



2012 HAWAII UNIVERSITY INTERNATIONAL CONFERENCES  
EDUCATION, MATH & ENGINEERING TECHNOLOGY  
JULY 31<sup>ST</sup> TO AUGUST 2<sup>ND</sup>  
WAIKIKI BEACH MARRIOT RESORT & SPA  
HONOLULU, HAWAII

# HIGH SCHOOL ALL-STATE MUSICIANS' INTEREST IN THE MUSIC PROFESSIONS

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**ABSTRACT:** A survey was administered to high school All-State musicians ( $N = 2005$ ) in 5 different states (MT, WY, SD, MN, and ND) and from 3 different performing groups (Bands, Choirs, and Orchestras) to determine the number of high school students with an interest in the music or music education professions from the best high school musicians available. High school All-State musicians were identified as one population of the 'best and brightest' musicians and as possible future music educators. The survey instrument was modeled after the questions Bergee, Coffman, Demorest, Humphreys, and Thornton (2001) used to gather data from college music students who had decided to pursue a career in music education. The present survey presented 20 questions including 16 closed-ended questions, and four open-ended questions. The survey included demographic information and information on the musicians' music experiences and background. In addition, the survey inquired about their possible future plans and gauged their interest in the music education profession.

The primary intent was to determine the number of high school students with an interest in the music or music education professions from the best high school musicians available. The study also attempted to identify reasons All-State music students would not pursue a career in music or music education, and what, if anything, could be changed to make the professions more attractive. Other goals of this study were to identify experiences and opportunities that may have triggered an interest in music education, or experiences or opportunities that may have squelched an interest in music education in our best high school musicians.

Thirty-three percent of all All-State musicians surveyed expressed an interest in majoring in music or music education ( $n = 662$ , 33.0%). Music and music education were combined together as previous research suggested that many of those not specifically in music education, do actually, eventually teach. Those indicating specifically music education numbered 188 of 1999 for 9.4%. Several areas were identified as items needed to be changed to make the music education profession more attractive. These were identified as 'More money/higher salary', 'Better Students', and 'Better job security/More career options/opportunities'. 'Opportunities to teach' was identified as a possible trigger mechanism for interest in the music education professions. Reasons given for not choosing music or music education as a possible major included 'Music is more of a hobby/Just for fun', (15.4%); 'More interested in (*something else*)', (12.6%); and 'Not enough money', (4.7%). Further research replicating this study in non-western states and in more urban areas is suggested as this could determine differences between those population groups and the present study, and the interest in the music education professions.

It is generally acknowledged that a public school teacher shortage exists, at least in some subject areas. Numerous reasons are given for this shortage including low salaries, lack of respect, retirement of practicing teachers, increasing student population, the No Child Left Behind (NCLB) law, high turnover of current teachers, and poor working conditions (Bracey, 2002; Howard, 2003; Ingersoll, 2003; Keller, 2003; McIntyre, 2002; Tye and O'Brien, 2002). It is also generally acknowledged that one of the subject areas with an ongoing critical shortage of teachers is music (Asmus, 1999; Bergee & Demorest, 2003; Clayton, 2001; Lindeman, 2004; Wilcox, 2000). Although small gains have recently been reported in the numbers of students graduating with degrees in music education, the number of graduates still does not satisfy the total need for more music educators (Music Educators National Conference, 2004).

Several authors have examined music teacher retention and attrition. (Conway, 2001; Madsen and Hancock, 2002; McDowell, 2002; Scheib, 2004). Several reasons for leaving the profession were outlined including low salary, excessive workload, stress and burnout, lack of administrative and budget support, and classroom management or student discipline. Few researchers, if any, have examined the interests of public school music students and their interest in the music education profession. Public school music students, and specifically high school music students, are the next generation of music teachers. Their level of interest in the music education professions should be of interest to the leaders of our profession.

