th>No students in these grades take private lessons</th>
<th>10%</th>
<th>20%</th>
<th>30%</th>
<th>40%</th>
<th>50%</th>
<th>60%</th>
<th>70%</th>
<th>80%</th>
<th>90%</th>
<th>100%</th>
<th>Do not know</th>
<th>STRING/ORCHESTRA instruction is not offered in grades K-5</th>
</tr>
</thead>
<tbody>
<tr>
<td>grades K-5</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
</tr>
<tr>
<td>grades 6-8</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
</tr>
<tr>
<td>grades 9-12</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
</tr>
</tbody>
</table>

**8. What percentage of STRING/ORCHESTRA students who graduate from your district go to college to pursue a music education degree?**

- No STRING/ORCHESTRA students who graduate from our district go to college to pursue a music education degree
- 1-10%
- 11-20%
- 21-30%
- 31-40%
- 41-50%
- 51-60%
- 61-70%
- 71-80%
- 81-90%
- 91-100%
- We have not had a STRING/ORCHESTRA graduating class from our program yet
- Do not know
* 9. What percentage of STRING/ORCHESTRA students who graduate from your program continue to play their STRING/ORCHESTRA instrument after graduation (alone or with others)?

- No STRING/ORCHESTRA students who graduate from our district continue to play their instrument after graduation
- 1-10%
- 11-20%
- 21-30%
- 31-40%
- 41-50%
- 51-60%
- 61-70%
- 71-80%
- 81-90%
- 91-100%
- We have not had a graduating STRING/ORCHESTRA class from our program yet
- Do not know
II. Critical Factors for Successfully Establishing New Rural String/Orchestra Programs

* 1. Do you believe that factors critical for the success of a STRING/ORCHESTRA program are different by location (rural, suburban, urban)?

   - Yes
   - No
2. Research indicates the following categories of factors as critical for the success of a STRING/ORCHESTRA program in ANY location. Please RANK these categories of factors for a STRING/ORCHESTRA program in ANY LOCATION. (1 = most critical, 2 = second most critical...8 = least critical)

<table>
<thead>
<tr>
<th>Category</th>
<th>Factors</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Community</strong></td>
<td>size, business, parent, church, civic group, local fine arts organization, and college or university support, rapport of the community, invitation to string/orchestra ensembles to perform at events and community festivities</td>
</tr>
<tr>
<td><strong>School District</strong></td>
<td>school board, administration, counselor, athletics, and non-music teachers support, funding/budget, music or string-specific professional development, performance opportunities offered, instructional space, rapport of music dept</td>
</tr>
<tr>
<td><strong>Non-String/Orchestra School Music Instruction</strong></td>
<td>other music teachers support, mix of competitiveness and collegiality, collaboration, added instruction time/duties</td>
</tr>
<tr>
<td><strong>String/Orchestra School Music Instruction</strong></td>
<td>specific instructional time, instructional space, class organization, start-year, number of string/orchestra staff, number of concerts/presentations, access to string instruments/accessories/repair</td>
</tr>
<tr>
<td><strong>String Teachers</strong></td>
<td>state certified/licensed, organizational skills, administrative skills, communication skills, competitiveness, collaboration, inventive, influence, variety of musical styles, contest success, experience teaching in a rural setting</td>
</tr>
<tr>
<td><strong>String Students</strong></td>
<td>number involved, attrition, private lesson opportunities, class scheduling, job or chore responsibilities, balance of other activities and organizations</td>
</tr>
<tr>
<td><strong>Resources</strong></td>
<td>instrument shops, repair shops, printed music shops, online access, technology, school and personal instrument purchases, collaboration efforts with other string programs in the region</td>
</tr>
<tr>
<td><strong>Perception</strong></td>
<td>string instruments fiddle, string instruments play in the symphony, learning to play a string instrument is difficult</td>
</tr>
</tbody>
</table>
* 3. Research indicates the following categories of factors as critical for the success of a STRING/ORCHESTRA program in ANY location. Please RANK these categories of factors for a STRING/ORCHESTRA program in a RURAL AREA. (1 = most critical, 2 = second most critical...8 = least critical)

