# RECONSIDERING THE GRADE LEVEL FOR BEGINNING INSTRUMENTAL MUSIC

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An important component related to the school music program is the grade level at which beginning instrumental music is first offered. The grade level selected has potential ramifications on many matters, including the percentage of students who decide to participate, the rate of learning and performance achievement, and students' retention in the program.

Some school districts are reassessing the grade level at which they first offer beginning instrumental music because of such factors as: (a) proposed grade-level configuration shifts in school buildings (e.g., shifting from a K-6 elementary school and 7-8 junior high school to a K-5 elementary and 6-8 middle school), (b) increases or decreases in the number of instrumental music teachers, (c) adopting new academic scheduling models (e.g., block scheduling), (d) concerns regarding recruitment or retention, and (e) general dissatisfaction with instructional outcomes. In her study of Ohio schools, Delzell (1989) found that at the time of the survey 16% of the districts were considering a change in the grade level for beginning band and 10% for beginning strings.

The purpose of this article is to present a research-based overview of the factors that teachers may wish to consider when reassessing the grade level to first offer beginning instrumental music in the schools. Though there have been several dozen research studies on attrition in instrumental music education, this review of literature includes only those selected studies most closely related to the issue of grade-level selection. In addition, this article is limited to discussion of instrumental music programs in the schools and does not address private lesson programs or extracurricular programs.

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# **Standards and Estimates of Current Practice**

In the first half of the twentieth century, leaders in instrumental music education recommended that beginning classes be offered starting in the third grade (Woods, 1920) or fourth grade (Hindsley, 1940). In 1927, Mursell recommended that students be introduced to beginning instrumental music in seventh grade, with earlier starts possible under certain circumstances; however, in 1943, he changed that recommendation to fourth grade. Goldman (1934) also believed that age 8 or 9 was optimal.

Fourth and fifth grades are the ones recommended by the Music Educators National Conference (MENC) and some leaders in the field. MENC recommends that "instruction on string instruments begins no later than grade 4, and instruction on wind and percussion instruments begins no later than grade 5" (1994, p. 4). In An Administrator's Guide to Curriculum for Music Education (American School Band Directors Association and the University of Northern Iowa School of Music, 1989), the American School Band Directors Association (ASBDA) recommended that programs offer "instruction on band and orchestra instruments ... beginning in grade 4 or 5" (p. 26). Colwell and Goolsby (1992) stated that fourth grade was the best time to start instrumental music (p. 87). In the fifth edition of the Guide to Teaching Strings, Lamb (1990) observes that fourth grade is a reasonable level at which to begin string instruction.

Though the above recommendations may imply a degree of common practice regarding grade-level starts, there is striking variability in current practice regarding the grade level at which beginning instrumental music is first offered in this country. The 1989 study by the National Arts Education Research Center at the University of Illinois (Leonhard, 1991) reported the mode for beginning band in small and large elemen-

tary schools was fifth grade and for strings was fourth grade. This study, however, did not investigate beginning band and orchestra programs offered in middle schools. In a comparison of data from a 1962 study to the 1989 study, Leonhard noted that there was a 34% reduction in the number of elementary schools offering wind and percussion instruction and a 40% reduction in strings. He observed, however, that those reductions might reflect grade reconfigurations—the implication being that school districts that had previously offered instrumental music in elementary schools had shifted the initial offerings to middle schools.

In a national study of string teachers, Gillespie and Hamann (1998) asked respondents what grade was the earliest that they taught strings. Results showed a remarkably even distribution with 26% teaching fourth-grade students, 30% fifth-grade, and 28% sixth-grade. Research by Delzell (1989) indicated that the majority (82%) of Ohio school districts offered band for the first time in fifth grade, followed by 11% in sixth grade, and 6% in fourth grade, and the majority of districts (57%) offered strings for the first time in fourth grade, with another 39% offering initial instruction in the fifth grade.

For purposes of this article, Doerksen (1996) completed a telephone survey of 17 selected 1996 ASBDA state chairs in which he asked what grade level was most common for beginning band to be offered in their state. Results showed that among the chairs, 12% indicated that fourth grade was most common, 35% fifth grade, 47% sixth grade, and 6% seventh grade. Not surprisingly, survey responses showed that none of the 17 chairs reported a uniform grade-level start for beginning band programs within their states. Though most state chairs reported beginning band being offered in one of 2-3 grade levels, the state chairs of Arizona, Minnesota, and Pennsylvania indicated grade-level starts at fourth, fifth, sixth, and seventh grades, and the Illinois chair reported programs that start beginning bands in one of five grade-levels: third grade through seventh grade.

