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ABSTRACT

This report describes a program for integrating the musical intelligence in a first-grade classroom curriculum in a primary K-2 school in a northern suburb of Chicago, Illinois. The utilization of the musical intelligence in the classroom is documented with attitudinal surveys, checklists, music journals and teacher observations. Music intelligence is not often taught in schools, or is taught in isolation, resulting in students' musical intelligence not being developed and music being considered a frill instead of a basic. The development and implementation of an educational program to address the problem would integrate music across the curricula to increase music awareness and musical intelligence. It would also reach students with different abilities to enhance music attitudes and overall learning. Post-intervention data indicates an increase in the use of the musical intelligence in the classroom and integration of music across the curricula. This has resulted in an increase in musical awareness, enjoyment, skill, and confidence, more positive musical attitudes, and enhanced overall learning. Appendices include the teacher and student surveys, story song books, and parent survey. Contains 35 references. (Author/EH)

INTEGRATING THE MUSICAL INTELLIGENCE IN A FIRST GRADE CLASSROOM

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DEDICATION

Dedicated to:

Our Husbands

Allen and Bruce

Our children

Beth and Dave, Meg, Rob, and Paul

Jamey and Becki Jo

Thank you for your love, patience, and support.

You are the music in our lives!

Love,

Kathy and Gail

ABSTRACT

This report describes a program for integrating the musical intelligence in a first grade classroom curriculum. The targeted population consists of a heterogeneous first grade classroom in a primary K-2 school. This school is part of a campus site located in a northern suburb of Chicago. The utilization of the musical intelligence in the classroom will be documented with attitudinal surveys, checklists, music journals and teacher observations.

Analysis of probable causes indicates that the music intelligence is often not taught in schools, or is taught in isolation. This has resulted in students' musical intelligences not being developed and music being considered a frill instead of a basic, resulting in inadequate funding and time allotments.

A review of solution strategies, suggested by knowledgeable others, and an analysis of the problem setting resulted in the development and implementation of an educational program which integrates music across the curricula to increase music awareness and musical intelligence, reach students with different abilities, and enhance music attitudes and overall learning.

Post intervention data indicates an increase in use of the musical intelligence in the classroom and integration of music across the curricula. This resulted in an increase in musical awareness, enjoyment, skill, and confidence; positive musical attitudes; and enhanced overall learning.

TABLE OF CONTENTS

CHAPTER 1

PROBLEM STATEMENT AND CONTEXT

General Statement of the Problem

Evidence of integration of the musical intelligence in the targeted first grade classroom curriculum has been minimal. The existence of this problem has been noted in surveys, teacher observations, music teaching done in isolation, and reduction in time allotments for general music.

Immediate Problem Context

The primary school referred to in this study contains prekindergarten through second grade, and is located in close proximity to the intermediate and middle school sites. As of April 1996, the primary enrollment is 1,830 students. There are 45 prekindergarteners, 604 kindergarteners, 623 first graders, and 558 second graders. These numbers include special education students. The average class size is 28 students. Ethnic characteristics of the student population are as follows: 83.7% White non-Hispanic, 8.25% Hispanic, 5.15% Asian-Pacific Islander, 2.75% African American, and 0.15% Native American. Low income students comprise 2.5% of the population, which is slightly below the district percentage and far below the state. The school consists of

5.4% Limited English Proficient (LEP) students. This is above the district percentage of 3.3% and slightly below the state percentage of 5.6%. The attendance rate of the school is 94.7%, the student mobility rate is 14.4%, and the truancy rate is 0%.

This school has 129 staff members. Of these, 100 are certified staff, and 29 are support staff. The staff is 94% female and 6% male. The average experience level of the teachers is 10.1 years, with 34% having a Master's Degree or above. There are 3 prekindergarten, 12 kindergarten, 26 first grade, and 22 second grade teachers. Special teachers include: six reading recovery teachers, five speech and language teachers, four social workers, three English as a second language (ESL) teachers, three physical education teachers, two and three-fourths music teachers, two learning disability (LD) teachers, two occupational therapists, two psychologists, one math specialist, one reading specialist, one librarian, and one nurse.

Major changes have been implemented in the school during the past five years. A literature based approach has replaced the basal reading method. Strong components of this program are reading and writing workshops. Reading recovery is part of the first grade reading program. A reading specialist supports at risk second grade students. Another major change has been the use of manipulatives and hands on activities within math and science. The school is in the process of a pendulum change, from total pull out for ESL and LD programs, to inclusion. Authentic assessment is being implemented. Staff development is a key focus of the primary

school. Due to population growth, the allocated class time for music, physical education, and library has been reduced.

The Surrounding Community

The community is located in a northern suburb of a large midwestern city. It is 35 miles from an international airport and in close proximity to a major interstate highway system. The area encompasses 35 square miles and is comprised of several unincorporated subdivisions and small villages. Within the last decade this community has transformed from a predominately rural setting to a mobile, white collar, residential community.

The population of the area is approximately 35,000. The 1990 census shows a population consisting of 93% White non-Hispanic, 4% Hispanic, with Asian Pacific Islander, African American, and Native American making up the remaining 3%. According to the district demographic analysis, the overall population of the community has grown by 54% since the beginning of the decade. Although this growth has impacted the school drastically, it has not changed the demographic or economic makeup of the community.

The level of education acquired by the adult community members is as follows: 29% are non-high school graduates, 26% are high school graduates, 24% have some college background, and 21% hold a Bachelor's Degree or higher. The median family household income for this area, according to the 1990 census figure, is $45,000.

Employment characteristics of the existing population are represented by major corporations, retail, manufacturing, amusement, health care, military, and educational fields.

The school district is unique in that it is a campus setting in which all K-8 students are bussed. It is composed of a primary building (K-2), intermediate building (3-5), and a middle school (6-8).

The total district population is 4,700. In five years the projected enrollment is 6,408, a 59.6% increase. The student population is 82.6% White non-Hispanic, 7.8% Hispanic, 5.9% Asian Pacific Islander, 3.4% African American, and 0.3% Native American. Of the student population, 3.3% exhibit limited English proficiency.

The faculty population is 215, of which 85.6% are female and 14.4% are male. The faculty consists of 98.1% White non-Hispanic, 0.9% Hispanic, 0.9% Asian Pacific Islander, 0.0% African American and 0.0% Native American. Faculty characteristics are: 66.1% Bachelor's Degree and 33.9% Master's Degree and above. The average teaching experience is 10.1 years. There are 169 tenured teachers and 94 non-tenured teachers. The pupil-teacher ratio is 20.7:1, and the pupil-administrator ratio is 398.9:1. The average administrator's salary is $75,903. The average teacher salary is $34,389. Per pupil operating expenditure is $4,537. District administration includes one superintendent of schools, one assistant superintendent of business services, one director of curriculum and instruction, one director of pupil personnel services, one director of building, grounds and transportation, four principals, and five assistant principals.

The community is characterized by active parent involvement. The most supportive groups are: Parent Teacher

Association, Friends of the School, and Volunteer Workers of the School. The school has a history of financial and growth concerns. Building referendums have been more successful than educational referendums. A middle school is under construction and will be ready for occupancy August, 1997. Some issues currently under consideration are year round school and reconfiguration of existing buildings.

National Context of the Problem

Early philosophers to current day educators, scientists to business executives, all have been exulting the merits of music education. "Plato once said that music 'is a more potent instrument than any other for education'" (Hancock, 1996,p. 58). Pythagoras considered music to be one of the branches of mathematics. Yet, the problem concerning minimal integration of music in the classroom has been ongoing since the inception of music education into the American school system. Music was first introduced into the American school curriculum in 1837 when Lowell Mason, a music teacher, convinced his Boston school to include music as part of the educational curriculum. Dewey, in 1916, emphasized the importance of the arts as an essential educational component rather than a luxury (Brophy, 1994).

The twentieth century has seen educators once again defending the importance of music as a vital part of the curriculum and not as just a "frill" or "enrichment" (Brophy, 1994). There continues to be debate over whether the arts should be part of the core curriculum. According to the National Coalition for Music Education, this has resulted in the marginalization of music and arts education. In 1977,

the Arts Education and American's panel made a strong case that arts are basic to education. In the 1980's, reforms swept the country. Even though schools adopted goals which included the arts, they were far from making them a reality (Martorelli, 1992). The arts were left out in both the 1990 National Education Goals and the 1991 America 2000 educational strategy. Due to this omission, the Arts Partnership program was established. By 1996 the arts were once again included in the National Assessment of Education; however, the arts are not included in the Illinois Goal Achievement Program (IGAP) test (Thomas, 1992).