The best musicians in our public school music programs can be found in the high school All-State honors groups that most states sponsor. These All-State music groups generally include concert bands, choirs, and orchestras. By definition, these auditioned groups include the best high school musicians at the time of their inception for the state in which they are assembled (Barnes, 2002; Elliott, 1995; Wine, 1996). There have been few studies done with All-State

students. Through the few existing studies, authors have examined the students, while others have examined the audition processes or the results of the auditions.

DeCarbo, Fiese, and Boyle (1990) surveyed Florida All-State students and inquired as to their personal, educational, and musical backgrounds. In addition to the numerous demographics of the Florida All-State students, they also reported 38% of the respondents intended to major in music in college. Lien and Humphreys (2001) examined the effects of the variables of school enrollment, distance to the audition site, sex of the auditionees, and instrument type on being selected for the All-State Band in South Dakota. Alford (1985) suggested a standardized audition format for All-State percussionists, while Bobbett (1993) reported that music activities such as All-State events had a positive impact on students' musical independence in college. Dugger (1997), Saunders and Holahan (1997) individually studied the audition process and judging reliability during the audition process.

As suggested by Wilcox (2000), and as evidenced by Tamagawa (1988), Osland (2002) and Rees (1988), many college music majors not in music education, do eventually teach. College music majors in performance, theory and other areas of concentration do become teachers at some level and at some time. Bergee, Coffman, Demorest, Humphreys, and Thornton (2001) also suggested that some music majors in the final year of their non-education degree program switch to a teaching degree program. Because of the possibility that music majors, not in music education, might teach music, all college music majors should be considered in the pool of possible music teachers for the public schools, as well as in other areas and levels.

Bergee et al (2001) reported that close to 60% of the college music education majors that they surveyed made the decision to become a music educator during their high school years. This is an important and influential time for career and education decisions. Experiences and

opportunities during the high school years have a great influence on those decisions. Bergee et al reported that honors groups (All-State, All-District), solo/ensemble festival events (contests), music camps, and other competitions all were important influences on music education majors' decision to choose that career. In addition, they reported that beyond their music teachers, one of the most important groups in influencing students' choices and decisions was parents. Other studies have also identified the positive impact of parents in music education and music students (Brand, 1986; Davidson, Sloboda, & Howe, 1995; Zdzinski, 1992, Zdzinski, 1996).

'Opportunities to teach' was also identified as an important factor in the decision to become a music educator (Bergee et al, 2001). This factor included opportunities to conduct, rehearse, and teach classes, or mentor/give private lessons to peers or younger students. Brand (2002) reinforces the idea that many factors, some outside of education and music, affect students' decisions in career and education choices. Current music teachers are also one group that can influence students to choose music education as a college major and a career.

The purpose of the present study was to survey high school All-State musicians in three different performing groups (band, choir, and orchestra) in five different states to determine their level of interest in the music or music education professions. The study also attempted to identify reasons All-State music students would not pursue a career in music or music education, and what, if anything, could be changed to make the professions more attractive. Other goals of this study were to identify experiences and opportunities that may have triggered an interest in music education, or experiences or opportunities that may have squelched an interest in music education in our best high school musicians.

## Method

### *Subjects*

The subjects were high school musicians ( $N = 2005$ ) selected for All-State music groups in Montana ( $n = 360$ ), Wyoming ( $n = 333$ ), South Dakota ( $n = 411$ ), North Dakota ( $n = 404$ ), and Minnesota ( $n = 497$ ). The survey was administered on site of All-State group rehearsals within the date range from October 2003 to August 2004. Generally for each state, one band, one choir, and one orchestra were surveyed, and usually within the time frame of the All-State event, but there was some variance. South Dakota holds its All-State Chorus and Orchestra in the fall, which includes a very large (almost 1,000 students) non-auditioned choir (South Dakota High School Activities Association, 2004). The SD All-State Band meets in the spring, and a SD All-State Honors Choir meets in the summer following the fall, large SD All-State Choir. Because of the logistics of the very large chorus, and its non-auditioned nature, only the select SD Honors choir was surveyed in the summer. Because of the time frames of the SD All-State groups, and the eligibility of students for those events, this also meant that two or three students might have been surveyed twice at different events, but due to the anonymous nature of the survey, this could not be confirmed. Because of its larger population, Minnesota has two All-State Bands (concert band and symphonic band) and three choirs (mixed, men's, and women's), in addition to its All-State Orchestra. All Minnesota groups were surveyed. North Dakota also included an additional women's chorus and both of the ND Choirs were surveyed.

