This study investigated whether music could be used as a tool to motivate students with emotional disturbances to develop positive attitudes toward writing and whether these attitudes would result in a higher volume of writing output and improved writing skills. The research focused on two fourth-grade male students. The data collection instrument included a rubric writing skills evaluation, sentence quantity evaluation, and an opinionnaire survey. Results indicated that the quality of basic writing skills (capitalization, punctuation, neatness, creativity, and sentence sense) showed an overall improvement when both students were exposed to music during writing assignments. Both students were immediately absorbed in the music and the calming effect helped them to ignore surrounding distractions, thus enabling them to focus on their writing assignments. Quantity of writing increased substantially in writing assignments with music, while writing assignments without music were regarded as chores to be accomplished as quickly as possible. Results of the study also indicated improved attitudes for both students, who indicated that their writing assignments were exciting when exposed to music during writing. (Contains 17 references.)

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An Investigation of the Effects of Music
On Two Emotionally Disturbed Students' Writing Motivations and Writing Skills

Patrick Kariuki
And
Cindy Honeycutt

Milligan College, TN

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Abstract

Most emotionally disturbed students are easily distracted during their writing. The problem for educators is to motivate the student to become involved in the writing process. The purpose of this study was to determine if music could be used as a tool to motivate emotionally disturbed students to develop a positive attitude towards writing. A related purpose was to examine whether positive attitude towards writing would result into a higher volume of writing output and improved writing skills. The research focused on two fourth grade male students. The data collection instruments included a rubric writing skills evaluation, sentence quantity evaluation and an opinionnaire survey. The results indicated that music has the potential of improving writing skills and increasing output volume as well as enhancing attitudes related to writing. Further research needs to be done on how music can be utilized as a tool to enhance motivation to write and to develop writing skills.
Review of the Literature

Students often hate writing. It is regarded as a chore to be avoided at all costs or else something to be accomplished as quickly as possible and placed in the past. It is a challenge to effectively motivate students not only to want to write but to also express themselves and enjoy the activity. Conversely, students enjoy listening to music. The spontaneous disposition students have toward rhythm and melody might make music an ideal tool for assisting them with writing. Perhaps music could be associated with writing in such a way as to stimulate their imagination and provide the motivational boost necessary to enhance their writing skills and give them some measure of appreciation of their ability to write. A most effective way to teach students to learn and value language is to provide them with a variety of meaningful experiences that fine-tune their ability to hear rhythm, sounds, and melodies. Combining writing and music was an effective way to encourage students' writing motivation and improve writing skills (Scott, 1996).

As students progress through the educational process, many of them require various helps to facilitate their progress. Specifically, many at-risk students have difficulty just learning to read, speak or write. The ones who are successful in learning those skills often choose not to use them. A student at risk “is one who is in danger of failing to complete his or her education with an adequate level of skill” (Slavin & Madden, 1989, p. 12). Therefore, the problem
for educators is to motivate the student to become interested in their literary education. Music is a tool that can be used to aid this process (Ebisutani, 1991).

Young writers must use their limited skills of language, art, music, and drama to make sense of the writing process. Research suggests that young children convey meaning to others using many different communication systems, and that they use what is known about one system to support the understanding of another system. As a result, teachers should create social environments in which children are free to use music to explore and enhance their writing (Karnowski, 1986).

In 1975 a study was conducted to measure the effect of music upon the spontaneous writing of students. The students' writings were evaluated in terms of quantity and quality. Quantity was measured by mean scores of word counts. Quality was determined by the following binary distribution: best writing (1) and worst writing (2). Findings indicated that most students had a positive attitude when writing to music and the quality and quantity of the students' writing was affected by using music as a stimulus (Donlan, 1976).

**Characteristics of Emotionally Disturbed Students**

What is an Emotionally Disturbed Student? As defined by the Department of Education/Special Programs Division, a student who exhibits one or more of the following characteristics, over an extended period of time and to a marked degree, which adversely affects educational performance, is considered emotionally disturbed (ED).

1. Inability to learn which cannot be explained primarily by intellectual, sensory,
health, or specific learning disability factors.

2. Inability to build or maintain satisfactory interpersonal relationships with peers, teachers, and other significant persons.

3. Inappropriate types of behavior or feelings under normal circumstances.

4. General pervasive mood of unhappiness or depression.

5. Tendency to develop physical symptoms or fears associated with personal or school problems (Special Education Student Evaluation Manual [SESEM], 1993, pg. 174).