Signs of recovery to music programs long neglected over time are slow, and cutbacks continue. With knowledge concerning the importance of the arts available to them, schools still, on average, have only one music teacher for every 500 children. Traditionally, students have music for 20-30 minutes once or twice a week, with scheduling done with classroom teacher planning time in mind, rather than the child's educational benefits as the motivating force. In most schools, knowledge continues to be cut up into unrelated subjects, which often have little relation to life. Music teachers still get caught up in their own agendas and separate curricula, to the exclusion of the classroom teacher's curricula (Brophy, 1994).

In 1983 Howard Gardner described seven kinds of intelligence common to all people. The musical-rhythmic intelligence is one of these intelligences. Gardner believes that everyone has one or two intelligences which are more fully developed; however, individuals are able to improve all

of their intelligences. One's family, school, and social environment dramatically impact a person's intellectual development. Gardner (1983) believes that all children can be taught to be more intelligent, and that anything can be taught through all seven intelligences. Teachers must learn how to use these multiple intelligences in order to understand student strengths and weaknesses. If educators and administrators believe Gardner's theory, then the arts should be given equal importance with the traditional basics of reading, science, and math. Yet, schools continue to rank math, science, and social studies as higher priorities than music or the arts. Although many schools advocate a fine arts curriculum, they fail to provide for arts education with necessary resources of money, staff development, or support for the classroom teacher trying to integrate the arts into their curriculum (Martorelli, 1992). Many people still do not understand the positive connection between arts and "academics", or that music and the other arts use a multiple of intelligences.

Scientists argue that if the public, parents, and administrators were attuned to brain research, music and other fine arts would be <u>daily</u> requirements (Hancock, 1996). Scientists are discovering more about genes daily. They now know that genes determine only the main circuits of the brain. Environment and education shape the trillions of other smaller circuits in the brain (Hancock, Feb. 1996). There are critical periods or windows of opportunity for increasing our intelligence. With the right input at the right time anything is possible. If you miss the window, you

are playing with a handicap. Connections are not formed haphazardly. Scientists know that exposure to music rewires neural circuits. Circuits formed early in music endure for a lifetime.

CEO's of Ceveron, AT&T, Kellogg, Xerox, and Chase Manhattan have all made public comments on the value of arts education for success in a competitive global environment. The arts are basic because they promote problem solving, creativity, self-discipline, and teamwork skills (Mahlmann, 1994).

As education and business forge partnerships, educators must take a lead from these observations from the business community. In spite of the historical record of isolating and minimizing educational research, Howard Gardner's Multiple Intelligences and current brain research suggest we must pursue integration of music into the learning experience in schools.

CHAPTER 2

PROBLEM DOCUMENTATION

Problem Evidence

This project was conducted by a first grade classroom teacher and a K-2 music specialist. The classroom teacher has a musical background having studied piano for eight years and organ for three years. Music participation in high school and college consisted mainly of vocal ensembles. Even though music is enjoyed and valued by the classroom teacher, she indicated she did not use the musical intelligence very often in student activities.

A survey was given to the classroom teacher concerning the use of the musical intelligence in the classroom. Results showed that singing, listening, and moving to music were most often done on a weekly rather than a daily basis. Integration of music with other subjects was found to be monthly. Subjects integrated with music were reading, calendar, holiday themes, and sometimes science and social studies. She never played an instrument with students and primarily used Raffi tapes or books to sing.

The music specialist is unique in that she was a first grade teacher for ten years prior to becoming a music teacher. She reported that she had begun to integrate

lessons for first grade using songs that correlated with current classroom themes but had not integrated authentic literature to help teach music concepts; thus, music skills tended to be taught in isolation. The music teacher attempted to use classroom themes in music class, but classroom teachers did not use music to help teach other subjects or reinforce musical concepts that had been taught by the music specialist. When integration occurred, the music teacher had to seek out the information needed about current themes from the classroom teachers. Rarely, if ever, did classroom teachers approach the music teacher for music resource suggestions. The music teacher prepared packets of songs for the first three theme units but saw little evidence of their use by classroom teachers. It was a one-way street. The music teacher expressed feelings of isolation and exclusion from curriculum planning sessions with classroom teachers.

The teacher survey (see Appendix A) given to the targeted first grade teacher was also given to all other classroom teachers in the K-2 school with a 100% response rate. Several conclusions could be drawn from the results. Daily singing, listening to music, moving to music, and integrating music with the curriculum drastically decreased as the grade level increased. The results depicted in Figure 1 show 75% of the kindergarten teachers sang with their class daily, while 32% of the first grade teachers and 18% of the second grade teachers sang daily.

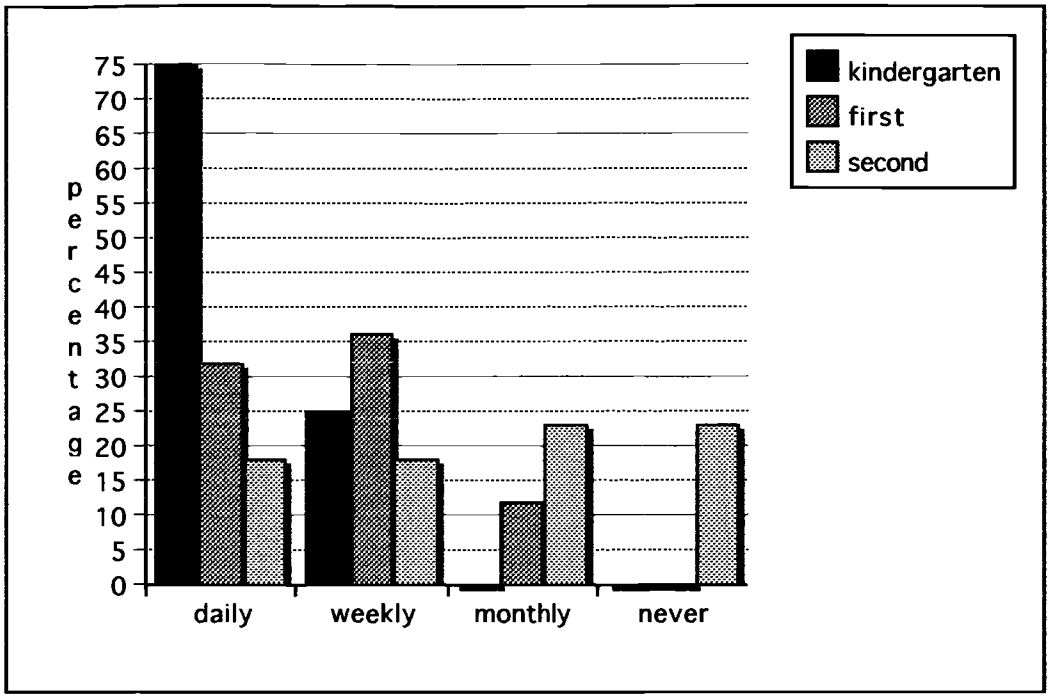

Figure 1. Percentages showing the frequency of singing by kindergarten, first, and second grade teachers.

Daily listening to music with students was accomplished by 33% of the kindergarten teachers, 8% of the first grade teachers, and 0% of the second grade teachers. Daily moving to music with students was accomplished by 67% of the kindergarten teachers, 32% of the first grade teachers, and 23% of the second grade teachers. Figure 2 shows daily integration of music with other content areas was accomplished by 8% of the kindergarten teachers, 8% of the first grade teachers, and 0% of the second grade teachers.

There was a large discrepancy between singing, listening to music, moving to music, and integration of music into the curriculum. On a daily basis, 36% of the teachers sang with their class, 36% moved to music, 10% listened to music, but

only 5% integrated music into the curriculum.

Weekly integration data showed 42% of the classroom teachers integrated weekly. A closer look at individual grade level data in Figure 2 revealed that 83% of the kindergarten teachers, 40% of the first grade teachers, and 23% of the second grade teachers integrated weekly. Evidence of a downward trend of music integration was apparent as the grade level increased.