The variability within each state can also be seen in the responses of the ASBDA state chairs regarding whether they were aware of districts in their state that offered beginning band at the various grade levels. Six percent of the chairs said they were aware of districts in their state that offered band at third grade and 41% were aware of districts using fourth grade. Not surprisingly, 94% noted there were districts in their state using fifth grade and 88% using sixth grade. It was a bit more unexpected that more than half of the chairs (53%) knew of districts in their states using seventh grade as the first opportunity. While these figures represent the views of individual ASBDA state representatives, they do give some clue as to possible trends in

first-year band instruction. Unfortunately, data on beginning instrumental music programs are not being systematically tracked at the national level so that current practices as well as trends can be determined.

# **Grade Configurations in School Buildings**

American elementary and middle schools have a variety of grade configurations that are usually the outcome of educational considerations, space and enrollment variables, and fiscal realities. It appears that one of the major factors influencing when to offer instrumental music has been the advent of the middle school as an alternative to the junior high. Alexander and McEwin (1989) reported that in 1970–71 the typical middle-level school housed grades 7–9. In 1986–87, the typical middle-level school housed grades 6–8.

With the typical junior high school beginning in seventh grade, many elementary schools housed both fifth and sixth grades and instrumental music was a subject offered at both grade levels. However, with the emergence of the middle school, many school districts moved sixth grade out of the elementary school, and many instrumental music teachers as a result were traveling to elementary buildings to teach students in only one grade level. School districts began to question the personnel costs related to travel, pull-out scheduling practices, and in some cases duplicative offerings of beginning classes in both the fifth and sixth grades.

There also appears to be increased attrition in instrumental music when students change buildings (Wolfle, 1969) and, probably even more so, when students change teachers (Allen, 1981/1982). Given the stress children often feel when going into a new school building and the absence of a relationship with the new instrumental music teacher, this is not surprising. Hartley (1996) compared grade-level organization with seventh-grade student attitude toward band participation. In her comparison of seventh-grade students who had changed buildings between fifth and sixth grades, she found that those who began in sixth grade had a more positive attitude than those who began in fifth grade and changed to another building. This difference was not seen when comparing students who remained in the same building for fifth and sixth grades, but started instrumental music at either fifth or sixth grade.

Grade-level configuration of middle-level buildings does appear to be influencing the grade instrumental music is first offered. In Hartley's study (1997), 70% of the schools beginning in fifth grade had fifth and sixth grades in the same building. However, in buildings where sixth grade was the initial grade, 73% started at that level.

## **Musical Performance Achievement and Retention**

Teachers considering a later start for the offering of instrumental music are often concerned about the possible impact on performance achievement and retention. Research studies comparing the performance achievement of those who began in sixth grade with those who had an additional year of instruction by starting in fifth grade have shown no significant difference in performance achievement (Hartley, 1991; McCarthy, 1980; Pence, 1942; Silliman, 1977/1978; Strachan, 1967). It appears teachers can shift instrumental music to a sixth-grade start without experiencing a decline in overall performance achievement. Musical performance achievement can be affected by the nature and amount of instructional time (discussed below).

Generally speaking, research has also shown that older beginners have a better rate of retention than younger (Allen, 1981/1982; Brown, 1996; Martignetti, 1965; Silliman, 1977/1978; Wolfle, 1969). Silliman (1977/1978) found that sixth-grade beginners showed a better rate of retention after one year of instruction than fifth-grade beginners, and they also continued to show better retention in seventh grade. Though the majority of studies indicate that a later start tends to result in better retention, McCarthy (1980) found no difference in attrition of fifth- and sixth-grade students. Hartley (1997) found that at the end of the initial year fifth-grade beginners showed better retention than sixth, but the retention advantage was no longer present at the beginning of seventh grade.

# Impact on Percentage of Students Who Begin

A common concern of in-service teachers is whether a shift to a later start will have a negative influence on the percentage of students who decide to participate in beginning instrumental music. Research on fifth- and sixth-grade students showed no difference in the percentage of students who chose to begin (Hartley, 1997; Silliman, 1977/1978).