The qualifier "over an extended period of time" requires that the student must exhibit one or more of the ED characteristics long enough for it to be considered chronic. Chronicity can be manifested in a number of ways, including sustained behavior over a long period of time, a high frequency of occurrences over a short time, multiple acute episodes, or an acute episode that appears to be the culmination of other less acute manifestations of problems [SESEM].

The term "to a marked degree" is intended to go far beyond the normal limits of the characteristics identified in the characteristics of ED. The behaviors must be exhibited at a far greater rate and/or intensity than typically seen in the student's peer group. This difference should be clearly observable. These behaviors must be displayed across different environments rather than situation-specific occurrences [SESEM].

**Focus on Functional Skill**

Essential in a curriculum for students with emotional disturbance
problems is developing functional skills including reading, writing, and speaking that can directly improve the ultimate functioning of the student and the quality of his or her life. The concept of functional skills is not limited to the areas of self-help or community mobility, but also encompasses skills such as those required to seek and access assistance, become life-long independent learners, respond to changes in the environment, succeed in employment, be adequately functioning adults and parents, and achieve satisfying and productive lives (Schelly, 1995).

The concepts of the functional curriculum approach which includes obtaining a high level of student participation must be extended to students with ED, many of whom will otherwise fail to fulfill their potential (Gable, Laycock, Maroney, & Smith, 1991, p.28).

**Research Combining Music With Learning**

Students often hate writing, but they enjoy listening to music. Research has indicated that music provides an environment that can stimulate creative expression, motivation and increase two major language skills: reading and writing (Scott, 1996). Combining music with writing was a technique used with fourth-grade students from Deatsville, Alabama. The study's objectives were to encourage imaginative thinking and improve writing skills. Benefits of the study included increased creativity, greater music appreciation and heightened writing skills (Scott, 1996).

The first part of the study consisted of playing tapes of instrumental classical music softly in the background as the students worked. The instructor
and students discussed the music, specifically, how it made them feel and what they thought about hearing music at school (Scott, 1996).

The study continued with playing tapes of modern composers and performers, classical music, and popular movie soundtracks during writing assignments. Students were to listen to the music and write words, phrases and paragraphs that came to mind. Incorporating music with writing produced some inspiring techniques to help students focus on their writing assignments with enthusiasm (Scott, 1996).

Other research has suggested that the spontaneous disposition students have toward rhythm and melody makes music an ideal tool for assisting them with the interwoven facets of language: listening, speaking, reading, and writing (Kolb, 1996). Primary grade students from the Camdenton School in Camdenton, Missouri participated in a study to develop literacy through music and song. The study's objective was not only to help students learn to read but also to help them develop love for reading. Integrating songs into the reading curriculum proved to be an effective tool in teaching beginning students to read (Kolb, 1996).

The study consisted of singing a song repeatedly until students were comfortable with the tune and lyrics. Hand motions, clapping to the beat, playing rhythm instruments, and choral chanting were used to develop phrasing and intonation (Kolb, 1996).

Next, the students saw the lyrics in print. Lyrics were printed on chart paper so the students could participate in a variety of reading experiences to help promote print awareness. Finally, activities such as pointing to each word as it
was sung, locating words that appeared in more than one place, and providing students with word cards to match like words were used to reinforce the link between speech and print. Music and song in an early reading program proved to have great value (Kolb, 1996). As a variety of research has shown, music helps provide the ability to exercise the imagination across the curriculum (Hickey & Webster, 1995).

Exposing Emotionally Disturbed Students To Music During Writing Assignments

Anxiety about writing can adversely affect school success and impair writing competence. It is critical that teachers learn more about negative attitudes toward writing and how to motivate students into a positive attitude in the writing process (Knudson, 1995). Student motivation naturally has to do with students' anxiety and desire to participate in the learning process. Although students may be equally motivated to perform a task, the sources of their motivation may differ (Lumsden, 1994). A student with emotional disturbances experiences anxiety across the curriculum that results in decline in grades, academic regression and inconsistent academic performances [SESEM].

Emotionally disturbed students need to have the least amount of distractions possible when trying to complete an academic task. Distractions can cause anxiety about completing a task which, in turn, can produce inconsistent academic performances (Zabel, 1988).
According to research, music can have a calming effect on students during their writing assignments (Scott 1996). To help eliminate the distractions that emotionally disturbed students experience, music could be used to help keep one focused on the present task at hand (Gladding, 1992). The use of music in writing has the potential for effectiveness (Snyder, 1994).