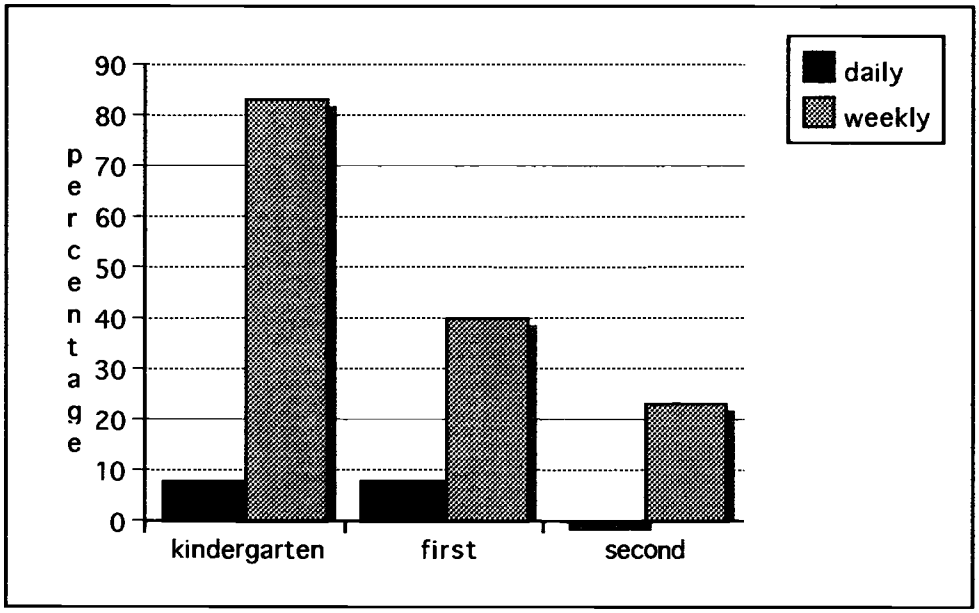

Figure 2. Percentages of teachers integrating music in the curriculum daily and weekly.

Looking at the results by grade level it can be seen that 91% of the kindergarten teachers, 48% of the first grade teachers, and 23% of the second grade teachers integrated music with their curriculum daily or weekly. It was also interesting to note that 23% of the second grade teachers never sang, 5% never listened to music, 9% never had students move to music, and 18% never integrated music into the curriculum.

A student music interest survey (see Appendix B) was individually administered by the music teacher to each child in the targeted first grade classroom during the first week of school. Students were asked a variety of questions concerning their music preferences.

The survey showed that 26 students liked listening to music and 1 did not. When asked about family music listening, 19 reported that their families listened to music, 3 said the family did not listen, and 5 replied that their parents didn't listen much but their brothers and sisters did. There were 21 children who enjoyed listening to music with friends, 4 who did not, and 2 who sometimes listened with friends.

If children could name a favorite song it was most often a children's song. Also chosen were 3 pop or jazz songs, 1 religious song, 1 patriotic song, and 1 show tune. Some type of a concert had been attended by 12 of the children; 2 of those were school concerts participated in by siblings, 3 others were actual concerts, and the rest were part of some type of entertainment event. One child asked, "What's a concert?" Everyone who had attended the musical events enjoyed them.

None of the children took formal lessons on a musical instrument. When asked what instrument they would like to play, the children chose band instruments, with drums being the most popular, and flute and guitar the next choices. Only one child did not want to play an instrument.

When asked what they liked most about music, students responded that listening to it was fun. The students liked

the sounds and the rhythms of music.

When students were asked what they liked best about music class, 14 children responded that they liked playing instruments, 7 liked singing, 3 liked playing rhythm sticks, 1 liked moving to music, and 1 liked performing on stage.

The principal of the school reported that 3.8% of the curriculum budget was spent on music. No staff development programs or teacher inservices have dealt with the music intelligence.

Probable Causes

The targeted first grade teacher indicated several reasons why she had not used music on a daily basis in the classroom. She lacked music resources (i.e. songs, tapes, records, C.D.s, and instruments that correlate with material being taught) and preparation time for music activities. Although she had participated in vocal ensembles, she felt inadequate as a song leader. Movement within the classroom was difficult because of the physical size of the room and a large class of 31 students. If music was integrated at all, authentic music was rarely used, and it was most commonly used to facilitate teaching a skill in the content areas, rather than to reinforce a musical concept taught by the specialist. (An example of this would be taking a familiar tune and change the words to teach or reinforce a concept.)

There were several reasons that the music teacher had difficulty integrating music. It was difficult to consistently incorporate songs about the topic being taught in each classroom because the large number of first grade teachers did not teach the same units simultaneously. There

was no common planning time, other than lunch, when the music teacher could dialogue with the team of first grade teachers about activities both in the classroom and the music class. The music teacher was unaware of the music resources each classroom teacher had. Due to overcrowding, the music teacher taught two twenty-five minute lessons per week for each class and taught from a cart, traveling to each room. As a result of using a cart, she was limited in the amount of materials she could carry with her. Movement activities were also difficult to implement.

"Music touches every human being from infancy to adulthood. The power of musical sound can be the vehicle for expression of a wide variety of human emotions. Not only does music move us emotionally, it activates our intellect" (Music Educators Journal, 1992, p. 36b). "You cannot study the arts without learning concepts of math, science, history, and problem solving, nor can you be truly educated if you are ignorant of the role of the arts in culture and history" (Griss, 1994, p. 79). These statements express the importance of music in our lives; yet, according to Howard Gardner (1983), music illiteracy in our culture is acceptable. For most children there is little musical development after they are school age.

When music is included in a school's curriculum, it is most often taught in isolation and exists separate from the traditional instructional objectives. Dana Ballard states that, "the philosophical acceptance of the arts as a fundamental component of education has done little to put arts education in the daily curriculum" (Ballard, 1990, p.

42). Until the arts (music) exist as an integral component of the curriculum, it will not be supported financially as part of the core curriculum.

Music specialists have struggled to keep their programs in schools since the early days of music education (Brophy, 1994). The attitude that music educators are "special" has been detrimental because special has meant "not necessary" or "expendable". People continue to feel the arts are nonessential and nonacademic. Currently the arts are most actively used in instruction for remedial or learning disabled students, or as enrichment in gifted programs. Historically, the arts have been the first programs cut in elementary schools because this usage has perpetuated the notion that the arts are "irrelevant frills".

Music education time allotments are inadequate in most American schools. Mary Howle (1994) stated that a 1989 study found students in grades one through three received just under one hour of music per week from the music specialist. Grades four through six received approximately 62 minutes per week. Significant learning is difficult in 50-60 minutes per week. In some schools, students get music instruction once or twice a month. Students are not expected to develop literacy in English with a 30 minute a week lesson, and yet it is expected in music.

Due to scheduling problems, lack of interest, or budget problems, there are few opportunities for students in middle schools, junior high schools, and high schools to study music (McCollister, 1989). Eighty percent of American high school students graduate with no meaningful arts instruction

(Ballard, 1990). In grades K-12, arts education constitutes less than 1% of total classroom time.

It is often assumed that classroom teachers can teach music. A Louisiana survey reported that 46% of their schools used classroom teachers to teach music, but 76% felt unqualified (Smardo, 1984). These teachers, often feeling inadequate and unqualified in music, did not actually teach it.

Music is often nonexistent in schools. There are no references to music on bulletin boards, in textbooks, or in classrooms. Singing is not heard when one walks through the halls. A snapshot of American education now, as compared to the 1950's, reveals that music education has fewer teachers, less instructional time, and fewer student musicians. The overall presence of music education in the schools has declined (Straub, 1994).

There are several causes for the lack of music education in our schools, and all are interrelated. Until recently many educators and parents were unaware of, or did not understand, Howard Gardner's theory of multiple intelligences. He believes that we are all born with varying levels of seven different intelligences: verbal/linguistic, logical/mathematical, visual/spatial, bodily/kinesthetic, rhythmical/musical, interpersonal, and intrapersonal. Each of these seven intelligences can be taught and enhanced to increase an individual's overall abilities. Gardner states that "all children deserve to have all seven intelligences nourished so that they may function at their full potential" (Feierabend, 1990, p. 16).

David Lazear has said that what happens to our various intelligences depends a great deal on family, school, and social environment. The more students know about the different intelligences, the more they will be able to use them in school and in their daily lives.

Society does not place equal emphasis on each of the intelligences. Traditionally, schools pay most attention to the linguistic and mathematical intelligences. Ninety-five percent of our teaching materials are in verbal/linguistic or logical/mathematical form, according to David Lazear (1992). Most teachers pay little attention to the other intelligences, except maybe as "extra curricular" activities, such as band and sports. Gardner states, "by minimizing the importance of the other intelligences within and outside of schools, we consign many students who fail to exhibit the 'proper' blend to the belief that they are stupid, and we do not take advantage of ways in which multiple intelligences can be exploited to further the goals of school and the broader culture" (as cited in Darby & Catterall, 1994, p. 308).

