

# The Role of Songs in the Teaching of French Vocabulary in Ghanaian Basic School

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## Abstract

This study investigated The role of songs in the teaching of French vocabulary in Ghanaian Basic schools. Two groups heard texts as songs, one group heard the same texts as speech, and one group was the control group. For the text recall variable, a cloze test was administered at the end of each song treatment to determine the total words recalled. Students from one of the music groups heard the melody of the song while testing. For the din variable, students were asked to report on the amount of this phenomenon experienced. Data was collected to answer the following questions: (1) Is there a significant increase in text recall when that text is learned through the use of songs, (2) Is there a significant difference in delayed text recall for students who learned the text with song, as compared to those who learned the text with spoken recordings?, (3) Is there a significant difference in the recall results when one group of students from the song groups hears the melody of the song during the recall test? Immediate recall of text showed higher scores for the music class in all three songs. This difference reached significance in Songs 1 and 3. Delayed text recall showed no significant difference between the classes. There was no advantage observed for the group that heard the background melody during testing. Overall results for the din occurrence showed a significant difference between the classes. Students in the classes that heard music reported a higher occurrence of this phenomenon than those who heard only spoken text. Students of the melody group reported a significantly higher frequency than did students from the text group. These findings suggest that the use of songs in the French language classroom may aid the memory of text. The results evidenced that the occurrence of the din is increased with music, and therefore may be a more efficient way to stimulate language acquisition.

**Keywords:** Teaching French vocabulary; Ghanaian Basic schools; songs.

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## **1. Background**

Researchers have reported that music and songs can be used in French language teaching to efficiently increase learners' language skills [1,3]. However, few empirical studies exist to support these claims. Filling this gap in the literature will give teachers confidence in using music to support all aspects of second language learning. Several studies have shown that music can be particularly effective in teaching early literacy skills [4,5] and that songs can act as a memory aid when teaching content in other subject areas [6,8]. Music is a universal in human culture. All cultures on this planet have music. Language and communication are also universal. Before the written word, stories of war and odes of praise were passed along from tribe to tribe by songs. According to Larrick [9], wandering minstrels brought literature to the crowds of people in the village square. The messenger first sang the content of the message, so he would not forget any of it. "Those who came to listen were soon singing or chanting repeated lines and sometimes adding new stanzas on the old pattern" [9, p. 3].

Until recently, research on the use of music and song as a pedagogical tool in the French language classroom has been rare. As Falioni [10] states, music's use in the French language classroom has long been valued, but "all too often, music in the classroom has been relegated to recreation and entertainment status" [10, p. 98]. She goes on to state that a survey of the last two decades of journals for French language teachers shows only a few articles on the subject compared to multitudinous articles on other methodological ideas. I also perused the major French language journals for the last 50 years for articles on the subject. Except for anecdotal articles advocating the incorporation of songs to increase students' involvement, there was little published until the late 50s and 60s, when the popularity of audio-lingual methodology became evident. Little has changed since 1972 when Coe [11] stated that in the area of songs, there have been no controlled experiments. That is to say, no one has tried to measure how effective songs are in French language teaching.

The intention to use songs in the classroom has often been met with ridicule and a cautionary statement that although students were enjoying class, they were not learning. Advice from other faculty was given to this researcher that music must be used rarely and with care since it serves as enjoyment only-to enriches the class-but should not rob too much time from necessary lessons. As Dupuy [12] remarked, "Music is considered the 'fluff' of the French language curriculum." This attitude prevailed, due in part to the lack of empirical research using song in French language teaching. The goal then, is to conduct more empirical studies measuring the role of songs in the teaching of French vocabulary in Ghanaian Basic schools. Medina [13] provides the following advice: "If music is a viable vehicle for second language acquisition to the same extent as other non-musical means, then songs can no longer be regarded as recreational devices, having little instructional value" [13, p. 18].

## **2. Purpose**

This work aimed at assessing the role of songs in the teaching of French vocabulary in Ghanaian Basic schools:

### **2.1 Research Questions**

1. Is there a significant increase in text recall when that text is learned through the use of songs among

Ghanaian Basic schools?