Music can be a powerful tool for motivation and provide a unique outlet or creativity and expression in the writing process (Barry, 1996). If teachers of emotionally disturbed students can control the outside distractions with a focus on music listening during writing assignments it is possible that anxiety levels will decrease, therefore, enhancing the student's ability to concentrate on the writing task at hand and help increase creativity and skills. By structuring expressive writing activities and correlating them with particular stages of the writing process, a teacher can extract this natural linguistic activity out of a student writer (Cobine, 1996).

Since media, particularly music, seems to play an important role in students' lives, it would be productive to see whether the use of music in the classroom might be used positively to affect writing abilities (Ebisutani, 1991). A number of educators have attempted to build theories that justify the use of music in reading and language arts classrooms. The studies that have been conducted are few. Research needs to continue to establish the connections between how students process music and how that process interacts with writing (Donlan, 1990).
Methodology and Procedures

The population for this study included 28 special education students enrolled at a rural east Tennessee elementary school. The school included kindergarten through fourth grade with an enrollment of 535 students. The sample was chosen from the special education classroom that serves emotionally disturbed students. This class consisted of eight males ranging from first grade to fourth grade. Two fourth grade male students were selected for the study. Selection was limited to students in the assigned class that could read and write.

Several instruments were used to collect data during the study period. The researcher observed student behaviors and habits during their weekly writing assignments. Informal interviews were conducted with the students weekly throughout the study concerning their thoughts during different types of writing assignments. A rubric writing skills evaluation form was used as method to objectively measure various writing skills. This form was designed by the researcher using input from a variety of sources. The evaluation focused on basic skills such as capitalization, punctuation, neatness, creativity and sentence sense. A writing volume scale was utilized to quantify the actual number of words each student produced during their writing assignment. The final data collection instrument was an opinionnaire consisting of ten questions pertaining to the attitudes of students regarding their writing assignments. The combination of these instruments allowed the researcher to describe the effects of music on emotionally disturbed students during their writing assignments.
Procedures

The first step in conducting this study was to gain permission from the principal of the participating school and from the school system's Director of Special Education. Upon approval, the researcher wrote a letter to the parents of the selected students requesting permission for their child to participate in the study. The study was divided into four sections with each section lasting approximately four weeks. The research was conducted during the student's writing assignments. In the first and third section the students completed their writing assignments without any intervention from the researcher. In the second and fourth sections, the students were exposed to music during their writing assignments.

The first section of the study composed of paragraph writing that included writing prompts that served as aids to the students creativity. Emphasis was placed on improving writing skills, increasing writing quantity and developing motivation.

The second section continued with writing assignments similar to the first section with the addition of music as a background. The students used headphones and listened to music while they wrote. In this section the writing prompts were related to the type of music to which the students were exposed during their assignment. This section included the following music: (1) movie-theme music, (2) instrumental music, and (3) classical music.

The third section was a replication of the first section. Writing assignments were given without any intervention from researcher. As in the
second section, the fourth section included exposure to music during student's writing assignments. This section included the following music: (1) top-forty music, (2) country music, and (3) college fight songs.

During each section, the researcher observed the students during their writing assignments and documented verbal and non-verbal behavior. The researcher also interviewed students at the end of each section and discussed their thoughts about the writing assignments. Journal writings were kept weekly by the researcher pertaining to the observations and interviews.

At the end of each section, the student was given a writing opinionnaire that helped the researcher assess each student's attitude regarding their writing assignments. Additionally, the writing rubric form was used with each assignment to allow the researcher to measure the students' writing skills. Finally, the number of words included in each writing assignment was totaled by the researcher in order to perform volume comparisons.

Results

Three research questions were used to guide the analysis of the data in this study.

Research Questions

1: Will emotionally disturbed students improve the quality of their writing skills when exposed to music while writing than when they are not exposed to music?
2: Will emotionally disturbed students improve the quantity of their writing when exposed to music while writing than when they are not exposed to music?

3: Will attitudes of emotionally disturbed students improve toward writing when exposed to music while writing than when they are not exposed to music?