A review of research failed to yield any studies comparing the participation percentages for sixth-grade versus seventh-grade beginners. It is quite possible that delaying the opportunity to seventh grade could, in some settings, adversely affect the number of students participating due to conflicting activities. *The Complete String Guide*, a teacher resource published jointly by the American String Teachers Association, MENC, and the National School Orchestra Association (MENC, 1988), notes that, though "seventh grade is not too late . . . . many students have already developed other interests" (p. 9).

The type of community the school district serves (i.e., metropolitan, urban, and rural) may influence

the nature and number of conflicting activities, including (a) athletics, both interscholastic and community teams; (b) clubs and youth organizations, including church youth groups; and (c) work, including after-school responsibilities at home and part-time jobs. In a study of discretionary time use of young adolescents, Medrich and Marazke (1991) noted results from the 1990 National Education Longitudinal Study that found 20% of eighth-grade subjects reported working for pay. Although time commitments associated with moderate employment may not interfere with involvement in school organizations by adolescents (Willits & Willits, 1986), Medrich and Marazke also noted a significant increase in the employment of adolescents from seventh to twelfth grade. Regardless of the types of activities, as adolescents grow older, they may perceive more conflicts between after-school time choices and the responsibilities inherent with membership in a band or string program.

Teachers considering a seventh-grade start should remember that older prospective students are likely to be evaluating the high school program when considering whether to begin. If high school instrumental music students have difficulty scheduling courses and meeting graduation requirements, seventh-grade prospective students and their parents may feel it is futile even to start. High school instrumental music programs with excessive time demands outside the regular school day may also be unattractive to some students.

### **Academic Scheduling Conflicts**

A review of attrition research showed that students commonly cite scheduling conflicts as one of the reasons for dropping out of instrumental music. Obviously, scheduling conflicts also have the potential of adversely affecting the number of students who begin. Without question, the academic schedule of a school building can have a significant influence on the quality of the instrumental music program, with one of the key issues being whether the schedule permits reasonable access to enrollment in instrumental music.

Teachers considering a change in initial grade level should determine how beginning classes would fit into the master schedule. This is especially important for middle-level schools, for their schedules typically involve complexities not usually associated with elementary schools. Block scheduling is used in some middle schools, in contrast to departmentalization or uniform-length periods, and some variations of block scheduling (e.g., 4-period days) can be limiting in terms of elective classes (MENC, 1995). Of special concern are those schedules where instrumental music is scheduled opposite "singletons" (classes that are only offered once in the master schedule). Certain uses of

"activity blocks" in elementary or middle-level buildings can also present difficulties, with students being forced to choose between band, choir, orchestra, computers, foreign language, and other academic electives. Even more undesirable are those schedules that offer academic courses, such as music, at the same time as school clubs or other recreation options.

### **Instructional Time Allotments**

Another important variable in considering gradelevel options is instructional time allotments. First and foremost, what is the total number of instructional minutes per week and what are the number and types of class meetings (e.g., whole group versus like-instrument classes)? MENC (1994) recommends that instrumental classes in elementary schools meet at least twice a week for a total of at least 90 minutes (p. 4).

In The Complete String Guide (MENC, 1988), the authors noted that "if you can see the students three to five times per week at the sixth-grade level as opposed to one or two times per week at the fourth-or fifth-grade level, it would be advantageous to start at the sixth grade" (p. 9). Not surprisingly, Pruitt (1966) found that students meeting for five class periods per week had better retention than those only meeting two or three times. Hartley's (1997) study of programs in Ohio, Virginia, and Indiana showed that programs beginning in sixth grade had more class meetings per week than those beginning in fifth grade.

Second, who controls the instructional period? Is the instrumental class a regularly scheduled class or are students "borrowed" or pulled out of academic classes for instrumental music. Research has shown that students pulled out of academic classes for instrumental music show no difference in academic achievement from those who remained in class (Groff, 1963/1965; Kvet, 1985). The classroom teacher, however, may not be supportive of the practice and this may have a negative effect on enrollment and retention. Instructional time may also be lost due to the teacher's holding students over for examinations, instructions related to assignments, or class discussions.

Third, are beginning classes scheduled outside the regular school day (i.e., before or after school)? It is likely that there are programs that are successful in offering beginning instruction outside the regular school day, typically in those settings where transportation issues are either accommodated in some manner or not applicable. However, the typical program would be disadvantaged moderately to severely by such scheduling. As one might expect, Solly (1987) found that before school rehearsals had a negative effect on retention of string students.

