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AN INVESTIGATION OF THE PROCESS BY WHICH
ELEMENTARY AND JUNIOR HIGH SCHOOL TEACHERS
PREPARE STUDENTS TO CHOOSE A MUSICAL INSTRUMENT

DISSERTATION

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

By

Jonathan Gardner Bayley, B.Mus., B.Ed., M.Mus., M.M.

*****

The Ohio State University
2000

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ABSTRACT

The purpose of this study was to investigate how teachers prepare beginning instrumental music students to select a musical instrument. Subjects (N = 322) were all music teachers in the province of Alberta, Canada, responsible for teaching beginning band. Two hundred forty-nine music educators returned completed surveys, representing a 77.3% return rate.

The majority of teachers (62.1%) reported that musical instrument choices were made during the first three weeks of fall classes. Respondents revealed they purposely restrict the range of choices available to their students by initially excluding specific instruments from the selection process. Significant restrictions were placed on students' choices with respect to (a) piccolo, (b) Bass clarinet, (c) double reeds, (d) saxophones, and (e) percussion. Findings indicated that teachers encouraged students to choose specific instruments "rarely" for financial considerations, "sometimes" due to physical considerations, and "frequently" in order to acquire a balanced instrumentation.

Respondents perceived that boys' instrument preferences were primarily limited to trumpet and saxophone. They identified flute, clarinet, and saxophone as girls' most preferred instruments. Teachers identified "friends" as having the
strongest degree of influence on students' instrument choices and believe that students most frequently wish to change to another instrument because "the instrument is thought to be too difficult to play."

The majority of respondents (61.5%) indicated that feeder school visits/performances were an aspect of their instrument selection process. Less than half (47.1%) of these indicated that students "always" or "frequently" saw demonstrations of individual instruments during such activities. Twenty-three percent of respondents indicated that music store personnel demonstrated instruments to students.

Teachers (61.9%) indicated that they took steps to address gender-stereotyping. Respondents (45.3%) indicated they "agree" or "strongly agree" with the statement: "Students' instrument choices are strongly influenced by gender-stereotyping (bias)."

Teachers indicated that their own "personal experiences" have been the most significant influence on their present approach to the instrument selection process. Respondents (66.5%) reported that aspects of the instrument selection process were "briefly mentioned" or "not addressed at all" during their preservice teacher education.
Dedicated to the memory of my father,

Robert Charlton Bayley (1913 - 1995)
I would like to express my sincere appreciation to my advisor, Dr. Timothy Gerber, for his continued guidance, encouragement, and enthusiasm throughout my doctoral studies.

I would like to thank the members of my dissertation committee for providing valuable insights during the revision process.

I would also like to thank Dr. Judith K. Delzell who offered valuable assistance with respect to the design of the survey.

I would like to express a word of thanks to the music educators in the province of Alberta who took time from their busy teaching schedules to complete and return the survey. It is my sincere wish that the results of this study will make a positive contribution to the body of literature relating to the musical instrument selection process.

A final word of gratitude is expressed to my family and friends whose support and encouragement has brought greater meaning to this entire endeavor.
VITA

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CHAPTER 1
INTRODUCTION

The process of choosing a musical instrument presents both challenges and opportunities for music students and their teachers. For educators, this selection process continues to be a major responsibility in the field of instrumental music education. Solomon (1983) believes that teachers have an obligation to guide students wisely in making musical instrument choices.

Individuals responsible for overseeing the instrument selection process typically accept several duties: (a) organizing and presenting recruitment activities, (b) acknowledging the availability of specific musical instruments, (c) responding to student instrument preferences, and (d) identifying and matching students' physical characteristics with the appropriate musical instruments. Cannava (1994) emphasized the importance of recruitment activities when he stated “recruitment techniques and strategies can drastically affect the retention of band students” (p. 8). Byo (1991) viewed the instrument selection process as an educational opportunity: The instrument demonstration session or recruiting presentation provides one means of expanding the tastes of young students and encouraging an attitude that is more tolerant of the less popular instruments (p. 23-24). In reference to instrument selection testing, Solomon (1983) warns of the negative consequences of not properly matching
students with the appropriate instruments when he states: “It’s no wonder the dropout rate is so high for so many beginning band programs. Too many students are simply started out on the wrong instrument and they are doomed to failure from the very beginning” (p. 16).

In addition to these concerns, music educators must strive continuously to achieve a balanced instrumentation within the confines of a traditional instrumental music class. Although obvious to music educators, the importance of obtaining a balanced ensemble has been a long-standing concern within the profession. DeGregori (1961) observed that once the school administration has been sold on the value of balanced instrumentation, the director must turn his attention to enlightening his students and parents (p. 58). In a study designed to determine the effect of different modes of presentation, Byo (1991), addressed a variety of issues relating to (a) the teacher’s role in the instrument selection process, (b) the necessity of acquiring a balanced ensemble, and (c) the importance of creating opportunities for students to learn.

The role that the instrumental music teacher ultimately assumes in shaping instrument preferences of children must be considered of critical importance with regard to the goal of balanced instrumentation in school music programs. In ensemble settings, unbalanced instrumentation caused by proliferation of performers where large numbers are not necessary may encourage dropouts and inhibit chances of success in music. Multiple players on a part caused by unbalanced instrumentation may diminish the real and perceived contributions of the individual to group achievement. Additionally, excessive numbers of instruments in certain areas result in insufficient numbers in other areas, a situation that can have a domino effect in instrumental music from the elementary grades through the university level. (Byo, 1991, p. 23)
When compared to their teachers, students, on the other hand, are primarily concerned with playing an instrument of their own choice. Acknowledging that teachers and students have different perspectives with respect to instrument selection, Powell (1982) claims that students select instruments based on their chances for success.

The process of deliberating the choice of an instrument represents, at least to some degree, conscious decision-making in each student. Perhaps unsophisticated and even uninformed, this process is both natural and necessary. The time period leading up to the actual selection of a musical instrument may vary in length depending upon the educational goals and administrative procedures employed by music educators.

Three basic approaches prevail, ranging from minimal teacher intervention to strong teacher control. For example, some educators assign musical instruments to students in as expedient a manner as possible. Generally, in such cases the students are given complete control in making instrument choices with little or no intervention from the teacher. Other educators may feel a need to guide students during such decision making, acknowledging that inevitable consequences accompany the choices students make. In these settings students may be given the opportunity to experience a variety of musical instruments similar to the instrument “banquet” recruitment approach. Teacher intervention is minimal, although students may be restricted with respect to instrument choices. Still other music educators may approach the period prior to choosing an instrument as a meaningful and requisite prelude to music making. In doing
so, this period may be viewed more holistically as a valuable educational opportunity for students to learn the physical, acoustical, historical, and musical aspects of many different instruments.

The number of people and the degree to which they are involved in this process differ depending on the educational setting. Consequently, procedural guidelines may vary from simply having the teacher inform students which instruments are available to them to active involvement by the music industry, instrumental specialists, the music students and their parents.

In order to make this preparatory time musically and educationally valuable, educational goals and administrative guidelines are often established. This is based upon the assumption that such preparedness will improve the likelihood of achieving a smooth transition toward the goal of successful instrument selection. In an effort to identify these goals and guidelines, this study investigated educational, musical, and administrative activities that occur throughout the duration of this selection process.

Need for the Study

For many students, participating in a school instrumental music class will be the first opportunity they will have had to learn to play a musical instrument. Such an endeavor is in no way an isolated activity. Exercising an interest in playing a musical instrument generally requires the involvement of parents, teachers, school officials, as well as the music industry.

The instrument choices that students make have the potential to affect both the students themselves and their music programs in either positive or negative
ways. According to DeGregori (1961) one of the goals of music educators should be to develop in our young musicians tonal concepts of true band and orchestral sound. DeGregori contends this development is possible only by achieving a balanced instrumentation, which is the key to true musical enjoyment (p. 58).

Ideally, if care is taken during the instrument selection process, the needs of the students and those of the music program will be met. In these settings students will be properly guided to choose an instrument which affords them the greatest opportunity to succeed. The results of such efforts will also ensure that music programs achieve a balanced instrumentation making possible a rich musical environment for all students.

In a study designed to investigate the relationship between a four-part instrument selection process and student retention, Cannava (1994) reported a moderate increase in student retention, a decrease in gender-stereotyping relating to instrument choice, and an improvement in instrumentation balance. Solomon (1983) reminded educators of the importance and potential consequences of this decision process when he stated "making an instrument choice . . . could either last for a lifetime or result in immediate problems and eventual failure" (p. 16).

At present, there is a need to investigate the nature of the educational and musical experiences that students have prior to choosing a musical instrument. This study focused specifically on how teachers prepare students to choose a musical instrument.

The research in music education consistently has addressed a broad range of problems related to instrument choice. For example, researchers have
investigated numerous psychological aspects of the instrument selection process pertaining to motivational criteria for beginning instrumental music (Mackenzie, 1991), the effects of different types of instrument presentations (Abeles & Porter, 1978; Byo, 1991; Bruce & Kemp, 1993; Tarnowski, 1993), and the relationship between personality and instrument choice (Cutietta & McAllister, 1997; Hyden, 1980; Kemp, 1981; Peggie, 1991; Sample & Hotchkiss, 1971; Sherman, 1984).

Researchers in music education have also examined various sociological facets of instrument preference relating to gender bias, gender association or sex-stereotyping (Abeles & Porter, 1978; Bruce & Kemp, 1993; Delzell & Leppla, 1992; Elliot & Yoder-White, 1997; Griswold & Chroback, 1981; Hizer-Jenkins, 1996; O'Neill, 1995; O'Neill & Boulton, 1996; Steblin, 1995; Tarnowski, 1993).

Other areas of relevant research have included inquiry related to the frequency of instrument choices (Byo, 1991; Chandler & Auria, 1987; Coffman & Sehmann, 1989; Fortney, Boyle & DeGarbo, 1993; Geringer, 1977; Thackray, 1973), instrument timbre preferences (Bernier & Stafford, 1972; Cutietta & Foustalieraki, 1990; Darrow, 1991; Gordon, 1986; May, 1995; Rideout, 1988; Weaver, 1987), relationships between instrument selection and student retention (Cannava, 1994), and various testing and matching procedures aimed to predict or encourage student success in instrumental music (Cannava, 1990, 1994; Hardin, 1990). Practitioners within the field of instrumental music education have also suggested a variety of instrument matching procedures (Peggie, 1991; Pizer, 1978; Powell, 1982; Solomon, 1982, 1983; Wilson, 1995) including the time-honored emphasis on achieving balanced instrumentation (DeGregori, 1961). Many of the extant studies have focused on the results of the selection process.
These studies primarily investigated the popularity of given instruments (i.e., the frequency with which an instrument was chosen), what instruments males and females chose, and the reasons for their choices.

A more complete understanding of the entire process by which elementary and junior high school music teachers prepare students to make instrumental choices may prove especially beneficial to preservice teacher education. A realization of the efficiency with which the various elements of this selection process occur may be used as an aid in the designing and sequencing of curricular content for post-secondary education methods courses. A clearer understanding of this entire process will make it possible to better inform preservice teachers of existing instructional practices.

The present study examined aspects of the instrument selection process by investigating preservice teacher education, teacher control and manipulation of selection outcomes, students' instrument preferences as perceived by teachers, procedural controls and administrative guidelines, efforts made by practicing educators to counterbalance gender stereotyping and the role played by the music industry.

It would also be valuable to determine the degree to which present instructional practices reflect research findings related to the instrument selection process. For instance, in studying the effects of different modes of instrument demonstration, Byo (1991) found that the manner in which an instrument is presented to a student may influence instrument preferences. In a two-year longitudinal study involving the Instrument Timbre Preference Test, Gordon (1986) reported that students who choose instruments for which they had a timbre...
preference were more successful, as measured by performance ability, than were those students who chose instruments for which they did not have a timbre preference. In an effort to increase retention in instrumental music programs, Cannava (1994) designed an instrument preference test for a selection process involving a promotional videotape, instrument demonstrations, student instrument selection, and an "exploratory session" where students were given the opportunity to interact physically with three instruments of their own choice. As a result of this four-part selection process, Cannava reported an 11% increase in retention.

There is a need to identify the degree to which these and other research findings influence instrumental music instruction. A clearer understanding of instrumental music teaching practices may, in turn, foster the advancement of additional educational theories and hypotheses within the context of existing philosophical and curricular paradigms. Acquiring a more accurate understanding of this selection process will allow researchers to identify areas that warrant further research. The addition of new, innovative proposals, founded upon solid philosophical and theoretical principles, will strengthen and give greater meaning to the preparatory period leading to student instrument selection. Whereas earlier research focused attention on student behaviour, the present study investigated various aspects of the teacher's role as defined within the context of the instrument selection process. A review of extant literature further revealed that aspects relating to the process of instrument selection have not been adequately addressed.
Purpose of the Study

The purpose of the study was to investigate how teachers prepare students to choose a musical instrument. More specifically, this investigation identified the nature of the educational and musical experiences which occur prior to determining students' instrument choices.

Research Questions

The specific research questions ensuing from the central purpose of this study were organized into six categories, representing key elements of the instrument selection process. The six categories that framed the research questions were (a) procedural controls and administrative responsibilities, (b) teachers' perceptions and expectations, (c) the role of the music industry, (d) teachers' views about gender stereotyping issues, (e) areas of influence which helped to shape or modify teachers' present approach to the instrument selection process and (f) preservice music teacher education. The study was designed in order to answer the following research questions:

Procedural Controls and Administrative Guidelines

1. What procedural controls or guidelines do teachers implement in order to manipulate student instrument selection?

2. At what time of the year are musical instrument choices made?

3. Are "feeder school" visits/performances included as part of the instrument selection process? If so, how often do students see demonstrations of individual instruments during such activities?
4. To what extent is the testing of students, or some form of student evaluation (musical, physical, academic), a part of the instrument selection process?

5. To what extent are students active participants in the instrument selection process? For example, do students have an opportunity to view, hear, or produce a sound on a variety of musical instruments prior to making an instrument choice?

6. What changes do teachers report they have made to the instrumental selection process since they began teaching?

Teachers' Perceptions and Expectations

7. How do teachers view their role during the instrument selection process?

8. Which instruments do teachers believe to be most favored by students?

9. Which instruments do teachers believe to be least favored by students?

10. What reasons do teachers report that students give for choosing a particular instrument? What reasons do teachers report that students give for wishing to change to another instrument?

The Role of the Music Industry

11. What role does the music industry play during the instrument selection process?

Gender Stereotyping Issues

12. To what degree do teachers acknowledge stereotypical gender associations?

13. In what ways do teachers counterbalance stereotypical gender associations?
Areas of Influence Which Helped to Shape or Modify Teachers’ Present Approach to the Instrument Selection Process.

14. What are the major influences that helped teachers develop their present instrument selection process?

Preservice Music Teacher Education

15. To what degree was the instrument selection process a component of subjects’ preservice teacher education?

Definitions of Terms

The instrument selection process represents the period of instructional time intended to prepare students to choose a musical instrument. The present study investigated the various musical, educational, and administrative teacher-generated activities that take place during this preparatory period.

In the province of Alberta, there are three identifiable school systems: public, separate, and private. Both the public and the separate school systems are financially supported by the taxpayers of Alberta who choose the school system they wish to support.

The following communication, relating to school system classification, was received from an official in the Department of Education for the province of Alberta.

There are two kinds of separate schools in Alberta: Roman Catholic and Protestant. Their first mandate is to provide a basic education for Roman Catholic and Protestant students within their jurisdiction. Any student may enroll in a separate school, if there is sufficient space and resources. Non-Catholic or non-Protestant parents may choose to send their child to a separate school because of the program (for example, a bilingual program)
offered by that particular school. Separate schools offer religious instruction as part of their programming. Public school districts . . . provide basic, universal education . . . Alberta Education provides partial funding for instruction of students enrolled in accredited private schools . . . Private schools may charge tuition fees and other fees as required.¹

Limitations of the Study

The present study investigated the status of current practices relating to the instrument selection process.

Subjects

This study was limited to elementary and junior high school music educators who were responsible for beginning band programs in the province of Alberta, Canada. These instrumental music programs began in either grades five, six, or seven. The population was identified from the Public and Separate (Roman Catholic) school systems.

Survey Instrument

A researcher designed questionnaire was used to collect data for this self-report research study. The items on the questionnaire related directly to the research questions.

Survey research takes less time than interviews, is less expensive, and allows the researcher to collect data from a larger sample than would be possible by either the interview or observational process. However, one of the disadvantages and, therefore, limitations of this research design is the challenge of assuring an adequate response rate (Gay, 1996, p. 255). The response rate will
determine the degree to which conclusions may be generalized to the defined population. Also, researchers must rely on respondents to answer all questionnaire items honestly and accurately. Finally, the design of this type of descriptive research does not allow for the manipulation of variables; therefore, any conclusions based on the acquired data can only suggest relationships rather than offer proof of relationships between variables.

Organization of the Study

Chapter 1 includes the background to the study, the purpose of the study, the research questions, the need for the study, the definitions of terms, and the limitations of the study. Chapter 2 comprises a review of extant literature relating to the instrument selection process. Chapter 3 outlines the formal design of this study. It also contains a description of the subjects, the instrument used to collect data, and the procedures used for collecting and analyzing the data. In Chapter 4, the findings of the study are presented as they related to the research questions. The final chapter, Chapter 5, draws conclusions from an analysis of the data as they relate to instrumental school music. Appropriate recommendations to the education profession are subsequently made based upon the findings and analysis of the data.
Endnotes

1E-mail communication from I. Sonnerberg (Department of Education, for the province of Alberta).
CHAPTER 2
REVIEW OF RELATED LITERATURE

The purpose of the study was to investigate how teachers prepare students to choose a musical instrument. More specifically, this investigation identified the nature of the educational and musical experiences which occur prior to determining students' instrument choices.

The purpose of this chapter is to review existing literature and published research relating to the instrument selection process. In order to understand all aspects of this educational process, a search of published sources found the following areas that relate directly to this study: (a) motivation for wanting to begin to learn a musical instrument, (b) personality characteristics and instrument choice, (c) influences on students' musical instrument choices (d) musical instrument selection procedure, (e) students' physical characteristics, (f) instrument presentation procedure, (g) timbre preferences, and (h) gender stereotyping associations.

In a study designed to investigate the factors which motivated primary school students \(N = 48\) to begin to learn a musical instrument, MacKenzie (1991) found that teacher influences and a personal interest in learning to play
an instrument were leading reasons to begin instrumental music. Subjects were asked, "Why did you start to learn to play a musical instrument?" (p. 16) Possible responses related to motivation were (a) the influence of parents, siblings, friends, and teachers; (b) the desire to play in an ensemble; (c) the desire to learn to play a musical instrument, and (d) the love of music.

While both boys and girls identified personal interest as their primary reason for wanting to begin to learn a musical instrument, their secondary reasons were different. Boys identified their teacher, while girls identified their friends, as secondary reasons for beginning instrumental instruction.

Researchers have attempted to relate personality characteristics with instrument choices (Kemp, 1981; Sample & Hotchkiss, 1971). In a study designed to investigate possible relationships between student personality, instrumental participation, and choice, Cutietta & McAllister (1997) surveyed band and orchestra students (N = 668) in grades 7 through 12. The authors concluded that there were no differences in personality type as a result of student grade or instrument played (p. 290). Furthermore, results indicated that personality features were very similar between beginning instrumentalists (grades 7-12) and the general school population.

Influences on Students' Musical Instrument Choices

Fortney, Boyle, and DeCarbo (1993) used an 11-item survey to investigate what middle school students believed were influences on their musical instrument choices. Respondents identified 10 factors as being responsible for influencing their instrument choices: (a) sound (51%), (b) middle school music
teacher (31%), (c) parents (21%), (d) availability (19%), (e) television (15%), (f) elementary music teacher (15%), (g) friends (14%), (h) cost (14%) (i) size (13%), and (j) other teachers (7%). The responses of males and females, relating to influences on instrument choices, were very similar with the greatest differences relating to the size of the instrument (females = 11%, males = 15%) and the influence of television (females = 17%, males 12%). Fifty-four percent of respondents indicated that another family member (father, 9%; mother, 7%; sibling, 22%; other relationship, 16%) played a musical instrument.

In response to open-ended questions, 39% of respondents indicated that they chose an instrument because of its sound. Twenty-nine percent indicated a “like” for their chosen instrument, while 7% chose an instrument because it was believed to be “easy to play.” The present study investigated what teachers believe are the reasons students give for choosing a particular musical instrument as well as the reasons they give for wishing to change to another instrument.

Overall, flute (26%) was identified as being the least-preferred instrument followed by tuba (23%). These were followed by trumpet (8%), clarinet (7%), horn (6%), and saxophone (6%). Of those who chose flute as the least-preferred instrument, 83% were males and only 17% were females. Respondents stated a variety of reasons for least preferring an instrument: (a) degree of difficulty to play (22%), (b) size (22%), (c) sound (16%), (d) “a general dislike of the instrument,” (13%), (e) gender associations (3%), (f) shape (1%), and (g) uses/roles (1%). The research by Fortney et al. (1993) confirmed the popularity of the saxophone as reported by Delzell and Leplla (1992) as well as
the influence of instrumental timbre on respondents' preferred instrument choices as reported by Gordon (1986). Research has also shown that students dropped instrumental music because they believed their instruments were too difficult to play or due to lack of interest (Casey, 1964; Duerksen, 1972; Martignetti, 1965).

Analysis revealed that there were considerable differences in student response with respect to gender and instrument (Fortney et al., 1993, p. 32). Gender associations were strong and consistent with previous studies (Abeles and Porter, 1978; Delzell and Leppla, 1992). Females indicated that they played mostly woodwinds, whereas, males reported that they played primarily brass and percussion instruments. An exception to the previously reported gender association pattern involved saxophone, where 72% of saxophonists in this study were males. Ninety-six percent of tubists were males and 91% of flutists were female. There were no females who played trombone.

Culture Background and Musical Instrument Choice

In a study designed to examine preferences involving a broad range of instrument timbres, Cutietta and Foustalieraki (1990) compared the instrument choices of 428 fourth-grade students from the United States of America and Greece. In response to earlier criticism relating to the validity of using synthesized timbres, Cutietta and Foustalieraki chose to use six acoustic instruments (trumpet, clarinet, bassoon, piano, guitar, and violin) representing two categories: traditional band instruments and nonband instruments.
Results revealed differences in instrument preferences between the two countries. For subjects in the United States there was a tendency to prefer band instruments over nonband instruments. The most significant difference in the rank order of instrument preference between countries was that associated with the piano. Subjects in the United States chose the piano as the least preferred instrument of choice whereas it was the first choice among Greek subjects. Trumpet, clarinet, and bassoon were ranked higher by subjects in the United States than by Greek subjects. However, Greek students ranked guitar and violin higher than their counterparts in the United States. This study suggests that cultural background influences timbre preference.

Musical Instrument Selection Procedure

In a study designed to examine the relationship between the implementation of professionally guided instrument selection and beginning band retention, Cannava (1994) outlined specific steps to take in order to improve student retention and instrument balance, while decreasing the effects of instrumental gender-stereotyping. Comparisons were made between three groups (N = 454) comprised of Grade 6 students. A control group received no treatment while an experimental group received a four-part Instrument Selection Test. The instrument selection method consisted of four steps: (a) sending a promotional letter home with the Grade 5 students, (b) playing a video demonstration of the available instruments, (c) requiring students to identify three instruments that
they would be interested in playing, and (d) participation by students in an Instrument Selection Procedure where they were given an opportunity to hold and produce a sound on their chosen instruments.

Of particular interest to music teachers responsible for overseeing the musical instrument selection process, is the fact that tested students who ended up playing instruments they did not choose were retained at a 74% level, as compared to 26% of dropouts (p. 67). Analysis revealed that, as a result of administering the four-part Instrument Selection Test, (a) student retention increased 11%, (b) improvements were shown to occur in instrument balance, and (c) more girls chose to play trumpet (10%) and percussion (17%).

Physical Characteristics of Students

There is a belief among some music educators that students' individual physical characteristics should be taken into consideration when choosing a musical instrument. The proper procedure to follow would be for the teacher to analyze accurately the physical characteristics of the student in question. Based on findings of the physical analysis, an appropriate instrument is assigned to the student. For example, Powell (1982) emphasizes the importance of identifying students' physical characteristics and guiding their instrument choices based on these physical traits.

The physical characteristics of a student's mouth - the variations of lips, teeth, and jaws - help determine the best instrument choice. Although natural talent, coordination, personality, intelligence, and many other factors are important, a skillful director's ability to match the student's embouchure with the right instrument can avoid many problems. (p. 14)
Revelli (1952) stated that the responsibility of pupil guidance rests with the instructor, (p. 20) and proposed that serious consideration be given to "dentofacial" traits when assigning instruments to prospective wind players.

Based on the understanding that children exhibit different neurological growth rates, Solomon (1983) designed a Student Development Guide consisting of a checklist identifying various physical traits and neurological skills to match students with an appropriate instrument. In addition to instrument exploration, Solomon's checklist included coordination tasks consisting of rhythm tests.

Instrument Matching Procedure and Presentation

Hardin (1990) investigated the degree to which an instrument matching procedure would contribute to success in beginning flute, trumpet, and trombone based upon musical performance scores and attitude assessment. The study also sought to find if relationships existed between students' overall performance scores and (a) academic achievement (Comprehensive Test of Basic Skills), (b) the Musical Aptitude Profile (MAP), and (c) an attitude assessment. The control group consisted of 12 flutes, 22 trumpets, and 8 trombones. The experimental group was comprised of 51 grade six students who chose one of the three preselected instruments.