In response to research question one, a rubric writing skills evaluation form was used as a method to objectively measure basic skills such as capitalization, punctuation, neatness, creativity and sentence sense. The data provided in Figure 1 illustrates improved writing skills for Subject 1 and Subject 2 when they were exposed to music during their writing assignments (see Figure 1). The students were able to concentrate on their assignments and made fewer errors involving capitalization, punctuation and sentence sense. Both subjects improved their letter grade by two levels.

In order to answer question two, a volume scale was utilized to quantify the actual number of words each student produced during their writing assignments. Figure 2 provides data showing an increase in writing output for Subject 1 and Subject 2 when exposed to music during writing assignments (see Figure 2). The students took their time and produced a greater volume of output instead of trying to hurry through an assignment. The word count for Subject 1 increased from 5 to 40 while the word count for Subject 2 increased from 9 to 92.

Research question three was answered with a writing opinionnaire that consisted of ten questions pertaining to the attitudes of students in regard to their writing assignments. The scores fell between 5 and 50, above 30 tended to be favorable towards writing assignments, and below 30 tended to be unfavorable.
towards their writing assignments. Figure 3 provides data depicting an improved attitude for both students when exposed to music during writing. The attitudes for both subjects improved by approximately 100%. The attitude scale for Subject 1 increased from 18 to 41 while the scale for Subject 2 increased from 26 to 49.

In addition to data collection utilizing the use of the writing rubric, volume scale and opinionnaire survey, the students were observed during the duration of the research. Observation findings supported the collected data regarding writing skills, writing output and attitude. Both students were observed staying on task for longer periods of time with less problems of frustration related to having to complete writing assignments. By staying on task the students were able to produce a higher volume of writing output that exhibited improved writing skills.

Discussion

The use of music as a means to improve writing skills, increase volume of writing output and enhance writing motivation reflected a positive effect on two emotionally disturbed students.

Writing Skills

The quality of basic writing skills such as capitalization, punctuation, neatness, creativity and sentence sense showed an overall improvement when both students were exposed to music during writing assignments. Both students were immediately absorbed in the music and exhibited calmer behavior traits. The calming effect of the music helped the students ignore surrounding distractions thus enabling them to focus on the writing assignments. The students
were able to better concentrate on their assignments and made fewer errors involving capitalization, punctuation and sentence sense. Exposure to the music also inspired the students to think and write more creatively.

Writing Quantity

Writing assignments without music were regarded as chores to be accomplished as quickly as possible. Conversely, the sessions of the study that involved writing assignments with music was welcomed with enthusiasm from both students. Instead of trying to hurry through an assignment, the students took their time and produced a greater volume of output. Quantity, determined by word count, increased for subject 1 from two words to thirty-eight words per assignment. Subject 2 showed an increased word count from 10 words to 98 words per assignment.

Writing Motivation

A writing opinionnaire that consisted of ten questions pertaining to the attitudes of students in regard to their writing assignments was given at the end of each assignment. The opinionnaire used the Likert scale of measurement to compare attitude levels. The attitudes for both students improved by 100%. The survey depicted an improved attitude for both students when exposed to music during writing.

Both students indicated that their writing assignment was exciting when they were exposed to music. The students related that the music helped them to think about their writing and stay focused. Increased satisfaction with their personal writing was also revealed by the survey. Overall, both students
approached their writing assignment with enthusiasm when exposed to music which enabled them to complete their work with satisfaction.

Conclusion

The quality and quantity of students' spontaneous writing was affected by using music as a stimulus. Observation during the duration of the research revealed a difference in the students' outward reactions during their writing assignments. When music was not available both students were easily distracted from the classroom environment. Frustration was apparent through verbal responses and physical actions made by both students. Complaints about the writing assignment and constant physical movement was the typical scenario. In contrast, when the students were exposed to music their resistance to perform decreased and they were able to ignore outside disturbances and focus on their writing. This enabled the student to produce a higher volume of writing output which displayed improved writing skills and positive attitudes.
Figure 1. Data in an ABAB design showing an effective intervention for increasing writing skill scores for Subjects 1 and 2.

Note:  
A = Baseline  
B = Intervention  
A = Withdrawal  
B = Intervention
Figure 2. Data in an ABAB design showing an effective intervention for increasing writing output for Subjects 1 and 2.

Note:  
A = Baseline  
B = Intervention  
A = Withdrawal  
B = Intervention
Figure 3. Data in an ABAB design showing an effective intervention for increasing positive attitudes for Subjects 1 and 2.

Note: A = Baseline
B = Intervention
A = Withdrawal
B = Intervention
References


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