Demographic information of the student participants revealed a majority of All-State students were females ( $f = 59.1\%$ ,  $m = 40.9\%$ ) and included more high school seniors than any other grade level (Table 1). Gender by group showed females were most dominant in orchestra despite all-women's choirs in Minnesota and North Dakota. Distribution of females and males

within the groups is displayed in Table 2. Gender by state numbers and percentages highlighted the addition of the women's-only choir to the North Dakota totals but also gave the numbers and percentages by state of the total number of surveys (Table 3). The number of years of musical experience on their present instrument was the highest percentage at 7+ years, but over 60% of all students surveyed expressed their musical experience as seven years or more ( $M = 6.952$ ,  $SD = 2.5014$ ). Three students did not respond to this question. All-State musicians surveyed had 1.8 years of All-State experience ( $M = 1.826$ ,  $SD = 0.9617$ ).

Of the survey respondents, 64.8% indicated they were primarily instrumentalists, while 33.1% indicated they were vocalists. Two percent (2.1%) gave no response. The All-State musicians' musical experiences showed that 90.2% had participated in a Solo/Ensemble contests and of those, 97.5% enjoyed the experience; 83.9% had participated in Large Group contests, and of those, 95.9% enjoyed the experience; 75.2% had participated in an 'Honors' group other than an All-State group and of those, 96.9% found it enjoyable; while 61.5% had attended a Music Camp, and of those, 93.9% enjoyed the experience. The All-State musicians' parents' musical experiences indicated that 73.6% of the parents had participated in music in high school, 33.8% had participated in music in college, 14.3% majored in music in college, while 13.3% of the All-State musicians' parents' were or had been music teachers.

### *Survey Instrument*

The survey instrument was modeled after the questions Bergee, Coffman, Demorest, Humphreys, and Thornton (2001) used to gather data from college music students who had decided to pursue a career in music education. Beyond demographic information, the model asked questions regarding college students' influences and opportunities in deciding to pursue a

music education career. The present survey included 20 questions consisting of 16 closed-ended questions, and four open-ended questions. The open-ended questions in the present study included the students' major instrument, their possible major in college, the reason music or music education was not listed as a possible major, and one thing about the music education profession they could change that would make it attractive as a career. As with the model, and as a variation of the model, the present survey inquired as to the students' experiences with solo/ensemble contests, large group contests, summer music camps, and honors music groups other than All-State groups, and their enjoyment of these activities. The present survey also questioned the students on their parents' musical backgrounds and experiences. As with the model, the present survey inquired about the students' opportunities to teach and whether or not they enjoyed those experiences. Finally, the present survey asked about the students' possible future plans. Possible answers to future plans included a. attending college, b. attending a vocational-technical school, c. working, d. joining a military organization, or e. not sure of future plans. If they checked 'attend college', they were asked to list a possible major. The last question simply asked: *If you could change one thing about the music education profession that would make it attractive to you as a career, what would it be?*

The survey tool was pilot-tested with a local high school and after three weeks, the same group was given the same survey again for a test-retest reliability check. Through suggestions by the pilot group, minor changes were made to the final survey form. A high degree of correlation existed between the test and retest ( $n = 46$ ,  $r = .984$ ,  $p < .01$ ) and the instrument was deemed reliable. Internal reliability of the questionnaire was assessed using Cronbach's alpha. A score of .91 was generated for non-demographic items.