Results indicated that no significant relationship existed between MAP and individual performance scores. However, a significant relationship was noted between attitude and overall performance scores. It was also determined that the dropout rate was 0.0% for the experimental group while the control group
experienced a 26.19% attrition rate. The experimental group scored higher than the control group on all independent variables: embouchure, tone quality, overall performance ability, and attitude.

Deihl (1993), in a critique of Hardin's study, cited three flaws relating to study design: (a) the study utilized convenience sampling and did not randomly assign students and teachers to groups, (b) the equality of instruction was not controlled for, and (c) a considerable difference existed between the control and experimental groups with respect to the variable of aptitude.

Byo (1991) hypothesized that the manner in which instruments were presented to students would influence their instrument preferences. Three ways of presenting musical instruments were tested on 76 third-grade children: (a) a clarinet-biased condition, (b) an unbiased, full demonstration, and (c) a photo-only condition.

Byo used the clarinet because research findings indicated a low preference rating for this instrument among children of either gender. Of particular interest to Byo was whether or not children could be influenced by "purposeful bias" during an instrument presentation and, consequently, respond more favorably towards a less preferred instrument.

Students were assigned to one of the three possible demonstration conditions. As part of pretest conditions, students were shown pictures of six instruments common to beginning band settings: flute, clarinet, alto saxophone, trumpet, trombone, and snare drum. Subjects were asked to study the labelled
pictures and answer the following question: "Which is your favorite, or if you were allowed to begin playing an instrument today, what would be your first choice" (Byo, 1991, p. 24)?

Approximately seven weeks after the pretest, three demonstration conditions were presented to the three third-grade classes. Group 1 received a demonstration which favored the clarinet. Group 2 received the full demonstration condition, which consisted of unbiased demonstrations, where each of the six instruments received equal emphasis. A control group (Group 3) received no treatment and took only the pretest. A posttest, asking students to rank order the six instruments, was completed by all three groups.

Pretest results indicated significant agreement both among and across groups in their preference rankings of the six instruments whereas posttest results showed no significant agreement, except for saxophone, among group rankings with respect to the remaining five instruments. Results revealed significant changes in the rank ordering of instrument preferences within each of the three conditions. Students ranked the clarinet highest as a result of the clarinet biased condition and lowest in the full demonstration condition.

*Timbre Preferences*

Many teachers assume that children choose an instrument based on timbre preference. The present study investigated a wide range of possible influences on student musical instrument choices.

In an early attempt to demonstrate a relationship between musical instrument preference and timbre discrimination, Bernier and Stafford (1972)
tested 876 subjects consisting primarily of adolescents and young adults of both genders (p. 283) using Seashore's *Test of Timbre Discrimination*. Subjects were played 100 paired tones and asked if they were the same or different with respect to timbre. Instrument categories, ranging from most to least degree of sound wave complexity, consisted of (a) solo voice, (b) group singing, (c) organ, (d) woodwind, (e) brass, (f) piano, (g) guitar, (h) string, (i) flute, (j) drum, and (k) no music.

Bernier and Stafford (1972) hypothesised that students, who could more readily detect changes in the timbre of a tone, would be more likely to prefer musical instruments with more complex sound waves. Results indicated little difference between the means (scores) of individuals playing different instruments and a low correlation between the rankings of the mean scores and the ranks of estimated harmonic complexity of the musical instruments (p. 284). However, Coffman and Sehmann (1989) criticized this study for its lack of a valid rating scale and for not explaining what criteria was used to determine sound wave complexity.

In a two-year study, Gordon (1986) examined the predictive validity of the *Instrument Timbre Preference Test* (ITPT) and the *Musical Aptitude Profile*. More specifically, Gordon sought to find whether students who have a timbre preference for the musical instrument they learn to play are more successful as performers than students who play an instrument for which they have no timbre preference.

Subjects (*n = 57*) in the experimental group were studying an instrument that was suggested by their scores on the ITPT, while subjects in the control group
(n = 111) were studying an instrument other than the one suggested by their ITPT score. A third group of fifth-grade students (n = 178) represented those remaining students who chose not to begin instrumental music.

The ITPT tests individual preferences for seven dissimilar synthesized timbres which represent 14 acoustic instruments: Timbre A (flute), Timbre B (clarinet), Timbre C (saxophone/French horn), Timbre D (oboe/English horn/bassoon), Timbre E (trumpet/cornet), Timbre F (trombone/baritone horn/French horn), and Timbre G (tuba/Sousaphone). The ITPT includes 42 recorded test items consisting of paired timbres. Subjects were asked to identify which of the two paired timbres they preferred.

The *Music Aptitude Profile* and the ITPT were administered to all 346 students in the fifth grade. Correlations between the two tests were low, suggesting that timbre preference was not related to music aptitude. Gordon found the following:

Students who were studying instruments for which they demonstrated a timbre preference overall profited more from instruction from their teachers, were better able to prepare lessons without assistance from their teachers, and sightread better than students who had not demonstrated a timbre preference for instruments they were playing. (p. 14)

Rideout (1988) administered Gordon's *Instrument Timbre Preference Test* to 138 sixth-grade students in an effort to investigate the relationships between (a) one's chosen instrument and timbre preference, (b) a preference/dislike for the timbre of one's chosen instrument and performance ability, and (c) a preference/dislike for the timbre of one's chosen instrument and re-enrollment
in music. Results of ITPT scores showed that 14% of subjects indicated a preference for an ITPT timbre and 16% indicated a dislike for an ITPT timbre.

Analysis of ITPT scores and instrument preferences suggest that ITPT scores do not correlate significantly with instrument selection (p. 62). Music teachers were asked to evaluate the students in their ensembles with respect to their performance achievement. Results appear to support Gordon's claim that students will perform better when playing an instrument whose timbre they prefer (p. 64). Results also revealed that no significant correlation existed between student enrollment trends and instrument preference scores.

The purpose of a series of studies by Schmidt and Lewis (1988) was to investigate aspects of criterion-related validity as it applies to Gordon's Instrument Timbre Preference Test. Subjects (N = 459) for the three studies were undergraduate nonmusic majors, undergraduate and graduate music majors, and university music faculty.

The purpose of Study 1 was to test the criterion-related validity of the ITPT. A recording of the seven synthesised timbres was played and each subject was asked to identify which instrument or instruments they felt the various timbres were intended to represent. Procedures were similar to those stated in the ITPT manual, however, in this study subjects were not given a list of instrument names to choose from.

Results showed that the subjects were very successful at identifying the intended instruments for Timbres A (91.2%), Timbre B (84.2%), and Timbre E
Moderate success was reported in identifying the intended instruments for Timbre F (61.4%). Subjects had considerable less success at identifying Timbre G (47.4%), Timbre C (28.1%), and Timbre D (24.6%).

The purpose of Study 2 was to examine test-retest reliability of the Instrument Timbre Preference Test. The first testing was administered according to the published directions in the ITPT manual. A retest was administered to all subjects one week later. Test-retest reliability coefficients were determined for each of the seven different timbres. Results indicated that, while the reliability coefficients were below the median coefficients reported by Gordon, they were within stated coefficient ranges as reported in the ITPT manual.

In Study 3, a survey was administered to 378 undergraduate students in order to examine aspects relating to the criterion-related validity of the ITPT. Results from the self-report survey identified 54.2% of subjects as having participated in instrumental music during high school and of those subjects 83.1% indicated that it was the sound of the instrument which determined their choice.

The ITPT was administered to all of the undergraduate students. Results were similar to those reported by Gordon. The timbre preference of those subjects with high school instrumental experience (N = 205) was investigated by examining the relationship between ITPT scores and instrument played. It was hypothesised that instrument timbre preference would be greater for the instrument that students played than for the instrument that they did not play.

Results indicated that instrument subgroups differed on their preferences on five of the seven timbres. No significant differences were found among instrument subgroups for Timbre C (saxophone) and Timbre D (double reeds).
Subgroup means for subjects who played flute, clarinet, or trumpet were significantly higher for synthesized Timbres A, B, and E than those subjects who did not play one of these three instruments. These results are consistent with the findings in Study 1 relating to criterion-related validity. Significant higher scores were not found for the other subgroups.

Gordon (1991), in a study of the characteristics of the Instrument Timbre Preference Test, sought to identify supplementary information which might affect related research and musical instruction. The following conclusions were based on the ITPT scores of 258 forth-grade students:

1. The timbre preferences of students who were enrolled in beginning instrumental music were similar to those of the student body at large. (p. 38)

2. The synthesized timbres intended to represent woodwind instruments were generally received more favourably by students than the synthesized timbres intended to represent brass instruments. (p. 38)

3. No overall pattern of timbre preferences emerged with respect to instrument type (woodwinds/brass) or range (high/low). (p. 39)

4. No relationships were found between gender and instrument timbre preference with respect to instrument type or range. (p. 40)

5. Of those subjects who took the ITPT, 47% indicated a preference for one timbre; 33% expressed a preference for two timbres, and 1% stated a preference for three synthesized timbres. Nineteen percent of students indicated no preference for any of the seven timbres. (p. 41)
6. For those students who indicated a preference for two timbres, no pattern emerged which would have suggested a preference or dislike for any one timbre or group of timbres. (p. 42)

The purpose of a study by Williams (1996) was to examine aspects of internal validity relating to Gordon's Instrument Timbre Preference Test. Subjects (N = 128) were high school band members and college music majors.

The ITPT tape was played for all subjects who were asked to identify which of the paired timbres in each test item they preferred. They were also asked to identify, by name, the one wind instrument they believed each timbre represented. Williams hypothesised that those students who played a particular instrument would have no problem in identifying it and would also show a preference for its timbre.

Results indicated that students, on average, were able to identify the timbre of the instrument they played 52% of the time and showed a preference for it 57% of the time. Overall results indicated high preference and recognition percentages for Timbre A (flute) and Timbre B (clarinet). However, preference and recognition scores for Timbre E (trumpet) and Timbre G (tuba/Sousaphone) were low.

Williams (1996) expressed a concern that the efforts to control variables in the ITPT may not be as accurate as claimed by Gordon (1984) resulting in more than one independent variable: timbre and instrumental range. He also stated that the length of the ITPT is appropriate for the intended audience, however, the number of repeated listenings (84) of a brief melody may prove problematic in terms of the ability of subjects to maintain concentration and not "become bored
with the process” (p. 270). Test construction was brought into question because the same instrument (French horn) was used in two timbre categories, producing a possible bias for this instrument. No other instrument has two chances for selection (p. 270). Finally, concern is expressed with Gordon’s reported low test-retest intercorrelations. In addition to the concerns expressed by Rideout (1988), Schmidt & Lewis (1988), and Williams (1996), both Colwell (1988) and Lehman (1988) have recommended that further research be undertaken in order to properly validate Gordon’s claims.

**Instrumental Preferences of Children with Special Needs**

A study by Jellison & Flowers (1991) compared the instrumental preferences, experiences, and skills obtained of disabled and nondisabled students. A content analysis of the structured assessment interviews of 228 subjects revealed that most students in all age groupings indicated that they wanted to play a particular instrument because of its sound (p. 327).

A preference for the physical characteristics of the instruments occurred less frequently than that of instrument timbre especially among disabled subjects. When asked which instrument they would like to play, disabled subjects indicated that their strongest preference was for drums (22%) while nondisabled subjects strongest preference was for “winds” (19%). One of the most significant findings of this study revealed that there were a number of similarities in the responses of disabled and nondisabled students.
In two studies involving hearing impaired children, Darrow (1991) sought to determine subjects timbre and musical instrument preferences. In the first study, involving musical instrument preference, subjects ($N = 34$), who were in Grades 1 through 4, were from a state school for the deaf.

Subjects received a 15-minute presentation, involving six musical instruments (trumpet, trombone, flute, clarinet, violin, and viola) from the string, brass, and woodwind family. Following group presentations, students were individually taken to an observation room where they were told they could "play" with any of the demonstrated instruments for five minutes.

Results revealed that, in terms of total playing time, instrument preferences from greatest to least were as follows: trumpet, clarinet, viola, trombone, violin, and flute. Signed responses from the children showed a preference for either trombone or violin as their most favoured instrument.

A second study, designed to study instrument timbre preference, involved 21 subjects in Grades 2 through 4 at a state school for the deaf. The instrument used in this study was Gordon's Instrument Timbre Preference Test. Scores from the ITPT, identifying hearing impaired subjects timbre category preferences, resulted in the following rank order from most preferred to least preferred timbre: (a) clarinet, (b) saxophone/French horn, (c) trumpet/cornet, (d) trombone/baritone/French horn, (e) tuba/Sousaphone, (f) oboe/English horn/bassoon, and (g) flute.
Abeles and Porter (1978) designed four studies intended to examine various aspects of musical instrument gender associations. Study 1 investigated the degree to which adults \( (N = 149) \) demonstrated gender associations with respect to musical instrument choice.

The test instrument consisted of a survey which asked subjects a hypothetical question as to which instrument they would encourage their fifth-grade son or daughter to play. The adult subjects were asked to rank order three from a choice of eight instruments consisting of cello, clarinet, drums, flute, saxophone, trombone, trumpet, and violin. Results indicated that the respondents selected clarinet, flute, and violin for their daughters and drum, trombone, and trumpet for their sons.

The purpose of Study 2 was to determine how subjects would assign select musical instruments to either a feminine or masculine category. Subjects \( (N = 58) \) were music majors and nonmusic majors who responded to a paired-comparison ranking of the same eight musical instruments as identified in Study 1.

Results were similar to those of Study 1. The three instruments respondents considered to be most feminine (in decreasing order) were flute, violin, and clarinet. The three instruments considered to be most masculine (in increasing order) were trumpet, trombone, and drum. The cello and saxophone were not identified as being either masculine of feminine, having received a relatively similar number of responses in either category.
In Study 3, a survey was used to determine the musical instrument gender associations of young children. Subjects \((N = 598)\) in Grades K-5 heard live performances and were shown pictures of eight musical instruments.

Results indicated that evidence of gender-stereotyping, with respect to musical instrument preference, is less prevalent in the early grades but becomes more evident in the behavior of students by Grade 3. Boys' instrument preferences were fairly consistent from Grades K-8, remaining at the masculine end of the male-female continuum. As girls increased in age, their instrument choices moved towards the instruments traditionally identified as feminine. By the third and fourth grades, differences in instrument choices between the genders were more pronounced. It was also noted that girls chose from a wider range of musical instruments than did boys.

Study 4 was designed to examine the effect different modes of instrument presentation would have on children's instrument choices. Subjects were children \((N = 47)\) from a day care center, between the ages of three and five who were randomly assigned to one of three distinct groups.

Group 1 heard a recording of the eight instruments and were shown the same pictures that were used in Study 3. Group 2 acted as a control group and were introduced to the musical instruments in the same manner as subjects were in Study 3. Group 3 heard recorded excerpts and saw pictures of the instruments being played by children.

An analysis of the results indicated that, young girls were generally not affected by the mode of presentation, whereas young boys responded differently in the unbiased presentation than in the other two conditions.
It was also noted that both boys and girls chose instruments that were considered to be masculine. As was the case in Study 3, girls, once again, indicated a wider variety in their instrumental choices than did boys.

The purpose of a study by Griswold and Chroback (1981) was to extend the scope of the Abeles and Porter (1978) study by including more instruments, an instrumental and choral conductor category, and to further explore sex-stereotyping as a function of gender and college major (p. 58). Subjects \((N = 89)\) were undergraduate music majors and nonmajors. The 17 instruments identified on the test instrument were harp, flute, piccolo, clarinet, French horn, oboe, glockenspiel, guitar, cymbal, saxophone, bass drum, trumpet, violin, cello, string bass, piano and tuba. The two conducting categories were choral and instrumental.

Analysis revealed that the instrument believed by subjects to have the most feminine attributes was the harp followed by the flute, piccolo, glockenspiel, choral conductor, cello, violin, clarinet, piano, French horn, and oboe. Instruments in an increasing order of perceived masculinity were guitar, cymbal, instrumental conductor, saxophone, bass drum, trumpet, string bass, and tuba. Music majors believed that the clarinet and string bass possessed greater masculine attributes than did undergraduate nonmajors. It was hypothesized that perceived differences between music majors and nonmajor undergraduates was due, primarily, to different experiences relating to these instruments. Other than this exception, the results of this study confirm the earlier findings of Abeles and Porter (1978).
The purpose of a study by Delzell and Leppla (1992) was fourfold: (a) to determine if any changes had occurred in gender associations of musical instruments from earlier research findings dating from the late 70s and early 80s, (b) to determine the instrument preferences of fourth-grade children at the time of the study, (c) to better understand why fourth-grade students' made the instrument choices they did, and (d) to compare the students perceived instrument choices of their peers with their actual choices. The first of two studies examined changes in gender association relating to musical instrument choices. Subjects \((N = 222)\) were college music and nonmusic majors. Paired comparisons of the eight musical instruments selected from an earlier study by Abeles and Porter (1978) were presented to the students in the form of a survey. Subjects were requested to identify which of the instruments they believed to be more masculine.

Results indicated considerable similarity in responses between music majors and nonmusic majors. These findings are consistent with those of the Abeles and Porter study but differ from the results obtained by Griswold and Chroback (1981). A comparison of the rank order of instruments on the masculine-feminine continuum between the two studies reveals no differences with the exception of the rank order of clarinet and violin. In the Abeles and Porter study clarinet was perceived by subjects as being slightly more masculine than the violin, whereas, in the Delzell and Leppla study, the reverse was true. In both studies drums were identified as being the most masculine and flute was
identified as being the most feminine. Analysis also indicated that a slight lessening in the degree of gender associations of musical instruments had occurred since the Abeles and Porter study.

A second study examined fourth-grade students’ instrument preferences, the rationale for their choices, and the perceived instrument choices of boys and girls with that of their actual choices. Analysis revealed that when boys’ and girls’ choices were combined, drums (37.1%), saxophone (26.5%), and flute (17.3%) were the three most preferred instruments. A closer inspection revealed that 83.2% of boys chose either drums (51.7%) or saxophone (31.5%) as their “first choice” instrument to play. Girls’ preferences represented a wider variety of instruments which included flute (30.4%), drums (21.7%), saxophone (21.3%), and clarinet (15%). Girls’ “first choice” preferences included instruments from both ends of the feminine-masculine continuum, whereas, boys’ preferences were restricted to the masculine end of the continuum. Analysis also revealed significant differences between boys’ and girls’ instrument preferences (p. 99) relating to flute, clarinet, saxophone, violin, and trombone.

Respondents were asked to state why they chose an instrument as either their first or last choice. First choice responses included: (a) they liked the instrument (35.7%), or how it sounded (35.5%), (b) they thought it would be easy to play or fun (24.2%), and (c) they had a friend who played the instrument (8.7%). (p. 99) When asked why they least preferred an instrument, respondents stated that (a) the instrument was too difficult or not fun to play (39.3%), (b) they
didn't like it (23.6%), (c) the instrument was too large or too heavy (18.7%),
(d) they did not like the sound (14.5%), or (e) they found the instrument to be
boring (7.3%). (p. 99)

Subjects were asked to indicate which instrument they believed a boy or girl
would most like to play. The instrument choices that subjects believed boys
would choose were very similar to the choices boys actually made. Perceived
instrumental choices for girls was less accurate. Girls showed a greater degree of
accuracy than boys in estimating opposite gender preferences.

The purpose of a study by Bruce and Kemp (1993) was to investigate what
effect the gender of an individual demonstrating a musical instrument would
have on students’ instrument choices. Demonstration concerts were given to
children between the ages of five and seven in four similar schools.

Results confirmed previous findings relating to gender-stereotyping of
instrument choices. Analysis of the data showed that, within the context of the
brass/woodwind concerts, girls’ strongest preference was for flute (41%)
whereas boys’ strongest preference was for the trombone (53%). Despite the fact
that the woodwind instrument was demonstrated only by a male during
string/woodwind demonstration concerts, both girls (36%) and boys (52.5%)
prefereed a woodwind instrument over cello (girls = 29.5%, boys = 27.5%) and
violin (girls = 34.5%, boys = 19.0%). During the brass/woodwind concert, 25% of
the girls chose trombone especially if it was demonstrated by a female (23.5%).

Results indicated that girls were influenced by the gender of the presenter
when the instruments were cello, flute, clarinet, trumpet, or trombone whereas
boys were influenced by the gender of the presenter when the instruments were
girls identified with the female musician and boys identified with the male musician. This study showed that gender-stereotyping of instrument choices can be counterbalanced by using presenters (musicians) whose gender is opposite that of the perceived gender association of the instrument being demonstrated.

The purpose of a study by Tarnowski (1993) was to investigate the following research questions relating to gender-instrument associations and instrument preferences: (a) at what age do children begin to develop gender-instrument associations, (b) what might the instrument preference be, (c) what are the attitudes and beliefs of preservice classroom teachers and how might they differ from young students, and (d) how does the manner in which an instrument is presented to a young child affect instrument preferences? The first part of the study investigated the degree to which gender-instrument associations were evident in preservice teachers and very young children. Subjects were preservice teachers (N = 135) enrolled in elementary music courses and children (N = 111) in Grades K-2.

Each child received a form that consisted of 15 line drawings depicting a variety of musical instruments, (violin, viola, cello, string bass, oboe, clarinet, flute, saxophone, trumpet, French horn, trombone, tuba, snare drum, bass drum, and piano). After hearing a recording of each of the musical instruments, subjects were asked to indicate whether the instrument would most likely be played by a male, or a female. They were then asked to select one instrument that they would most like to play. In order to study the effects of a gender-neutral presentation format, 17 different children saw and heard each of the 15
instruments played by both a male and female performer. Preservice teachers were asked to respond to a hypothetical scenario indicating which instrument they might encourage a son or daughter to play.

Preservice teachers identified piano (80.7%) to be the most gender-neutral instrument followed by saxophone (60.7%), snare drum (53.3%), and violin (51.8%). They identified trombone (10.3%), bass drum (10.3%), string bass (5.9%), flute (4.4%), and tuba (0.0%), to be the least gender-neutral instruments.

The children identified the violin (86.6%), to be the most gender-neutral instrument followed by the piano (74.7%), trumpet (59.4%), saxophone (56.7%), clarinet (53.1%), and snare drum (50.4%). They identified cello (41.4%), trombone (30.6%), and tuba (25.2%) to be the least gender-neutral instruments.

The majority of the childrens' responses (53%) rated instruments as gender-neutral compared to 33.3% of the responses from the preservice teachers. There was little difference in the responses due to gender within each group. However, responses did differ due to age within the group of children. Nearly 88% (87.9%) of the responses by children in kindergarten were gender-neutral, whereas, 45% were so for Grade 1 students, and 39.8% of the responses by children in Grade 2 were gender-neutral.

Subjects in both groups were asked to choose one instrument that they would most enjoy playing. Male preservice teachers' instrument selections were much more limited than their female counterparts. Over half (52.2%) of males chose the piano as their first choice instrument followed by saxophone (13.0%), trumpet (13.0%), and snare drum (8.7%). Female preservice teachers also
indicated that piano (37.0%) was their first choice instrument, followed by saxophone (16.7%), flute (15.8%), cello (7.4%), clarinet (4.6%), and French horn (3.7%).

When preservice teachers were asked which instrument they would encourage their son or daughter to play (p. 16), trumpet (28.9%) was chosen as a first choice for sons, followed by saxophone (23.7%), snare drum (14.1%), piano (12.6%), trombone (3.7%) and French horn (2.2%). Over 10% (10.4%) of preservice teachers indicated no preference in choosing an instrument for a son. Preservice teachers chose the piano (25.2%) as their most preferred instrument for daughters, followed by flute (20.7%), clarinet (12.6%), saxophone (10.4%), trumpet (8.9%), violin (5.9%), and cello (2.2%). Slightly less than 10% (9.8%) of preservice teachers indicated no preference in choosing an instrument for a daughter.

Both male and female children indicated preferences for 12 of the 15 musical instruments. The most preferred instrument by young boys was the bass drum (29.1%), followed by saxophone (18.2%), snare drum (18.2%), and trombone (7.3%). The clarinet and piano were each preferred by 5.4% of the children, while flute, trumpet and the tuba were preferred by 3.6% of the male children. This same subgroup showed the least preference for string bass (1.8%), oboe (1.8%) and French horn (1.8%). Boys indicated a mild preference for the string bass (1.8%), and a strong dislike for violin (0.0%), viola (0.0%), and cello (0.0%). Young girls chose piano (33.3%) as their most preferred instrument followed by snare drum (17.5%), saxophone (10.5%), flute (9.1%), trombone (9.1%), violin (5.3%), oboe (5.3%), and bass drum (3.5%). Whereas boys showed a strong dislike for
middle and upper strings, girls showed a strong dislike for low string instruments (cello = 0.0%, string bass = 0.0%) as well as low brass (tuba = 0.0%). It should be noted that more girls chose trombone as their preferred instrument than did boys, whereas, more boys chose French horn than did girls.

As a part of a pretest, all participants were asked to indicate whether they thought a male or female would be more likely to play each of the 15 instruments. Results of the pretest were similar to previous research which rated instruments on a masculine-feminine continuum. A comparison of the two groups revealed that the preservice teachers most frequently made gender-biased associations, and the frequency of gender-neutral responses in this group differed significantly from that of the children group (p. 19). Following the pretest, children experienced eight classes where instruments were presented in a gender-neutral manner. The children were once again asked to identify if a particular instrument would be more appropriate for a boy or a girl to play. Comparisons of pretest-posttest responses indicated that a significant change had taken place in gender-neutral ratings.