<table>
<thead>
<tr>
<th>Category</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Community</td>
<td>size, business, parent, church, civic group, local fine arts organization, and college or university support, rapport of the community, invitation to string/orchestra ensembles to perform at events and community festivities</td>
</tr>
<tr>
<td>School District</td>
<td>school board, administration, counselor, athletics, and non-music teachers support, funding/budget, music or string-specific professional development, performance opportunities offered, instructional space, rapport of music dept</td>
</tr>
<tr>
<td>Non-String/Orchestra School Music Instruction</td>
<td>other music teachers support, mix of competitiveness and collegiality, collaboration, added instruction time/duties</td>
</tr>
<tr>
<td>String/Orchestra School Music Instruction</td>
<td>specific instructional time, instructional space, class organization, start-year, number of string/orchestra staff, number of concerts/presentations, access to string instruments/accessories/repair</td>
</tr>
<tr>
<td>String Teachers</td>
<td>state certified/licensed, organizational skills, administrative skills, communication skills, competitiveness, collaboration, inventive, influence, variety of musical styles, contest success, experience teaching in a rural setting</td>
</tr>
<tr>
<td>String Students</td>
<td>number involved, attrition, private lesson opportunities, class scheduling, job or chore responsibilities, balance of other activities and organizations</td>
</tr>
<tr>
<td>Resources</td>
<td>instrument shops, repair shops, printed music shops, online access, technology, school and personal instrument purchases, collaboration efforts with other string programs in the region</td>
</tr>
<tr>
<td>Perception</td>
<td>string instruments fiddle, string instruments play in the symphony, learning to play a string instrument is difficult</td>
</tr>
</tbody>
</table>

* 4. Using the factors listed above and including any additional factors that you consider important, what do YOU recommend the first three steps are in beginning to establish a new STRING/ORCHESTRA program in a RURAL area based on your experiences teaching STRING/ORCHESTRA in a RURAL area?

Step one: 
Step two: 
Step three: 

276
Thank you for participating in this survey.

The purpose of this study is to examine the current profile of rural string/orchestra program and identify factors critical for successfully establishing new rural string programs.

The gift of your time and insights towards the research of string/orchestra programs in rural areas is invaluable as we aim to bring string music education to every child.

Thank you again for your participation.
Appendix I: Recommendations for Starting a Rural String/Orchestra Program
**Step One**

“Sell” the importance of a string experience for students. Pitch must be realistic as to the time and expense needed to grow a program.

Access to quality string instruments.

Administrative support.

Assess interest among community and students.

Check interest (& community) levels of students/parents.

Commitment from the district at the district level.

Community relationships.

Community support.

Community support.

Connect with other music teachers in the district (if applicable).

Convince the community of its value – educate community on art form.

Desire for instruction coming from many parents.

District and Administrative Support.

Do it for free because you love it, get as many kids involved, especially if you feed your own program, and accept new students ALL YEAR.

Establish a consistent time and location for class.

Establish demand. Establish priority and reasons for having the program.

Establish program with full support of district administration.

Establish schedule and teaching space.

Establish/determine interest in a strings program. Are there kids to fill the first section?

Excite parent and administrators.

Experienced, trained, and focused instructor.
Expose school/community to string music.

Expose students to live orchestra music.

Expose students to String/Orchestra instruments.

Find a quality string teacher.

Get administration and parents on board.

Get Administrator/Other Music Teacher Support.

Get the entire music department and community on board; explain that there are students who are not being reached with the band and choir programs.

Get the support of local school district.

Having a 5 year plan that includes instrument purchases, proper teaching space/resources, goals and standards.

Hire a good instructor.

Hire a quality teacher.

Instruction time (Rural areas often have low test scores and therefore teachers and administrators do not like to give up class time or students for string instruction.

Know the baseline.

Make sure that strings are a celebrated part of the music curriculum, not an add-on or afterthought.

Make sure there is interest in the community and students.

Market the program and yourself.

Meet with other music teachers in the area.

More administrative support.

Music have instruments to use students can’t always afford to rent or find place to rent from.

Not sure.
Obtain support from school administration and community members.

Parent/Community support, $$$.

Perception.

Philosophical support of school board and administration.

Playing for young students to introduce them to strings.

Private String Teachers Available.

Program exciting, rhythmic, and harmonically simple music that students can have success with.

Publicity and community enthusiasm.

Qualified, knowledgeable string teacher.

School board and community support.

School District.

School District Support.

School District Support.

Start a beginning class after or before school.

Start with young students.

String Students.

Strings teachers.

String/orchestra performances in the schools and community by guest schools/artists.

Talk to as many 4th and 5th graders as possible to get them started. Do this every year for at least 5 years.

Teacher must be a kid magnet.

Teacher/administrative support.

**Step Two**
Acquire funding resources through school funds and local businesses and grants.

Acquire good quality instruments.

Adequate quantity of teachers.

Administration.

Be an effective and exciting teacher

Be PRESENT in all elementary school happenings, make yourself an indispensible commodity in the district and community.

Begin at 3rd grade.

Commitment from the building administration.

Community.

Community.

Community awareness of beginning of program, parent support for new program to school administrators.