As Sharon Begly reported in 1996, scientists who do brain research are continually discovering more about intelligences. They know that main genetic circuits exist which determine the outer limits of the various intelligences. Millions of smaller neurons or wiring connections are unprogrammed and full of potential. This wiring is not genetically predetermined. Experiences early in a child's life can change the way a person turns out later in life. Scientists also know that there are time limits or

windows for changing connections through activity. Schools seem to be missing the musical window of opportunity, which occurs between the ages of two and nine. With this information, primary administrators would be wise to have music instruction for their K-3 students every day.

Gardner, in his book Frames of Mind, states, "Of all the gifts with which individuals may be endowed, none emerges earlier than musical talent" (as cited in Andress, 1989, p. 29). Edwin Gordon of Temple University studied musical intelligence. He found that the level of musical intelligence that children are born with will begin to atrophy if they are not given musical experiences. It decreases each year until age nine (Feierabend, 1990). The success of musical experiences may depend on the musical training presented in a child's preschool years, and kindergarten teachers can change a child's musical intelligence for life. John Feierabend stated that the arts "are not as important in preschool as at other times in life. They are more important" (Feierabend, 1990, p. 19). Although the arts offer a multitude of benefits, most parents and educators are unaware of the difference that early training in music can make in a child's later development.

The musical intelligence can be used to affect other intelligences. In August of 1994, Dr. Frances Rauscher of the University of California presented the American Psychological Association's 102nd Annual Convention with the first definite scientific link between music and intelligence and the development of children. She found that fifteen minutes a week of private keyboard instruction along with

group singing at the preschool age can dramatically improve intelligence needed for higher level math and science. The links between brain neurons are strengthened, and new neural bridges needed for spatial reasoning are built when children take music lessons. Her study also found a 46% boost in spatial intelligence in preschoolers who received music lessons for eighteen months, but only a 6% improvement in her control group who were not taught music (Music Educators Journal, 1994). In addition, the arts (music) contribute positively to social, emotional, intellectual, physical, perceptual, aesthetic, and creative abilities (Education Service Center Region 11, 1985).

Plato Karofelle (1995) believes that the arts are the disciplines that pull all knowledge together. They are the key to or catalyst for academic achievement and productivity. There is a positive connection between music and other academics.

Students registered for the Scholastic Aptitude Tests were surveyed four years in a row concerning their musical background. It was determined that studying music was most beneficial. Those students had significantly higher verbal and math scores (National Coalition for Music Education, 1994). In another project the grades of music and nonmusic students were compared in math, English, history, and science. Six to ten percent more music students received A's and B's than did non music participants. This raised several questions concerning the correlation of music and learning (Music Educators Journal, 1994).

According to Bartosz (1982),

Education, to be valid, must be as complete as possible during the years of formal schooling, but also, must create a desire to learn which will last a lifetime. Educators must press for these goals. They must realize the position of the arts as necessary in a complete education and continuing learning experience. Elimination of the arts, or its de-emphasis today, will require the payment of a price in the culture of tomorrow. This price must never be paid. (p.31)

CHAPTER 3

THE SOLUTION STRATEGY

Literature Review

David Lazear (1991) stated that each of the multiple intelligences can be used to gain knowledge in other areas. This can be accomplished by integrating the intelligences into all subjects. A richer learning experience is possible when music is a significant part of each curriculum area. "By experiencing and creating, children gain not only knowledge and awareness of themselves, but also a better understanding of other people and the world around them" (Education Service Center Region 11, 1985, p. 1).

Integration of music into the curriculum has many positive effects on students' lives. Learning Through an Extended Arts Program (LEAP) is a New York City inner city program that has made the arts a central component in the curriculum. These results about their students have emerged: 93.4% developed better understanding of subject matters, 95% strengthened their problem solving skills, 96% strengthened their creative thinking skills, 93% gained self discipline, and 97% had a more positive attitude toward school. LEAP teachers verified that children were more excited and interested in their work, worked together better, and learned

to focus ideas better. Using music to teach skills made learning fun (Dean & Gross, 1992).

Wolcott Elementary School in West Hartford, Connecticut, spends more time on the arts than most schools, and their achievement scores on the Connecticut Mastery Test increase every year. This school is dedicated to the premise that the arts are an integral part of the learning experience for children, and that the arts help children express themselves (Karafelis, 1995). With its strong emphasis in the arts, this school demonstrates that it embraces the philosophy of the 1996 Music Educators National Conference (MENC) theme, "Music is Key". Music is the key to a basic education, successful schools, active and happy lives, creativity, problem solving, cultural and global understanding, teamwork and cooperation, excellence in the workplace, and lifelong wellness.

Today, music educators can not assume that boards of education will continue their programs. To guarantee that music will have a meaningful place in the total school curriculum, music educators must create programs that are "too important to be relegated to the classroom teacher, too exciting to be reduced, and too necessary to be cut" (Brophy, 1994, p. 29). They must design programs that are essential to students' educational progress in all learning areas, while still emphasizing musical goals. With this, comes the realization that their job is not just to teach music, but to enhance the teaching of other subjects. When music educators demonstrate that they can augment and support classroom learning, administrators and classroom teachers will realize

that music is a crucial and indispensable component of the curriculum.

The most feasible method of incorporating music into the daily curriculum is to involve the classroom teacher in integrating music with the help of a music specialist (Ballard, 1990). Classroom teachers should not be expected to provide all the music education, but they can enrich and reinforce musical concepts. With careful planning between music specialists and classroom teachers, learning can transfer easily from one area to another.

Anchorage, Alaska, has developed a program for music integration. Music is taught by the music specialists twice a week. Then the classroom teacher is given other music materials, prepared by the music specialist, to use throughout the week. This requires minimum classroom teacher preparation. "The beauty of such an approach lies in its compromise between total reliance on a classroom teacher who may not be interested or competent in teaching the arts and the specialization of arts instruction to the extent that the arts remain outside the core curriculum mainstream" (Ballard, 1990, p. 45). If we merely depend on the classroom teacher, music education can be haphazard from grade to grade. When the specialist and the classroom teacher work together, they can develop standardized objectives and procedures so students can acquire music knowledge and skills in a sequential manner.

When the music specialist is working in the combined role of educator of both students and classroom teachers, it is important to allocate adequate time in the daily schedule

for this expanded role. Time is needed for dialoging between the teachers, planning, and creating and finding resources.

Clivetta Johnson, a music teacher who was reassigned to a fifth grade classroom, found that some subjects naturally lead to the inclusion of music, while others do not. What is most important is that music becomes a natural, frequent, and enjoyable part of the classroom routine (Lee, 1987). Music is unquestionably something that should be part of an individual's daily life. It must be recognized as ordinary and necessary, not a frill. Stephen Corey (as cited in Phillips, 1995) found that when music is integrated into every aspect of school learning, it not only helps students think and problem solve in other areas, it also enhances the human spirit and gives the soul vigor.

Music can help make connections in language arts programs. According to Paula McGirr (1994),

> The music in language and the language in music support each other and young children's learning. Weaving language and music activities together through the use of quality children's literature provides an integrated, natural setting for meaningful learning. Language and music concepts develop simultaneously, along with creativity, imagination and critical thinking skills.(p. 78)

Clivetta Johnson has used music to teach some language arts skills. All kinds of sounds were used to increase listening skills. Teacher questions were sung, and students responded in song. Students copied rhythms and clapped them back, listened to unfamiliar music, and wrote stories to it.

Two different musical compositions were used for comparing and contrasting. Song lyrics were used to teach syllabication and other languages (Lee, 1987).

Other teachers have used music to teach language arts in creative ways. They taught simple repetitive songs and had students write their own lyrics to the music. Song lyrics were used to search for phonetic elements. Songs were used to inspire students to write about their own experiences. Rhythmic patterns in music, songs, and poetry were used to afford children the opportunity for playful word experiences. Reading instruction was given utilizing picture books with song lyrics that were familiar or catchy.

Tucker (1980) listed several reading skills that are developed through vocal music: sight and oral vocabulary, comprehension, decoding, oral and aural sound discrimination, accent placement, and syllabication. Music also broadens experiences and gives purpose for reading.

Lori Fitzgerald (1994) trained classroom teachers to use music to teach reading. She listed five basic steps. Students: 1)learn a favorite song, 2)meet the lyrics in print, 3)read the song on charts and booklets, 4)work on comprehensive extension activities, and 5)conclude with a writing activity. Songs build vocabulary and language skills as they are teaching musical concepts and making learning pleasurable. The boredom caused by constant repetition and drill is alleviated.

Thomas Armstrong (as cited in Fogarty & Bellanca, 1995) suggested using music to teach spelling. Spellings could be sung or chanted, perhaps going up an octave to emphasize

vowels or silent letters. An example would be to sing a seven letter word to the tune of "Twinkle Twinkle Little Star".