Fourth, how much flexibility is there in determining the class configuration, as well as modifications to the schedule as the year progresses? For example, if the current situation allows the teacher to spend the first part of the year exclusively in like-instrument classes and then change to a combination of like-instrument and full group classes, does the proposed arrangement also provide for this degree of flexibility? Does one of the options require that the teacher work with a full beginning band in one setting instead of allowing for like-instrument family groupings?

# **Physical Maturation and Musical Readiness**

One factor that immediately comes to mind regarding grade-level options is whether students have the requisite physical maturation needed to succeed on a musical instrument. In string instruments, of course, this factor is not a concern given the availability of instruments of varying sizes (e.g., 1/4 size violin and 1/2 size cellos). Suzuki, in fact, recommended that string instruction begin around the age of 3 (Kendall, 1973).

Yet with wind instruments, physical maturation can be a matter of concern, especially with regard to a third-grade start and, to a lesser degree, a fourth-grade start. Smaller children may not have the requisite arm length to position a standard model flute or be able to reach sixth position on the trombone, and thin children may not have finger pads large enough to completely cover the tone holes on the clarinet. Research has shown that students do consider the size of musical instruments when considering instrument preferences (Delzell & Leppla, 1992; Fortney, Boyle, & DeCarbo, 1993).

Two studies conducted in the 1940s-1950s investigated physical maturation and beginning instrumental music performance and concluded that seventh grade was optimal for the study of wind instruments (Cramer, 1958; Pence, 1942). A study by Kovacs (1985/1986) also found a slight but significant relationship between psychomotor ability and performance achievement. Research on human growth and development has indicated that during the past 100 years North American children at each age have been getting taller and maturing earlier (Marshall, 1987). Marshall observed that 11-year-old children in the late 1980s were about the same size as 12-year-old children in the late 1950s. It is possible that today's sixth-grade students would perform much like the seventh-grade students did in Cramer's and Pence's studies.

Gordon (1993) proposes that there is not a correct chronological age but rather a correct musical age, in terms of musical readiness, to begin instrumental music. Schleuter and Schleuter (1988) also stress the musical readiness component. Gordon said that a student is not ready to begin the study of an instrument until the student has "developed a sense of tonality, a sense of meter, a vocabulary of tonal patterns, and a vocabulary of rhythm patterns to the extent that he can sing with acceptable intonation some tonic and domi-

nant patterns in major and harmonic minor tonalities and can chant with consistent tempo some macro/microbeat and division patterns in usual duple and triple meters" (p. 309). Though this may represent the ideal, from a practical standpoint, many instrumental music teachers are required to continue the development of these abilities within the instructional program, especially given that it is group instruction. Suzuki and others have shown us that instrumental music is possible at a young age assuming that teachers are engaging students in developmentally appropriate musical tasks.

# **Comparing Starting Grades for Strings and Band**

When contemplating a grade change, another factor to consider is whether or not to start band and strings at the same grade level. Unfortunately, national data on patterns regarding the relationship between the grade level strings start as compared to band are not available. In research on Ohio school districts, Delzell (1989) found that a large percentage (38%) of the districts offered strings and band for the first time at the same grade level. The size of this percentage would likely surprise those who believe strings are almost always offered at least a year before band.

In The Complete String Guide (MENC, 1988), the authors note that there are a number of advantages in starting strings and band at the same grade level including: reduced dropout rate, elimination of the negative image gained when students play strings for a year or so only to change to wind instruments when available, and potentially larger participation of students in both strings and band as a result of both string and band students beginning at the same time.

### Staffing, Finances, and Classroom Environments

Reconsideration of what grade level to first offer instrumental music also provides a prime opportunity to consider a variety of staffing models, including team teaching. Obviously this does not apply in situations where a single teacher is responsible for the entire program. The staffing of instrumental music is done in a horizontal manner in some school districts (e.g., one teacher assigned to grades 5–8 and another teacher assigned 9–12), while in other districts the staffing is done in a vertical manner (team teaching). Research by Allen (1981/1982) suggested that continuity of teachers may have a positive effect on retention. Reul, in MENC's instructional resource titled *Getting Started with Middle Level Band* (1994), also supported the use of team teaching at the beginning level.