Community support.

Connect with community.

Consistent string education.

Conversations with district and building administration, plus band directors (if supportive).

District support.

District support.

District support.

Ensure that instruments are in good condition.

Ensure that the class will not be cut for numbers of students.

Enthusiastic, competent teacher.
Establishment of need.

Expose students to String/Orchestra music.

Figure out what you can do to immediately grow it.

Financial commitment for long term.

Find an excited, skilled teacher with a LOT of energy.

Find community members and teacher willing to promote a string program.

Find money via the community or grants for instruments and resources.

Find/source resources – teachers, repair persons, instruments, etc.

Gain school support.

Get district support, including funding, if available. If not, start applying for grants to support your program.

Get early performances promoted.

Get the Master Schedule worked out in your favor.

Get them out performing in the community.

Hire a qualified teacher.

Hire an excellent teacher.

Identify resources.

Include the parents and community as much as possible.

Locate and develop a relationship with music stores, distributors, community college music programs and other music teachers throughout the community.

Make instruments, teachers, and classes accessible to students.

Make sure you have a teacher who can teach strings.

Making sure that 5 year plan is supported by community, teachers, administration.

Meet with parents and administration.
Needs to be a part of the school day.

Not sure.

Parental support.

Parental and School Administration support mu be secured.

Perform as often possible to improve public perception.

Provide the teacher the resources (facilities, instruments, materials, instructional time, etc.) necessary to provide quality instruction.

Purchase instruments.

Qualified Teacher.

Quality Instruments.

Quality of teaching.

Recruitment.

Resources.

Resources (Paper violins and graduating to real violins and hopefully there will be money for other string instruments).

Resources – identify what you have; start looking for resources and mentorship.

Sell it to the kids.

Strong administration/board support.

Student interest.

Support from school administration.

Teacher must be energetic and willing to push students and program recognition.

Work with administration to establish a place for strings education in the schedule where is it accessible to student.

**Step Three**

Actively recruit. Always.
Advertise and recruit members.

Apply for grants to fund start-up costs such as instrument purchases so initial capital outlay isn’t a deal breaker.

Ask to be implemented into the curriculum. Come to the board with parent and community support. Have a 5-10 year plan of growth prepared, and bring students for testimonials regarding how orchestra has helped them and what unique opportunities it offers them.

Assure there will be private instruction.

Available resources for instruction.

Brainstorm solutions to potential scheduling/budgetary concerns.

Build and nurture the culture for strings. Reach out for mentorship and support at school, district and community levels.

Community.

Community (Lack of exposure to string education and the symphony).

Community support.

Community/family support.

Connect with school district.

Core classroom teacher support.

Cost.

Discover local resources for students and the program – shops, local music, etc.

Ensure that teachers are appropriately trained.

Establish a connection with a stringed instrument rental program, as well as establish a time and location to begin instruction.

Evaluate the availability of resources such as much stores, private teachers, etc.

Experience and qualified teachers.

Eye and ear catching performances.
Figure out what you can do in the future to grow it.

Find as many finding avenues as possible.

Find ways to make strings visible – visiting artists, commissioned compositions, ways for community to be aware of and involved with program.

Get outside support from surrounding areas and or colleges.

Have an appropriate teaching space for success.

Hire energetic, outstanding, likable teacher.

Hiring a highly qualified string teacher who KNOWS and UNDERSTANDS the plan and making sure it is put in place.

Homogeneous classes at the beginning level.

Instruments for needy students.

Let the teacher recruit.

Make sure the student schedule allows for adequate time on stringed instruments.

Make sure they enjoy what they are doing!

Make sure they have the resources to teach strings.

Meet with school board members – board, principals, etc.

Need district and school support and funding.

Not sure.

Organization: Where will you secure instruments, etc.

Perform music audiences enjoy.

Promote the program at the beginning of the school year, mid-year and again at the end of the school year to build numbers.

Provide adequate resources.

Provide excellent rehearsal space and resources.
Provide performances opportunities for students string players.

Provide quality learning for the students. If they learn to play the instrument and can see measured growth over the course of their study, they will be more likely to continue.

Provide the teacher with quality professional development opportunities.

Qualified teacher.

Quality instruction.

Rapport with other music teachers, classroom teachers and administration.

Recruit like crazy.

Recruit students.

Schedule at least 90 minutes per week during the regular school day.

Scheduling.

School district.

Seek administrator support for program.

Stick with it for 10 or more years to see it to fruition.

String teachers.

Strong grant-writing skills.

Support at home and within community.

Support from teachers/parents.

Teacher meets possible students face to face.

Time and money.

Value giving performance opportunities.

Willing teacher.