

USING SONGS FOR TEACHING 21st CENTURY LEARNERS

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Abstract

Recent studies have shown that songs may enhance learning as they function as mnemonic devices to increase memorability. Songs based on the more difficult subtopics in Chemistry were composed, encompassing many equations and facts to be remembered. This technique of song composition can be used in any subject and any tune can be used. This technique can be utilized for any class size, from tutorials to lecture halls. It was found in this study that students understood and retained key information better. In addition, songs added variety to classroom learning experiences, lowered students' stress levels, increased enjoyment and engaged students more effectively by catering for students with different learning styles.

Key words: songs, classroom learning, 21st century learners.

INTRODUCTION

Composing songs as a technique for adding variety to classroom learning could be incorporated into any subject and for any class size. This technique of song composition using popular tunes but with strange lyrics, appeals to our 21st century learners as it engages students through multiple modalities namely auditory, kinesthetic and visual learning styles (Crowther, 2012). It has even been used by notable people such as National Institutes of Health Director Francis Collins, who occasionally sang to students at the University of Michigan "to break up the monotony" (Anonymous, 2011). Any tune could be used, as long as it was familiar to students. This methodology has been tried for students in Pre-University, Diploma, and in training sessions for Academic and non-Academic staff. The diploma students ranged from those in the School of Engineering, to the School of Architecture, from those in the School of Communication to those in the School of Chemical and Life Sciences.

This methodology has support in physiological, neurological and behavioral studies to reduce stress in students (Savan 1999, Russell 1992, Albers and Bach, 2003). Research has shown that music reduces blood pressure, heart rate and body temperature in students (Savan, 1999) and these may be indicative of

reduced levels of anxiety (Russell, 1992). In Russell's investigation, he studied the effectiveness of using music in anxiety reduction among 265 university students. His results indicated that using music for highly anxious students might be an effective and alternate method for reducing anxiety. Students generally find learning science concepts more difficult and stressful than learning social studies and the arts. Studying science subjects is academically rigorous, intellectually stimulating and can be frustrating for students who are academically weak. In addition, the learning styles of most of our MUFY students are mostly visual and kinesthetic, rather than auditory. Therefore, expecting them to sit through a 1 hour 15 min lecture without a variety of pedagogical techniques may give rise to a host of classroom management problems. There needs to be innovation in traditional teaching that can cater for our 21st century learners that have such diverse learning styles and short attention spans.

The objective of this preliminary study is to gather research data on the effectiveness of using songs to complement current pedagogical techniques. It aims to obtain feedback if this method of song composition can assist students of different academic caliber.

METHODOLOGY

Action research was conducted on 95 Monash University Foundation Year (Science) students in Sunway College. By referring to the Syllabus of a chosen subtopic, a song could be written based on important key concepts and formulas. After teaching the concepts, a hand-out of the song was given to students and the song was sung. As students had a copy of the song, they could practice singing it. A questionnaire, consisting of eight closed questions was administered during class time. Students were given about 5-10 minutes to complete the questionnaire and add in any additional comments. They were not requested to write down their names in the forms, hence there was a level of anonymity and they were free to write down their opinions. A frequency count was done for each question and figures were used to present the findings. The results of the questionnaire were analyzed and categorized. Further research could be done to include a more comprehensive questionnaire with a greater addition of open ended questions. In addition, more varieties of songs could be composed using different tunes as those currently used originated from Disney animations.

RESULTS AND DISCUSSION

In this survey, approximately 85% of students surveyed revealed that songs added variety to teaching. It lowered their stress (83%) and boredom levels and they understood and retained key information better. A majority of the students (88%) rated that songs were enjoyable in the classroom. This technique was used for all modules, especially for subtopics that had complex subject matter as students found it helpful as a study tool (68%). Research from Wolters and Rosenthal (2000) also concurred that students who were unwilling to read a textbook chapter might listen to a related song repeatedly. This methodology can be applied at strategic points for all subjects to supplement the curricula with music. As they could remember

lyrics of songs upon listening to them repetitively, they could recall key reactions and facts easier from song lyrics (67%). Crowther (2012) opines that songs make recalling of facts easier and are organizational mnemonic devices. The same method that students use to remember the lyrics of their favorite song can be applied to their studies for long term memory retention.

Nevertheless, this technique cannot be used for all subtopics due to time constraints. It takes a lot of time and intellectual effort for a teacher to compose songs and sing it in class. In addition, not all complex facts can be incorporated in a song as diagrams, tables and charts may need to be used instead to make certain points as clear as possible for students.

CONCLUSION

Generally, there was positive reception from students with this technique as it appealed to them, helped them in recall of important facts and was enjoyable for learning as they are a generation of 21st century learners that love music.

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