Generally, the researcher administered the distribution, explanation, and collection of the survey during rehearsal breaks of the All-State music groups for a maximum return of the survey forms. Due to time schedules and location of rehearsals, this was not always possible. Instructions for the administration of the survey and a script to be read to the students were developed, so others, other than the researcher, could administer the survey. This was generally very successful except in a few cases. It was stressed to the students that the information was anonymous and confidential and no identifying information was asked for. Most students took approximately 5-10 minutes to complete the survey, although a very few took as much as 15 minutes. The number of All-State students selected for each state and group and the total number of valid surveys from each was calculated, and based upon that, the return rate for the entire study was 89.1% of the All-State musicians, with the total number of valid surveys being 2005 ( $N = 2005$ ).

### Results

Ninety-four percent of the high school All-State musicians surveyed indicated they would attend college after high school ( $n = 1884, 94.0\%$ ), while four percent ( $n = 80, 4.0\%$ ) stated they were not sure what they were going to do, but less than one percent each indicated attend a Vocational-Technical school ( $n = 18, 0.9\%$ ), work ( $n = 8, 0.4\%$ ), or join a military organization ( $n = 15, 0.7\%$ ). Of those that indicated they would likely attend college after high school, 188 of 1999 or 9.4% indicated specifically they would major in music education. When combined with the 474 students (23.6%) who indicated only music as a possible major, thirty-three percent of all All-State musicians surveyed could be considered as possible music educators ( $n = 662, 33.0\%$ ). Music and music education were combined together as previous research suggested that many of those not specifically in music education, do actually, eventually teach (Bergee, Coffman,

Demorest, Humphreys, and Thornton, 2001; Osland, 2002; Rees, 1988; Tamagawa, 1988; Wilcox, 2000). Other responses to the question of a possible college major included 'Not Sure/Don't Know' ( $n = 221$ , 11.1%), 'Medicine/Pre-Med' ( $n = 120$ , 6.0%), 'Engineering' ( $n = 103$ , 5.2%), and 'Biology' ( $n = 75$ , 3.8%). There were almost 100 college majors listed by the students, but the aforementioned college majors highlighted the six most frequent responses.

To the question '*Why not music or music education as a possible major?*' 46.2% ( $n = 905$ ) gave no response or stated "No Idea". Fifteen percent ( $n = 308$ , 15.7%) did not consider music as a vocation but merely an avocation and indicated it was 'Just for Fun/Hobby'. Almost 13 percent ( $n = 252$ , 12.9%) of the students responded to this question by stating they had a stronger interest in some other area other than music or music education. Other responses to the question '*Why not music or music education?*' included Money ( $n = 95$ , 4.8%), Not Interested ( $n = 95$ , 4.8%), Lack of Career Opportunities ( $n = 78$ , 4.0%), Not Good Enough ( $n = 51$ , 2.6%), and 'I enjoy playing more than teaching' ( $n = 50$ , 2.5%).

To the question "*If you could change one thing about the music education profession (band director, choir director, orchestra director, elementary music teacher) that would make it attractive to you as a career, what would it be?*" 36.2% ( $n = 725$ ) of the respondents indicated 'More Money/Higher Salary'. Other Responses included 'No Response' (18.4%,  $n = 369$ ), 'OK' (10.1%,  $n = 202$ ), 'Better Students' (7.0%,  $n = 140$ ), 'Career Options/Job Security' (5.8%,  $n = 116$ ), and 'Don't Know' (5.8%,  $n = 116$ ).

Although the final question asked for only one change to make music education attractive as a career, several students ( $n = 287$ ; 14.3%) included more than one item. These items were similar to the previous list but also highlighted some different areas. The percentages are based upon extra responses only and included: 'More recognition/Respect/Support', ( $n = 72$ , 25.1%);

'Better job security/More career options/opportunities', ( $n = 61, 21.3\%$ ); 'More money/higher salary', ( $n = 45, 15.7\%$ ); 'Better Students', ( $n = 45, 15.7\%$ ).