2. Is there a significant difference in delayed text recall of students who learned the text with song, compared to those who learned the text with spoken recordings?
3. Is there a significant difference in the recall results when one student song group hears the melody of the song during the recall test?

## **2.2 Methods**

This educational research study approximated the conditions of a true experiment; however, without the control or manipulation of all variables, it must be considered a quasi-experimental research design [14]. This study was similar to one conducted by McElhinney and Annett [15], a 2X2 factorial design incorporating four trials of prose and song, and assessed by counting the total number of words that were written correctly. This study differed in that a 3X3 factorial design with three trials was used, and experimental units were tested on three variables. Subjects were assessed in text recall by counting the total number of words that were correctly written in the blanks that replaced deleted words.

A one-way ANOVA test was performed, to test for the significance of the means of treatment regarding the dependent variables between the classes. The construct presented a fixed effects model since specific treatments are viewed, such as song, text, and melody.

The selection process of experimental units, in this case, the students, was accomplished in such a way as to fulfill the randomization criteria. The cohort group was formed through the normal university registration process, with the non-random cohort highly representative of classes in that particular level of the target population. The whole class assignment into the comparison groups, however, was randomly done from the classes registered to a singular teacher. The cohort group was made more homogeneous by the deletion of those students who were not beginning language learners. Those who had indicated previous experience with Spanish on the background questionnaire subsequently were deleted from the analysis.

The music treatment was administered during six class periods and conducted at regular class time by the same teacher. This method was applied to avoid variances in environment, teaching methodology, or student-teacher rapport. The instruction in all classes remained the same throughout the semester except for the addition of the treatment. Group A heard texts during class in the form of songs. Group B heard the same texts, but as recorded speech, while Group C served as the control group for song 1, and then as the melody group for songs 2 and 3. Group D served as the control group for songs 2 and 3. Students were able to view the words of the song during class time, and were aided in the comprehension of the lyrics, but were not allowed to take written lyrics out of the classroom. The spoken text group had the option of reading aloud, while the song groups had the option of singing with the songs.

An ANOVA test was performed to analyze data gathered on the variables of the 3X3 design and to observe the interaction effect among these variables. For text recall, a cloze test was administered to all four groups, and these scores were compared showing the total number of missing words that students were able to recall. The

SAS program performed the Least Significant Difference (LSD) test with the Bonferroni adjustment to make pair-wise comparisons between the treatment groups. SAS default was at a 5% level of significance.

Students from classes A, B, and C were asked to report on the occurrence of the din. A frequency procedure was applied giving a percentage of din occurrence from each class. A chi-square categorical analysis was also done to determine the significance of percentage comparisons.

For research question 1, all groups took the cloze tests with missing words at intervals of seven. Students filled in as many of these missing items as they recalled. Tests were scored for the total number of correct items and a comparison was made between the groups. For research question 2, groups A and B were given the previously taken cloze test to determine the amount of retention after a two-week delay. For research question 3, students of Group C heard the music CD during treatment, then heard the melody only of the song while taking the cloze test.

Murphey [16] analyzed the content of fifty of the most popular songs from Music and Media's Hot 100 Chart of September 12, 2007. They were analyzed by looking at word count, content, time, place, gender, and words per minute. He determined that the Popular Song (PS) Register is at the level of the simplest graded English readers or the reading level of a native-speaker child after five years of school. The analysis concluded that songs provide repetition, high-frequency words, easy vocabulary, and high-interest subject matter. Murphey said, "Popular songs offer short, effective, simple, native texts with a lot of familiar vocabulary recycled" (p. 773).

The speed of pop songs is 75.49 words per minute, or about half the normal speed of speech. The words are highly similar to conversation, yet repeated an average of three times. This repetition is not considered unusual in song, yet in speech, it would seem redundant. Trapp [17] reminds us, "The more repetition you give your students, the more likely it is that they will retain the message" (p. 438). Since 94% of pop songs have no time marker, 80% have no specific place indicator, and 62% lack gender referents, the song's story occurs when, where, and by whom it is heard: "Their vague references allow learners to fill them with their content" [18, p. 774]. Pop songs' frequent pauses make the songs more understandable to learners and may allow the listener time to search his own life experiences for an association, therefore strengthening a personal "owning" of the feelings expressed in the song. Thus, pop songs become rich learning material with natural texts, seemingly better than authentic spoken discourse, due to the manageable speed and vocabulary repetition.