Consideration should also be given to the amount of travel a given plan entails. For example, if Proposal A has the teacher making 10 additional trips between buildings as compared to Proposal B, the latter proposal would have a clear advantage. Not only does excessive travel result in loss of available instructional time, it is also more tiring and tends to result in increased isolation on the part of the teacher.

Programs considering a move from a middle school start to an elementary school start should also plan for the expenses required to equip the elementary school(s). Finding adequate and appropriate classroom space for instrumental music in the various buildings should also receive consideration.

### Conclusion

The grade level at which beginning instrumental music is first offered is an important component of the school music program. Music educators are often reluctant to change to a different grade level because of concerns regarding potential negative ramifications on the following matters: percentage of students who decide to participate, rate of learning and performance achievement, and retention in the program. In recent years, however, many school districts have reconsidered the grade level at which to offer beginning instrumental music.

Though the standard recommendation in the profession has remained quite constant over the years regarding the desirability of beginning instrumental music students in grades four or five, many school districts have moved their instrumental music programs to later grade levels. Research suggests that delaying band until sixth grade rather than starting in fifth grade will not have an adverse effect on performance achievement or percentage of students who participate, and it may have a positive effect on retention as students enter seventh grade.

There are a number of factors individual districts should consider when deciding when to first offer beginning orchestra or band, including the grade configurations of school buildings in the district, number of instrumental music staff, and fiscal realities. Music teachers should also weigh several additional factors, including degree of access to instrumental music allowed in each grade level's academic scheduling model, classroom environments available for instrumental music at the various grade levels, and the relationship between starting grades of string and band programs. It is particularly important that attention be given to possible differences in instructional time allotments for the various options. Each school district needs to give careful consideration to the advantages and disadvantages of proposed grade levels and then choose the grade level that seems best, given the district circumstances.

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### References

- Alexander, W. M., & McEwin, C. K. (1989, September). Schools in the middle: Progress 1968–1988. Reston, VA: National Association of Secondary School Principals.
- Allen, B. E. (1981/1982). Student dropout in orchestra programs in three school systems in the state of Arkansas (Doctoral dissertation, Northeast Louisiana University, 1981). Dissertation Abstracts International, 42, 3405A-3406A.
- American School Band Directors Association and the University of Northern Iowa School of Music. (1989). An administrator's guide to curriculum in music education. Cedar Falls, IA: University of Northern Iowa.
- Brown, M. J. (1996). Student attitude toward instrumental music education during the first year of instruction (Doctoral dissertation, Ohio State University, 1996). *Dissertation Abstracts International*, 57, 1987 A.
- Colwell, R. J., & Goolsby, T. (1992). The teaching of instrumental music (2d ed.). Englewood Cliffs, NJ: Prentice Hall.
- Cramer, W. F. (1958). The relation of maturation and other factors to achievement in beginning instrumental music performance at the fourth through eighth grade levels. *Dissertation Abstracts*, 19, 540-41.
- Delzell, J. K. (1989, October). An analysis of patterns and trends in beginning instrumental music education programs in Ohio. Portions of this paper were presented at the 1989 OMEA Leadership Conference, Columbus, OH.
- Delzell, J. K., & Leppla, D. A. (1992). Gender association of musical instruments and preferences of fourth-grade students for selected instruments. *Journal of Research in Music Education*, 40, 93–103.
- Doerksen, P. F. (1996, June). Unpublished telephone survey data from 17 selected ASBDA state chairs.
- Fortney, P. M., Boyle, J. D., and DeCarbo, N. J. (1993). A study of middle school band students' instrument choices. *Journal of Research in Music Education*, 42, 28–39.
- Gillespie, R., & Hamann, D. L. (1998). The status of orchestra programs in the public schools. *Journal of Research in Music Education*, 46.
- Goldman, E. F. (1934). Band Betterment. New York: Carl Fischer. Gordon, E. E. (1993). Learning sequences in music (1993 ed.). Chicago: GIA Publications.
- Groff, F. H. (1963/1965). Effect on academic achievement of excusing elementary school pupils from classes to study instrumental music. *Dissertation Abstracts*, 25, 5014–15.
- Hartley, L. A. (1991). A comparison of music performance ratings between eighth-grade instrumental music students who began in fifth grade and those who began in sixth grade. *Journal of Band Research*, 26 (2), 66–71.
- Hartley, L. A. (1997). Influence of starting grade and school organization on enrollment and retention in beginning instrumental music. *Journal of Research in Music Education*, 44 (4), 304–318.
- Hartley, L. A. (1996). The relationship of student attitude toward instrumental music to beginning instructional grade and grade level organization. *Contributions to Music Education*, 23, 46–61.
- Hindsley, M. H. (1940). School band and orchestra administration. New York: Boosey & Hawkes.
- Kendall, J. D. (1973). The Suzuki violin method of American music education. Washington, DC: Music Educators National Conference.
- Kovacs, B. E. (1985/1986). An exploratory study of the relationships of flute, clarinet, and trumpet playing achievement, psychomotor ability, and selected physical characteristics of fifth and sixth graders. (Doctoral dissertation, University of Maryland College Park, 1985). Dissertation Abstracts International, 46, 2957A.
- Kvet, E. J. (1985) Excusing elementary school students from regular