On the pretest, only the piano and French horn were rated as gender-neutral by more than half the group of children, while on the posttest, all 15 instruments were rated as gender-neutral by more than 70% of the group. (p. 19)

In a study designed to investigate female instrument choices, Zervoudakes & Tanur (1994) contacted 600 educational institutions requesting music programs for band and orchestra performances spanning a period of three decades (60s, 70s, and 80s). Institutions included elementary schools, high schools, colleges and universities.
Each submitted music program was gender coded (with respect to instrument played) and frequency counts of male and female players were generated. Whereas the Delzell & Leppla (1992) study indicated that a slight lessening in the degree of gender associations of musical instruments had occurred since the time of the Abeles and Porter (1978) study, Zervoudakes & Tanur (1994) concluded that gender-bias segregation has increased at the high school and college level, but there is no evidence that it has done so at the elementary level (p. 58).

In a study designed to investigate children's musical instrument preferences and gender stereotyping associations, O’Neill & Boulton (1996) interviewed 153 children between the ages of 9 and 11. Subjects were shown pictures of six musical instruments (flute, violin, drums, trumpet, piano, guitar) and asked to rank order them from the most to the least preferred instrument they would like to play. They were requested to explain their reasons for choosing their most and least preferred musical instrument. Participants were also asked if there were any instruments boys and girls should not play and to state reasons for their choices.

Girls indicated a preference for piano, flute, and violin, while boys indicated a preference for guitar, drums, and trumpet. Slightly less than half of female subjects (47.2%) and 38.3% of male subjects indicated that they chose an instrument because they preferred the sound of that instrument.
Girls indicated (38.9%) that the reason for least preferring a musical instrument was because of its sound. However, boys (44.4%) indicated that the reason for least preferring a musical instrument was the fact that they perceived it as being too difficult to play.

Both female and male participants expressed close agreement as to which instruments boys and girls should not play. Flute was chosen as the least preferred instrument for a boy to play by both female (48.6%) and male (44.4%) participants. Drums were chosen as the least preferred instrument for a girl to play by both female (61.1%) and male (66.7%) participants. Violin proved to be the instrument with which female (13.9%) and male (35.8%) participants disagreed the most with regard to which instrument should not be played by boys.

Elliot & Yoder-White (1997) used a stimulus tape, consisting of a four-bar musical phrase played by eight different acoustical musical instruments, to determine whether young children would make consistent masculine/feminine judgements with respect to timbre preferences. One hundred and six children between the ages of seven and nine listened to the same musical example performed on flute, clarinet, oboe, alto saxophone, bassoon, trumpet, French horn, and trombone and identified each selection as being either masculine, feminine, or neither/both.

When the responses of both genders were combined, the eight musical instruments could be placed on a masculine/feminine continuum in the following order: bassoon, trombone, French horn, trumpet, alto saxophone, clarinet, flute, and oboe. The degree to which trumpet and trombone were
perceived to be masculine varied between boys and girls. Male subjects were more inclined to consider these musical timbres as masculine than were female subjects.

Results such as these helped frame the research questions for the present study. In addition to responding to questions relating to student instrument choice, teachers were also asked to describe the steps they take in order to address gender-stereotyping.

Summary

Chapter 2 consists of a review of related literature pertaining to various aspects of the musical instrument selection process. Chapter 3 describes the methodology used in this study, defines the population, identifies the subjects, and presents the results of a pilot test.
CHAPTER 3
METHODOLOGY

The purpose of the study was to investigate how teachers prepare beginning instrumental music students to select a musical instrument. More specifically, this investigation identified the nature of the educational and musical experiences which occur prior to determining students’ instrument choices.

The target population was defined as all music teachers in the province of Alberta who were responsible for teaching beginning band. In order to acquire this information it was clear that a survey was the most appropriate method.

The design and construction of the survey was guided by the research questions as enumerated in Chapter 1. An extensive process of selecting and writing questions, refining their clarity, and insuring the consistency between question format and research problems took place over an eight month period. Once the survey instrument was in its final stages of design, a field test was undertaken to assess the validity and accuracy of the survey instrument itself.
Pilot Study

The questionnaire and cover letters were field tested by music educators chosen from a purposive sample (Fraenkel & Wallen, 1996, pp. 100-101). Field test subjects \((n = 7)\) were initially contacted by telephone at which time the nature of their involvement and responsibilities were explained. All of the contacted subjects agreed to participate in this pilot project (see Appendix A).

Field test participants included both males \((n=4)\) and females \((n=3)\) from rural \((n=4)\) as well as urban \((n=3)\) settings. The average number of years of teaching experience was 20.4 years with a range of 19.5 (28-8.5) years. Three of the music educators had a master’s degree, two were working on a master’s degree, and two had a bachelor’s degree.

Using an evaluation form supplied by the researcher (see Appendix B), subjects were asked to (a) indicate how long it took them to complete the survey, (b) identify which of two possible survey covers they preferred, (c) make comments as to the overall clarity and accuracy of the 26 questions found in the survey, and (d) make suggestions for changes/improvements relating to either the cover letter or the survey questions.

An analysis of the field test responses indicated that subjects needed from 12 to 37 minutes to complete the survey; the average completion time was 24 minutes. All of the participants returned their completed surveys and, as a part of the process, offered valuable constructive criticism.

The field test subjects stated that the 26 survey questions were very clear, accurate, and covered the important aspects of the instrument selection process. Four of the seven teachers made recommendations which the researcher felt
were either beyond the scope of this research project or they could be easily addressed using the existing survey. The value of pilot testing was evident through modest revisions in the language of the questions, format, and in some response modes in order to make it easier for respondents to answer. Two survey questions were eliminated in order to insure that the questionnaire was an appropriate length.

**Validity of Revised Survey Instrument**

In addition to the effort to make the survey instrument user-friendly, one purpose of the pilot test was to assess the validity of the instrument. Ary, Jacobs & Razavieh (1996) state the following with respect to survey research validity:

Two important variables influence the validity of a questionnaire. First, How important is the topic to the respondent? We can assume more valid responses from individuals who are interested in the topic and/or are informed about it. And second, Does the questionnaire protect the respondents' anonymity? It is reasonable to assume that greater truthfulness will be obtained if the respondents can remain anonymous, especially when sensitive or personal questions are asked. (p. 462)

With a response rate of 77.3%, teachers demonstrated a strong interest in the research topic relating to the musical instrument selection process. Furthermore, this topic related directly to a facet of music educators' educational and administrative responsibilities. The issue of confidentiality was addressed in the initial cover letter which accompanied each survey sent to subjects.
Procedures Used to Collect Data

In order to determine the potential members of the defined population, it was necessary to identify which schools within the province of Alberta offered beginning band instruction. It was also necessary to acquire the names of the teachers who were responsible for this instruction in order to follow specific aspects of survey implementation as outlined by Dillman (1978, p. 172), as well as eliminate the possibility of duplicate mailouts.

Three sources were used to identify the target population. One, the Department of Education for the Province of Alberta was contacted in order to establish whether or not they had, on a data base, a list of teachers who were responsible for beginning band instruction. They did not possess such a list; however, they were able to supply a list of all the public and separate schools in the province of Alberta. Public and separate schools were grouped into 6 zones which comprised a total of 57 school districts. Also on this list, were the addresses, phone and facsimile numbers for every school in each district or region within the province of Alberta. Schools were grouped alphabetically by district.

The researcher was informed by the Department of Education that the names of teachers could not be made available in compliance with the Freedom of Information, Privacy, and Protection Act (FOIP). Therefore, written requests were sent to the superintendents of each school district in the province of Alberta asking for the names of the schools in their jurisdiction which offered beginning band instruction as well as the names of the music teachers associated with the schools. This information made it possible to identify teachers who taught at
more than one school, therefore eliminating duplication in mail-outs. In total, 63 superintendents were contacted and asked for information relating to beginning band instruction (see Appendix C). When warranted, follow-up telephone calls were made resulting in a 100% response rate from superintendents.

The completeness of the information varied from superintendent to superintendent. In response to the request, some superintendents stated that they were not able to make available the names of individual teachers because of recent FOIP legislation. However, they did provide the names of schools in their district that offered beginning band instruction, as well as mailing addresses, telephone phone and facsimile numbers. An effort was made to make all contact information consistent for all schools and when inconsistent information was supplied those schools were faxed or E-mailed requesting specific information directly from the music teacher (see Appendix D).

Two additional sources were used in order to obtain pertinent information relating to the defined population. The Canadian band association handbook/De l'association Canadienne des harmonies (1997 -1998), and the 1998 Alberta Band Association membership list were used to obtain, or further verify, essential data that would confirm the identify of those teachers who were responsible for beginning band instruction.

By cross-referencing the published directory lists with superintendents' data, it was possible to identify and confirm most of the teachers who were responsible for beginning band instruction within the province of Alberta. These efforts provided the necessary contact information: telephone number, facsimile number, E-mail and school addresses.
Gay (1996) states that in a census survey, an attempt is made to acquire data from each and every member of a population; a census survey is usually conducted when a population is relatively small and readily accessible (p. 252). This advice matched perfectly the well defined target population in Alberta and therefore it was decided to conduct a census survey rather than a sample survey.

Among six zones, or geographic areas within Alberta, 55 of 57 school jurisdictions offer beginning band instruction, representing a total of 334 teachers. Based on the information obtained from these various sources, a list of teachers responsible for beginning band instruction was compiled and categorized by zone and school district or jurisdiction (see Table 3.1).

A revised questionnaire, cover letter and stamped, addressed envelope was mailed to each potential respondent (N = 328) on February 22, 1999. In order to track responses, an identification number (ranging from 1 to 335) was placed on the top right front page of each of the questionnaires.

Each returned survey was checked for item completeness. Subjects who returned incomplete surveys were sent a facsimile requesting them to submit the missing data (see Appendix E).
<table>
<thead>
<tr>
<th>Zone (geographic area)</th>
<th>School Jurisdictions</th>
<th>Jurisdictions offering beginning band</th>
<th>Number of band teachers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Zone 1</td>
<td>8</td>
<td>6</td>
<td>20</td>
</tr>
<tr>
<td>Zone 2</td>
<td>8</td>
<td>8</td>
<td>32</td>
</tr>
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<td>Zone 3</td>
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<td>16</td>
<td>117</td>
</tr>
<tr>
<td>Zone 4</td>
<td>7</td>
<td>7</td>
<td>45</td>
</tr>
<tr>
<td>Zone 5</td>
<td>8</td>
<td>8</td>
<td>94</td>
</tr>
<tr>
<td>Zone 6</td>
<td>10</td>
<td>10</td>
<td>27</td>
</tr>
<tr>
<td>TOTAL</td>
<td>57</td>
<td>55</td>
<td>335</td>
</tr>
</tbody>
</table>

Table 3.1: Beginning Band Teacher Population in Alberta (School and teacher involvement by zone)

Unique Characteristics of Target Population

Upon contacting the school districts to be surveyed, several indicated special conditions for participation. Four of the largest school districts (Edmonton Public, Edmonton Separate, Calgary Public, and Calgary Separate) requested formal research proposals to be submitted as a part of the application procedure in order to obtain permission to carry out research in their school districts (see Appendices F and G). Each of the four school districts was sent a research proposal which addressed the following topics: (a) description of the research to be undertaken (title, objectives, procedure, survey instrument, organization of the study), (b) informed consent form, (c) ethics review statement, (d) value to the school district, (e) identification of subjects, schools and times, and (f) time...
lines for completing the study. Having complied with the special requests, all four submission proposals were approved by the respective school boards.

Two school districts made special requests of the researcher. In an effort to guarantee anonymity, Edmonton Catholic Regional Division No. 40 requested that “survey packs,” each consisting of a cover letter, survey, return envelope and a participatory consent form, be sent directly to the school division which would in turn send them to the respective teachers (see Appendix H). “Thank you”/reminder postcards were also sent to this school division with instructions for them to be mailed out to all potential respondents one week after the initial mail out. Edmonton Public School Division No. 7 requested that the surveys and accompanying materials be sent directly to the principals of the schools. Each principal received a cover letter requesting that they pass on the submitted materials to the appropriate teacher (see Appendix I).

The four school districts who had special requests also asked that Participatory Consent Forms be included with the mailed surveys (see Appendix J). These consent forms, developed by the researcher to comply with specific school board requirements, were tailored to each school district that asked for them. In the province of Alberta these consent forms were designed to serve as the defacto human subjects review procedure.

**Survey Instrument**

In this descriptive study, a survey was used to collect data relating to various aspects of the musical instrument selection process. The survey was comprised of seven sections (see Appendix K). In the first two sections, seven questions were
presented to participants requesting demographic information relating to (a) school system, (b) beginning band status (optional/required), (c) the grades beginning band was taught, (d) beginning band enrollment, (e) overall school grade enrollment associated with beginning band grade, (f) gender, (g) respondent’s level of education, (h) respondent’s teaching experience, and (i) respondent’s principal musical instrument. The remaining five sections of the survey consisted of 19 numbered items which were directly related to six research question categories. The six categories that framed the research questions were: (a) procedural controls and administrative responsibilities, (b) teachers’ perceptions and expectations, (c) the role of the music industry, (d) teachers’ views about gender stereotyping issues, (e) areas of influence which helped to shape or modify teachers’ present approach to the instrument selection process, and (f) preservice music teacher education. The overall content of the survey, which focused directly on the research questions, was derived from previous research and information acquired through a review of extant literature, as well as from the researcher’s personal teaching experiences and interviews with middle school music teachers.

In order to guarantee accuracy and consistency in the responses from the music educators, structured, closed-ended questions were used primarily throughout the survey. This format facilitated both the coding of data sets and statistical analysis. Respondents were also given the opportunity to elaborate on their responses to closed-form items in the form of short answer responses. When appropriate, closed-ended questions ended with an “other” category allowing participants to provide a response not anticipated by the researcher.
Established guidelines (Gay, 1996, pp. 256-257) were used in planning the content and format of the survey questionnaire. These included the following: (a) the questionnaire will be attractive and neat, (b) the questionnaire will relate to the objectives of the study, (c) structured or closed-form items will be used, if at all possible, (d) each question will deal with a single concept, include all possible responses, and conclude with an "other" category when applicable, and (e) directions will be clear and standardized.

Three primary sources influenced the design of the survey instrument. A text by Dillman (1978) titled *Mail and telephone surveys: The total design method* was used as a guide with respect to survey design and implementation. The questionnaire used in a study by Doerksen and Delzell (1998) titled *1997 National study of beginning band and orchestra programs* was used as a reference with respect to survey design and formatting. The third source, an educational research text by Gay (1996), titled *Educational research: Competencies for analysis and application* (5th ed.) was referred to as a general guide with respect to survey design, implementation, and analysis.

The survey instrument for this study consisted of 26 questions; 24 were closed-ended and 2 were open-ended. Ten of the closed-ended questions included an "other" category. On the last page of the survey, respondents were given the opportunity to add comments relating to the musical instrument selection process. Most questions asked respondents to provide nominal and ordinal data, usually in a likert-style format, with the exception of two questions which generated ratios.
Cover Letter Design

The following guidelines were used in planning the content and format of the initial cover letter, which accompanied the survey (see Appendix L): (a) the cover letter will be brief, neat, and addressed to the potential respondents; (b) a statement will explain what is being asked of the respondents and why; (c) the purpose, as well as the importance and significance of the study will be stated; (d) a reason will be given why a response is necessary; (e) results of the study will be made available to the respondents; (f) confidentiality of responses will be assured; and (g) each cover letter will be individually signed by the researcher (Gay, 1996, pp. 257-258).

Respondents were informed in the cover letter that they could receive a summary of results by printing their name and address on the back of the return envelope. Ninety-eight respondents (30.4%) indicated that they wished a copy of results.

Postcard

One week after the initial mailout, potential respondents received a postcard reminding them to return their surveys (see Appendix M). The front of the postcard consisted of an attractive photograph of Grande Prairie Regional College. On the back was printed a brief note to teachers reminding them to return their surveys as soon as possible. They were, once again, reminded of the importance of their participation in this provincial research study. Mailing and E-mail addresses, as well as phone and facsimile numbers were given in order
that potential respondents could contact the researcher if they did not receive a survey. Each postcard was signed in blue ink by the researcher (Dillman, 1978, p. 185).

Survey Cover Letter (2nd Mailout)

On April 12, 1999 a second mailout was sent to all potential respondents who had not returned their completed surveys. Subjects received a second questionnaire, a new cover letter, and another stamped reply envelope, all of which were enclosed in a “package” envelope.

The purpose of the study was, once again, stated and subjects were reminded of the importance of their input if results were to be truly representative of all instrumental music teachers in the province of Alberta (see Appendix N). Grande Prairie Regional College supplied package envelopes, reply envelopes, and postcards.

The Reply Envelope

A return address was clearly indicated on all reply envelopes. In the top right hand corner of each envelope was a prepaid (business reply) Canada Post Corporation postal stamp indicating that postage would be paid if mailed in Canada. As an additional precaution, each reply envelope was also stamped in red with the words “Fine Arts Department (L116),” identifying the name of the department and the researcher’s office in order to ease the task of mail room sorting.
Survey Response Rates

Four follow-up activities were used to improve responses. First, a "thank you"/reminder postcard, was mailed to all potential respondents \(N = 328\) on March 1, 1999, one week after the first mailout. The first mailout together with the reminder postcard generated a 53.7% response rate.

As recommended by Dillman (1978), a second request was designed to elicit greater response. A second follow-up mailing (with revised cover letter, questionnaire, and addressed, stamped reply envelope) was sent on April 12, 1999 to all respondents who did not return their questionnaire by the sixth week. The identifiable potential respondents from three of the four large school districts, (Edmonton Public, Calgary Public, and Calgary Separate) were sent a second follow-up mailing on April 19, 1999. The fourth large school district, Edmonton Separate Schools, did not receive a second mailout at the request of the school division.

Rather than a third, and final, follow-up mailing, all remaining nonrespondents received a reminder phone call between the 15th and the 19th of April, 1999. A fourth and final follow-up was undertaken in order to assure an adequate return rate. On May 12, 1999, all members of the defined population who had not returned their surveys were sent a facsimile encouraging them to respond as soon as possible (see Appendix O). The four combined follow-up activities resulted in a 77.3% response rate.

In follow-up telephone conversations with nonrespondents, it was discovered that six respondents had no involvement in the instrument selection.
process. Because of noninvolvement, they were eliminated from the identifiable population. Thus, the final research population, drawn from both public and separate schools systems, numbered 322 music teachers.

**Procedures Used in Organizing and Treating Data**

Analysis of results from the responses of participants involved
(a) reporting the total sample size and overall percentage of returns,
(b) reporting the response rate for each item on the questionnaire, and
(c) identifying relationships between appropriate variables (Gay, 1996, p. 261).

Open-ended items were transcribed verbatim, coded, and categorized in order to identify common themes or response categories. Relationships between the following variables were analyzed using the appropriate statistical tests:

1. The type of school system and (a) beginning band status (required or optional), (b) gender, (c) feeder school visits/performances, (d) music store personnel involvement, (e) the nature of preservice teacher education, and (f) level of teacher education.

2. Gender and (a) the nature of preservice teacher education, (b) level of teacher education, (c) number of years of teaching experience, (d) feelings regarding the gender-bias statement, (e) steps taken to address gender-stereotyping (bias), (f) changes made to the instrument selection process, and (g) music store personnel involvement.
3. Years of teaching experience and (a) school system, and (b) gender.

When appropriate, percentages, means, and standard deviations were given for each of the items found on the questionnaire.

All returned survey data were coded (see Appendix P) and imputed on a microcomputer and analyzed using Statistical Package for the Social Sciences (SPSS) software program (version 9). Criterion Research Corporation was contracted to do the data imputing and staff at the Centre for Research in Applied Measurement and Evaluation, of the University of Alberta, cleaned up the raw data, generated frequency counts for all variables, and ran the appropriate statistical analysis (mode, mean, and standard deviation).

Summary

This chapter has described the methodology used in this study of the musical instrument selection process. The population was defined, subjects were identified, and the results of pilot testing described. Chapter 4 presents the findings from the analysis of the data.
\textit{Endnotes}

\footnote{The words district and division are both used to refer to a school jurisdiction.}
CHAPTER 4

RESULTS

The purpose of the study was to investigate how teachers prepare students to choose a musical instrument. More specifically, this investigation identified the nature of the educational and musical experiences which occur prior to determining students' instrument choices.

This chapter presents the findings from the analysis of the data. They relate directly to the research questions presented in the purpose of the study as outlined in Chapter 1, and are presented in both discussion and table form. The research questions were grouped into six categories which included the following: (a) procedural controls and administrative responsibilities, (b) teachers' perceptions and expectations, (c) the role of the music industry, (d) teachers' views about gender stereotyping issues, (e) areas of influence which helped to shape or modify teachers' present approach to the instrument selection process, and (f) preservice music teacher education. The following discussion presents the results of all survey questions in these categories.
Data Reporting Procedures

In order to determine patterns relating to beginning band instrumental selection in the province of Alberta, it was determined that a survey was the most appropriate method to collect data. In some cases percentages proved to be the most suitable means of ascertaining trends whereas in other cases mean scores proved more useful.

Data analysis of the returned surveys used descriptive statistics, involving measures of central tendency and measures of variability. All percentages are shown rounded to one decimal place. Percentage totals may exceed 100% due to rounding and do not include missing data percentages. Common themes or response categories were identified for each open-ended question.

Return Rate

As reported in Chapter 3, an effort was made to identify all potential members of the target population resulting in a 100% response rate from school superintendents. Initially, 335 teachers were identified as being responsible for beginning band instruction in the province of Alberta. Seven music educators were purposefully chosen from this population to field test the Musical Instrument Selection Process survey, thus reducing the identified population to 328. Of the 328 educators who received surveys, six were later eliminated from the study due to their non-involvement in the instrument selection process. The final, revised population therefore included a total of 322 potential respondents.

The first mailed survey request, which was sent February 22, 1999, combined with the “postcard” reminder, sent March 1, 1999, generated an initial response
rate of 53.7% \((n = 173)\) by April 9, 1999. Table 4.1 identifies the number of returned surveys from each of the six provincial zones in Alberta. The identifiable return rate for all of the six provincial zones was 76.9% with a range of 18.4 (88.9 - 70.5\%)\(^1\). All zones had a return rate of at least 70%. Nine returned surveys did not have identification numbers. In total, 249 surveys were returned by the cutoff date of June 30, 1999, representing an overall response rate of 77.3%. Ninety-eight respondents (30.4\%) indicated on the reply envelope that they would like a copy of results.

<table>
<thead>
<tr>
<th>Zone</th>
<th>Number of Teachers(^a)</th>
<th>Returned Surveys (%)</th>
<th>% of Total Returns</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>18</td>
<td>16 (88.9)</td>
<td>6.4</td>
</tr>
<tr>
<td>2</td>
<td>30</td>
<td>25 (83.3)</td>
<td>10.0</td>
</tr>
<tr>
<td>3</td>
<td>114</td>
<td>85 (74.6)</td>
<td>34.1</td>
</tr>
<tr>
<td>4</td>
<td>44</td>
<td>31 (70.5)</td>
<td>12.4</td>
</tr>
<tr>
<td>5</td>
<td>90</td>
<td>64 (71.1)</td>
<td>25.7</td>
</tr>
<tr>
<td>6</td>
<td>26</td>
<td>19 (73.1)</td>
<td>7.6</td>
</tr>
<tr>
<td>Other(^b)</td>
<td>--</td>
<td>9 (3.6)</td>
<td></td>
</tr>
<tr>
<td>TOTAL</td>
<td>322</td>
<td>249 (76.9)</td>
<td>100.0(^c)</td>
</tr>
</tbody>
</table>

\(^a\)These figures do not include those who were eliminated from the study as well as those who field tested the survey.

\(^b\)This category identifies the number of surveys that were returned without an identification number.

\(^c\)All percentages are shown rounded to one decimal place. Percentage totals may exceed 100\% due to rounding and do not include missing data percentages. This applies to all tables.

Table 4.1: Survey Return Rate by Provincial Zone
The purpose of the first section (Q1-3) of the Musical Instrument Selection Process survey was to gather data relating to each respondent’s educational setting. Table 4.2 identifies respondent’s school system affiliation. With respect to school system affiliation, 76.2% of teachers indicated that they taught for the Public schools while 23.8% indicated that they taught for the Separate (Roman Catholic) school system. None of the respondents indicated that they taught for any other school system.

<table>
<thead>
<tr>
<th>School System</th>
<th>f</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Public school system</td>
<td>189</td>
<td>76.2</td>
</tr>
<tr>
<td>Separate (Roman Catholic) school system</td>
<td>59</td>
<td>23.8</td>
</tr>
<tr>
<td>TOTAL</td>
<td>248</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Note. N = 249. Missing data = 1 (0.4%).

Table 4.2: Teacher’s School System Affiliation

Table 4.3 identifies the frequency with which beginning band is offered as either a required class or as an elective. More than three-quarters of the respondents (75.7%), indicated that beginning band was offered as an elective class. The remainder (24.3%) indicated that beginning band was a required class in their school.
Table 4.3: Beginning Band Class Status

<table>
<thead>
<tr>
<th>Class Status</th>
<th>f</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Required</td>
<td>60</td>
<td>24.3</td>
</tr>
<tr>
<td>Elective</td>
<td>187</td>
<td>75.7</td>
</tr>
<tr>
<td>TOTAL</td>
<td>247</td>
<td>100.0</td>
</tr>
</tbody>
</table>

*Note. N = 249. Missing data = 2 (0.8%).*

Table 4.4 indicates the frequency with which beginning band is taught at specific grade levels. The majority of respondents (61.2%), indicated that they started beginning band in Grade 7. Slightly less than a quarter (24.5%), indicated that in their schools they started beginning band in Grade 6. Based on the responses of some of the teachers, it is not possible to infer from the data whether or not beginning band classes actually begin in Grade 8 and 9. These data may represent the number of beginners who are placed in second or third year classes.