Baechtold and Algier (as cited in Morrow-Pretlow, 1994) used action songs to help build good listening, speaking, and singing skills. These songs work very well because of their repetitive nature and simple melodies.

Listening to classical music affects auditory discrimination skills. In a study by Joya Turnipseed (as cited in Brandt, 1986), it was found that five year old students who listened to more classical music during the day had better developed auditory skills and a greater ability to handle instructional tasks. Increased frequency of music instruction significantly improved auditory sequencing skills.

There is a song for every event in history. Children can understand different times and events through songs of the period. Music, through its lyrics, helps students feel subjects they are studying. Songs of the Civil War, for example, help students learn about this period in American history. All people benefit from studying music of other time periods and cultures (Campbell, 1995). Beverly McCollister (1989) integrated music with American history, and said it may enhance the retention of the subject.

Math and science are challenging subjects to integrate with music. Clivetta Johnson (as cited in Lee, 1987, p. 24) stated, "Music is based on sound in time" and as a result can be used to teach mathematical or number concepts, although it is sometimes difficult to find a natural connection. Johnson

used the steps of a scale and intervals to help teach the number system. The number of beats per measure, phrases, and sections of music were used to explain the "multiples" concept. Note values were used to teach fractions. Music has also been used to teach science. A unit on sound production was taught by gathering environmental sounds.

Rap songs have been found to be useful in teaching many subject areas. They have been used to teach counting numbers, the metric system, scientific facts, and body parts (Morrow-Pretlow, 1994).

Landis and Cander (as cited in McGirr, 1990) state that young children find music, language, and movement to be inseparable. They need opportunities to play with sounds and language and to move to chants and songs. Music supports the development of the whole child; it is an instrument for teaching any curriculum in a joyful manner.

Music can also be integrated in the physical surroundings of the school. Music teachers can affect music attitudes and concept development by utilizing bulletin boards and hallways to teach the value of music. Classroom teachers can give the music teacher wall space to make musical ideas visible within the classroom. Musical awareness is heightened when students see the integration of music into the entire school physical setting (Howle, 1994).

Music also needs to remain "whole". Teachers need to take care not to remove the sensitivity and creativity of music in order to teach skills (McGirr, 1995). Music educators need to use "real songs...don't teach music in order to teach whole language; teach music by using whole

language strategies..." (Wedel, 1995, p. 8). In a whole language approach, skills are not taught in isolation with music divided into little component parts. Teachers use authentic music and teach from whole to part rather than part to whole. In a study of the West, Aaron Copland's "Rodeo" would be very appropriate as an authentic piece for visualizing the wonders of the West.

Music integration is a two way street. Music should be used to facilitate and enrich the teaching of other subjects, and good children's literature should be used to teach music concepts. Many children's literature books (story songs) that are good for musical integration are found in Appendix C. Books that can be used to teach music concepts are found in Appendix D. The important thing is that the arts maintain their integrity in the curriculum (Martorelli, 1992).

Music is magic and wonder. It has the power to transform children's lives. In addition to being an essential part of human learning, music celebrates life--everyone's (Darby & Catterall, 1994).

Project Objectives and Processes

As a result of increased integration of music, during the period of September, 1996 to January, 1997, the first grade students from the targeted class will have an increase in music awareness and overall learning, as measured by attitudinal surveys, reviews of student portfolios, and teacher observation.

In order to accomplish the terminal objective, the following processes are necessary:

1. The classroom teacher and the music teacher will team teach using music to reinforce content areas and music concepts.

2. Learning activities will be developed which use the musical intelligence to enhance learning in the content areas.

3. Learning activities will be developed which use authentic literature and musical instruments to enhance musical learning.

Project Action Plan

The following plan for integrating music into the first grade classroom curriculum will be developed and implemented.

The classroom teacher and the music teacher will work together to established parent communication. To accomplish this a parent disclaimer, informational letter (see Appendix E) will be sent home the first day of school. On curriculum night, the third week of school, the music teacher will join the classroom teacher in explaining the integrated music program that will be in place in the classroom. A weekly home-school news letter will be sent to the parents keeping them informed about the weekly occurrences in the classroom. This letter, a joint effort between the classroom and music teacher, will include music information. A parent questionnaire (see Appendix F) will be given in January.

Two types of surveys will be given. One will be directed to the faculty and address the issues of music and integration of music in the classroom. Another will be an individual, music interest survey, orally administered by the music teacher, asking students about their musical preferences. This will be given as a pretest the first week of school and again as a posttest in January.

The classroom teacher and the music teacher will team teach for two 30 minute periods a week. This will be in addition to the two regularly scheduled 25 minute music classes taught by the music teacher.

The music teacher and the classroom teacher will give the children recorder instruction during a portion of the team teaching time. The classroom teacher will have the children play the recorder for ten minutes on each of the other days of the week. The children will be encouraged to take the recorder home for daily practice.

Other instruments will be available for the children to play. The keyboard will be set up with headphones. Percussion instruments will be used for a variety of activities. They will be available for children to play in a center.

Students will have a music journal and use it for listening responses to music and for reflection about the activities we will do in music. This journal will begin in October and carry through the rest of the year. Students will have a music folder where the music journal, recorder music, and staff paper for practicing note writing will be kept, along with any other music items.

Music will be a part of the integrated curriculum activities each day. There will be music playing as the children arrive in the morning and during work periods as appropriate. Calendar time at the beginning of each day will include a patriotic song, self esteem-friendship songs, songs about the days of the week, odd-even numbers, and the weather (see Appendix G).

Story song books will be sung each day. One new book will be introduced to the whole group each week as the book of the week. This book will be sung every day for a week and then put into the listening center for the children to enjoy on their own.

Music will be incorporated into penmanship, spelling, and phonics lessons. Penmanship will be taught through song and chant the first nine weeks of school and will include staff writing with symbol and note formation practice. Musical terms will be included in the spelling word wall. Songs and poems will be sung and chanted during phonics.

Music will be a part of math instruction. Musical instruments, notes, symbols, and sounds will be utilized in sorting and patterning activities. Music will be a part of addition and subtraction instruction, with note values, instruments, and musical story problems. Fractions will also be taught musically.

The music teacher will assist the classroom teacher in finding musical games and activities. She will provide a wrap-up for the language arts themes utilizing the songs of the unit. This will be a "sing" for the entire grade level. September will be a Nursery Rhyme Sing, October will be a Farm and Halloween Sing, and November will be a Teddy Bear Sing.

The following are the monthly language arts themes that will be covered:

August
- Getting to know you songs
- Color/Numbers
- Water Animals - fish, whales

September
- Friendship and Self esteem
- Nursery Rhymes
- Apples

October
- Little Red Hen
- Farm
- Friendship and Self esteem
- Columbus
- Spiders
- Pumpkins/Halloween

November
- Bears
- Fairy Tales
- Voting
- Veterans Day
- Thanksgiving

December
- Dinosaurs/Monsters
- Earth/Geology
- Winter holiday

January
- Friendship/Feelings
- Families
- Pigs
- Winter
- Martin Luther King

February
- Bodies
- Nutrition/Teeth
- Washington/Lincoln
- 100 Day
- Valentine Day

March
- Weather

Methods of Assessment

In order to assess the effects of the intervention, student journals and reflections will be kept throughout the intervention period. The student attitudinal surveys and teacher observation will be utilized as part of the assessment process.

CHAPTER 4

PROJECT RESULTS

Historical Description of the Intervention

The objective of this project was to integrate music in the targeted classroom to increase music awareness and overall learning. There were three components involved in the realization of this objective. Team teaching by the classroom teacher and music teacher was a major component in effecting the desired changes in the targeted students. Musical learning activities were developed to enhance learning in the content areas, and activities which used authentic music literature and musical instruments were developed to enhance musical learning.

Team teaching was engaged in twice a week for two 30 minute lessons. During this time the teachers taught various content subjects together, sometimes teaching in tandem and sometimes alternating the teaching. The classroom teacher gave ideas for current themes or subjects, and the music teacher acted as a resource for musical information and materials. Other times the music teacher discussed music concepts she was covering, and the classroom teacher initiated activities to reinforce these musical concepts. Planning for team teaching and making materials were both

accomplished before and after school. The two teachers had no common planning time during the school day.

The first two weeks of school were crucial to the implementation of the project. The classroom and music teacher determined their working relationship. A portion of every morning was spent in creating the music routine for the year. Care was given to make music an integral part of the school day. Establishing these procedures set the tone for the rest of the year.

