Effective Methods of Teaching Factual Material through Lessons Based on Gardener's "Musical Intelligence"

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Abstract. Can music help people retain information easier? Howard Gardner developed the theory of multiple intelligences and demonstrated that interactions between learning styles can help to reinforce learning material. In my research I used Gardner's "musical intelligence" to study thirteen students and see if they had the ability to retain information easier through a rhythmic pattern as opposed to a repetitive verbal method. These students were given five minutes each to study the fifty states in alphabetical order. While some students studied quietly, others were exposed to a simple rhyming song of the material to be studied. The students were then given another five minutes to reiterate as many states as they possibly could and were scored separately for states in correct (alphabetical) order and for states in wrong order. Various schemes were used to combine the separate scores into a single score. Students performed significantly better when they studied musically.
Keywords: Multiple intelligences, Howard Gardener, stroke aid recovery.

INTRODUCTION

Can people retain information more easily through music? Gardener's scheme of eight multiple intelligences [2] includes a "musical intelligence". Studies have shown that people use music to recover from strokes when they become speech impaired [1]. Working specifically with the "musical intelligence", I found that students to better retain information because of the pattern that exists in the music.

METHODS

Thirteen students were asked to memorize the 50 states in alphabetical order. Each student was allotted to study the states for five minutes; six of these students studied quietly, seven students were taught a simple rhyming song of the material to be memorized. Following the study period the students were asked to recite the states in alphabetical order. States that were recited in order were marked separately from states that were recited in the incorrect order. The data set was analyzed according to a variety of weighting schemes. Averages and standard deviations were recorded from these schemes. The students who studied with music showed better results in retaining information because a rhythmic pattern helped them keep a flowing stream of information.

RESULTS

Results for students who were tested with music and students who studied without music varied. As opposed to the students who studied with music the students who studied quietly and without the music retained some information but not as much and had some issues reiterating the information in the correct order. Students who studied with music showed better results that those students who didn't study with music which further proves that information can be better retained through a rhythmic pattern.

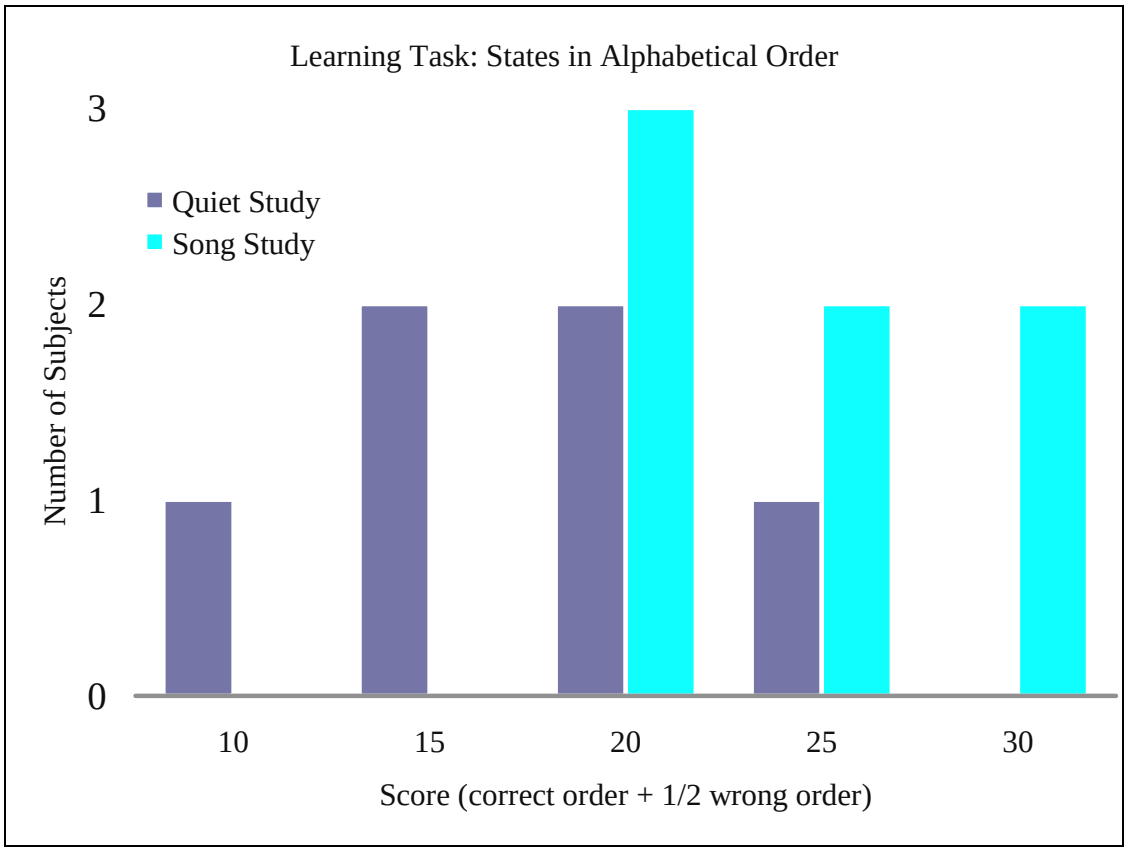

Figure 1. Histogram of the results from test subjects who studied quietly and students who studied with music. Students with song study showed better results than those students who studied quietly.

DISCUSSION

Although the results are robust they show that students who studied with music retained more information and did better when it came time to reiterate information. Perhaps using more students will help improve the results to have a greater amount of information to more accurately analyze.

CONCLUSIONS

As a result of studying Howard Gardner's multiple intelligences and testing students to see if they better retain information through music or through a repetitive way of teaching. I observed that the students learned more through the repetitive way of teaching but better understood and reiterated the information in the correct order but not as much information.

ACKNOWLEDGMENTS

The author gratefully acknowledges the contributions of Dr. Robert Muratore and the Freeport High School Students.

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