Question 3, relating to beginning band school population, proved to be the most problematic. Initially, some respondents left items blank or indicated that they did not completely understand the question. With follow-up, it was possible to secure a respectable amount of data relating to question 3, parts a, b, and c. Due to difficulties in acquiring accurate data, it is recommended that the data and resulting statistics be viewed as a general indication of band and overall school enrollments rather than exact enrollment numbers.
Table 4.4: Frequency With Which Beginning Band is Taught at Specific Grade Levels

<table>
<thead>
<tr>
<th>Grade Level</th>
<th>f</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>4</td>
<td>1</td>
<td>0.4</td>
</tr>
<tr>
<td>5</td>
<td>28</td>
<td>11.4</td>
</tr>
<tr>
<td>6</td>
<td>60</td>
<td>24.5</td>
</tr>
<tr>
<td>7</td>
<td>150</td>
<td>61.2</td>
</tr>
<tr>
<td>8</td>
<td>2</td>
<td>0.8</td>
</tr>
<tr>
<td>9</td>
<td>4</td>
<td>1.6</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td>245</td>
<td>100.0</td>
</tr>
</tbody>
</table>

*Note. N = 249. Missing data = 4 (1.6%).*

Table 4.5 identifies the average number of students for each possible beginning band grade. When surveys were returned, each item was checked for accuracy and completeness. Both the range and the standard deviation for the beginning band enrollments imply that extremes exist within the province of Alberta. The means vary depending on the particular grade, with the larger class enrollments occurring in grades 6 (M = 44.7) and 7 (M = 50.22). In some cases, the mean grade level may represent more than one beginning band class within a school setting.
<table>
<thead>
<tr>
<th>Grade Level</th>
<th>f</th>
<th>M</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>4</td>
<td>1</td>
<td>42.00</td>
<td>NA</td>
</tr>
<tr>
<td>5</td>
<td>27</td>
<td>36.11</td>
<td>27.76</td>
</tr>
<tr>
<td>6</td>
<td>61</td>
<td>44.70</td>
<td>26.05</td>
</tr>
<tr>
<td>7</td>
<td>148</td>
<td>50.22</td>
<td>34.92</td>
</tr>
<tr>
<td>8</td>
<td>2</td>
<td>38.00</td>
<td>52.33</td>
</tr>
<tr>
<td>9</td>
<td>4</td>
<td>15.00</td>
<td>10.80</td>
</tr>
<tr>
<td>TOTAL</td>
<td>243</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note. N = 249. Missing Data = 6 (2.4%).

Table 4.5: Average Student Enrollment Associated with Beginning Band Grades

Table 4.6 shows the average school population (music and non music students) as it relates to the grade at which beginning band is taught. Respondents were requested to indicate the total number of students at their school for the grade level that beginning band was taught. As was the case in Table 4.5, both the range and the standard deviation for the total school enrollments imply that extremes in enrollment exist within the province of Alberta. As might be expected, the largest means were reported in grades 6 ($M = 72.84$) and 7 ($M = 129.39$). Once again these data provide a general indication of total school population.
## Table 4.6: Average Total School Population (Music and Nonmusic Students) by Grade Level

<table>
<thead>
<tr>
<th>Grade Level</th>
<th>(f)</th>
<th>(M)</th>
<th>(SD)</th>
</tr>
</thead>
<tbody>
<tr>
<td>4</td>
<td>1</td>
<td>50.00</td>
<td>NA</td>
</tr>
<tr>
<td>5</td>
<td>27</td>
<td>54.56</td>
<td>36.09</td>
</tr>
<tr>
<td>6</td>
<td>61</td>
<td>72.84</td>
<td>48.28</td>
</tr>
<tr>
<td>7</td>
<td>148</td>
<td>129.39</td>
<td>113.87</td>
</tr>
<tr>
<td>8</td>
<td>2</td>
<td>77.00</td>
<td>103.24</td>
</tr>
<tr>
<td>9</td>
<td>4</td>
<td>101.50</td>
<td>63.84</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>243</strong></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Note. \(N = 249.\) Missing Data = 6 (2.4%).*

Demographic information relating to gender, level of education, years of teaching experience, and principal instrument, was asked of all survey recipients in the second part of the Musical Instrument Selection Process survey. Questions 4 to 7 in the survey attempted to identify specific characteristics of the defined population.

Table 4.7 identifies the gender of the teachers who chose to participate in this study. Gender representation among respondents was very equal. Of a total of 248 teachers who stated their gender, 127 (51.2%) were male and 121 (48.8%) were female.
Table 4.7: Gender of Respondents

<table>
<thead>
<tr>
<th>Gender</th>
<th>$f$</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>127</td>
<td>51.2</td>
</tr>
<tr>
<td>Female</td>
<td>121</td>
<td>48.8</td>
</tr>
<tr>
<td>TOTAL</td>
<td>248</td>
<td>100.0</td>
</tr>
</tbody>
</table>

*Note. $N = 249$. Missing data = 1 (0.4%). Range = 6 (127-121).*

Table 4.8 identifies the level of education of the respondents. More than 75% of the respondents (77.0%) have a bachelor's degree as the highest level of education they have attained. Thirty-one teachers (12.5%) stated that they were working on a master's degree while 22 (8.9%) indicated that they had obtained a master's degree. Three respondents (1.2%) were working on a doctoral degree while only one teacher (0.4%) had completed a doctoral degree.
<table>
<thead>
<tr>
<th>Level of Education</th>
<th>f</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bachelor’s degree</td>
<td>191</td>
<td>77.0</td>
</tr>
<tr>
<td>Working on a master’s degree</td>
<td>31</td>
<td>12.5</td>
</tr>
<tr>
<td>Master’s degree</td>
<td>22</td>
<td>8.9</td>
</tr>
<tr>
<td>Working on a doctoral degree</td>
<td>3</td>
<td>1.2</td>
</tr>
<tr>
<td>Doctoral degree</td>
<td>1</td>
<td>0.4</td>
</tr>
<tr>
<td>TOTAL</td>
<td>248</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Note. \( N = 249 \). Missing data = 1 (0.4%).

Table 4.8: Respondent’s Level of Education

Table 4.9 shows measures of central tendency (mean and mode) and measures of variability (range and standard deviation) as they pertain to the number of years respondents have been teaching. On average, respondents had 10.65 years of teaching experience with a range of 34 years (1-35). Twenty-three teachers (9.3%) indicated that they had 2 years of teaching experience. Nearly sixty percent (59.3%) indicated that they had 10 or less years of teaching experience, while only 15% indicated that they had 20 or more years of teaching experience. In the province of Alberta there is a rather young teaching population with modest postgraduate study. In this context young refers to the brief level of teaching experience.
Table 4.9: Years of Teaching Experience

<table>
<thead>
<tr>
<th>M</th>
<th>mode</th>
<th>Range</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>10.65</td>
<td>2</td>
<td>34 (1-35)</td>
<td>8.02</td>
</tr>
</tbody>
</table>

Note. N = 249. Missing data = 1 (0.4%).

Table 4.10 displays a frequency distribution based on teachers' principal musical instrument choice. Nine instrument selections were combined to form five common groupings. Within these groupings, instruments included:
(a) Piccolo (1) and Flute (20), (b) Bb clarinet (35) and Bass clarinet (1),
(c) Saxophone (18), Alto saxophone (4), and Tenor saxophone (2), (d) Baritone (1) and Euphonium (6), and (e) Guitar (5) and Bass guitar (1). In cases where respondents identified more than one instrument, their first selection was chosen as their principal instrument.

Piano/Keyboards (18.6%) was the most frequently chosen principal instrument of respondents. Thirty-nine teachers (15.8%) chose Trumpet/Cornet; 36 (14.6%) chose Bb or Bass Clarinet; 24 (9.7%) chose Saxophone; 21 (8.5%) chose Piccolo/Flute; 19 (7.7%) chose French Horn, and 10 (4.0%) chose Trombone as their principal musical instrument. More teachers chose voice (3.6%) as their principal "instrument" than Tuba (2.8%), Baritone/Euphonium (2.8%), Percussion (2.8%), Oboe (2.0%), or Bassoon (0.8%). Instruments not associated with traditional band instrumentation, such as the violin were chosen by five (2.0%) respondents while Pipe Organ was chosen by three (1.2%).
<table>
<thead>
<tr>
<th>Instrument</th>
<th>f</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Piano/Keyboards</td>
<td>46</td>
<td>18.6</td>
</tr>
<tr>
<td>Trumpet/Cornet</td>
<td>39</td>
<td>15.8</td>
</tr>
<tr>
<td>Bb Clarinet/Bass Clarinet</td>
<td>36</td>
<td>14.6</td>
</tr>
<tr>
<td>Saxophone</td>
<td>24</td>
<td>9.7</td>
</tr>
<tr>
<td>Piccolo/Flute</td>
<td>21</td>
<td>8.5</td>
</tr>
<tr>
<td>French Horn</td>
<td>19</td>
<td>7.7</td>
</tr>
<tr>
<td>Trombone</td>
<td>10</td>
<td>4.0</td>
</tr>
<tr>
<td>Voice (^{a})</td>
<td>9</td>
<td>3.6</td>
</tr>
<tr>
<td>Tuba</td>
<td>7</td>
<td>2.8</td>
</tr>
<tr>
<td>Percussion</td>
<td>7</td>
<td>2.8</td>
</tr>
<tr>
<td>Baritone/Euphonium</td>
<td>7</td>
<td>2.8</td>
</tr>
<tr>
<td>Guitar/Bass Guitar</td>
<td>6</td>
<td>2.4</td>
</tr>
<tr>
<td>Oboe</td>
<td>5</td>
<td>2.0</td>
</tr>
<tr>
<td>Violin</td>
<td>5</td>
<td>2.0</td>
</tr>
<tr>
<td>Pipe Organ</td>
<td>3</td>
<td>1.2</td>
</tr>
<tr>
<td>Bassoon</td>
<td>2</td>
<td>0.8</td>
</tr>
<tr>
<td>String Bass</td>
<td>1</td>
<td>0.4</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td>247</td>
<td>100.0</td>
</tr>
</tbody>
</table>

*Note. N = 249. Missing data = 2 (0.8%).

\(^{a}\)In this context, voice is identified as an instrument category.

Table 4.10: Respondent’s Principal Musical Instrument
Table 4.11 shows a frequency distribution by instrument family. When grouped as instrumental families, Woodwind (35.6%), Brass (33.2%), and Percussion (2.8%) instruments account for 71.7% of all the instruments chosen by music educators as their principal instrument. Piano/Keyboards (19.8%) was the third most frequently chosen grouping with Strings (4.9%), Voice (3.6%), and Percussion (2.8%) representing fourth, fifth, and sixth position respectively.

<table>
<thead>
<tr>
<th>Instrument Family</th>
<th>f</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Woodwind</td>
<td>88</td>
<td>35.6</td>
</tr>
<tr>
<td>Brass</td>
<td>82</td>
<td>33.2</td>
</tr>
<tr>
<td>Keyboard</td>
<td>49</td>
<td>19.8</td>
</tr>
<tr>
<td>Strings</td>
<td>12</td>
<td>4.9</td>
</tr>
<tr>
<td>Voice</td>
<td>8</td>
<td>3.6</td>
</tr>
<tr>
<td>Percussion</td>
<td>7</td>
<td>2.8</td>
</tr>
<tr>
<td>TOTAL</td>
<td>247</td>
<td>100.0</td>
</tr>
</tbody>
</table>

*Note. N = 249. Missing data = 2 (0.8%).
*aIn this context, voice is identified as an instrument category.

Table 4.11: Frequency Distribution by Instrument Family

The third section (Q8-12) of the Musical Instrument Selection Process survey asked respondents to describe their procedural and administrative practices relating to this selection process. Table 4.12 identifies the time of the year when musical instrument choices are made. The largest percentage of respondents indicated that musical instrument choices were made either “prior to fall classes”
(31.9%) or during the “first week of fall classes” (29.0%). One hundred fifty-four respondents (62.1%) indicated that musical instrument choices were made within the first three weeks of fall classes. Twenty-six teachers (10.5%) made more than one choice, indicating that in their school setting instrument choices were made at more than one time. Ten (4.0%) indicated that musical instrument choices were made both “prior to fall classes” and during the “first week of fall classes.” Eleven teachers (4.4%) indicated that, within their setting, instrument choices were made at some other time than those stipulated in the question.

Eleven respondents (4.4%) chose to reply to the “other” category. A number of teachers chose to elaborate on the selections they made. Some stated reasons why instruments were chosen at specific times while others indicated that they had selected more than one option. Respondents who indicated that instrument choices were made at times other than those indicated in the survey, stated that they did so either in the fourth or fifth week of fall classes or during the second term (winter semester).
At the end of the year, prior to fall classes & 79 & 31.9 \\
During the summer months & 4 & 1.6 \\
First week of fall classes & 72 & 29.0 \\
Second week of fall classes & 46 & 18.5 \\
Third week of fall classes & 36 & 14.5 \\
Other & 11 & 4.4 \\
TOTAL & 248 & 100.0

*Note.* $N = 249$. Missing data = 1 (0.4%).

Table 4.12: Time Period When Musical Instrument Choices are Made

Table 4.13 indicates the frequency with which respondents considered feeder school visits/performances an aspect of their instrument selection process. One hundred fifty-two teachers (61.5%) stated that they were involved in feeder school visits/performances as one facet of their instrument selection process.

<table>
<thead>
<tr>
<th>Visits/Performances</th>
<th>$f$</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>No</td>
<td>95</td>
<td>38.5</td>
</tr>
<tr>
<td>Yes</td>
<td>152</td>
<td>61.5</td>
</tr>
<tr>
<td>TOTAL</td>
<td>247</td>
<td>100.0</td>
</tr>
</tbody>
</table>

*Note.* $N = 249$. Missing data = 2 (0.8%).

Table 4.13: Feeder School Visits/Performances
Table 4.14 shows the frequency with which students see demonstrations of individual instruments during feeder school visits/performances. Of the 155 teachers who identified their degree of involvement in feeder school visitations, 73 (47.1%) indicated that students “frequently” or “always” saw demonstrations of individual instruments during such activities. Sixty respondents (38.7%) indicated that students “sometimes” saw demonstrations and 22 teachers (14.2%) indicated that students “never” or “rarely” saw demonstrations of individual instruments during feeder school visits/performances.

<table>
<thead>
<tr>
<th>Frequency of Student Viewing</th>
<th>f</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Never</td>
<td>4</td>
<td>2.6</td>
</tr>
<tr>
<td>Rarely</td>
<td>18</td>
<td>11.6</td>
</tr>
<tr>
<td>Sometimes</td>
<td>60</td>
<td>38.7</td>
</tr>
<tr>
<td>Frequently</td>
<td>30</td>
<td>19.4</td>
</tr>
<tr>
<td>Always</td>
<td>43</td>
<td>27.7</td>
</tr>
<tr>
<td>TOTAL</td>
<td>155a</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Note. N = 249. Missing data = 94 (37.8%). M = 3.58. SD = 1.09.

aThree respondents who answered “No” to the first part of question 9 also responded to the second portion of the question.

Table 4.14: Frequency With Which Students See Demonstrations of Individual Instruments

Table 4.15 identifies the frequency with which forms of testing/evaluation are used as a part of the instrument selection process. Teachers were asked to indicate their responses to a five-item scale (indicating relative strength of the reasons) ranging from “never” (1) to “always” (5). The mode, mean, and standard deviation is given for each subcategory item identified in question 10.
The item receiving the highest mean (3.59) was "analysis of students' physical characteristics." The lowest mean (1.13) was associated with the subcategory item "IQ Test." Teachers identified "analysis of students' physical characteristics," "playing test (fittings)", and "rhythm 'echo' test" as being the three most commonly used forms of testing/evaluation during the instrument selection process. Respondents indicated that, on average, they "never" used specific forms of testing such as standardized IQ tests or music tests by Leblanc, Gordon, or Seashore. "Physical coordination test[s]," "music theory test[s]," and "academic record[s]" were "rarely" or "never" used.

In order to gain a complete understanding of the data, it should be noted that all subcategory items with a mode of one were positively skewed (with more extreme scores at the higher end of the distribution) to varying degrees. With the exception of "rhythm 'echo' test", all subcategory items with a mode of three or higher were negatively skewed (with more extreme scores at the lower end of the distribution).

Fifty-four respondents (21.7%) chose to reply to the "other" category. Eight teachers indicated that they used a variety of tests other than those listed in question 10 in the questionnaire. These included the (a) St. John's Music Test, (b) King Instrument Test, (c) Selmer Music Survey, (d) "In Tune" (UMI), and (e) Physical Adaptability Test and Music Aptitude Test from The Band and Orchestra Handbook. Thirteen respondents identified other forms of testing/evaluation which included teacher-designed tests as well as an evaluation of student's (a) past musical experience or background, (b) personality, (c) piano background, (c) desire to play an instrument, and (d) musical interests.
<table>
<thead>
<tr>
<th>Test/Evaluation</th>
<th>Response</th>
<th>Missing data (%)</th>
<th>mode</th>
<th>M</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Analysis of students' physical characteristics</td>
<td>243</td>
<td>6 (2.4)</td>
<td>5</td>
<td>3.59</td>
<td>1.28</td>
</tr>
<tr>
<td>Playing test (fittings)</td>
<td>242</td>
<td>7 (2.8)</td>
<td>4</td>
<td>3.31</td>
<td>1.36</td>
</tr>
<tr>
<td>Rhythm &quot;echo&quot; test</td>
<td>244</td>
<td>5 (2.0)</td>
<td>3</td>
<td>3.00</td>
<td>1.43</td>
</tr>
<tr>
<td>Aural test</td>
<td>242</td>
<td>7 (2.8)</td>
<td>3</td>
<td>2.90</td>
<td>1.35</td>
</tr>
<tr>
<td>Input from elementary music teacher</td>
<td>234</td>
<td>15 (6.0)</td>
<td>1</td>
<td>2.70</td>
<td>1.50</td>
</tr>
<tr>
<td>Music theory test</td>
<td>243</td>
<td>6 (2.4)</td>
<td>1</td>
<td>2.54</td>
<td>1.41</td>
</tr>
<tr>
<td>Physical coordination test</td>
<td>243</td>
<td>6 (2.4)</td>
<td>1</td>
<td>2.51</td>
<td>1.26</td>
</tr>
<tr>
<td>Academic record</td>
<td>240</td>
<td>9 (3.6)</td>
<td>1</td>
<td>2.20</td>
<td>1.26</td>
</tr>
<tr>
<td>Measures of Musical Talent</td>
<td>238</td>
<td>11 (4.4)</td>
<td>1</td>
<td>1.24</td>
<td>0.67</td>
</tr>
<tr>
<td>Musical Aptitude Profile</td>
<td>241</td>
<td>8 (3.2)</td>
<td>1</td>
<td>1.24</td>
<td>0.71</td>
</tr>
<tr>
<td>Instrument Timbre Preference Test</td>
<td>242</td>
<td>7 (2.8)</td>
<td>1</td>
<td>1.22</td>
<td>0.71</td>
</tr>
<tr>
<td>Leblanc Music Talent Quiz</td>
<td>242</td>
<td>7 (2.8)</td>
<td>1</td>
<td>1.14</td>
<td>0.52</td>
</tr>
<tr>
<td>IQ test</td>
<td>241</td>
<td>8 (3.2)</td>
<td>1</td>
<td>1.13</td>
<td>0.44</td>
</tr>
<tr>
<td><strong>OVERALL</strong></td>
<td></td>
<td></td>
<td></td>
<td>2.21</td>
<td>1.19</td>
</tr>
</tbody>
</table>

*Note. N = 249.*

*Number of responses per subcategory item.*

Table 4.15: Frequency With Which Forms of Testing/Evaluation Are Used
Table 4.16 identifies the frequency with which a variety of activities occur prior to making an instrument choice. Respondents were asked to indicate their responses to a five-item scale ranging from “never” (1) to “always” (5). The mode, mean, and standard deviation is given for each subcategory item identified in question 11. The item receiving the highest mean (4.47) was “look at a variety of instruments on display.” The lowest mean (3.66) was associated with the subcategory item “hear recorded performances of instruments.” All subcategory items identified in Table 4.16 are negatively skewed.

Twenty-two respondents chose to reply to the “other” category. Nineteen took this opportunity to clarify the nature of the activities which took place before instrument selection. These explanations related to the six activities presented in question 11. Three teachers indicated that their students had an opportunity to see videos of performers prior to making an instrument choice.
<table>
<thead>
<tr>
<th>Activities</th>
<th>Response</th>
<th>Missing data (%)</th>
<th>mode</th>
<th>M</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Look at a variety of instruments on display</td>
<td>244</td>
<td>5 (2.0)</td>
<td>5</td>
<td>4.47</td>
<td>0.78</td>
</tr>
<tr>
<td>Touch/hold a variety of instruments</td>
<td>244</td>
<td>5 (2.0)</td>
<td>5</td>
<td>4.19</td>
<td>0.95</td>
</tr>
<tr>
<td>View pictures/diagrams of musical instruments</td>
<td>243</td>
<td>6 (2.4)</td>
<td>5</td>
<td>4.10</td>
<td>1.09</td>
</tr>
<tr>
<td>Hear live performances of instruments</td>
<td>245</td>
<td>4 (1.6)</td>
<td>5</td>
<td>4.09</td>
<td>0.99</td>
</tr>
<tr>
<td>Produce a sound on a variety of instruments</td>
<td>244</td>
<td>5 (2.0)</td>
<td>5</td>
<td>3.86</td>
<td>1.15</td>
</tr>
<tr>
<td>Hear recorded performances of instruments</td>
<td>242</td>
<td>7 (2.8)</td>
<td>4</td>
<td>3.66</td>
<td>1.12</td>
</tr>
<tr>
<td>OVERALL</td>
<td></td>
<td></td>
<td></td>
<td>4.06</td>
<td>1.01</td>
</tr>
</tbody>
</table>

Note. N = 249.
*Number of responses per subcategory item.

Table 4.16: Frequency With Which Activities Occur Prior to Instrument Selection
Excluded Instruments

One of the research questions sought to ascertain how often certain instruments might be excluded from the selection process. Table 4.17 indicates the frequency with which teachers initially exclude specific instruments from the selection process. The instruments most often excluded were reported to be (a) piccolo (92.4%), (b) bassoon (78.7%), (c) baritone saxophone (73.9%), (d) oboe (58.6%), (e) Bass clarinet (51.0%), (f) drums and mallet instruments (33.7%), (g) tenor saxophone (31.3%), (h) alto saxophone (24.5%), and (i) (19.3%) drums (only). Respondents initially excluded a number of instruments from the selection process because they were “not available” or were considered “not an appropriate instrument for a beginner” to learn.

Seventeen respondents chose to reply to the “other” category in Q12(a). Nine explained why they did, or did not, exclude specific instruments. For example, one teacher stated “If a child desperately wanted to play bassoon and is willing to practice and work hard, I have no problems starting them on some of the more difficult instruments.” In addition to the musical instruments listed in the question itself, eight teachers reported that they also excluded (a) guitar or bass guitar, (b) drum kit, and (c) keyboard. They also indicated that the criteria for allowing students to select certain instruments included (a) a strong desire, (b) proper behavior, (c) owning an instrument, (d) taking private lessons, and (e) piano experience. Another educator stated that they “Allow students to play any instrument if they are taking private lessons on that instrument.”
<table>
<thead>
<tr>
<th>Instrument</th>
<th>Frequency of exclusion (%)</th>
<th>Missing data (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Piccolo</td>
<td>230 (92.4)</td>
<td>19 (7.6)</td>
</tr>
<tr>
<td>Bassoon</td>
<td>196 (78.7)</td>
<td>53 (21.3)</td>
</tr>
<tr>
<td>Baritone saxophone</td>
<td>184 (73.9)</td>
<td>65 (26.1)</td>
</tr>
<tr>
<td>Oboe</td>
<td>146 (58.6)</td>
<td>103 (41.4)</td>
</tr>
<tr>
<td>Bass clarinet</td>
<td>127 (51.0)</td>
<td>122 (49.0)</td>
</tr>
<tr>
<td>Drums and Mallet</td>
<td>84 (33.7)</td>
<td>165 (66.3)</td>
</tr>
<tr>
<td>Tenor saxophone</td>
<td>78 (31.3)</td>
<td>171 (68.7)</td>
</tr>
<tr>
<td>French Horn</td>
<td>74 (29.7)</td>
<td>175 (70.3)</td>
</tr>
<tr>
<td>Alto saxophone</td>
<td>61 (24.5)</td>
<td>188 (75.5)</td>
</tr>
<tr>
<td>Drums (only)</td>
<td>48 (19.3)</td>
<td>201 (80.7)</td>
</tr>
<tr>
<td>Tuba</td>
<td>41 (16.5)</td>
<td>208 (83.5)</td>
</tr>
<tr>
<td>Mallet keyboard (only)</td>
<td>21 (8.4)</td>
<td>228 (91.6)</td>
</tr>
<tr>
<td>Baritone</td>
<td>16 (6.4)</td>
<td>233 (93.6)</td>
</tr>
<tr>
<td>Trombone</td>
<td>3 (1.2)</td>
<td>246 (98.8)</td>
</tr>
<tr>
<td>Bb clarinet</td>
<td>2 (0.8)</td>
<td>247 (99.2)</td>
</tr>
<tr>
<td>Flute</td>
<td>1 (0.4)</td>
<td>248 (99.6)</td>
</tr>
<tr>
<td>Trumpet</td>
<td>1 (0.4)</td>
<td>248 (99.6)</td>
</tr>
</tbody>
</table>

Note. N = 249.

Table 4.17: Rank Order of Frequency With Which Instruments Are Initially Excluded

Respondents initially excluded instruments for a variety of reasons. Of the 226 educators who indicated reasons why they initially excluded piccolo, 133 (58.8%) of these did so because they felt it was "not an appropriate instrument for a beginner." It should also be noted that 37.2% of teachers indicated that a piccolo was "not available" for students to choose from.