To bolster the classroom teacher's musical confidence and to establish a closer relationship with the students, the music teacher came into the classroom to teach the calendar songs for the first two weeks of school. After this, the classroom teacher took over calendar time, enriching the activities with music.

The first week of school a parent disclaimer, informational letter was sent home giving parents an introduction to the integrated music program in place for the year, and a student music interest survey was orally administered to each student by the music teacher. The student survey was again administered in February.

The primary focus of the project was to integrate music into the content areas. Integration was accomplished in a two-pronged approach. The music teacher used classroom themes to teach musical concepts, and the classroom teacher used music and musical concepts to teach other subjects. Language arts was found to be the most natural and easiest area to integrate. Integration was successful in handwriting, phonics, literature, reading, and writing.

Handwriting was enhanced by the teacher singing and chanting letter formations as the whole class learned the correct strokes to form each letter. This heightened interest and kept everyone on task better than in past years. Dividing the writing of each letter into small tasks and chanting made it easier to remember the pattern for its formation. During the same penmanship lessons, the classroom teacher had the students write musical symbols to reinforce musical learning taught by the music teacher.

Phonics was taught with chants set to music. Short and long vowel poems were read, sung, and used for reinforcing prior phonetic lessons. Children used written songs to identify specific letter combinations, sounds, and grammar components.

A large portion of the integration was accomplished by utilizing literature. The students read books which were songs that publishers put into book form with colorful illustrations. These were read and sung by the teacher to the whole group and then put into the listening center for small groups of children to enjoy.

Poetry and written songs from all of the subject areas were valuable tools for teaching reading, grammar, rhyming, patterning, sequencing, and finding beats. These poems were kept in individual student poetry notebooks and utilized for whole class instruction and for student self-selection during reading workshop. The music teacher used these same poems and songs to teach the musical concepts of rhythm, dynamics, tempo, and melody. Nursery rhymes and poems were a vehicle for improvisation using the voice, percussion instruments,

and xylophones. Sometimes both teachers used these poems for movement activities.

The music teacher was a resource for some of the literature. It was the responsibility of the music teacher to find and create songs, music, and activities to complement and enrich the literature being taught by the classroom teacher.

Books with musical themes provided a springboard for writing activities. For instance, after reading and singing the Itsy Bitsy Spider by Iza Trapoli, the children wrote their own story innovations. I Went Walking by Sue Williams provided the impetus for writing a class book in rondo form (ABACADA).

Initially, integrating music with math seemed the most difficult of the content areas; however, the teachers discovered it was not difficult but required a different mind set. As the year progressed, the teachers found that some skills such as sorting and patterning seemed to have a natural musical-mathematical link. Sounds were sorted by attributes, such as volume, tempo, mood, and style. The children were encouraged to find rhythm and patterns in words and objects around them and then graphed the findings. Students identified sound patterns as AB, ABA, or rondo form and then used percussion instruments to make these same patterns. The next step was to make visual representations of the sound patterns on paper. At times students listened and moved to patterns found in classical music. Music symbol cards were used as manipulatives for sorting and patterning.

The classroom teacher encouraged students to write story

problems using musical manipulatives and themes. The difficult concept of doubles-plus-one was taught using musical symbols. The combination of using musical symbols and the manner in which the lesson was taught increased the ease with which the children grasped this concept.

Many songs and activities were found for science and health and social studies integration. Music was used to introduce, teach, and reinforce concepts being taught in these subjects. Some science units using music were bears, weather, spiders, dinosaurs, plants, seasons, and the farm. Dental health, nutrition, bus safety, and drug awareness were enriched with songs. Social studies units on friendship, self-esteem, patriotism, holidays, important historical figures, and other cultural groups were also covered.

Background music was used at various times of the day. When the children came into the room in the morning, the teacher had classical music playing to set a quiet tone for starting the day's work. Music was played during writing workshop to create a peaceful, calm atmosphere for thinking. Soft, soothing music was played after physical education classes and other high energy activities to calm and quiet the children. After lunch or late in the day, the teacher chose upbeat music to energize the students.

A music journal was kept, during which time the children responded spontaneously to music or music lessons that peaked their interest. Sometimes while the children listened to music, they drew pictures of the song or the moods and feelings it stirred in them.

The classroom teacher often got the children's attention by clapping rhythms which the children echo clapped. Directions were given by singing, and the children sang an echo response. A student reflection or conclusion activity that could be sung is located in Appendix H.

Another component of the music integration program was classroom reinforcement of musical concepts. A musical bulletin board covering one wall of the room contained musical symbols and terminology, pictures of composers and instruments, and fingering charts for the recorder. There was a staff rug in the reading area of the room. The teacher had the children sit on various lines and spaces to learn the names of the lines and spaces on the staff. Games were played on the rug with beanbags and large notes, all to help reinforce the learning of the staff. A small staff with movable magnetic note heads was kept on the chalkboard near the calendar to be manipulated during calendar time. It took only a few minutes each day to review stepping and skipping on the staff. This helped the children with ABC order as well as staff reading. Musical terminology was integrated into other subject areas as appropriate. For example, ABC ordering of words included musical terms. Weekly newsletters to parents included details about music. Information concerning current classroom music activities, concerts outside of school, and classical music stations were included in these letters.

A pilot program introducing the recorder to first graders was begun in September and continued throughout the year. The music teacher taught lessons twice a week.

Initially, the teachers had hoped to do a few minutes of recorder every day, but time limitations prohibited this from occurring.

The action plan called for the implementation of centers; however, this was not feasible due to a large class, a small room, and a lack of time during the school day due to other curricular requirements.

Presentation and Analysis of Results

The effectiveness of the integration of music in the content areas was analyzed from two perspectives. First considered was the effect of team teaching and musical integration on a student population with different abilities as seen in their level of musical awareness and musical intelligence, their music attitudes, and overall learning. Secondly, the process was viewed from the teachers' perspectives, addressing curriculum, attitudes, and ease of implementation. Assessment of the effectiveness of this intervention was measured by student journals and reflections, student music interest surveys, a parent questionnaire, and teacher observation.

The level of musical awareness and musical intelligence of this class was higher than previous classes taught by the classroom teacher or other classes taught by the music teacher. The behaviors of the students indicated that they enjoyed music to a high degree and were more aware of music in their environment. These children loved classical music and discussed composers such as Tchaikovsky very readily. They actively sought out music and made connections with it, recognizing music which had been listened to and discussed in

class when it was presented on television. For example, a boy in the class recognized the music that he heard on an exercise program as being from "The Nutcracker", and a girl recognized the music when she heard it on Disney. The students made far more comments and had a more insightful discussion about "The Nutcracker" than any of the other classes taught by the music teacher.

The love of singing was evidenced by the interest and confidence they exhibited when they sang. Many times, singing was a spontaneous occurrence, happening most often during poetry notebook time. Children who had learned a tune to a particular poem would teach it to the others. Sometimes the children worked together spontaneously to create their own tune for a poem. For example, when doing a whole class reading of the poem "Five Enormous Dinosaurs", the children instinctively began singing and making up a song to fit the poem. The teacher realized the importance of what was happening and became silent as the students corporately played with the melody and rhythm. By the time the six stanzas were completed, the students had created a recognizable song that could be reproduced and sung. The teacher then joined the students as the poem was sung all the way through again, using the newly created melody and rhythm. This was powerful affirmation that the teachers were "on the right track" with music integration.

The calendar time singing activities helped the children become confident singers and musical risk takers. The students sang out enthusiastically as a group and gained confidence singing alone in front of the class. Even the

shyest child stood up and sang confidently. The children eagerly looked forward to having their turn leading the calendar activities.

Singing to reflect on daily learning strengthened the students' musical confidence and helped with pitch matching. This was an effective manner for first graders to learn and develop reflective thinking.

Acceptance of diverse talents and abilities was an unplanned positive result of daily singing and instrument playing. The children praised and encouraged each other and never laughed at or teased any student who was singing or playing an instrument, no matter how off key or poorly the child performed. This created an accepting, warm, and relaxed climate in the classroom.

The children in the targeted class were more interested and inquisitive about music than other classes that the music teacher taught. They were more observant and asked more questions about instruments, composers, and music in general. One child created a music dictionary and wrote the notes to a song the class had sung. When the children arrived, and various other times during the day, the classroom teacher routinely had classical music playing in the background. The students' interest in this music was demonstrated when they requested that music be turned on if the teacher forgot.

Recorder instruction was included as a component in the action plan. At first the teachers were concerned that first grade was too early to begin instruction. Although initially the recorder was difficult due to their age and hand size, the students proved they could do it. Children who practiced

at home did a better job of playing than those who did not. After a few notes were mastered, children began to work ahead on their own, transferring previous knowledge to the new notes. Several students began to understand the concept of tonguing, but most did not.