- classroom activities for the study of instrumental music: The effect on sixth grade reading, language, and mathematics achievement. *Journal of Research in Music Education*, 33, 45–54.
- Lamb, N. (1990). *Guide to teaching strings* (5th ed.). Dubuque, IA: Wm. C. Brown.
- Leonhard, C. (1991). The status of arts education in American public schools. Report of a survey conducted by the National Arts Education Research Center. Urbana, IL: University of Illinois
- Marshall, W. A. (1987). Physical growth and development. In V. C. Kelley (Ed.), *Practice of pediatrics* (Rev. ed.). Philadelphia: Harper & Row.
- Martignetti, A. J. (1965). Causes of elementary instrumental music dropouts. *Journal of Research in Music Education*, 13, 177–83.
- McCarthy, J. F. (1980). Individualized instruction, student achievement, and dropout in an urban elementary instrumental music program. *Journal of Research in Music Education*, 28, 59–69.
- Medrich, E. A., & Marazke, C. (1991). Young adolescents and discretionary time use: The nature of life outside school. (ERIC Document Reproduction Service No. ED 365 899).
- Mursell, J. L. (1927). Principles of musical education. New York: Macmillan.
- Mursell, J. L. (1943). Music in American schools. New York: Silver Burdett.
- Music Educators National Conference. (1988). The complete string guide: Standards, programs, purchase, and maintenance. Reston, VA: Author.
- Music Educators National Conference. (1994). Opportunity-to-learn standards for music instruction. Reston, VA: Author.
- Music Educators National Conference. (1995). Scheduling time for music. Reston, VA: Author.
- Pence, D. P. (1942). A study to determine the optimum grade for beginning class study of wind instruments. Unpublished master's thesis, University of Kansas.
- Pruitt, J. S. (1966). A study of withdrawals from the beginning instrumental music programs of selected schools in the school district of Greenville County, South Carolina. *Dissertation Abstracts*, 27, p. 1075A.
- Reul, D. G. (1994). Getting started with middle level band. Reston, VA: Music Educators National Conference.
- Schleuter, S., & Schleuter, L. (1988). Teaching and learning music performance: What, When, and How. In C. Fowler (Ed.), The Crane symposium: Toward an understanding of the teaching and learning of musical performance (pp. 63–87), Potsdam, NY: Potsdam College, SUNY.
- Silliman, T. E. (1977/1978). The effect of entrance age on achievement and retention in the beginning band instrument program (Doctoral dissertation, University of Maryland, 1977). Dissertation Abstracts International, 38, 5982A.
- Solly, B. J. (1987). A study of attrition from the instrumental music program in moving between grade levels in Cherry Hill, NJ. *Dissertation Abstracts International*, 47, 2877A.
- Strachan, E. D. (1967). The designation of the appropriate grade level for beginning instrumental study. *Dissertation Abstracts*, 28, 161A.
- Willits, W.L., & Willits, F.K. (1986). Adolescent participation in leisure activities: The less, the more or the more, the more? Leisure Sciences, 8, 189-206.
- Wolfle, E.E. (1969). Relationships between selected factors and participation and nonparticipation in instrumental music in the Cincinnati Public Schools. (Doctoral dissertation, Indiana University, 1969). Dissertation Abstracts International, 30, 2565A-2566A.
- Woods, G. H. (1920). Public School orchestras and bands. Boston: Oliver Ditson
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