Recordings of modern popular music are generally brief (from 3-6 minutes), so they will capture the students' attention. The music and the lyrics are an audio representation of the living language, rather than an artificially constructed pattern, often found in grammar textbooks [19]. Songs frequently are closer to the real-life experiences of the students than most textbook material, with lyrics that exemplify good examples of authentic language [20].

### **3. Findings/Discussions**

Is there a significant increase in text recall when this text is learned through the use of songs? The results of this question were analyzed, with data obtained from three songs. After the song, a cloze test with missing words at

intervals of every seventh word was given to the three groups. Students wrote as many missing items as they recalled and total words were tabulated for memory. Group A was the music class, Group B was the text class, and Group C was the control group. Due to missing values, 76 of the 94 total observations were used in the analysis of song 1. The comparison of results for song 1 showed no significant difference on the ANOVA the p-value was 0.0861; however, the pair-wise comparison showed a significant difference (0.0504) between the music class and the text class.

Is there a significant difference in delayed text recall of students who heard text in song as compared to those who heard text in recorded speech? Here our null hypothesis was that there would be no significant difference between the two groups when tested for delayed text recall. Groups A and B, having heard song 1, were given the cloze test for the first song after a two-week delay, to determine the amount of memory retention. In this test, as in all the tests, the music group performed better than the text group. However, this difference did not reach significance. The F-value from SAS output was 0.94, while the p-value from the corresponding test was 0.3989; a result greater than 0.05. Hence, we fail to reject the null hypothesis. It may be concluded from the results that there is no significant difference between the groups when comparing the variable of delayed text recall, based on song 1.

Is there a significant difference in the recall results when one group of students from the two musical groups hears the melody of the song during the recall test? Here our null hypothesis was that there was no significant difference between the groups when testing for the melody during testing variable. For this question, students of Group C heard the same music CD during treatment as Group A, but Group C then heard the melody only of that same song while taking the cloze test. This treatment remained the same for Songs 2 and 3.

Recall results for Song 2 showed no significant difference between the melody and the other treatment groups. Results showed that the melody group not only scored lower than the music group though they had received the same treatment-but they also scored lower than the text group. In Song 3, the melody group moved much closer to the music class performance in this song. The melody group performed better than the text group and nearly as well as the music group. However, this difference did not attain significance.

It can be concluded from the results that there is no significant difference between the groups when comparing the variable text recall based on melody. Summary results of the text recall component of analysis for research questions 1, 2, and 3 show that the music group consistently scored higher than all other groups. There was no significant difference in delayed recall or in recall of song 2 between the class that heard the song and the other classes. There was also no significant difference between the group that heard the melody and the other groups. Students from the music group scored significantly higher than students from the text class for songs 1 and 3.

The answer to Research Question 1, "Is there a significant increase in text recall when that text is learned through the use of songs?" varied with the song.

There was a significant increase in text recall for the music group in Songs 1 and 3. No significant test results were reached for Song 2. The results of this variable were intended to add research knowledge regarding the

integration of melody and text in memory. The theory of melody-text integration as discussed by Serafine, and his colleagues. [21,22] stated that the melody and the text of songs are learned together as one integral unit. According to that scenario, the song is stored in memory as one unit, and the melody will serve as a memory trigger for the text. Results of the present study seem to lend support for that theory in Song 1 and Song 3. However, since one song did not approach significance, these findings cannot support or dispute this theory.

The control group performed better than the text group in Song 1, indicating that students were able to guess the meaning of some of the missing words. Whether or not this group consisted of high performers was unclear, since there were no standardized Spanish tests given as pre-tests.

Test results for Song 1 and 3 reached significance when testing for the number of items recalled. The scores from the students in the music group were significantly greater than the scores from the students in the text group. Song 2 did not reach significance between the comparison groups. Reasons for the lower student scores could be due to the song choice. The song, *Usted*, is a romantic ballad written in 1951. Lyrics provide rich yet antiquated vocabulary and poetic text with complicated syntax structures. The smooth singing style of the singer and the accompanying orchestra provides a wonderful piece for enjoyment or relaxation. However, the text may have been too difficult for beginning-level students to retain given the length of exposure. It may also be possible that the song was not enjoyable for these particular students.