Initially, all the children were excited about playing the recorder, but after a few months, about a third of the children were no longer interested, perhaps due to difficulties they had remembering fingerings and notes. All the children in this pilot program learned to read notes on the staff better than the other children in the other first grade classes taught by the music teacher. The teachers felt this was due to the additional exposure to music and musical notation that they received throughout the year.

The student music interest survey administered the second week of school was again administered the first week in March for the purpose of noting changes in the students' musical interests. The question that was answered most differently concerned the type of instrument the students would like to play. In September the children chose drums, flute, and guitar, in that order. In March the children were very diverse in their replies. The trumpet was chosen by seven children, three chose flute, three chose piano, two chose saxophone, two chose french horn, one chose trombone, one chose bassoon, one chose bass guitar, one chose electric guitar, and one chose violin. One child chose her voice stating, "No one can take it away from me, and I like my voice a lot!" Three children did not want to play an instrument and one could not decide which instrument to play.

The researchers concluded that changes in the answers concerning instrument preference on the second survey were the result of exposure to numerous instruments. During the course of the year, the classroom and music teacher introduced the students to different musical instruments in a variety of ways. Children and their families were invited to attend band concerts at the local community college. Books about instruments were read to the class and then put in a basket to be enjoyed by the children during reading workshop. Table groups were identified by different instrument names, and instrument pictures were hung over the tables. For "Leaders Are Readers Day", adults who played instruments were asked to demonstrate their instrument and talk about it with the children. C.D.s of instrumental concertos were played in the classroom.

When the children were asked what they liked most about music, the answers were varied with attention given to detail. The researchers felt this was due to increased exposure to music and discussions of musical concepts. Children made the following comments regarding what they liked most about music:

"the high and low of it,"

"the way it sounds,"

"the fun of it,"

"it is interesting,"

"how conductors make it go up and down and slow and fast,"

"C.D.s so you don't have to go some place special to listen to music,"

"It makes me feel good!"

Children also noted that they liked singing, playing the recorder, dancing, volume, tempo, and listening to music.

In September when the students were asked what they liked best about music class they needed to be prompted and given suggestions to help stimulate their thinking. In March the children needed no prompting and gave very diverse answers. Recorder activities were enjoyed most by twelve children, five children chose singing, four chose musical notation, two chose listening activities, one chose movement to music, one chose rhythmic dictation, one chose music patterning, and one chose playing percussion instruments.

The children in this class learned musical skills and concepts quicker and saw musical relationships more easily than children in other classes. They counted rhythms correctly more often, noticed similarities and differences in songs, and by October a majority of the children were able to distinguish F, G, A, and B on the staff. One child even taught the class a mnemonic that her father had taught her for remembering the lines and spaces on the staff. Both project teachers felt this was due to more music instruction time and integration of music into the other curriculum areas.

The effectiveness of integration of music in the content areas can also be analyzed from the teachers' perspectives, addressing curriculum, attitudes, and the ease of implementation. Integrating music enhanced the curriculum. Music helped the teachers meet the needs of the diverse student population. With the addition of the musical

intelligence into the lesson design, several other intelligences were naturally incorporated. The bodily/kinesthetic intelligence was most readily linked with the musical intelligence. After listening to music, a natural follow-up activity was moving to music and making rhythms with instruments. Music lessons lent themselves to integration of the verbal/linguistic intelligence very easily. Counting of beats and rhythms and finding patterns is logical/mathematical.

Initially it was difficult for the classroom teacher to get into the musical mind set and remember all the times music could be incorporated. The integration was very deliberate, but as the year progressed finding ways to integrate became more natural. The classroom teacher wanted integration to become an instinctive and natural way of thinking, and by January this had occurred. The classroom teacher gained confidence from the continued presence of the music teacher.

The biggest detriment to the teaming effort was a lack of common planning time for the two teachers. This made communication and planning more difficult. As a direct result, there were times when the integration effort was compromised, and topics that could have been integrated were not.

The success of the project intervention was, in a large measure, a direct result of the team teaching component. The teaming effort allowed both teachers to do small group and individual review and enrichment that neither teacher would have had time to do alone. This also allowed for modeling

time. Both teachers were able to gain insights into what the other was teaching. The classroom teacher liked working with the music teacher and appreciated having music materials and resources available to her rather than having to search for the materials herself.

As the team teaching progressed, it became apparent that the teachers were involved in more than a teaming relationship; a peer coaching relationship had also developed. The teachers modeled and learned classroom management ideas, teaching strategies, and discipline techniques from each other. This was an unplanned, but very beneficial result of the project. As a result of the project integration, both teachers are more committed than ever to making music an integral part of the curriculum.

Conclusions and Recommendations

Based on the presentation and analysis of the data on musical integration, several conclusions and recommendations can be made. Integration can and should be done in all of the content areas. Language arts was the easiest subject area for the project teachers to begin integrating, and it is recommended that other teachers begin the music integration process with this curriculum area. Student learning is strengthened when chants and songs are used to teach, reinforce, and review concepts. Music heightens interest and helps students stay on task.

Team teaching and peer coaching should be an integral part of any integration effort; it takes modeling and practice to embrace new teaching techniques. This enables the classroom teacher with little musical training or

background to learn musical elements and gain confidence in teaching music. For music teachers who have not had any classroom experience, teaming is a wonderful way to learn the curriculum.

The success of the teaming effort hinges on several key issues. There needs to be good rapport and communication between the teachers. Planning time and joint planning time are essential. The music teacher, acting as a resource person, needs planning time to make and gather resources for the team. The classroom teacher needs to plan ahead so the two teachers can then plan how the integration will occur. The researchers' most outstanding integrated lessons were the result of brainstorming sessions when they completely created the lessons together. It is interesting to note that these lessons utilized more of the multiple intelligences than other lessons the teachers routinely taught.

The comments, reflective writing, and journal responses of the students indicate the importance of including a variety of musical activities and approaches when integrating lessons. This is a good technique for differentiating instruction. Children have many learning styles and what is meaningful to one child may not be meaningful to another.

Although recorder instruction proved to be a valuable musical endeavor, the project researchers do not recommend it for integration purposes. It was an excellent way to teach theory and note reading, but it was very time consuming and took time away from team teaching. The classroom teacher was not comfortable teaching recorder or reviewing lessons with the children when the music teacher was not there. Recorder

instruction took time away from many other integrated activities. Also, when the music teacher worked with individual students on the recorder, it was distracting to the rest of the class.

The researchers also concluded that having high musical intelligence does not necessarily transfer to excellent performance on an instrument. The student in the action project that was thought to have the highest level of musical intelligence ended up being the least able to play the recorder and showed very little interest. Success with an instrument is also dependent upon hand/eye coordination, fine motor dexterity, and self-discipline.

The teachers conclude that integrating subject areas with music makes learning more fun and exciting for both students and teachers. The teachers involved in this action research project strongly feel that integration is an essential component of teaching. After seeing the success of musical integration and the powerful impact it had on student learning and attitudes, the teachers recognize the necessity of integrating music and all of the other intelligences in all facets of the curriculum.

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APPENDICES

APPENDIX A

TEACHER SURVEY

Teacher Survey

Kathy Bodenlos and Gail Mack are working on a Master's project entitled "Integrating Music in a First Grade Classroom". As a part of the project we need to survey our school faculty. We would appreciate it if you would take the time to fill out this survey for us and return it by September 16, 1996. Thank you very much! Kathy and Gail

Please answer the questions according to what you do with your students (not what the music teacher does with them).

1. How often do you **sing** with your class?

Daily Weekly Monthly Never

2. How often do your students **listen to music**?

Daily Weekly Monthly Never

3. How often do your students do **movement activities**?

Daily Weekly Monthly Never

4. Do you **integrate music** with other subjects?

Daily Weekly Monthly Never

5. What subjects **have** you **integrated** with music?

___Reading ___Phonics ___Spelling

___Writing ___Math ___Science

___Social Studies ___Transitional Time

___Calendar ___Arrival Time ___Wrap-Up Time

___Holiday Themes ___Other (Specify)

6. Do you play an **instrument** with your students? If so what instrument?_____

7. What **kinds of music** do you listen to with your students?_____

NAME:_____

APPENDIX B

STUDENT MUSIC INTEREST SURVEY

Student Music Interest Survey

Name _____ **Survey #1 #2**

1. Do you like to listen to music? Yes No
2. Does your family like to listen to music? Yes No
3. What is your favorite song?