Of the 188 respondents who gave reasons why they initially excluded bassoon, 100 (53.2%) indicated that bassoon was "not available" to students as an instrument choice. They also indicated that this instrument was excluded because
(a) it was “too expensive” (28.2%), (b) it was “not an appropriate instrument for a beginner” (23.9%), and (c) the teacher was “less familiar” with this instrument” (7.4%).

One hundred eighty respondents identified reasons why they initially excluded baritone saxophone. Seventy-five teachers (41.7%) indicated that baritone saxophone was primarily excluded because it was “too large/heavy.” A significant number also indicated that they felt that this instrument should be excluded because it was (a) “not an appropriate instrument for a beginner” (26.1%), (b) “not available” (25.6%), and (c) it was considered to be “too expensive” (17.8%).

One hundred forty respondents identified reasons for initially excluding oboe. Of these, 38.6% indicated that oboe was excluded from the selection process because school owned instruments were “not available.” Teachers also indicated that they believed that this instrument was (a) “too difficult to learn at this stage” (32.9%), (b) “not an appropriate instrument for a beginner” (32.1%), and (c) “too expensive to rent, buy, or maintain” (17.1%). Nine (6.4%) indicated that they were “less familiar” with this instrument.

One hundred sixteen respondents identified reasons for initially excluding bass clarinet. Of these, 37.9% indicated that the primarily reason was because they believed it was “not an appropriate instrument for a beginner.” As was the case with other musical instruments, 26.7% indicated that bass clarinet was “not available” to students. In addition, 22.4% indicated that they excluded this instrument because they considered it to be “too large/heavy.”
Sixty respondents stated reasons for excluding alto saxophone, 76 gave reasons for excluding tenor saxophone and 72 provided reasons for excluding percussion (drums and mallets). The primary reason for excluding both alto (85%) and tenor (60.5%) saxophone was because they were considered to be “too popular with students.” A relatively small number indicated that alto (15%) and tenor (18.4%) saxophones were “not available” as an instrumental choice for their students. Forty-seven (65.3%) of 72 respondents indicated that percussion instruments (drums and mallets) were excluded from the selection process primarily because they felt that these instruments were “too popular with students.” Of the 45 teachers who gave reasons for initially excluding drums (only), 37 (82.2%) stated that they did so because they felt that these instruments were also “too popular with students.”

Sixty-nine respondents identified reasons for initially excluding French horn from the instrument selection process. Of these, 30 (43.5%) indicated that French horn was excluded because it was considered “too difficult to learn at this stage.” Twenty-one (30.4%) also indicated that this instrument was “not available.”

Of the 40 respondents who gave reasons for excluding tuba, 22 (55%) considered it to be “too large/heavy” for students. Twelve (30%) indicated that this instrument was “too expensive to rent, buy, or maintain.” The same number (12) indicated that this instrument was “not available” for their students to choose from.

Fourteen respondents gave reasons why they excluded baritone. The main reason for excluding baritone was that it was “not available” (50%). Both
saxophone and percussion were excluded due to the fact that they were considered to be "too popular with students." No reasons were given as to why flute, clarinet, and trumpet were initially excluded from the instrument selection process.

Fifty-nine respondents chose to reply to the "other" category in Q12(b). They identified a wide variety of additional reasons for initially excluding instruments. As one teacher stated, "Band music is not varied enough at the beginning level." Nineteen indicated that they wanted their students to learn another instrument first. Thirteen respondents stated that they encourage their percussion students to become familiar on all percussion instruments and not drums exclusively. Some educators indicated a desire to begin students on a wind instrument in order "to assure that all students understand pitch and not just rhythm." They also stated that discipline, private lessons, and the limitations of beginning band literature were factors to be considered when initially excluding musical instruments from the selection process.

The Roles and Influences of Teachers and Music Store Personnel

The fourth section in the Musical Instrument Selection Process survey dealt with the roles and influence of teachers and music store personnel during the instrument selection process. Table 4.18 identifies what teachers believed their role to be during this process. Approximately half of the respondents (49.6%) indicated that "students are guided in making their instrument choices" while 45.6% stated that "students are guided in making their choice from a limited number of instruments."
Based on the frequency with which teachers indicated they initially excluded instruments from the selection process (Q12), it is possible that there may have been confusion about the wording of parts two and three of question 13. Part two stated that teachers guide students in making their instrumental choices with no mention of limiting the number of instruments. This statement, relating to teacher's role, conflicts with the stated frequencies with which teachers initially excluded certain instruments.

<table>
<thead>
<tr>
<th>Teachers Role/Influence</th>
<th>f</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Students are guided in making their instrument choices</td>
<td>123</td>
<td>49.6</td>
</tr>
<tr>
<td>Students are guided in making their choice from a limited number of instruments</td>
<td>113</td>
<td>45.6</td>
</tr>
<tr>
<td>No attempt is made to influence or guide students in making their instrument choices</td>
<td>8</td>
<td>3.2</td>
</tr>
<tr>
<td>The appropriate instrument is chosen for the students</td>
<td>4</td>
<td>1.6</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td>248</td>
<td>100.0</td>
</tr>
</tbody>
</table>

*Note. N = 249. Missing data = 1 (0.4%).*

Table 4.18: Teacher's Role During the Selection Process (first reason)
Ten respondents (4.0%) chose two statements to define their role during this process. Four teachers (1.6%) indicated as their second selection that "students are guided in making their choices from a limited number of instruments" while five (2.0%) stated that "the appropriate instrument is chosen for the students.” Table 4.19 presents these additional frequencies.

<table>
<thead>
<tr>
<th>Teachers Role/Influence</th>
<th>f</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>The appropriate instrument is chosen for the students</td>
<td>5</td>
<td>50.0</td>
</tr>
<tr>
<td>Students are guided in making their choices from a limited number of instruments</td>
<td>4</td>
<td>40.0</td>
</tr>
<tr>
<td>Students are guided in making their instrument choices</td>
<td>1</td>
<td>10.0</td>
</tr>
<tr>
<td>No attempt is made to influence or guide students (in making their instrument choices)</td>
<td>0</td>
<td>0.0</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td>10</td>
<td>100.0</td>
</tr>
</tbody>
</table>

*Note. N = 249. Missing data = 239 (96.0%).*

Table 4.19: Teacher's Role During the Selection Process (second reason)

Table 4.20 shows the reason why and frequency with which teachers encourage students to choose specific instruments. Teachers were asked to indicate their responses to a five-item scale (indicating relative strength of the reasons) ranging from “never” (1) to “always” (5). The resulting means from each category suggest that overall respondents encouraged students to choose
specific instruments "rarely" for financial considerations, "sometimes" due to physical considerations, and "frequently" in order to acquire a balanced instrumentation.

More specifically, 38.5% of respondents indicated that they "never" encouraged students to select an instrument due to financial reasons. However, 34.4% indicated that they "sometimes" encouraged students to select an instrument due to financial reasons, resulting in a positively skewed distribution (with more extreme scores at the higher end of the distribution).

One hundred twenty-six respondents (51.2%) stated that "sometimes" physical considerations were a reason to encourage students to choose a specific instrument. Teachers were fairly evenly divided as to whether they "frequently" (38.5%) or "always" (34.0%) encouraged students to choose a specific instrument in order to achieve a balanced instrumentation.

Thirty-seven respondents chose to reply to the "other" category. Eleven indicated that students were encouraged to choose specific instruments based upon availability. They identified additional reasons for encouraging students to choose a musical instrument relating to (a) interest, (b) physical makeup, (c) musical and academic ability, (d) suitability, (e) previous musical experience, (f) attitude and (g) behavior.
Table 4.20: Frequency Reason is Used to Encourage Students to Select a Musical Instrument

Question 14 asked teachers to identify which instruments they encouraged students to choose based on financial, physical, and instrumentation considerations. Given the complexity of the question itself and the multiple factors available in the response section, it is not clear from the data whether students were encouraged or discouraged by their teachers to choose specific instruments.

Forty-five respondents identified a variety of instruments which they encouraged students to choose because of financial considerations (see Table 4.21). This resulted in 85 responses. Twenty-seven responses (31.8%) identified members of the saxophone family (alto, tenor, baritone) while 14 respondents (31.1%) indicated the general category of saxophone.

Table 4.21 also identified the instruments that students were encouraged (and possibly discouraged) to choose due to physical considerations. Of the 107 teachers who responded to this portion of the question, 77 (72.0%) indicated that
physical qualities were a consideration when selecting tuba. Teachers were also asked to indicate which instruments they encouraged students to choose because of financial, physical, or instrumentation considerations. This resulted in both specific instruments as well as general categories being identified. Of the 181 responses, 111 (61.3%) can be included under the broader category of low and large brass while 57 responses (31.5%) fall under the category of low and large woodwinds.

Finally, Table 4.21 shows the frequency with which students are encouraged to choose specific instruments in an attempt to achieve a balanced instrumentation. Ninety teachers chose to identify instruments resulting in 173 responses. Seventy-seven responses (44.5%) can be identified with the broader category of low and large brass. More specifically, respondents indicated that trombone (23.3%), tuba (25.6%), and those instruments associated with the broad category of low brass (24.4%) were the instruments or categories which students were encouraged to choose in order to achieve a balanced ensemble.
<table>
<thead>
<tr>
<th>Instrument</th>
<th>Financial</th>
<th>Physical</th>
<th>Balance</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>f(%)</td>
<td>f(%)</td>
<td>f(%)</td>
</tr>
<tr>
<td>Piccolo</td>
<td>-</td>
<td>-</td>
<td>1 (1.1)</td>
</tr>
<tr>
<td>Flute</td>
<td>5 (11.1)</td>
<td>1 (0.9)</td>
<td>6 (6.7)</td>
</tr>
<tr>
<td>Oboe</td>
<td>4 (8.9)</td>
<td>-</td>
<td>2 (2.2)</td>
</tr>
<tr>
<td>Bb Clarinet</td>
<td>7 (15.6)</td>
<td>2 (1.9)</td>
<td>10 (11.1)</td>
</tr>
<tr>
<td>Bass Clarinet</td>
<td>3 (6.7)</td>
<td>4 (3.7)</td>
<td>1 (1.1)</td>
</tr>
<tr>
<td>Bassoon</td>
<td>5 (11.1)</td>
<td>5 (4.7)</td>
<td>2 (2.2)</td>
</tr>
<tr>
<td>Alto saxophone</td>
<td>5 (11.1)</td>
<td>-</td>
<td>7 (7.8)</td>
</tr>
<tr>
<td>Tenor saxophone</td>
<td>5 (11.1)</td>
<td>19 (17.8)</td>
<td>-</td>
</tr>
<tr>
<td>Baritone saxophone</td>
<td>3 (6.7)</td>
<td>29 (27.1)</td>
<td>2 (2.2)</td>
</tr>
<tr>
<td>Trumpet/Cornet</td>
<td>3 (6.7)</td>
<td>1 (0.9)</td>
<td>6 (6.7)</td>
</tr>
<tr>
<td>French Horn</td>
<td>6 (13.3)</td>
<td>3 (2.8)</td>
<td>9 (10.0)</td>
</tr>
<tr>
<td>Baritone</td>
<td>6 (13.3)</td>
<td>11 (10.3)</td>
<td>14 (15.6)</td>
</tr>
<tr>
<td>Trombone</td>
<td>1 (2.2)</td>
<td>18 (8.9)</td>
<td>21 (23.3)</td>
</tr>
<tr>
<td>Tuba</td>
<td>6 (13.3)</td>
<td>77 (72.0)</td>
<td>23 (25.6)</td>
</tr>
<tr>
<td>Low Brass</td>
<td>2 (4.4)</td>
<td>2 (1.9)</td>
<td>22 (24.4)</td>
</tr>
<tr>
<td>Large Brass</td>
<td>4 (8.9)</td>
<td>1 (0.9)</td>
<td>1 (1.1)</td>
</tr>
<tr>
<td>Brass</td>
<td>-</td>
<td>1 (0.9)</td>
<td>3 (3.3)</td>
</tr>
<tr>
<td>Euphonium</td>
<td>2 (4.4)</td>
<td>2 (1.9)</td>
<td>-</td>
</tr>
<tr>
<td>Brass instruments</td>
<td>-</td>
<td>-</td>
<td>2 (2.2)</td>
</tr>
<tr>
<td>Low Woodwinds</td>
<td>1 (2.2)</td>
<td>-</td>
<td>5 (5.6)</td>
</tr>
<tr>
<td>String Bass</td>
<td>-</td>
<td>1 (0.9)</td>
<td>-</td>
</tr>
<tr>
<td>Percussion</td>
<td>2 (4.4)</td>
<td>-</td>
<td>9 (10.0)</td>
</tr>
<tr>
<td>Drums</td>
<td>-</td>
<td>-</td>
<td>4 (4.4)</td>
</tr>
<tr>
<td>Saxophone</td>
<td>14 (31.1)</td>
<td>3 (2.8)</td>
<td>15 (16.7)</td>
</tr>
<tr>
<td>All instruments</td>
<td>1 (2.2)</td>
<td>1 (0.9)</td>
<td>8 (8.9)</td>
</tr>
</tbody>
</table>

TOTAL responses: 85\(^{e}\) 181 173

Note. \(N = 249\).

\(^{a}\)Number of respondents = 45. Missing data = 204 (81.9%).

\(^{b}\)Number of respondents = 107. Missing data = 142 (57.0%).

\(^{c}\)Number of respondents = 90. Missing data = 159 (63.9%).

\(^{d}\)Percentage of respondents who chose the instrument.

\(^{e}\)Number of responses. Because respondents were able to choose more than one instrument, responses exceeded the total number of respondents.

Table 4.21: Frequency Reason is Used to Encourage Students to Select Specific Musical Instruments
Music Store Personnel Involvement

The retail music industry, in particular music stores that sell and rent instruments, historically have been involved to some degree in the instrument selection process. One of the research questions sought to ascertain the level of this involvement.

Table 4.22 indicates the extent to which music store personnel demonstrate instruments to students within school settings. Slightly more than three-quarters of respondents (77.0%) stated that music store personnel were not involved in demonstrating instruments to students in their school.

<table>
<thead>
<tr>
<th>Music Store Personnel Involvement</th>
<th>f</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>No</td>
<td>188</td>
<td>77.0</td>
</tr>
<tr>
<td>Yes</td>
<td>56</td>
<td>23.0</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td>244</td>
<td>100.0</td>
</tr>
</tbody>
</table>

*Note. N = 249. Missing data = 5 (2.0%).*

Table 4.22: Extent to Which Music Store Personnel Demonstrate Instruments to Students

Instrument Preferences

In the fifth section (Q16-21) of the Musical Instrument Selection Process survey, respondents were asked to identify boys' and girls' instrumental preferences and what they believed were their reasons for choosing or wishing to change specific instrument choices. Table 4.23 shows the first, second, and third musical instrument preferences of boys as perceived by their teachers.
When asked what they thought boys' first, second, and third instrument choices would be, the majority of respondents indicated that preferences were limited to two instruments: trumpet and saxophone. Respondents chose Trumpet/Cornet as both their first (39.7%) and third (26.9%) choice. As their second choice they selected saxophone (32.2%).

It should be noted that 21.2% of respondents selected trumpet as boys' second choice. With respect to the third perceived choice of boys', 24.2% chose saxophone. In the following table, the same instrument was chosen for both the first and third choice. Instrument selection for each category was based on the highest percentage of responses.
Table 4.23: Boys’ Instrument Preferences (as Perceived by Teachers)

<table>
<thead>
<tr>
<th>Choices</th>
<th>Instrument</th>
<th>f</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>First Choice</td>
<td>Trumpet/Cornet</td>
<td>94 (237)&lt;sup&gt;a&lt;/sup&gt;</td>
<td>39.7</td>
</tr>
<tr>
<td>Second Choice</td>
<td>Saxophone&lt;sup&gt;b&lt;/sup&gt;</td>
<td>76 (236)</td>
<td>32.2</td>
</tr>
<tr>
<td>Third Choice</td>
<td>Trumpet/Cornet</td>
<td>59 (219)</td>
<td>26.9</td>
</tr>
</tbody>
</table>

Note. N = 249. Missing data for First choice = 12 (4.8%); for Second choice = 13 (5.2%); for Third choice = 30 (12.0%).
<sup>a</sup>Figures in parenthesis identify the total number of respondents who chose to answer this subcategory item.
<sup>b</sup>The responses from teachers who indicated either “saxophone” (n = 56; 23.7%), “alto saxophone,” (n = 16; 6.8%) or “tenor saxophone,” (n = 4; 1.7%) were combined and categorized as Saxophone.

Table 4.24: Instrument Believed to Be Least Preferred by Boys

<table>
<thead>
<tr>
<th>Instrument</th>
<th>f</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flute</td>
<td>208 (231)&lt;sup&gt;a&lt;/sup&gt;</td>
<td>90.0</td>
</tr>
</tbody>
</table>

Note. N = 249. Missing data = 18 (7.2%).
<sup>a</sup>Figures in parenthesis identify the total number of respondents who chose to answer this subcategory item.
Table 4.25 shows the first, second, and third musical instrument preferences of girls as perceived by their teachers. Teachers identified flute (62.3%) as the first choice and clarinet (58.5%) as the second choice. They selected saxophone as the third choice (37.4%). It should also be noted that for the perceived first choice of girls, 28.4% of respondents selected clarinet and for their perceived second choice 27.1% they chose flute. However, 33.8% did indicate trumpet as girls' third choice for a musical instrument. Frequency counts indicate that teachers believe that girl's instrumental preferences were flute, clarinet, or saxophone respectively. The vast majority of teachers indicated that flute and clarinet would be the first choice of girls.

In each of the three choices, teachers' perceived instrument preferences for girls represented a narrower range of instruments than that for boys. Generally, teachers believe that boys prefer instruments from both the woodwind and brass instrument families, and believe girls' preferences to be primarily from the woodwind family.
Choices | Instrument | f | %
--- | --- | --- | ---
First Choice | Flute | 147 (236)
Second Choice | Clarinet | 138 (236) | 58.5
Third Choice | Saxophone | 82 (219) | 37.4

Note. N = 249. Missing data for First choice = 13 (5.2%); for Second choice = 13 (5.2%); for Third choice = 30 (12.0%).

Figures in parenthesis identify the total number of respondents who chose to answer this subcategory item.

The responses from teachers who indicated either "alto saxophone," (n = 29; 13.2%) or "saxophone," (n = 53; 24.2%) were combined and categorized as Saxophone.

Table 4.25: Girls' Instrument Preferences as Perceived by Teachers

Table 4.26 shows the instrument which teachers believe to be least preferred by girls. One hundred three respondents (46.4%) indicated that the tuba was the instrument least preferred by girls. It should be noted that 7.7% chose the general category of "low brass" as the instrument least preferred by girls. With this in mind, 19.8% of respondents indicated trombone, 5.9% identified baritone. Two (0.9%) indicated euphonium, while 6.8% believed trumpet to be the least preferred instrument by girls. Two (0.9%) chose the general category of "large brass" while one (0.5%) stated that "brass" instruments in general were least preferred by girls. This represents an instance of potential ambiguity of the survey instrument itself in which teachers could indicate specific instruments or general instrument categories.
One hundred eighty-one responses (81.5%) identified low and large brass instruments as being least preferred by girls. Over 88% of responses (88.7%) identified brass instruments as being least preferred by girls.

Some of the respondents wrote responses in the margins to questions 16 and 19 indicating that they felt that there was “very little gender discrimination” due to “boys and girls wanting all instruments.” One respondent stated that these were “not valid questions anymore,” but these data suggest otherwise.

<table>
<thead>
<tr>
<th>Instrument</th>
<th>f</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tuba</td>
<td>103 (222)a</td>
<td>46.4</td>
</tr>
</tbody>
</table>

Note. N = 249. Missing data = 27 (10.8%).

*a*Figures in parenthesis identify the total number of respondents who chose to answer this subcategory item.

Table 4.26: Instrument Believed to Be Least Preferred by Girls

One of the research questions sought to determine precisely why students select certain instruments. Table 4.27 shows the degree to which a variety of reasons influence students’ instrumental choices. For each reason teachers were asked to indicate their responses to a five-item scale (indicating relative strength of the reasons) ranging from “very weak” (1) to “very strong” (5). The mode, mean, and standard deviation is given for each subcategory item found in question 20. Teachers identified “friends” as having the strongest degree of influence on students’ instrument choices. This item received the highest mean
(4.08) while "cost of the instrument," with a mean of 2.08, was identified as having the least degree of influence on students' instrument choices. With a mean of 3.69, teachers acknowledged that the "sound of the instrument" was a "moderate" influence on students instrumental choices. Of the nine reasons presented in question 20, five were positively skewed (with more extreme scores at the higher end of the distribution) while four were negatively skewed (with more extreme scores at the lower end of the distribution).

Forty-seven respondents chose to reply to the "other" category. Teachers listed a variety of reasons which they believed influenced a student's instrument choice. The most prominent of these related to (a) the influence of the media, (b) student's perception of what is "cool" or popular, (c) whether a student already owns an instrument, and (d) prior musical experience. Teachers also identified (a) initial success, (b) band teacher's influence, (c) performing artists (i.e., Kenny G.), (d) perceived degree of difficulty of the instrument, (e) "hand's on" opportunities, and (f) transportability as influencing students' choices. However, they did not indicate the strength of their response.
## Table 4.27: Rank Ordering of The Degree to Which Reasons Influence Students’ Instrument Choices

<table>
<thead>
<tr>
<th>Reasons</th>
<th>Response&lt;sup&gt;a&lt;/sup&gt;</th>
<th>Missing data (%)</th>
<th>mode</th>
<th>$M$</th>
<th>$SD$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Friends</td>
<td>245</td>
<td>4 (1.6)</td>
<td>4</td>
<td>4.08</td>
<td>0.79</td>
</tr>
<tr>
<td>The sound of the instrument</td>
<td>245</td>
<td>4 (1.6)</td>
<td>4</td>
<td>3.69</td>
<td>0.84</td>
</tr>
<tr>
<td>Relatives</td>
<td>245</td>
<td>4 (1.6)</td>
<td>4</td>
<td>3.65</td>
<td>0.79</td>
</tr>
<tr>
<td>Size/weight of an instrument</td>
<td>244</td>
<td>5 (2.0)</td>
<td>3</td>
<td>3.52</td>
<td>0.85</td>
</tr>
<tr>
<td>Easy to learn to play</td>
<td>242</td>
<td>7 (2.8)</td>
<td>3</td>
<td>3.33</td>
<td>1.01</td>
</tr>
<tr>
<td>Availability of a school instrument</td>
<td>242</td>
<td>7 (2.8)</td>
<td>3</td>
<td>3.18</td>
<td>1.19</td>
</tr>
<tr>
<td>School performing ensembles</td>
<td>239</td>
<td>10 (4.0)</td>
<td>3</td>
<td>2.99</td>
<td>1.00</td>
</tr>
<tr>
<td>Elementary classroom teacher</td>
<td>236</td>
<td>13 (5.2)</td>
<td>3</td>
<td>2.28</td>
<td>1.02</td>
</tr>
<tr>
<td>Cost of an instrument</td>
<td>241</td>
<td>8 (3.2)</td>
<td>1</td>
<td>2.08</td>
<td>1.18</td>
</tr>
<tr>
<td>OVERALL</td>
<td></td>
<td></td>
<td></td>
<td>3.20</td>
<td>0.96</td>
</tr>
</tbody>
</table>

Note. $N = 249$.

<sup>a</sup>Number of responses per subcategory item.
Table 4.28 identifies five reasons why students may wish to change to another instrument. Respondents were asked to indicate their responses to a five-item scale (indicating relative strength of the responses) ranging from “never” (1) to “always” (5). The mode, mean, and standard deviation is given for each subcategory item found in question 21.

The highest mean (3.58), within the five subcategories, was associated with the statement “the instrument is thought to be too difficult to play.” Respondents indicated that students “rarely” (2) wish to change to another instrument because they did “not like the sound of the instrument.” The mean for this subcategory item was 2.41 with a standard deviation of .80. Reasons relating to playing difficulty and popularity were negatively skewed, whereas reasons relating to size/weight, peer influence, and sound were positively skewed.

Thirty-nine teachers chose to reply to the “other” category. They stated that the following reasons are given by students who wish to change to another instrument: (a) parental influence, (b) boredom, (c) difficulty in producing a proper sound, (d) instrument is not challenging enough, (e) lack of commitment, (f) lack of confidence, and (g) cost. Two respondents indicated that few or no changes were allowed.
<table>
<thead>
<tr>
<th>Reasons</th>
<th>Response</th>
<th>Missing data (%)</th>
<th>mode</th>
<th>M</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Instrument is thought to be too difficult to play</td>
<td>243</td>
<td>6 (2.4)</td>
<td>4</td>
<td>3.58</td>
<td>0.74</td>
</tr>
<tr>
<td>Student wants to play an instrument his/her friend is playing</td>
<td>242</td>
<td>7 (2.8)</td>
<td>3</td>
<td>3.24</td>
<td>0.79</td>
</tr>
<tr>
<td>Size/weight of the instrument</td>
<td>242</td>
<td>7 (2.8)</td>
<td>3</td>
<td>3.10</td>
<td>0.76</td>
</tr>
<tr>
<td>Not believed to be a popular instrument</td>
<td>242</td>
<td>7 (2.8)</td>
<td>3</td>
<td>2.68</td>
<td>0.85</td>
</tr>
<tr>
<td>Does not like the sound of the instrument</td>
<td>241</td>
<td>8 (3.2)</td>
<td>2</td>
<td>2.41</td>
<td>0.80</td>
</tr>
<tr>
<td><strong>OVERALL</strong></td>
<td></td>
<td></td>
<td></td>
<td>3.00</td>
<td>0.79</td>
</tr>
</tbody>
</table>

*Note. N = 249.*

*aNumber of responses per subcategory item.*

Table 4.28: The Rank Ordering of Perceived Reasons Given for Students Who Wish to Change to Another Instrument
Views About Gender-Stereotyping Issues

In section six (Q22-23) of the Musical Instrument Selection Process survey, respondents were asked to provide their views about gender-stereotyping issues. Table 4.29 indicates the degree to which respondents disagree or agree with the following statement: "Student instrument choices are strongly influenced by gender-stereotyping (bias).” Respondents were asked to indicate their responses to a five-item scale (indicating relative strength of the reasons) ranging from "strongly disagree" (1) to "strongly agree" (5). One hundred (40.8%) respondents indicated that they agreed with the statement.