It should be noted that the greatest significance appeared in Song 3, the last song of the semester. By the end of the semester, beginning students had a better grasp of the language, comprehended more of the words, and therefore were able to retain more of the lyrics. In addition, the song, *Milagro*, is considered a more popular, contemporary song that was sung by a more popular singing artist (Gloria Estefan). Students may have enjoyed Song 3 more than the others, which may have increased motivation to learn the lyrics and subsequently aided in higher recall scores.

It should also be noted that the cloze tests for Song 1 and 2 were administered to students during the next class period. Thus, there was a two to three-day delay between treatment and testing. Ideally, students should have been given the tests on the day the listening treatment ended rather than providing a short delay period. This could have seriously lowered recall results in Songs 1 and 2. Students at this level of Spanish language proficiency were probably not able to store the song in long-term memory with only six treatments. For Song 3, however, the instructor was reminded to administer the recall test on the same day as the last listening treatment, thus making the recall task more immediate. This could be another reason for the strong significance of Song 3.

The response to Research Question 2, "Is there a significant difference in delayed text recall of students who learned the text with song, as compared to those who learned the text with spoken recordings?" was negative. The findings showed no difference in delayed text recall between the groups, indicating that neither the music students nor the text students retained the material long enough for storage in long-term memory. Several studies indicate that the time between treatment and the delayed recall task may have been too short. The time-lapse after the last listening treatment was only two weeks. Bygrave's [23] study showed an improvement in the receptive vocabulary skills of the students participating in the music program. However, this music effect on

retention was not apparent until the test given 7 weeks after the posttest.

These findings appear consistent with studies by Hurwitz, and his colleagues. [24], who found that the development of reading skills in young children involved in a music program tended to accelerate over a prolonged period. This suggests that a longer period may be needed for a significant music effect to show.

The two studies mentioned above suggest a longer delay period is necessary to see the effects of music. In contrast to my study, both results were observed with children who were being tested in their native language. Further study might administer the delayed recall test after a longer delay period than the present study employed. It is doubtful that this would have made a difference in these results since I suspect the words were not stored in memory. It is important to remember that students in the present study are not only dealing with the French language but also with some difficult and poetic language. Perhaps instead of lengthening the delayed recall time, the initial learning time should be increased to allow enough processing time for text to be stored in memory.

The data collected to answer Research Question 3, "Is there a significant difference in the recall results when one group of students from the song groups hears the melody of the song during the recall test?" began with Song 2. For Song 2, students of the melody group scored lower than students of the text group. Playing the melody while testing may have removed any positive effects gained through the musical treatment. Since the melody group students received the same treatment as the music group students, the background tune may have served as a distractor rather than a facilitator. Some students may prefer quiet during a test-taking task without the distraction of the melody. The test results for the melody group were much improved for Song 3. In Song 3, although students of the melody class had been exposed to the same songs, they continued to perform lower than students of the music class. However, the melody group performed almost as well as those of the music group. Were the students more accustomed to hearing music during testing or did the type of song help make the melody more effective in triggering learned text? The only difference in the groups was the background melody during testing, therefore, we can infer that the difference in results is based solely on the testing situation. This would indicate that college students prefer to test without distractions.

#### **4. Conclusion**

The goal of this study was to the role of songs in the teaching of French vocabulary in Ghanaian Basic schools. In addition to the quantitative results, the students felt that they benefitted from the experience. The majority of students from both of the classes that heard songs reported that music was a positive addition to the classroom; the melody class by 86% of students and 100% of students from the music class answered yes to this question. As second language educators we try to provide students with the skills to understand authentic communication. A song is an ideal marriage of poetry and music, and is "one of the most authentic expressions of people, their feelings, and their everyday life" [25, p. 412]. Music can empower students with a real-world communicative advantage. After all, a song tells a story set to music; therefore, one has examples of authentic speech that is slowed, rhythmic, and repetitious—a powerful tool to impress upon the individual learning experience.

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