Correlations between several variables and choosing music or music education as a possible major revealed several significant relationships ( $p < .05$ ). The participation in Solo/Ensemble contests ( $r = -.056$ ), participation in Large Group contests ( $r = -.048$ ), and participation in Honors Groups other than All-States ( $r = -.121$ ) all showed significant although not strong relationships to the choice of major. Attendance at music camps ( $r = -.148$ ), and parents' as music majors ( $r = -.079$ ) or as music teachers ( $r = -.078$ ) also showed a significant relationship to the choice of music as a possible major. The opportunities to teach, rehearse, or direct ( $r = -.248$ ) also showed a significant and the strongest relationship to the choice of music as a possible major. The negative numbers were a reflection of the data coding.

Chi-square analysis revealed differences between those choosing music as a possible college major (music) and those that did not (non-music), and their opportunities to teach, conduct and/or rehearse ( $\chi^2 = 136.83, df = 4, p < .01$ ). Similarly, the number of years in an All-State group ( $\chi^2 = 14.22, df = 4, p < .01$ ) and the number of years playing an instrument or singing ( $\chi^2 = 14.696, df = 6, p < .05$ ) also were related to the choice of music as a possible major. Participation in Solo and Ensemble contests ( $\chi^2 = 6.314, df = 1, p < .05$ ), Large Group contests ( $\chi^2 = 4.682, df = 1, p < .05$ ), and Honors groups other than All-State events ( $\chi^2 = 29.512, df = 1, p < .01$ ) also showed a significant relationship to the possible choice of music as a college major. Attendance at a music camp and choosing music as a possible college major was also significant ( $\chi^2 = 43.904, df = 1, p < .01$ ). The effect of parents' background and their

children's choice of a possible college major was also evident whether the parents majored in music ( $\chi^2 = 13.146$ ,  $df = 2$ ,  $p < .01$ ) or if the parents were music teachers ( $\chi^2 = 12.201$ ,  $df = 1$ ,  $p < .01$ ).

A factor analysis of variables (Table 4) related to the choice of music as a possible college major reinforced the positive effect of parents, of musical experiences especially contests, and of opportunities to teach. The year in school, the number of years performing music, and the number of years in an All-State group were also significant contributors to the decision to major in music. A detailed examination of the factor analysis reveals the relative independence of the different variables. The Pattern Matrix and the Structure Matrix identify that Factor 1 is largely derived from parents' influence, and that Factor 2 is a result of experience, either in music or school in general. Factor 3 is derived from the effect of Solo/Ensemble Contests and Large Group Contests, while Factor 4 is the result of the mix of the years in All-State groups and the opportunities to teach, conduct and/or rehearse. The Factor Correlation Matrix once again shows the relative independence of the variables and the factors except for the expectant relationship between years in school, years in music, and years in All-state groups.

Other Chi-square analysis also revealed differences between those choosing music as a possible college major (music) and those that did not (non-music), and their home state ( $\chi^2 = 12.090$ ,  $df = 4$ ,  $p < .05$ ), but differences by group (Band, Choir, Orchestra) were not significant ( $\chi^2 = .558$ ,  $df = 2$ ,  $p > .05$ ). Further differences between the students by states can be seen in Table 5, showing the range of possible music education majors with a low of 5.9% (MT) to a high of 13.2% (MN).

## Discussion

The major purpose of this research was to gauge the interest of high school All-State musicians in the music education professions. Of the survey respondents that answered the question regarding a possible major in college, 188 of 1999 or 9.4% specifically indicated music education was a possible major. When combined with the 474 or 23.6% of the respondents that specified music, music performance, music theory or some other music major other than music education, the total number rises to 662 or 33.0 % of the respondents. The figure of 33.0% is similar to the percentage of Florida All-State members (38%) who indicated they might major in music as reported by DeCarbo, Fiese, and Boyle (1990), but it is also less. Reasons for the difference can only be speculative, but may include geography, time, or changing interests.