By combining frequencies associated with “agree” categories (“agree” and “strongly agree”) responses in the affirmative total 111 (45.3%). Likewise, by combining frequencies associated with “disagree” categories (“strongly disagree” and “disagree”) responses in the negative total 75 (30.6%). Less than one quarter of teachers (24.1%) indicated that they “neither disagree or agree” with the statement.

Six teachers supplied written comments in response to the gender-stereotyping statement. They stated that things “seem to be changing for the better.” Responses included “things seem to be getting better,” “I refuse to let stereotyping enter my class,” the gender-stereotyping statement applies “more so for boys than girls,” and “I try and offset this with an explanation before choices are made.”
Table 4.29: Degree to Which Respondents Disagree or Agree With the Statement: “Student instrument choices are strongly influenced by gender-stereotyping (bias).”

<table>
<thead>
<tr>
<th>Level of Agreement</th>
<th>f</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strongly Disagree</td>
<td>13</td>
<td>5.3</td>
</tr>
<tr>
<td>Disagree</td>
<td>62</td>
<td>25.3</td>
</tr>
<tr>
<td>Neither Disagree or Agree</td>
<td>59</td>
<td>24.1</td>
</tr>
<tr>
<td>Agree</td>
<td>100</td>
<td>40.8</td>
</tr>
<tr>
<td>Strongly Agree</td>
<td>11</td>
<td>4.5</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td>245</td>
<td>100.0</td>
</tr>
</tbody>
</table>

*Note. N = 249. Missing data = 4 (1.6%). M = 3.14. SD = 1.02.*

Table 4.29 identifies the number of respondents who took steps to address gender-stereotyping (bias) during the instrument selection process. Over sixty percent of teachers (61.9%) indicated that they took steps to address gender-stereotyping (bias) during the instrument selection process.

One hundred fifty-eight respondents (64.8%) chose to describe the steps they take to address gender-stereotyping (bias). Teachers indicated that, through the medium of class discussions, they were able to convey to their students that it is acceptable to play any instrument regardless of gender. In other words, “there are no ‘boy’ or ‘girl’ instruments.” One teacher stated: “Explain selection has nothing to do with gender. Pick what you like, are physically able to produce a respectable sound on the instrument, and will work at it.”

Respondents stated that they used videos, pictures (i.e., poster of Julius Baker), recordings, and live demonstrations to show that instrument selection was “gender-neutral.” Well-known performing artists (i.e., Ian Anderson, James
Galway, Robert Aitken, Jean-Pierre Rampal) were used as positive role models with respect to non-stereotypical instrument association. Professional male flutists and female low brass players were most frequently mentioned as examples by respondents.

Teachers indicated that live demonstrations of musical instruments, using students and professional clinicians, involved both males and females playing all instruments. In these settings, males would play instruments such as flute and clarinet that, at least in educational settings, are more traditionally associated with females, and females would play instruments such as tuba which are more commonly associated with male performers. Such reversals of expected roles were intended to demonstrate to students that it is acceptable to play any instrument regardless of gender. For example, one teacher stated that “Students should choose an instrument they want to play. I generally let a male student model the clarinet and a female student model the trombone.”
<table>
<thead>
<tr>
<th>Response [Steps taken]</th>
<th>f</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>No</td>
<td>93</td>
<td>38.1</td>
</tr>
<tr>
<td>Yes</td>
<td>151</td>
<td>61.9</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td>244</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Note. N = 249. Missing data = 5 (2.0%).

Table 4.30: Frequency With Which Respondents Took Steps to Address Gender-Stereotyping

Influences on Teachers' Orientation to the Instrument Selection Process

The seventh and final section (Q24-26) of the Musical Instrument Selection Process survey asked respondents to assess the relative impact of specific areas of influence which helped to shape or modify their present approach to the instrument selection process. Table 4.31 identifies the degree to which individuals or experiences have influenced music educators' present approaches to the instrument selection process.

Teachers were asked to indicate their responses to a five-item scale (indicating relative strength of the reasons) ranging from "very weak" (1) to "very strong" (5). "Personal experiences" was the subcategory item which received the highest mean (4.36), while "respondent's predecessor" was shown to have the least degree of influence ($M = 1.99$) over teacher's present approach to the instrument selection process.
Twenty-nine respondents chose to reply to the "other" category. They identified the following additional individuals or settings as having influenced their present approach to the instrument selection process: (a) professional development activities (i.e., conferences, inservices, speakers, lectures, and clinicians), (b) published articles, (c) music store personnel, (d) school board policy (political environment), and (e) university music teachers.
<table>
<thead>
<tr>
<th>Influence</th>
<th>Response(^a)</th>
<th>Missing data (%)</th>
<th>mode</th>
<th>M</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Personal experiences</td>
<td>248</td>
<td>1 (0.4)</td>
<td>5</td>
<td>4.36</td>
<td>0.74</td>
</tr>
<tr>
<td>Fellow teachers</td>
<td>243</td>
<td>6 (2.4)</td>
<td>3</td>
<td>2.69</td>
<td>1.22</td>
</tr>
<tr>
<td>Respondent's music teacher when they were a student</td>
<td>242</td>
<td>7 (2.8)</td>
<td>1</td>
<td>2.65</td>
<td>1.39</td>
</tr>
<tr>
<td>College/university preservice teacher education courses</td>
<td>238</td>
<td>11 (4.4)</td>
<td>3</td>
<td>2.57</td>
<td>1.13</td>
</tr>
<tr>
<td>Cooperating teacher(s) during preservice teacher training</td>
<td>237</td>
<td>12 (4.8)</td>
<td>3</td>
<td>2.54</td>
<td>1.24</td>
</tr>
<tr>
<td>Respondent's predecessor</td>
<td>238</td>
<td>11 (4.4)</td>
<td>1</td>
<td>1.99</td>
<td>1.15</td>
</tr>
<tr>
<td><strong>OVERALL</strong></td>
<td></td>
<td></td>
<td></td>
<td><strong>2.80</strong></td>
<td><strong>1.15</strong></td>
</tr>
</tbody>
</table>

*Note. N = 249.*

\(^a\)Number of responses per subcategory item.

Table 4.31: Degree to Which Individuals or Experiences Have Influenced Music Educator's Present Approaches to the Instrument Selection Process
Table 4.32 indicates the degree to which respondents' preservice teacher education addressed aspects of the instrument selection process. One-hundred seven respondents (44.2%) stated that aspects of the instrument selection process were "briefly mentioned" during their preservice teacher education. Seventy teachers (28.9%) stated that it was "dealt with in some detail" while 54 (22.3%) indicated that this selection process was "not addresses at all." Fully two-thirds of the teachers indicated that the instrument selection process was either "not addressed at all" or "briefly mentioned" during their preservice teacher education.

Nineteen teachers chose to reply to the "other" category. Eleven indicated that they had no formal music training as music educators, thus no opportunity to have the instrument selection process addressed during preservice teacher education. Three respondents indicated that they could not remember if their preservice teacher education addressed aspects of the instrument selection process.

<table>
<thead>
<tr>
<th>Degree Addressed</th>
<th>f</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not addressed at all</td>
<td>54</td>
<td>22.3</td>
</tr>
<tr>
<td>Briefly mentioned</td>
<td>107</td>
<td>44.2</td>
</tr>
<tr>
<td>Dealt with in some detail</td>
<td>70</td>
<td>28.9</td>
</tr>
<tr>
<td>Other</td>
<td>11</td>
<td>4.5</td>
</tr>
<tr>
<td>TOTAL</td>
<td>242</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Note. N = 249. Missing data = 7 (2.8%). M = 2.16. SD = .82.

Table 4.32: Degree to Which Respondents Preservice Teacher Education Addressed Aspects of The Instrument Selection Process
Table 4.33 shows the number of teachers who have (or have not) made changes to their instrument selection process since they began teaching. More than two-thirds (69.5%) of the respondents indicated that they had made changes to their instrument selection process since they began teaching.

One hundred seventy-four respondents described changes that they have made to their instrument selection process since they began teaching. Despite the number and variety of responses, basic similarities in many of the responses were evident. An analysis of their written commentary revealed four basic themes: (a) control over the selection process, (b) achieving a balanced ensemble, (c) improving communication with both students and parents, and (d) creating more opportunities for students to interact physically with instruments.

Teachers indicated that, since beginning teaching, they have attempted to acquire greater control over the selection process. For some, this has been a matter of limiting the number of instruments students have to choose from whereas for others, it has been a matter of giving “more structure to the process” therefore administrating it with greater efficiency. As one teacher remarked, “I now try to have each student play (or attempt to play) several different instruments prior to choosing one. I also limit the number of saxophones and I don’t start any percussionists—they begin later after they get a start on a wind instrument.”

Respondents indicated that since beginning teaching they work harder to achieve a balanced ensemble. In order to make this possible they have become more flexible, encouraging doubling and some instrument changes depending
on the situation. Many teachers indicated that students list their top three instrument choices and the teacher chooses the appropriate instrument from these three choices with consideration being given to balance.

Respondents indicated that they have attempted to improve communication with both students and parents by taking the time to discuss, in greater detail, the nature of the instrument selection process. Efforts have been made to further involve both parties in the selection process. One teacher stated that "I now spend quite a bit of time conferring with students and parents about instrument choice."

Students have greater opportunities to interact physically with a variety of instruments prior to making an instrumental choice. A more hands on approach has been adopted. Teachers also stated that they try to develop student interest in the band program at an earlier age and take more time to advise students in choosing an appropriate instrument. Some indicated that they evaluated students more thoroughly in order to match them with an instrument they will have the greatest chances for success in playing. For example, one educator stated: "This year I would like to give students a better opportunity to try out the available instruments. I have considered inviting one class at a time to my school to rotate through instrument stations, and I am also considering the help of representatives of the music store I'm dealing with to make visits to my feeder schools."

It should be noted that 5.2% of respondents indicated that at the end of the school year they had only one year of teaching experience thus making it
difficult for them to comment on changes to the selection process due to a lack of experience. No attempt was made to correlate these recommended changes with age or years of experience.

<table>
<thead>
<tr>
<th>Changes</th>
<th>$f$</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>No</td>
<td>76</td>
<td>30.5</td>
</tr>
<tr>
<td>Yes</td>
<td>173</td>
<td>69.5</td>
</tr>
<tr>
<td>TOTAL</td>
<td>249</td>
<td>100.0</td>
</tr>
</tbody>
</table>

*Note. $N = 249$. Missing data = 0 (0.0%).*

Table 4.33: Number of Teachers Who Have (or Have Not) Made Changes to Their Instrument Selection Process Since They Began Teaching

Respondents were given the opportunity to add any additional comments relating to their instrument selection process on the back page of the Musical Instrument Selection Process survey. Ninety-five respondents provided additional written comments relating to the following topics: (a) personal teaching philosophy, (b) description of their instrument selection process, (c) description of their teaching setting and available resources, (d) personal concerns relating to student and parent satisfaction, and (e) budgetary concerns. A sampling of these verbatim responses appears in Appendix P.
Summary

This chapter presented the findings from the analysis of the data. Chapter 5 contains a summary of the major findings from this study, conclusions derived from the results of the study, and recommendations for further study.
Endnotes

1The range was calculated using the procedure described in Gay (1996, p. 436).
CHAPTER 5
SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

The purpose of this study was to investigate the process by which elementary and junior high school teachers prepare students to make musical instrument choices. This investigation identified the nature of the educational and musical experiences which occur prior to determining students' instrument choices. These choices relate specifically to wind and percussion instruments.

Method and Design of the Study

The nature of this investigation took the form of descriptive research. In order to obtain data relating to various aspects of the musical instrument selection process, a survey was designed, pilot tested and ultimately distributed to the entire population of music educators responsible for teaching beginning band, in the province of Alberta, Canada. Of the 322 potential respondents who received the researcher-designed survey, 249 music educators returned completed surveys thus representing a 77.3% return rate.
The survey was comprised of seven sections. In the first two sections, participants were asked to provide information relating to their educational setting and musical background. The remaining five sections of the survey consisted of 19 numbered items which were directly related to six research question categories. The six categories that framed the research questions were:
(a) procedural controls and administrative responsibilities, (b) teachers’ perceptions and expectations, (c) the role of the music industry, (d) teachers’ views about gender stereotyping issues, (e) areas of influence which helped to shape or modify teachers’ present approach to the instrument selection process and (f) preservice music teacher education.

Summary of Survey Results

The summary of results, based on an analysis of the acquired data, is presented below within the context of the research questions upon which the study is based.
1. What procedural controls or guidelines do teachers implement in order to manipulate student instrument selection?

Respondents indicated that they purposely restrict the range of choices available to their students by initially excluding specific instruments from the selection process. Generally, significant restrictions were placed on students’ choices with respect to the following instruments or instrument categories: (a) piccolo, (b) Bass clarinet, (c) double reeds, (d) saxophones, and (e) percussion.

More specifically, 92.4% of teachers indicated that they initially excluded piccolo from the instrument selection process. More than 70% indicated that they
excluded bassoon (78.7%), and baritone saxophone (73.9%). Slightly more than half of teachers excluded oboe (58.6%) and Bass clarinet (51.0%). More than one third of respondents (33.7%) indicated that they initially excluded drums and mallet instruments, while 19.3% excluded drums (only). Less than one third (31.3%) excluded tenor saxophone while 24.5% excluded alto saxophone from the selection process.

An analysis of the data indicated that respondents initially excluded a number of instruments from the selection process because they were “not available” or were considered “not an appropriate instrument for a beginner” to learn. The percentages listed below represent those teachers who excluded specific instruments because they were “not available” as choices for students: (a) piccolo (37.2%), (b) oboe (38.6%), (c) bassoon (53.2%), (d) Bass clarinet (26.7%), (e) alto saxophone (15.0%), (f) tenor saxophone (18.4%), (g) baritone saxophone (25.6%), (h) French horn (30.4%), (i) baritone (50.0%), and (j) tuba (30.0%).

Both saxophone and percussion were excluded because they were considered to be “too popular with students.” A small percentage of teachers indicated that they were “less familiar with the double reed instruments.”

Findings indicated that respondents encouraged students to choose specific instruments “rarely” for financial considerations, “sometimes” due to physical considerations, and “frequently” in order to acquire a balanced instrumentation. More specifically, 38.5% of teachers indicated that they “never” encouraged students to select an instrument due to financial considerations. However, 34.4% indicated that they “sometimes” encouraged students to select an instrument due to financial considerations. More than half of the teachers (51.2%) stated that
"sometimes" physical considerations were a reason to encourage students to choose a specific instrument. Respondents were fairly evenly divided as to whether they "frequently" (38.5%) or "always" (34.0%) encouraged students to choose a specific instrument in order to achieve a balanced instrumentation.

Teachers indicated that physical qualities (i.e., size/weight) were a consideration when encouraging students to choose an instrument. This was true for low brass, especially tuba (72.0%), as well as low and large woodwind instruments (i.e., tenor and baritone saxophone). Teachers stated that they encouraged students to choose trombone (23.3%), tuba (25.6%), and instruments associated with the broad category of low brass (24.4%), in order to achieve a balanced ensemble.

2. At what time of the year are musical instrument choices made?

The majority of teachers (62.1%) reported that musical instrument choices were made during the first three weeks of fall classes. However, 31.9% indicated that these decisions were also made "at the end of the year, prior to fall classes." Few (1.6%) stated that choices were made "during the summer months." Teachers who indicated that instrument choices were made at times other than those given in the survey, stipulated that they did so either in the fourth or fifth week of fall classes or during the second term (winter semester).

3. Are feeder school visits/performances an aspect of teachers' instrument selection process? If so, how often do students see demonstrations of individual instruments during such activities?

The majority of respondents (61.5%) indicated that feeder school visits/performances were an aspect of their instrument selection process. Of
those teachers who indicated that they were involved in feeder school visitations, 47.1% indicated that students “always” or “frequently” saw demonstrations of individual instruments during such activities. Slightly less than 40% (38.7%) indicated that students “sometimes” saw demonstrations and 14.2% indicated that students “rarely” or “never” saw demonstrations of individual instruments during feeder school visits/performances.

4. To what extent is the testing of students, or some form of student evaluation (musical, physical, academic), a part of the instrument selection process?

Of a possible 13 subcategory items, teachers identified “analysis of students’ physical characteristics,” “playing test (fittings),” and “rhythm ‘echo’ test” as being the three most commonly used forms of testing/evaluation during the instrument selection process. Findings indicated that “aural test[ing]” was also used to some degree as a form of evaluation during the instrument selection process. Music educators indicated that, on average, they “never” used specific forms of testing such as standardized IQ tests or music tests by Leblanc, Gordon, or Seashore. “Physical coordination test[s],” “music theory test[s],” and “academic record[s]” were “rarely” or “never” used. Data relating to “input from elementary music teacher” was positively skewed (indicating more extreme scores at the higher end of the distribution), and registered the largest standard deviation of any subcategory.

More than one fifth of respondents (21.7%) chose to reply to the “other” category. Teachers indicated that they used a variety of commercial tests other
than those stated in the survey question. Others indicated that they used a wide variety of teacher-designed tests relating to (a) past musical experience, (b) personality, and (c) musical interests.

5. To what extent are students active participants in the instrument selection process? For example, do students have an opportunity to view, hear, or produce a sound on a variety of musical instruments prior to making an instrument choice?

Research results from the survey indicated that students were "frequently" involved in a variety of activities of a visual, aural, and physical nature, prior to making an instrument choice. Such activities included (a) looking at a variety of musical instruments on display, (b) touching/holding a variety of instruments, (c) viewing pictures/diagrams of musical instruments, and (d) hearing live performances of musical instruments. Findings also indicated that students "sometimes" (a) produce a sound on a variety of instruments, and (b) hear recorded examples of musical instruments.

6. What changes do teachers report they have made to their instrument selection process since they began teaching?

More than two thirds (69.5%) of the respondents indicated that they had made changes to their instrument selection process since they began teaching. Teachers indicated that they had adopted a variety of improvements designed to enable them to (a) gain greater control over the selection process, (b) achieve a more balanced ensemble, (c) improve communication with both students and parents regarding aspects of the instrument selection process, (d) insure that students have greater opportunities to interact physically with a variety of
instruments, (e) develop an interest in the band program at an earlier age, and 
(f) to evaluate students more thoroughly in order to match them with an 
appropriate instrument.

7. How do teachers view their role during the instrument selection process?

The vast majority of respondents (95.2%) indicated that they guide their 
students in making instrument choices. With respect to the exact nature of the 
guidance, approximately half of the teachers (49.6%) indicated that “students are 
guided in making their instrument choices” while slightly less than half (45.6%) 
stated that “students are guided in making their choice from a limited number of 
instruments.” Teachers indicated clearly that they take an active role in guiding 
their students in making instrument choices.

8. Which instruments do teachers believe to be most favored by students?

When asked what they thought boys’ first, second, and third instrument 
choices would be, the majority of respondents indicated that preferences were 
limited to two instruments: trumpet and saxophone. Teachers chose 
trumpet/cornet as both their first (39.7%) and third (26.9%) choice. As their 
second choice they (32.2%) selected saxophone. Also, for the perceived second 
choice of boys, 21.2% of teachers selected trumpet and for the perceived third 
choice 24.2% chose saxophone.

With respect to the musical preferences of girls, respondents identified flute 
(62.3%) as the first choice and clarinet (58.5%) as the second choice. They selected 
saxophone as the third choice (37.4%). Also, for the perceived first choice of girls, 
28.4% of respondents selected clarinet and for the perceived second choice 27.1%
chose flute. However, 33.8% of teachers did indicate trumpet as girls’ third choice
for a musical instrument. Generally, teachers believe that boys prefer instruments from both the woodwind and brass family and believe girls' preferences to be primarily from the woodwind family of instruments.

9. Which instruments do teachers believe to be least favored by students?

The vast majority of respondents (90.0%) indicated that they believed the flute was the instrument least preferred by boys. Teachers reported that brass instruments, especially low and large brass instruments, were least preferred by girls. More specifically, 46.4% indicated that the tuba was the instrument least preferred by girls.

10. What reasons do teachers report that students give for choosing a particular instrument? What reasons do teachers report that students give for wishing to change to another instrument?

Teachers identified "friends" as having the strongest degree of influence on students' instrument choices, while "cost of the instrument," was identified as having the least degree of influence on students' instrument choices. This may be in part due to the fact that a number of schools make musical instruments available to students for a nominal rental fee. They also acknowledged that overall the "sound of the instrument" was a "moderate" influence on students instrumental choices.

Respondents who chose to reply to the "other" category listed a variety of reasons which they believed influenced a student's instrument choice. The most significant of these related to (a) the influence of the media, (b) a student's
perception of what is "cool" or popular, (c) whether a student already owns an instrument, and (d) prior musical experience. However, the strength of these reasons was not determined.

Teachers indicated that students most frequently wish to change to another instrument because "the instrument is thought to be too difficult to play." They also indicated that the instrument a student's friends play as well as the size/weight of the instrument "sometimes" are given by students as reasons for wishing to change to another instrument.

In response to the "other" category, respondents stated that the following reasons are given by students who wish to change to another instrument: (a) parental influence, (b) boredom, (c) difficulty in producing a proper sound, (d) instrument is not challenging enough, (e) lack of commitment, (f) lack of confidence, and (g) cost.

11. To what degree does the music industry play a role during the instrument selection process?

Less than a quarter of respondents (23.0%) stated that music store personnel demonstrated instruments to students in their schools during the instrument selection process.

12. To what degree do teachers acknowledge stereotypical gender associations?

When asked how they felt about the statement: "Students' instrument choices are strongly influenced by gender-stereotyping (bias)," 45.3% of teachers indicated that they either "agree" or "strongly agree" with the statement. Less
than a third (30.6%) indicated that they "disagree" or "strongly disagree" with the statement. A modest minority (24.1%) indicated that they "neither disagree" or "agree" with this statement.

13. In what ways do teachers counterbalance stereotypical gender associations?

Over 60% of teachers (61.9%) indicated that they took steps to address gender-stereotyping (bias) during the instrument selection process. Neither the specific steps nor the intensity of their actions was ascertained. Respondents also stated that by initiating class discussions, as well as using videos, pictures, recordings, and live demonstrations, they felt they were able to convey more effectively to their students that it is acceptable to play any instrument regardless of their gender.

14. What are the major influences that helped teachers develop their present instrument selection process?

Teachers indicated that their own "personal experiences" have been the most significant influence on their present approach to the instrument selection process. "Fellow teachers" had a "weak" to "moderate" influence while respondents "predecessor" was identified as having the least influence on their selection process. Teachers identified the following additional individuals or settings as having influenced their present approach to the instrument selection process: (a) professional development activities (i.e., conferences, inservices, speakers, lectures, and clinicians), (b) published articles, (c) music store personnel, (d) school board policy (political environment), and (e) university music teachers.
15. To what degree was the instrument selection process a component of subjects' preservice teacher education?

The vast majority of teachers (66.5%) reported that aspects of the instrument selection process were "briefly mentioned" or "not addressed at all" during their preservice teacher education whereas a minority of educators indicated that it was "dealt with in some detail" (28.9%).

Conclusions of the study

The results of this study indicate that music educators, responsible for beginning band instruction in the province of Alberta, adhere to a variety of procedural and administrative practices during the musical instrument selection process. This researcher's evaluation of their opinions, as recorded on a detailed survey, led to the following conclusions:

1. During the instrument selection process, the nature and frequency of teacher designed learning activities varies widely. In order to develop a better basis for choosing a musical instrument, students need a thorough and systematic approach that introduces them to musical instruments through a deliberate combination of aural, visual, and physical representations. Teachers' increased attention to the inclusion of all three activities would encourage a richer understanding of each instrument's unique timbral, musical, and physical qualities. Therefore, if beginning band instruction is to improve in Alberta, students must have increased opportunities to produce sounds on a wide range of musical instruments. They must also hear exemplar recordings of these instruments during the instrument selection process.
2. Considering the powerful influence of students' peers, educators need to recognize that friendships per se may play a significant role in determining students' instrument choices. A sensitivity to such social influences may create an environment that supports individual choices that more realistically represent students' musical tastes and preferences.

3. Constructive manipulation of peer influence might be considered a means to achieve a more balanced instrumentation. When appropriate, friends and peers of beginning students should be encouraged to serve as exemplars and mentors during the instrument selection process. The involvement of more experienced students should include instrument demonstrations and peer tutoring. This could be particularly valuable if such peer involvement were to encourage the selection of less popular instruments or to diminish gender stereotyping.

4. Since over a third of teachers indicated that they did not participate in feeder school visits/performances, it is clear that many Alberta band teachers miss out on potentially valuable recruitment and educational opportunities. Increased communication between elementary and junior high school personnel could improve student recruitment.

5. Although the exact nature of feeder school visits cannot be ascertained from the existing data, it was found that actual instrument demonstrations occur on an irregular, even spotty, basis. In view of the relative infrequency of these demonstrations, students need more opportunities to familiarize themselves with a wide range of instruments.
6. In the vast majority of schools, music store personnel are not actively involved in demonstrating musical instruments during the selection process. Despite the obvious potential for a conflict of interest between business objectives and specific educational goals, it would seem that the full potential of music stores as an educational resource remains under-utilized. When possible, the music industry should be invited and welcomed to participate in the instrument selection process.