   _____

4. Do you like to listen to music with friends?

   Yes No
5. Have you ever been to a concert? Yes No

   What concert did you go to? _____

   _____

   Did you like it? Yes No
6. Do you play an instrument? Yes No

   What instrument do you play? _____

   _____

   Would you like to play an instrument? Yes No

   _____
7. What do you like least about music? _____

   _____
8. What do you like most about music? _____

   _____
9. What do you like best about music class? _____

   _____

   _____
10. Circle the things you have at home.

    C.D. Player Cassette Tape Player Record Player

    Radio

APPENDIX C

STORY SONG BOOKS

Story Song Books

Adams, Pam, Old MacDonald Had a Farm

Adams, Pam, There Was an Old Lady Who Swallowed a Fly

Aliki, Go Tell Aunt Rhody

Aliki, Hush Little Baby

Aylesworth, Jim, The Completed Hickory Dickory Dock

Carle, Eric, Today is Monday

Christelow, Eileen, Five Little Monkeys Jumping On The Bed

Christelow, Eileen, Five Little Monkeys Sitting in a Tree

Cole, Joanna, Anna Banana 101 Jump-Rope Rhymes

Cole, Joanna, Miss Mary Mack

Coplon, Emily; Orgel, Doris; Schecter, Ellen; She'll Be Coming Around the Mountain

Eagle, Kim, Hey Diddle, Diddle

Eagle, Kim, It's Raining, It's Pouring

Flanders, Michael & Swann, Donald, The Hippopotamus Song

Gurney, J.S., Over the River and Through the Woods

Hale, Sarah Josepha, Mary Had a Little Lamb

Ivimey, John, 3 Blind Mice

Kennedy, Jimmy, Teddy Bears' Picnic

Kovalaski, Maryann, Take Me Out to the Ball Game

Kovalaski, Maryann, The Wheels on the Bus

Langstaff, John, Frog Went A-Courtin

Langstaff, John, Oh a Hunting We Will Go

Mills, Alan, Over the Rolling Sea

Omerod, Jan, Ms. MacDonald Has a Class

Peek, Merle, Mary Wore Her Red Dress

Polenghi, Evan, Miss Mary Mack

Rae, M.M., The Farmer in the Dell

Raffi, Baby Beluga

Raffi, Down By the Bay

Raffi, Everything Grows

Raffi, Five Little Ducks

Raffi, Like Me and You

Raffi, One Light, One Sun

Raffi, Shake My Sillies Out

Raffi, Spider on the Floor

Raffi, Tingalayo

Raffi, The Wheels on the Bus

Saksie, Judy, The Seed Song

Scelsa, Greg, Down on the Farm

Seeger, Pete, Abiyoyo

Spier, Peter, London Bridge is Falling Down

Spier, Peter, To Market! To Market!

Trapani, Iza, I'm a Little Teapot

Trapani, Iza, Itsy Bitsy Spider

Trapani, Iza, Twinkle Twinkle

Vaughan, Marcia, Wombat Stew

Weiss, David & Thiele, Bob, What a Wonderful World

Westcott, Nadine, The Lady With the Alligator Purse

Westcott, Nadine, Skip to My Lou

Williams, Rozanne Lanczak, The Bear Went Over the Mountain

Williams, Rozanne Lanczak, Little Green Frog

Williams, Rozanne Lanczak, Reduce, Reuse, Recycle

Williams, Rozanne Lanczak, Round and Round the Seasons Go

Williams, Rozanne Lanczak, What's the Weather Like Today?

Wise William, Ten Sly Piranhas

Wood, Jakki, Fiddle-I-Fee

APPENDIX D

MUSIC CONCEPT BOOKS

Music Concept Books

Andrews, Sylvia, Rattlebone Rock

Baer, Gene, Thump, Thump, Rat-a-tat-tat

Brett, Jan, Berlioz the Bear

Carle, Eric, Have You Seen My Cat?

Henkes, Kevin, Chrysanthemum

Hurd, Thatcher, Mama Don't Allow

Isadora, Rachael, Ben's Trumpet

Lionni, Leo, Geraldine, the Music Mouse

Martin, Bill & Archambault, John, Barn Dance

Martin, Bill & Archambault, John, Chicka Chicka Boom Boom

Martin, Bill, The Maestro Plays

Miranda, Anne, Let's Get the Rhythm

Moss, Lloyd, Zin! Zin! Zin! a Violin

Ryder, Joanne, Earth Dance

Rubin, Mark & Daniel, Alan, The Orchestra

Tsutsui, Keisuke, (adapted by), Carnival of the Animals

Williams, Sue, I Went Walking

Van Loan, Nancy, Possum Came A-Knockin

Winter, Jeanetter, Follow the Drinking Gourd

Wood, Audrey, Silly Sally

APPENDIX E

PARENT DISCLAIMER, INFORMATIONAL LETTER

Parent Disclaimer, Informational Letter

August 28, 1996

Dear Parents,

Mrs. Gail Mack (your child's music teacher) and I are involved in a Master's Degree project concerning the integration of music across the curriculum. Mrs. Mack and I will be team teaching this year to incorporate music into the various themes and subjects covered in first grade.

We will be reporting the results of our project. If for some reason you do not wish your child to be counted in our results, please contact us. The children's identities will not be divulged, and grades will not be affected by your desire. All participation will be in keeping with normal school procedures. If you have any questions, please call us.

As a part of this program the children will: participate in music centers, learn to play the tonette, keep a music response journal, do some composing and have music activities every day.

Knowing that children learn best when they are active rather than passive learners, we would like to offer tonette instruction as a part of their first grade learning experience. We are asking you to contribute $2 for the purchase of a tonette which will be your child's personal instrument. We would appreciate the money by **September 4**.

Sincerely,

Mrs. Kathy Bodenlos
362-3513

Mrs. Gail Mack
816-2544

APPENDIX F

PARENT QUESTIONNAIRE

PARENT QUESTIONNAIRE

Dear Parents,

As you know, we have been team teaching this year in order to integrate music across the content areas. We would like your assistance in evaluating our success in meeting this objective. Please answer the following questions and return this survey by Tuesday, February 18, 1997. Thank you!

Name_____

1. Has your child talked to you about any of the musical activities we have done during school? If so please give a few examples.

2. Have you gone to the library to check out music, or have you purchased C.D.s or tapes that your child has mentioned hearing in school? If so, please list the titles.

3. Has your family attended any formal concerts since September? If so, please list them.

4. Discuss your child's and your opinion about playing the recorder. (Was it worthwhile, did your child practice, was it enjoyable? etc.)

5. Discuss any changes you have noticed in your child's musical attitude or musical awareness.

APPENDIX G

CALENDAR SONGS

Calendar Songs

Days of the Week Song

Sunday, Monday, Tuesday, Wednesday, Thursday, Friday, and Saturday

(*clap*) the days of the week!

(Then change it to start on the day of the week it is, and sing.)

The Odd - Even Song

The **evens** go marching **two** by **two**, hurrah, hurrah.
The **evens** go marching **two** by **two**, hurrah, hurrah.
They all have a **partner**, yes they do.
Evens always march by **two's**.
And they all go marching
Merrily **two** by **two**.

The **odds** go marching **two plus one**, hurrah, hurrah.
The **odds** go marching **two plus one**, hurrah, hurrah.
There's always **one** who marches **alone**,
He stopped to play and got left alone.
And the **odds** go marching
Merrily **two plus one**.

(Sung to the tune of "When Johnny Comes Marching Home Again")

The Today Song

Today is Monday.
Today is Monday.
What shall we do today?
We'll go to gym class.
Boys on equipment.
That's what we'll do today.

(Make up your own tune.)

What's the Weather Like Today?

What's the weather like today,
like today, like today.
What's the weather like today?
Today is _____! (cloudy, rainy, windy, sunny, snowy, etc.)
(One child puts up this sentence, and sings this line by himself.)
Today is _____! (The rest of the class echoes what ever the weather person sang.)

(Sing to the tune "London Bridge")

APPENDIX H

STUDENT REFLECTION OR CONCLUSION ACTIVITY

Reflection Song

We've done our math.
We've done our math.
What did we learn today.
We learned to_____(student sings something he/she learned)
We learned to _____(class echoes)
That's what we learned in math.

(This is a variation of "The Today Song")
(Make up your own tune)

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Printed Name: Kathleen Ann Bodenlos	Organization: School of Education
Address: Saint Xavier University 3700 West 103rd Street Chicago, IL. 60655 Attention: Dr. Richard Campbell	Telephone Number: (773) 298-3159
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