Another purpose of the present study was to explore possible reasons why some of our 'best and brightest' music students would not want to pursue a career in music education. The largest single response to this question other than No Response was the fifteen percent of the respondents (15.7%,  $n = 308$ ) that indicated that they considered music as a mere avocation and hobby, but not as a serious possibility as a vocation. Some, through their comments, doubted that music or music education should be considered as a serious career choice and saw music education as a profession as 'unrealistic' or 'impractical'. Most of this group emphasized that for them it would always only be 'Just for Fun'. Others indicated that they had a stronger interest in some other area or field other than music or music education, and most indicated exactly what that area was. These are our 'best and brightest' but what was casually pointed out by several host directors during the data collection for this study, many of these students are also the 'best and brightest' in their schools and would logically have more interests other than just music.

Money was a factor for some not to pursue music or music education as a possible major in college, and was also mentioned by more in the question regarding changing something in music education to make it more attractive as a career. Although on the surface this may seem obvious or logical that all students would want to make more money, the opinions expressed by many students showed a real concern for the inability of teachers in general, and music teachers specifically, to make a salary that would adequately support them or their future families. As stated by one student about changing something in music education to make it attractive, she declared, "If it paid more so I could support a family, then I might consider it, but at the present the jobs pay just above the poverty level." Many students that showed this concern expressed similar statements and these concerns are manifested in previously mentioned research in reasons given to leave the profession, as well as why teachers stay in the profession.

Other topics that surfaced in both questions regarding 'why not music or music education as a major' and 'changing something in music education to make it attractive as a career' were career problems. These problems were identified as job security, career opportunities, job availability, and career advancement. Some students saw music education as a dead-end career with no avenues to advance. Some expressed concern over the cuts being made to music programs in the public schools, and saw music education as a career with little future or as an unstable career choice. Others saw music education as a career with limited job opportunities or availability.

Another area of concern again mentioned in both 'why not music or music education as a major' and 'changing something in music education to make it attractive as a career' by survey respondents was students. Some All-State students expressed a concern that not all students in their home music programs had the same level of interest in a quality performance or serious

study of music that they did. Some saw music classes as 'dumping' grounds for uninterested music students or music classes as lacking in discipline and structure. It must be pointed out that All-State musicians are highly motivated and 'the best and brightest' of our music students. They have different expectations of music classes and directors in their schools, but many of them could not see themselves putting up with the various frustrations of teaching music, especially to students of less than All-State caliber.

Casual conversations with music directors during the data collection for this survey identified two other factors within the scope of this study but not documented within the survey. Several directors highlighted that the All-State music students are not only the best musicians in the state in their respective organizations, but in many cases they are also the better, if not the best, students in their schools. No data was collected of All-State students and their grade point averages, their ACT or SAT scores as this was not part of the survey, but this in part could explain their interest in areas other than music for college majors and career choices. Several directors also affirmed that they themselves were never a member of an All-State music group, but they, never the less, went on to major in music and make music education their career. All-State students were chosen for this study because they are the best musicians in our high school music programs, but also they are a readily available population sample. Clearly there are many successful music educators without the All-State music experience, but Bergee et al (2001) identified 'Honors' groups like All-States to be an influential experience and event. Suggested research might be to correlate an All-State music experience and success as a music educator within the population of practicing music educators. Other possible further research could include a replication of this study in non-western states and in more urban areas to determine if differences exist between those population groups and those in the present study.