7. Since music teachers often encourage students to choose specific instruments to meet the needs of balanced instrumentation, this study corroborates the practical demand for such balance, and it confirms the reality that bands and their teachers are evaluated on that basis. This may explain teachers' high motivation to manipulate selection outcomes.

8. Teaching strategies need to be developed to address students' perceptions that their instruments are too difficult to play. Building student confidence early may encourage fewer instrument changes, and help to diminish student playing anxiety thus increasing musical and educational success.

9. While many teachers acknowledge and attempt to counter the gender-stereotypical selection of instruments, the data here reveal that their efforts have produced no fundamental change. Gender-stereotyping issues must be addressed more effectively during preservice teacher education.

10. Consistent with earlier findings, some instrument gender associations persist and remain polarized with respect to boys and girls choices.

11. Music educators understandably restrict students' initial instrument choices because of limited availability, financial considerations, or a lack of
teacher familiarity. It is particularly unfortunate when students are excluded from band instruction due to an inability to afford an instrument. Ways must be found to supplement music budgets in order to provide equality of access to beginning instrumental study.

Some teachers indicated that they excluded study on double reed instruments due to their lack of expertise. Therefore, it is imperative that preservice education provide teachers with an opportunity to develop the requisite skills to instruct students in double reeds. Additional workshops should be made available to practicing teachers in order to address pedagogical aspects of double reed playing.

12. Since nearly a third of band teachers indicated that neither winds nor percussion were their primary performing musical instrument, many Alberta music educators may lack adequate expertise in demonstrating band instruments to beginning students. This reinforces the importance of ensuring that post-secondary instrument technique and methods courses are educationally sound in both pedagogy and curricular content. Workshops and graduate courses in wind and percussion pedagogy should be made available to practicing teachers in order to strengthen the expertise in beginning band instruction.

13. Given the relatively low level of postgraduate study among the surveyed teachers, continuing education by Alberta music educators may not be highly valued. Within Alberta, no graduate study, beyond the baccalaureate, is required to maintain teaching certification. However, considering the relative youth of this teaching population, postgraduate studies are certainly warranted. If students in Alberta are to gain the benefits of informed instruction from a highly
educated teaching force, then music educators should be encouraged to pursue graduate studies in music. This would increase their knowledge base and potentially enrich their students' music education.

14. In view of the pervasive lack of attention to the musical instrument selection process during respondents' preservice teacher education, most Alberta band teachers must learn these techniques during their first years of teaching. To strengthen teachers' skills in this area, preservice teacher education programs must allot more time to this topic.

Recommendations for further research

Based on the results of this study, several research initiatives are recommended. These include:

1. An investigation of the musical instrument selection process with populations outside the province of Alberta.

2. A qualitative study that investigates the entire process by which select "expert teachers" introduce students to musical instruments, including the time allotted for specific tasks and the nature of introducing students to various instruments.

3. An investigation into the effectiveness of using peer demonstrations by students on (a) improved instrumentation balance, (b) students' choices of less popular musical instruments, and (c) perceptions of gender-stereotyping.

4. An investigation to ascertain the degree to which the instrument selection process is addressed in post secondary preservice music education methods courses taught in both Canada and the United States.
5. A study to determine why Canadian teachers have or have not pursued graduate studies in music and the conditions that would encourage them to do so.

6. A study designed to determine the effect of a meaningful and equal presentation of musical instruments on achieving balanced instrumentation and lessening gender bias.

7. An investigation into the nature of feeder school involvement by Alberta junior high and middle school instrumental music programs.

8. Research that seeks to determine the reasons for attrition in beginning band as it relates to gender and instrument selection.

9. A study to ascertain “best practices” in which music teachers invite music industry representatives to assist with the instrument selection process.
APPENDIX A

PILOT STUDY (COVER LETTER)
PILOT STUDY (COVER LETTER)

January 14, 1999

Name of participant

Address of participant

Dear (name of pilot study participant):

Thank you for offering to assist me with this pilot project. I am currently in the process of completing a Ph.D. in music education from The Ohio State University. The primary focus of my dissertation involves research into how teachers prepare students to choose a musical instrument.

Please find enclosed a 12-page survey, a cover letter, two possibilities for a cover page, a return envelope and a comment sheet. The final version of the survey will be in booklet form with back-to-back pages.

Instructions:

1) Complete the survey and time yourself.
2) Identify which of the two cover pages you prefer.
3) Evaluate the overall clarity and accuracy of the 26 questions in this survey.

Your input and comments are greatly appreciated. I thank you in advance for your support of music education research in the province of Alberta.

Sincerely,

Jonathan G. Bayley

phone: (403) 539-2014
FAX: (403) 539-2800
e-mail: bayley@gprc.ab.ca
APPENDIX B

PILOT STUDY (EVALUATION FORM)
PILOT STUDY (EVALUATION FORM)

1) Your name. ________________________________________________________________

2) Time it takes you to complete the survey. ____________________________
   (minutes)

3) Which cover do you prefer (circle the number)
   1 No. 1 (outline of the province of Alberta)
   2 No. 2 ("cobblestone" background)

4) Please comment as to the overall clarity and accuracy of the 26 questions
   found in the survey.
   ________________________________________________________________
   ________________________________________________________________
   ________________________________________________________________

5) Suggestions for change/improvements (questions and/or cover letter).
   ________________________________________________________________
   ________________________________________________________________
   ________________________________________________________________

6) Any other thoughts?
   ________________________________________________________________
   ________________________________________________________________
   ________________________________________________________________

Please return the completed survey and the evaluation form
as soon as possible.

Jonathan G. Bayley
Grande Prairie Regional College
10726-106 Avenue
Grande Prairie, AB
T8V 4C4
FAX: (403) 539-2800
APPENDIX C

LETTER TO SUPERINTENDENTS
LETTER TO SUPERINTENDENTS

September 28, 1998
Name of the Superintendent
Name of the school district
Address of the school district

Dear (Name of the Superintendent):

I am currently in the process of completing a Ph.D. in music education from The Ohio State University. The primary focus of my dissertation involves research into how teachers prepare students to choose a musical instrument. More specifically, this investigation will identify the nature of the educational and musical experiences that occur prior to determining students' instrument choices.

This study involves administering a survey, which will examine aspects of the instrument selection process. This research will be conducted in the province of Alberta and will involve music teachers responsible for beginning band instruction.

In order to successfully complete this research, it is necessary to identify those schools which offer BEGINNING band instruction. It is with this in mind that I wish to request the following information:

1) A list of the names of the schools in your jurisdiction that offer BEGINNING band instruction. Such a list would include the school name, mailing address, e-mail address, phone and fax numbers.

2) The names of the music teachers associated with the schools that offer BEGINNING band instruction. This information would also make it possible to identify teachers who teach at more than one school, thus eliminating duplication in mailouts.

I thank you in advance for your support of music education research in the province of Alberta.

Yours truly,

Jonathan G. Bayley, Instructor
Grande Prairie Regional College
Phone: (403) 539-2014
FAX: (403) 539-2800
e-mail: bayley@gprc.ab.ca
APPENDIX D

FACSIMILE/E-MAIL MEMO TO TEACHERS
FACSIMILE/E-MAIL MEMO TO TEACHERS

Dear Instrumental Music Teacher:

I am currently in the process of completing a Ph.D. in music education from The Ohio State University. The primary focus of my dissertation involves research into how teachers prepare students to choose a musical instrument.

This study involves administering a survey which will examine aspects of the instrument selection process. A survey will be sent to all teachers of BEGINNING band, within the province of Alberta. I hope to be able to send you the survey in early January. I would appreciate it if you could take a few minutes and fill it out. To the best of my knowledge, it will be the first study of its kind in Canada and maybe the US as well.

• In order that the survey is addressed to the correct teacher, could you please print your name and school affiliation below and FAX it to me at (403) 539-2800. I may also be reached by e-mail.

__________________________________________________________________________

teacher’s name                        school

• In order to prevent duplication in survey mailouts, please answer these two questions.

1) Do you teach BEGINNING band? _______________________
2) Do you teach BEGINNING band at more than one school in your school district? ______ If YES, what other schools? ___________________________

Thank you for taking a few minutes from your busy schedule.

Jonathan G. Bayley

phone:  (403) 539-2014
FAX:    (403) 539-2800
e-mail: bayley@gprc.ab.ca
Thank you very much for returning the survey.

When checking the responses, I noticed that the following questions were not filled out.

Question(s) # ____________________ Page(s) ______________.

If you could take a minute to fill them out it would be greatly appreciated.

It might be easiest just to FAX it to me at (780) 539-2800.

Thanks,

Have a great musical year!

Jonathan
APPENDIX F

RESEARCH PROPOSAL (COVER LETTERS)
October 23, 1998

Ms. Jane Kinoshita - Research Liaison, Consulting Services
Edmonton Public School District No. 7
Centre for Education
One Kingsway Avenue
EDMONTON, AB
T5H 4C9

Dear Ms. Kinoshita:

I am currently in the process of completing a Ph.D. in music education from The Ohio State University. The primary focus of my dissertation involves research into how teachers prepare students to choose a musical instrument. More specifically, this investigation will identify the nature of the educational and musical experiences that occur prior to determining students’ instrument choices.

This study involves administering a survey, which will examine aspects of the instrument selection process. This research will be conducted in the province of Alberta and will involve music teachers who are responsible for beginning band instruction.

I have also enclosed the following items relating to this music education research:

• Survey instrument (draft with respect to format only)
• Participation Consent form
• Cover letter for the participants (music teachers)
• Postcard (reminder/thank you) and follow-up letter to teachers
• Bibliography
• Chapter I (complete)
• Chapter II (sample)
• Résumé

Thank you for considering this research proposal.

Yours truly,

Jonathan G. Bayley

phone: (403) 539-2014
FAX: (403) 539-2800
e-mail: bayley@gprc.ab.ca
October 23, 1998

Dr. Dwight Harley
Edmonton Catholic Regional Division No. 40
9807-106 Street
EDMONTON, Alberta
T5K 1C2

Dear Dr. Harley:

I am currently in the process of completing a Ph.D. in music education from The Ohio State University. The primary focus of my dissertation involves research into how teachers prepare students to choose a musical instrument. More specifically, this investigation will identify the nature of the educational and musical experiences that occur prior to determining students' instrument choices.

This study involves administering a survey which will examine aspects of the instrument selection process. This research will be conducted in the province of Alberta and will involve music teachers who are responsible for beginning band instruction.

I have also enclosed the following items relating to this music education research:

- Survey instrument (draft with respect to format only)
- Participation Consent form
- Cover letter for the participants (music teachers)
- Postcard (reminder/thank you) and follow-up letter to teachers
- Bibliography
- Chapter I (complete)
- Chapter II (sample)
- Résumé

Thank you for considering this research proposal.

Yours truly,

Jonathan G. Bayley

phone: (403) 539-2014
FAX: (403) 539-2800
e-mail: bayley@gprc.ab.ca
October 23, 1998

Dr. Sandra Sangster, Director of Accountability Services
Calgary School District No. 19
515 Macleod Trail, SE
CALGARY, AB
T2G 2L9

Dear Dr. Sangster:

I am currently in the process of completing a Ph.D. in music education from The Ohio State University. The primary focus of my dissertation involves research into how teachers prepare students to choose a musical instrument. More specifically, this investigation will identify the nature of the educational and musical experiences that occur prior to determining students’ instrument choices.

This study involves administering a survey which will examine aspects of the instrument selection process. This research will be conducted in the province of Alberta and will involve music teachers who are responsible for beginning band instruction.

I have also enclosed the following items relating to this music education research:

- Survey instrument (draft with respect to format only)
- Participation Consent form
- Cover letter for the participants (music teachers)
- Postcard (reminder/thank you) and follow-up letter to teachers
- Bibliography
- Chapter I (complete)
- Chapter II (sample)
- Résumé

Thank you for considering this research proposal.

Yours truly,

Jonathan G. Bayley

phone: (403) 539-2014
FAX: (403) 539-2800
e-mail: bayley@gprc.ab.ca
October 24, 1998

Mr. Pat McLaughlin, Supervisor, Special Projects
Calgary RCSSD No. 1
1000 Fifth Avenue S.W.
CALGARY, AB
T2P 4T9

Dear Mr. McLaughlin:

I am currently in the process of completing a Ph.D. in music education from The Ohio State University. The primary focus of my dissertation involves research into how teachers prepare students to choose a musical instrument. More specifically, this investigation will identify the nature of the educational and musical experiences that occur prior to determining students’ instrument choices.

This study involves administering a survey which will examine aspects of the instrument selection process. This research will be conducted in the province of Alberta and will involve music teachers who are responsible for beginning band instruction.

I have also enclosed the following items relating to this music education research:

• Survey instrument (draft with respect to format only)
• Cover letter for the participants (music teachers)
• Postcard (reminder/thank you) and follow-up letter to teachers
• Bibliography
• Chapter I (complete)
• Chapter II (sample)
• Résumé

Thank you for considering this research proposal.

Yours truly,

Jonathan G. Bayley

phone: (403) 539-2014
FAX: (403) 539-2800
e-mail: bayley@gprc.ab.ca
APPENDIX G

RESEARCH PROPOSAL
RESEARCH PROPOSAL

"THE MUSICAL INSTRUMENT SELECTION PROCESS"

Research Proposal documentation:
1. Description of research project

Title
An exact title of this dissertation will be finalized at a later date. However, the present “Project Title” can be accurately stated as “AN INVESTIGATION OF HOW TEACHERS PREPARE STUDENTS TO CHOOSE A MUSICAL INSTRUMENT”.

Objectives
• To identify the nature of the educational and musical experiences that occur prior to determining students’ instrument choices.
• To answer the research questions relating to the instrument selection process as outlined in Chapter 1 (pp. 5-7). [This study will investigate various aspects of teacher control and manipulation of selection outcomes; students’ instrument preferences as perceived by teachers; procedural controls and administrative guidelines; efforts made by practicing educators to counterbalance gender stereotyping; teacher preservice teacher education; and the role played by the music industry.]
• To make available to music educators data relating to present administrative and educational practices of beginning band teachers.
• To stimulate discussion, analysis and self-evaluation with respect to present administrative and instructional practices relating to the instrument selection process.

Procedure
Addresses of schools which offer BEGINNING band instruction will be obtained from all school districts throughout the province of Alberta. The names of teachers responsible for BEGINNING band instruction will also be obtained, if possible, under the guidelines of FOIP legislation. Research has shown that response rates are higher if cover letters identify the potential respondents by name rather than just stating their title or position in an organization. This would also eliminate the possible duplication of mail-outs.

Survey Instrument
A researcher designed questionnaire will be used to collect data for this self-report research study. The items on the questionnaire relate directly to the research questions. The response rate will determine the degree to which conclusions may be generalized to the defined population. This survey will be mailed to all BEGINNING band teachers in the province of Alberta.

Organization of the Study
Chapter 1 includes the background to the study, the purpose of the study, the research questions, the need for the study, the definitions of terms, and the
limitations of the study. Chapter 2 comprises a review of extant literature relating to the instrument selection process. Chapter 3 outlines the formal design of this study. It also contains a description of the subjects, the instrument used to collect data, and the procedures used for collecting and analyzing the data. In Chapter 4, the findings of this study will be presented as they relate to the research questions. In the final chapter, Chapter 5, conclusions will be drawn from an analysis of the data as it relates to instrumental school music. Appropriate recommendations will be made to the education profession based upon the findings and subsequent analysis of the data.

2. Informed consent
A participatory consent form is enclosed.

3. Ethics review
My advisor, Dr. Timothy Gerber, will send (by mail or FAX) a letter on The Ohio State University letter head informing you that a dissertation committee from The Ohio State University has approved my dissertation topic thus allowing my research to proceed. I agree to conform to the requirements of the Freedom of Information and Protection of Privacy Act.

4. Value to the school district (see also Chapter 1)
Teachers are continuously striving to find ways to better their instructional and administrative practices. This present research attempts to identify the instructional activities and administrative procedures that beginning band teachers use during the instrument selection process. Results of the data collected from this research will be a valuable resource for all instrumental teachers. This research will make it possible for individual teachers to compare and analyze their instructional and administrative practices with provincial norms. Such comparisons will encourage personal reflection and self-analysis with respect to educational goals and instructional practices.
A more complete understanding of the entire process by which instrumental music teachers prepare students to make instrument choices will prove beneficial to preservice teacher education. A realization of the efficiency with which the various elements of this selection process occur will aid in the designing and sequencing of curricular content for post secondary education methods courses. These music education method courses will, in turn, be able to address more accurately those elements of the instrument instruction process which are either administrative or educational in nature. Such an endeavour has the potential to increase the administrative efficiency of preservice teachers while maintaining educational integrity. By doing so, future inservice teachers will be able to deliver musical instruction in a more meaningful and effective manner. A clearer understanding of this entire process will also make it possible to better inform preservice teachers of existing instructional practices. This will then help to prepare them for their future roles as instrumental music educators.
5 Participants/Personnel, schools and times

Subjects
This study is limited to elementary and junior high school music educators who are responsible for beginning band programs in the province of Alberta, Canada. November (1998) is the month in which the survey will be mailed to all BEGINNING band teachers in the province of Alberta.

6. Time lines

September 22, 1998
Letter to Superintendents asking for the names of the schools which offer BEGINNING band instruction and the names of the teachers who are responsible for this instruction.

October, 1998
Submit Research Proposal to Edmonton School Board

November, 1998 (early)
Acquire the names and addresses of the schools which offer BEGINNING band instruction. If possible, acquire the names of teachers responsible for this instruction so that duplication does not occur in mail-outs for those teachers who may teach at more than one school.

December, 1998 - January 1999
Record and analyze the collected data as it relates to the research questions. Draw conclusions from an analysis of the data as it relates to instrumental school music. Make the appropriate recommendations to the education profession based upon the findings and subsequent analysis of the data.

February, 1999
Submit a draft of Chapters 4 and 5 to my advisor Dr. Timothy Gerber and my dissertation committee.

March - April, 1999
Tentative completion date
APPENDIX H

COVER LETTER TO ACCOMPANY "SURVEY PACKS"
February 12, 1999

Dr. Dwight Harley
Edmonton Catholic Regional Division No. 40
9807-106 Street
EDMONTON, AB
T5K 1C2

Dear Dr. Harley:

Please find enclosed 20 "survey packs" to be addressed and sent by courier to the teachers in your school district who are responsible for beginning band instruction.

I have also included 20 "Thank you/reminder" postcards to be mailed to the same population of teachers one week after the initial mail out.

I thank you in advance for your support of music education research in the province of Alberta.

Yours truly,

Jonathan G. Bayley

phone: (780) 539-2014
FAX: (780) 539-2800
e-mail: bayley@gprc.ab.ca
APPENDIX I

COVER LETTER TO EDMONTON PUBLIC SCHOOL PRINCIPALS
COVER LETTER TO PRINCIPALS
(Edmonton Public Schools)

February 12, 1999

Principal's name
Name of the school
Address of the school

Dear (Name of the Principal):

Please pass on the contents of this envelope to the teacher in your school who is responsible for beginning band instruction, (name of the music teacher). I have enclosed a cover letter, a survey, a consent form, and a return envelope.

This provincial study was approved on November 2, 1998 by Edmonton Public schools (Jane Kinoshita - Research Liaison, Consulting Services).

This study involves administering a survey, which will examine aspects of the musical instrument selection process. This research will be conducted in the province of Alberta and will involve the music teachers who are responsible for beginning band instruction.

I thank you in advance for your support of music education in the province of Alberta.

Yours truly,

Jonathan G. Bayley
Grand Prairie Regional College
phone: (403) 539-2014
FAX: (403) 539-2800
e-mail: bayley@gprc.ab.ca
APPENDIX J

PARTICIPATORY CONSENT FORMS
PARTICIPATORY CONSENT FORM
(Edmonton Public Schools)

I ______________________________ (teacher’s name) hereby authorize Jonathan G. Bayley to use the data collected from me in the survey titled "Musical Instrument Selection Process (1999)" for the following purposes:

1) To be used in the researcher’s dissertation as partial fulfilment of the requirements for the degree of Doctor of Philosophy (music education) in the graduate school of The Ohio State University.

2) Data collected from this research may take the form of articles or papers which may be submitted to professional journals and/or presented at educational conferences.

3) A copy of results of this study will be made available to educators upon request.

Complete confidentiality is assured. The names of individual teachers and/or schools will not be disclosed. Teachers are under no obligation to participate in this research project.

_________________________  ______________________
teacher’s signature         date

____________________
code

Please return this consent form with your survey.
PARTICIPATORY CONSENT FORM
(Edmonton Catholic Schools)

I ______________________________ (teacher’s name) hereby authorize Jonathan G. Bayley to use the data collected from me in the survey titled "Musical Instrument Selection Process (1999)" for the following purposes:

1) To be used in the researcher’s dissertation as partial fulfilment of the requirements for the degree of Doctor of Philosophy (music education) in the graduate school of The Ohio State University.

2) Data collected from this research may take the form of articles or papers which may be submitted to professional journals and/or presented at educational conferences.

3) A copy of results of this study will be made available to educators upon request.

Complete confidentiality is assured. The names of individual teachers and/or schools will not be disclosed.

______________________________  __________________________
teacher’s signature              date

Please return this consent form with your survey.
PARTICIPATORY CONSENT FORM
(Calgary Board Of Education)

I _______________________________(teacher's name) hereby authorize Jonathan G. Bayley to use the data collected from me in the survey titled “Musical Instrument Selection Process (1999)” for the following purposes:

1) To be used in the researcher’s dissertation as partial fulfilment of the requirements for the degree of Doctor of Philosophy (music education) in the graduate school of The Ohio State University.

2) Data collected from this research may take the form of articles or papers which may be submitted to professional journals and/or presented at educational conferences.

3) A copy of results of this study will be made available to educators upon request.

Complete confidentiality is assured. The names of individual teachers and/or schools will not be disclosed.

__________________________________________________________________________________________

teacher's signature date

__________________________________________________________________________________________

code

The Calgary Board Of Education requires that I add the following statement to this consent form: “Any complaints associated with this research should be directed to Dr. Sandra Sangster, Director, Accountability Services either by Email: SLSANGSTER or telephone 294-8900.”

Please return this consent form with your survey.
PARTICIPATORY CONSENT FORM
(Calgary Catholic School District No. 1)

I ______________________________(teacher's name) hereby authorize Jonathan G. Bayley to use the data collected from me in the survey titled "Musical Instrument Selection Process (1999)" for the following purposes:

1) To be used in the researcher's dissertation as partial fulfilment of the requirements for the degree of Doctor of Philosophy (music education) in the graduate school of The Ohio State University.

2) Data collected from this research may take the form of articles or papers which may be submitted to professional journals and/or presented at educational conferences.

3) A copy of results of this study will be made available to educators upon request.

Complete confidentially is assured. The names of individual teachers and/or schools will not be disclosed.

_____________________________  ________________
teacher's signature               date

code

Please return this consent form with your survey.
APPENDIX K

QUESTIONNAIRE (MUSICAL INSTRUMENT SELECTION PROCESS)
The purpose of this survey is to gather information relating to the instrument selection process from music educators throughout the province of Alberta. Please answer all of the questions. If you wish to elaborate on any of the questions please feel free to use the space provided in the margins, or enclose your comments on a separate sheet of paper. Your input and comments are greatly appreciated.

Return this survey to:

Grande Prairie Regional College
Fine Arts Department (L116)
10726-106 Avenue
Grande Prairie, AB
T8V 4C4
MUSICAL INSTRUMENT SELECTION PROCESS

Please provide information relating to your educational setting.

Q1. Which of the following best describes your school system? [circle the number]
   1. Public school system
   2. Separate school system
   3. Other (specify) ________________________________

Q2. In your school, is BEGINNING band a required class or is it offered as an option/elective? [circle the number]
   1. Required
   2. Option/Elective

Q3. Consider your BEGINNING band population.
   (a) Circle the grade level(s) at which BEGINNING band is taught at your school. [see “a” below]

   (b) Write in the total number of BEGINNING band students for each grade level you circled. [see “b” below]

Now consider your TOTAL student population (music and non music).
   (c) Write in the TOTAL number of students at your school for each grade level you circled. [see “c” below]

<table>
<thead>
<tr>
<th></th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
</tr>
</thead>
<tbody>
<tr>
<td>a</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>b</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>c</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Please provide information on your professional background.

Q4. Your gender. [circle the number]

1. Male
2. Female

Q5. What is the highest level of education that you have attained? [circle the number]

1. Bachelor’s degree
2. Working on a master’s degree
3. Master’s degree
4. Working on a doctoral degree
5. Doctoral degree

Q6. At the end of the current school year, how many years will you have been teaching?

______________ years(s)

Q7. What is your principal musical instrument?

_______________________ (instrument)

Please describe your procedural and administrative practices relating to this selection process.

Q8. When are musical instrument choices made? [circle a number]

1. At the end of the year, prior to beginning classes in the fall
2. During the summer months
3. 1st week of fall classes
4. 2nd week of fall classes
5. 3rd week of fall classes
6. Other (specify)________________________
Q9. Are feeder school visits/performances an aspect of your instrumental selection process? [circle the number]

1  No
2  Yes

If yes, how often do students see demonstrations of individual instruments during feeder school visits/performances? [circle the number]

1  Never
2  Rarely
3  Sometimes
4  Frequently
5  Always
Q10. How frequently do you use the following forms of testing/evaluation as a part of your instrument selection process?