Tables

Table 1

All-State Musicians Year in School

Class	# Students	% of All-State Musicians
Freshman	124	6.2
Sophomore	251	12.5
Junior	639	31.9
Senior	991	49.4
Totals	2005	100.0

Table 2

Gender Distribution of All-State Musicians by Group

Group	# Females	# Males	Total by Group	% Females	% Male
Bands	344	245	589	58.4	41.5
Choirs	503	397	900	55.8	44.1
Orchestras	337	179	516	65.3	34.6
Totals	1184	821	2005	59.1	40.9

Table 3

Gender Distribution by State and State Percent

State	# Females	# Males	Total by State	% Females	% Males	State %
MT	201	159	360	55.8	44.2	17.9
WY	198	135	333	59.5	40.5	16.6
SD	243	168	411	59.1	40.8	20.5
MN	275	222	497	55.3	44.7	24.8
ND	267	137	404	66.1	33.9	20.2
Totals	1184	821	2005	59.1	40.9	100.0

Table 4  
 Factor Analysis for Students Choosing Music as a Possible College Major (*n* = 188)

Correlation Matrix	1	2	3	4	5	6	7	8	9	10
1. Parents Teach	1.000									
2. Parents Major	.678	1.000								
3. Year in School	.121	.033	1.000							
4. Years in Music	-.015	-.056	.245	1.000						
5. Solo/Ens. Contest	-.012	.013	-.286	-.086	1.000					
6. Large Contest	-.054	-.001	-.230	-.035	.365	1.000				
7. Honors Groups	-.005	.037	-.132	-.094	.073	.052	1.000			
8. Music Camp	.042	.078	-.023	-.023	.137	.086	.098	1.000		
9. All-State Exp.	-.105	-.138	.183	.091	-.100	-.064	-.173	-.083	1.000	
10. Oppor. To Teach	-.130	-.087	.196	.114	-.107	-.121	-.166	-.116	.126	1.000

Total Variance Explained

Factor	Eigenvalue	% of Variance	Cumulative %
1	1.983	19.832	19.832
2	1.742	17.419	37.251
3	1.126	11.265	48.516
4	1.028	10.276	58.792
5	.899	8.987	67.779
6	.863	8.635	76.413
7	.795	7.947	84.361
8	.649	6.495	90.856
9	.606	6.056	96.912
10	.309	3.088	100.000

Table 4 (cont.)

Pattern Matrix

	Factor			
	1	2	3	4
Parents Teach	.997	.048	-.029	.089
Parents Major	.692	.006	-.012	-.028
Year in School	.074	.889	-.192	-.075
Years in Music	-.011	.239	.006	.125
Solo/Ens. Contest	.011	-.064	.643	.009
Large Contest	-.034	-.038	.550	.012
Honors Groups	-.065	-.029	-.066	-.496
All-State Exp.	-.078	.121	-.002	.301
Oppor. To Teach	-.106	.122	-.062	.266
Music Camp	.016	.099	.141	-.245

Structure Matrix

	Factor			
	1	2	3	4
Parents Teach	.973	.039	-.030	-.116
Parents Major	.698	.031	.022	-.182
Year in School	.045	.904	-.360	.256
Years in Music	-.050	.279	-.087	.202
Solo/Ens. Contest	.036	-.202	.655	-.220
Large Contest	-.015	-.153	.554	-.169
Honors Groups	.048	-.171	.098	-.469
All-State Exp.	-.153	.221	-.128	.358
Oppor. To Teach	-.175	.266	-.178	.349
Music Camp	.073	-.011	.199	-.263

Factor Correlation Matrix

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Factor	1	2	3	4
1	1.000	-.044	.038	-.231
2	-.044	1.000	-.219	.321
3	.038	-.219	1.000	-.321
4	-.231	.321	-.321	1.000

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Extraction Method: Maximum Likelihood.

Rotation Method: Oblimin with Kaiser Normalization.

Only cases for which major = music are used in the analysis phase.

Table 5

Distribution of Possible Music Education Majors by State

State	MT	WY	SD	MN	ND	Total
Possible College	354	333	411	497	404	1999
Music Ed. #	21	27	35	66	39	188
Music Ed. %	5.9	8.1	8.5	13.2	9.6	9.4

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