<table>
<thead>
<tr>
<th>Frequency of use [circle your answer]</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Playing test (“fittings”) (mouthpiece/headjoint/reed)</td>
</tr>
<tr>
<td>2 Aural test (matching pitches)</td>
</tr>
<tr>
<td>3 Rhythm “echo” test (call-response sequences)</td>
</tr>
<tr>
<td>4 Physical coordination test (psychomotor skills)</td>
</tr>
<tr>
<td>5 Music theory test</td>
</tr>
<tr>
<td>6 Analysis of students’ physical characteristics (teeth/ hands/ lips, etc.)</td>
</tr>
<tr>
<td>7 Input from elementary music teacher</td>
</tr>
<tr>
<td>8 Academic record</td>
</tr>
<tr>
<td>9 IQ test</td>
</tr>
<tr>
<td>10 Leblanc Music Talent Quiz</td>
</tr>
<tr>
<td>11 Instrument Timbre Preference Test (Gordon)</td>
</tr>
<tr>
<td>12 Musical Aptitude Profile (Gordon)</td>
</tr>
<tr>
<td>13 Measures of Musical Talent (Seashore)</td>
</tr>
<tr>
<td>14 Other (specify name or type of test and frequency)</td>
</tr>
</tbody>
</table>
Q11. Prior to making an instrument choice, **how often** do students have an opportunity to participate in the following activities?

**Frequency of occurrence**

[circle your answer]

<table>
<thead>
<tr>
<th></th>
<th></th>
<th>NEVER</th>
<th>RARELY</th>
<th>SOMETIMES</th>
<th>FREQUENTLY</th>
<th>ALWAYS</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>View pictures/diagrams of musical instruments</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Look at a variety of instruments on display</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Touch/hold a variety of instruments</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Produce a sound on a variety of instruments</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Hear live performances of instruments</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>Hear recorded performances of instruments</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>Other (specify)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Q12. One of the important decisions teachers make during this process is deciding which, if any, instruments will be initially excluded from the range of choices available to students.

[Please answer both "a" and "b" sections]

(a) Place a check mark (✓) in column "A" beside any of the following instruments which you initially exclude from the instrument selection process. [Example: ✓ Bassoon]

<table>
<thead>
<tr>
<th>COLUMN &quot;A&quot;</th>
<th>INSTRUMENT</th>
<th>COLUMN &quot;B&quot;</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Piccolo</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Flute</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Oboe</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Bb clarinet</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Bass clarinet</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Bassoon</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Alto saxophone</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Tenor saxophone</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Baritone Saxophone</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Trumpet</td>
<td></td>
</tr>
<tr>
<td></td>
<td>French horn</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Baritone</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Trombone</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Tuba</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Drums (only)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Mallet keyboard (only)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Drums and Mallet</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Other (specify) ______</td>
<td></td>
</tr>
</tbody>
</table>
(b) Using the list of reasons in the box below, identify why you initially exclude certain instruments. Please assign to column "B" (above) the appropriate reason for each instrument excluded (v).

[Example: Bassoon 1, 2]

Reasons for excluding certain instruments

# Reason
1 Instrument(s) are not available
2 Too expensive to rent, buy, or maintain
3 Too large/heavy
4 Not an appropriate instrument for a beginner
5 Too difficult to learn at this stage
6 Too popular with students; offered later in an effort to control instrument balance
7 The teacher is less familiar with these instruments
8 Other (specify)______________________________

Describe the roles and influence of teachers and music store personnel during the instrument selection process.

Q13. Which one of the following statements most accurately describes your role as a teacher during the instrument selection process?
[circle the number]

1 No attempt is made to influence or guide students in making their instrument choices
2 Students are guided in making their instrumental choices
3 Students are guided in making their choice from a limited number of instruments
4 The appropriate instrument is chosen for the students
Q14. Given the following reasons, how often do you encourage students to choose specific instruments? [Answer ALL four questions]

Frequency of Encouragement
[circle your answer]

1 Financial considerations
(cost of renting/purchasing a musical instrument) NEVER RARELY SOMETIMES FREQUENTLY ALWAYS

Which instrument(s), if any?

2 Physical considerations
(the instrument is too large/heavy for the student) NEVER RARELY SOMETIMES FREQUENTLY ALWAYS

Which instrument(s), if any?

3 Balanced instrumentation NEVER RARELY SOMETIMES FREQUENTLY ALWAYS

Which instrument(s), if any?

4 Other (specify) NEVER RARELY SOMETIMES FREQUENTLY ALWAYS

Which instrument(s), if any?

Q15. Do music store personnel demonstrate instruments to students at your school? [circle the number]

1 No
2 Yes
Please identify boys’ and girls’ instrument preferences and their reasons for choosing or wishing to change specific instrument choices.

Q16. Which beginning instruments are most preferred by BOYS?
   1st choice _____________
   2nd choice _____________
   3rd choice _____________

Q17. What beginning instrument is least preferred by BOYS?
   _______________________ (least preferred instrument)

Q18. Which beginning instruments are most preferred by GIRLS?
   1st choice _____________
   2nd choice _____________
   3rd choice _____________

Q19. What beginning instrument is least preferred by GIRLS?
   _______________________ (least preferred instrument)
Q20. As beginners, students choose instruments for a variety of reasons. Based on your experience, to what degree do the following reasons influence student's beginning instrument choices?

<table>
<thead>
<tr>
<th>Reason</th>
<th>Degree of Influence</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cost of an instrument</td>
<td>VERY WEAK WEAK MODERATE STRONG VERY STRONG</td>
</tr>
<tr>
<td>Size/weight of an instrument</td>
<td>VERY WEAK WEAK MODERATE STRONG VERY STRONG</td>
</tr>
<tr>
<td>Easy to learn to play</td>
<td>VERY WEAK WEAK MODERATE STRONG VERY STRONG</td>
</tr>
<tr>
<td>Availability of a school instrument</td>
<td>VERY WEAK WEAK MODERATE STRONG VERY STRONG</td>
</tr>
<tr>
<td>The sound of the instrument</td>
<td>VERY WEAK WEAK MODERATE STRONG VERY STRONG</td>
</tr>
<tr>
<td>Friends (peers)</td>
<td>VERY WEAK WEAK MODERATE STRONG VERY STRONG</td>
</tr>
<tr>
<td>Relatives (parents, siblings, grandparents, etc.)</td>
<td>VERY WEAK WEAK MODERATE STRONG VERY STRONG</td>
</tr>
<tr>
<td>Elementary classroom teacher</td>
<td>VERY WEAK WEAK MODERATE STRONG VERY STRONG</td>
</tr>
<tr>
<td>School performing ensembles</td>
<td>VERY WEAK WEAK MODERATE STRONG VERY STRONG</td>
</tr>
<tr>
<td>Other reason(s) (specify)</td>
<td>VERY WEAK WEAK MODERATE STRONG VERY STRONG</td>
</tr>
</tbody>
</table>
Q21. The following reasons may be given by students who wish to change to another instrument. How frequently do students express these reasons?

Frequency reason is given for change

[Circle your answer]

1 Instrument is thought
to be too difficult to play............. Never Rarely Sometimes Frequently Always

2 Not believed to be a
popular instrument
by their peers............................... Never Rarely Sometimes Frequently Always

3 Size/weight of the
instrument ..................................... Never Rarely Sometimes Frequently Always

4 Student wants to play
an instrument his/her
friend is playing.......................... Never Rarely Sometimes Frequently Always

5 Does not like the sound
of the instrument.......................... Never Rarely Sometimes Frequently Always

6 Other ______________________________ Never Rarely Sometimes Frequently Always

Please provide your views about gender-stereotyping issues.

Q22. How do you feel about this statement? “Student instrument choices are strongly influenced by gender-stereotyping (bias).”

[Circle the number]

1 Strongly Disagree
2 Disagree
3 Neither Disagree or Agree
4 Agree
5 Strongly Agree
Q23. Do you take any steps to address gender-stereotyping (bias) during the instrument selection process? [circle the number]

1  No
2  Yes

If yes, please describe the steps taken __________________________

Please assess the relative impact of the following areas on shaping and modifying your approach to the instrument selection process.

Q24. To what degree have the following individuals or settings influenced your present approach to the instrument selection process?

Degree of influence [circle your answer]

1  Your college/university preservice teacher education courses.....................VERY WEAK WEAK MODERATE STRONG VERY STRONG

2  Your cooperating teacher(s) during your preservice teacher training..................VERY WEAK WEAK MODERATE STRONG VERY STRONG

3  Your predecessor's approach to the instrument selection process.......................... VERY WEAK WEAK MODERATE STRONG VERY STRONG

4  Your fellow teachers (colleagues)..............................................VERY WEAK WEAK MODERATE STRONG VERY STRONG

5  Your personal experiences as a teacher..............................................VERY WEAK WEAK MODERATE STRONG VERY STRONG

6  Your music teacher when you were a beginning student....... VERY WEAK WEAK MODERATE STRONG VERY STRONG

7  Other (specify)________________.. VERY WEAK WEAK MODERATE STRONG VERY STRONG
Q25. To what degree did your preservice teacher education address aspects of the instrument selection process? [circle the number]

1  Not addressed at all
2  Briefly mentioned
3  Dealt with in some detail
4  Other (specify) ________________________________

Q26. Have you made changes to your instrument selection process since you began teaching? [circle the number]

1  No
2  Yes

If yes, what are some of the changes? ________________________________

_________________________________________________________
_________________________________________________________
_________________________________________________________
_________________________________________________________
_________________________________________________________
_________________________________________________________
Are there any additional comments you would like to make about your instrument selection process? If so, please use the space provided below.

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

Your contribution to this research project is greatly appreciated. If you would like a summary of results, please print your name and address on the back of the return envelope.

Thank you for participating!

Please return this survey as soon as possible.
APPENDIX L

SURVEY COVER LETTER (1ST MAILOUT)
SURVEY COVER LETTER (1st mailout)

February 22, 1999

Name of the teacher (if known)
Name of the school
Address of the school

Dear Instrumental Music Teacher or (Name of the potential respondent):

I need your help in acquiring data that describe how Alberta students are prepared to select a musical instrument. The process of choosing a musical instrument presents certain challenges for students and music teachers. For many students, participating in a beginning band class will be the first opportunity they have had to play a musical instrument. For educators, this selection process continues to be a major responsibility in instrumental music education.

The purpose of this survey is to investigate the process by which teachers of beginning band prepare students to make instrument choices. The results of information gathered from music teachers throughout the province of Alberta will make it possible to identify present instructional practices relating to the instrument selection process.

As a teacher responsible for beginning band instruction, your input is very important. In order that the results of this study truly represent the instructional practices of instrumental music teachers in Alberta, it is important that each questionnaire be completed and returned.

You may be assured of complete confidentiality. The questionnaire has an identification number for mailing purposes only, thereby making it possible to check off the name of your school from the mailing list when your questionnaire
is returned. The results of this research will be made available to instrumental
music teachers and arts administrators. If you would like to receive a summary
of results, please print your name and address on the back of the return
envelope.

This survey takes approximately 15 minutes to complete. I would be happy to
answer any questions you might have. Please feel free to contact me by phone,
FAX, or e-mail.

Thank you in advance for taking the time to complete the survey.

Sincerely,

Jonathan G. Bayley
Director, GPRC Wind Ensemble
Phone: 539-2014
FAX: 539-2800
e-mail: bayley@gprc.ab.ca
APPENDIX M
POSTCARD
POSTCARD

February 1999

Last week a questionnaire about the musical instrument selection process was mailed to you.

If you have already returned your survey, please accept my sincere thanks. If not, please complete it today.

It is my hope that this survey will accurately represent the present status of beginning instrumental music teaching in Alberta.

Your response is an important part of this research effort.

If you did not receive the questionnaire, please contact me immediately and I will mail another one to you today.

Sincerely,

Jonathan G. Bayley
Grande Prairie Regional College
10726-106 Avenue
Grande Prairie, Alberta
T8V 4C4
e-mail: bayley@gprc.ab.ca
phone: (780) 539-2014/FAX: (780) 539-2800

Note: On January 25, 1999, the area code for northern Alberta changed from 403 to 780.
APPENDIX N
SURVEY COVER LETTER (2ND MAILOUT)
SURVEY COVER LETTER (2nd mailout)

April 12, 1999
Name of the teacher (if known)
Name of the school
Address of the school

Dear Instrumental Music Teacher or (Name of the potential respondent):

A few weeks ago I sent you a questionnaire seeking your input regarding various aspects of the instrument selection process. As of the above date, I have not received your completed questionnaire.

The purpose of this study is to investigate the various musical and educational experiences which occur prior to determining students' instrument choices.

As an instrument specialist, your input is crucial to the success of this provincial study. In order that the results of this study be truly representative of all instrumental music teachers in the province of Alberta, it is essential that each questionnaire be completed and returned as soon as possible.

I have enclosed an additional questionnaire for your convenience.

Your contribution to this project is greatly appreciated.

Sincerely,

Jonathan G. Bayley
Director, GPRC Wind Ensemble
Grande Prairie Regional College
10726-106 Avenue
Grande Prairie, Alberta
T8V 4C4

e-mail: bayley@gprc.ab.ca/phone: (780) 539-2014/FAX: (780) 539-2800

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APPENDIX O

NONRESPONDENT REMINDER
TO: _____________________________________________________

FROM: JONATHAN G. BAYLEY — Bayley@gprc.ab.ca

DATE: _______________________

PAGES: _______________________

MESSAGE:

A friendly reminder re:


If you could return it as soon as possible, it would be greatly appreciated.

Thanks,

Jonathan

GRANDE PRAIRIE REGIONAL COLLEGE
10726-106 Ave., Grande Prairie, AB T8V 4C4
Phone: (780) 539-2014/FAX: (780) 539:2800
APPENDIX P
INSTRUMENT NAME AND CODE
<table>
<thead>
<tr>
<th>Code</th>
<th>Instrument Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>01</td>
<td>Piccolo</td>
</tr>
<tr>
<td>02</td>
<td>Flute</td>
</tr>
<tr>
<td>03</td>
<td>Oboe</td>
</tr>
<tr>
<td>04</td>
<td>Bb clarinet</td>
</tr>
<tr>
<td>05</td>
<td>Bass clarinet</td>
</tr>
<tr>
<td>06</td>
<td>Bassoon</td>
</tr>
<tr>
<td>07</td>
<td>Alto saxophone</td>
</tr>
<tr>
<td>08</td>
<td>Tenor saxophone</td>
</tr>
<tr>
<td>09</td>
<td>Baritone saxophone</td>
</tr>
<tr>
<td>10</td>
<td>Trumpet/Cornet</td>
</tr>
<tr>
<td>11</td>
<td>French Horn</td>
</tr>
<tr>
<td>12</td>
<td>Baritone</td>
</tr>
<tr>
<td>13</td>
<td>Trombone</td>
</tr>
<tr>
<td>14</td>
<td>Tuba</td>
</tr>
<tr>
<td>15</td>
<td>Drums (only)</td>
</tr>
<tr>
<td>16</td>
<td>Mallet keyboard (only)</td>
</tr>
<tr>
<td>17</td>
<td>Drums and Mallet</td>
</tr>
<tr>
<td>18</td>
<td>Low brass</td>
</tr>
<tr>
<td>19</td>
<td>Large brass</td>
</tr>
<tr>
<td>20</td>
<td>Brass</td>
</tr>
<tr>
<td>21</td>
<td>Euphonium</td>
</tr>
<tr>
<td>22</td>
<td>Low woodwinds</td>
</tr>
<tr>
<td>23</td>
<td>Bass instruments</td>
</tr>
<tr>
<td>24</td>
<td>Piano/keyboards</td>
</tr>
<tr>
<td>25</td>
<td>Guitar</td>
</tr>
<tr>
<td>26</td>
<td>Strings</td>
</tr>
<tr>
<td>27</td>
<td>String bass</td>
</tr>
<tr>
<td>28</td>
<td>Percussion</td>
</tr>
<tr>
<td>29</td>
<td>Voice</td>
</tr>
<tr>
<td>30</td>
<td>Saxophone(s)</td>
</tr>
<tr>
<td>31</td>
<td>“All” instruments</td>
</tr>
<tr>
<td>32</td>
<td>Bass guitar</td>
</tr>
<tr>
<td>33</td>
<td>Violin</td>
</tr>
<tr>
<td>34</td>
<td>Pipe organ</td>
</tr>
<tr>
<td>88</td>
<td>Other (specify)</td>
</tr>
<tr>
<td>99</td>
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APPENDIX Q
ADDITIONAL COMMENTS FROM RESPONDENTS
Additional Comments from "BACK PAGE"

1. This is my first year of teaching grade 4 classroom music, and I am doing a large recorder unit which I approach as “pre-band” — behaviour, room setup, practicing, podium protocol, etc. This will hopefully make grade 5 band run smoother.

2. I find myself often “pleasing students’” first choice of instrument and often, therefore, struggle with balanced sections. Many times, if a student cannot play their first choice (I ask for three) they want to say no to the program.

3. I’m finding more hands-on playing experiences the most effective i.e., Sell pkgs. from retailers works well, (i.e.) a demonstration than opportunity for playing trial.

4. My instrument selection form offers the following choice of instruments: flute, clarinet, alto sax, tenor sax, trumpet, horn, trombone, baritone, and tuba. Each student is asked to list their first, second, and third choices. Percussion is not a choice. In November, I run auditions for the percussion section. By this time I pretty well know who I don’t want in the back row. Successful candidates then double on the wind instrument that was chosen in September and the assigned percussion instrument, (i.e., flute and percussion). If the band is performing two pieces, the doubler will play flute in one piece and percussion in the other. Hope this helps.

5. I use my high school band students a lot in this process. By playing famous “licks” on less popular instruments and down-playing the “too popular.”
6. You can't please everyone. I let my students write down their top 3 choices, and even though I try my best to accommodate everyone, there is always a parent or a student complaining about the instruments received.

7. You failed to mention the budgets of schools which dictate availability of instruments so the teacher may not be able to put everyone who wishes on the trumpet for example. Some students wanting to be in band because of their friends, take what they can or what is available to play.

8. Students are given opportunity to listen to a variety of musical timbres, given instruction on making personal choice of instrument with tips on pros and cons of each instrument, given opportunity to try all the instruments on a given night, then make their selection in consultation with parents and music/band teacher.

9. I do allow switching after a trial period when students are struggling on a specific instrument—some end up not coping on any instrument and continue searching for something "easy." I think they ultimately have to be allowed to make the choice therefore being more satisfied with the instrument.

10. The extent to which funding is available for our program greatly affects the instrument selection process. I teach in two rural schools and the students all use school instruments. I feel moderately optimistic that this will stay the same for the next few years but when the time comes for the school to provide instruments, we will see a dramatic decrease in the numbers due to increased expectations of user-pay programs—especially in rural Alberta!

11. Being a very small school, our junior high students (gr. 7-9) have no "options." The band is a compulsory course throughout Jr. High. Since the numbers are small in each grade, I indicate to the students the importance of a balanced band and discuss the main instruments needed to produce a good sound. The students
are given three (3) choices from these instruments and I chose which they will play. I look at previous musical experience in elementary class and piano lessons. And I try to put some girls and boys in each section, as well as, some weaker students with the more talented ones. It has been a very successful process over the past six (6) years!

12.
I primarily focus on the importance of balance in creating a good band. I begin with describing bass instruments as key to a good sound.

13.
Need $$$$$$ (money) for more instruments.

14.
I find this to be the most difficult part of teaching band, after the choosing of music. I often envy the full balanced bands of some other schools, and it is something that is becoming better in my program, but costs are almost always the first and foremost consideration.

15.
Because time is an issue in the spring, my school does not do feeder school concerts. Instead, we offer a one-hour presentation on orientation day to all prospective grade six students. This presentation consists of a concert by the senior concert band and jazz band, instrument demonstrations, an explanation of the band program at [name of the school], and the distribution of an orientation handbook.

16.
In the handbook, students receive an instrument selection form which they fill out their top three choices and return to me after they’ve discussed them with their parents.

17.
During their orientation, students have an opportunity to visit the band room, see instruments up close, and ask questions. Students only have approximately 10 minutes in the band room before they continue their tour through the school.
18. During the first week of school, students learn, hear and see all instruments and write a multiple choice test. I use the mark on this test as one of the indicators for instrument choice.

19.
THE SECRET! — Start as many Fr. Horn and tubas as possible. Clarinet, trumpet, flute always work out—they drop out of the sky! But if you want the group to sound good, get the low brass going. If you stick to the Alberta curriculum, it's easy to justify never allowing a kid near a drum! You save yourself a ton of headaches if you establish a section of "percussionists" as opposed to "drummers"!

20. I team teach in a very successful program that was well established before I got there. A balanced band is fairly easy to achieve because our division owns all instruments that we (the teachers) get to order. We let kids decide keeping the balanced band in mind and their desire to play the instruments almost always wins!!

21. I believe it is also important to counteract the tendency for "popular" instruments to overbalance/unbalance the instrumentation. For the first month or so, I offer "percussion club" at noon hours—the only exposure Grade 6 students will get to hands-on experience. They must prove their dedication, responsibility and musical aptitude before being considered for the percussion section.

22. I also "stack the deck" as far as "unpopular" instruments, having my trumpet, flute and saxophone clinicians play/demonstrate on the "tame" side, while having tuba, trombone, oboe and others really "turn it on" and impress them. This tends to even things out better when it comes time for students to make their three choices. (One of their three choices is finally assigned by me.)
23. Students are experientially influenced by television. Student’s top choices reflect instruments they see and hear in rock videos. Low brass instruments are rarely heard or seen, and if so, are playing “unfamiliar” bass lines in a low register. This is where we all struggle to fill that most valuable section with strong musicians who least want to play low brass instruments.

24. I have our high school students do an orientation night in June. Each instrument is demonstrated by both males and females. My students can ask questions at this time and have a closer look. They then have an instrument selection sheet where they write their first and second choices.

25. I teach both the elementary and junior high programs. In the elementary program, students start each class with a listening exercise. They identify solo instruments, group which they belong to, era of piece, and mood of music. We listen to many different styles. We do two joint concerts a year with the grade 7 band, so, my elementary students are exposed to the band instruments.

26. Often ask my fellow music teachers in the district about their practices.

27. I also assign certain instruments based on personality somewhat. I seek out strong individuals to play more select instruments like bass clarinet. Prospective French horn players must have either a piano or choral background. Students that have an interest in performing with the Jazz Ensemble, are encouraged to start on trombone or trumpet. Players desiring to play saxophone, must start on either flute or clarinet. Percussionists must have a piano background and must be serious students.

28. In grade 6 at my school, we just received a grant to purchase new instruments. It was very difficult to choose what to buy with the $50,000. I chose flutes, clarinets, trumpets and trombones for the beginners. I also supplemented my other
instruments by getting Alto and Tenor saxes, new Bass drum, cymbals, concert toms etc. Now beginner students choose from only Flute, Clarinet, Trumpet and Trombone. To my knowledge this is the only Grade 6 mandatory band class in the public board. It is a unique and special situation which I think has very special circumstances. We do not see the “gender-stereotyping” in these younger students. We have equal mixes on all the instruments (except trombone [all boys]). I would be very interested in the results of your research!!

29.
I find that many students are making their ‘parent choice’ of instruments, not their own. This is disappointing and not very ‘musical.’ Since the students need parental support and encouragement to succeed, they are not learning ‘their’ preferred choice.

30.
I do everything I can to introduce students to all instruments and then allowing them to choose what they want to learn. After all, it’s their education and their option, so the instrumentation of my ensemble, at a beginning level, must take a back seat.

31.
As time passes, balance can be achieved by introducing instruments on the extremities of range etc. For example, a Euphonium player moves to tuba, or a trumpet to baritone or Horn, a clarinet to Bass clarinet and so on.

32.
In small programs, every student is important, so attrition is a real concern. There’s no doubt that when a student loves their instrument, they will stay in band.

33.
I give students the opportunity to make informed choices about what instrument they would like to play. We watch videos, listen to CD’s. I demonstrate—everyone tries different mouthpieces. It takes about three weeks but I rarely have students who switch. I only switch them if they are really not succeeding (1 student/yr.). Lastly, I include parents in the equation. I give
students a 3-choice form and parents MUST sign it. Preference is given to students who have their forms in on time. I rarely cannot give them their first choice as I SELL the less popular instruments REALLY HARD. It has worked well since I started. Thanks.

34.
Even though I teach in a K-9 school, students coming in grade 7 are from a variety of schools -- some have some basic music training and some have none at all. Every year it’s like starting all over. We have a very transient population and are classed as an inner city school. Our students come from low-income families with little or not musical support. Private lessons are unheard of and many parents feel a small fee for renting instruments is too much of a burden. They don’t support a home-practicing environment either. They live in a small apartment with neighbours who don’t support a student practicing at home.

35.
I’m finding that only high academic kids are achieving success with the French horn. I’m looking to modify my selection process accordingly.
The oboe is tending to be ignored because I don’t want to spend the money required for the reeds. I only allow very sharp kids to play the bassoon for the same reason.

36.
I think the selection process is crucial to the success of a program. I am most interested to see the results of your survey.

37.
Cost is never a factor at our school because we charge every student a flat $50.00 rental fee at the beginning of the year. Our school has enough instruments that we are able to accommodate every student need in this respect.

38.
This is one of the hardest things to do. I find kids initially complain but if not allowed to switch, they’ll stick with it and like it. It’s important kids have a
chance to try them before choosing — many will discover they have a hard time with flute, but rock on the trombone and the problem of seven (7) flutes is solved!

39.

I find that if they are going to fail at music, they will fail on any instrument, but a student with potential may not be motivated to succeed if they are playing an instrument they hate.

40.

I never assign an instrument to a student if they really don’t want to play it. However, I often find that if I speak to an individual and do a bit of “negotiation,” I can get them to reconsider their initial choice and steer them towards choosing a different instrument. I do this to improve the band’s balance or to avoid letting students play instruments that they probably should not play.
LIST OF REFERENCES


