

## SONG AS SAGA: CURRICULUM-BASED SONGS FOR LEARNING

**Ms. Aniko Debreceny**

Charles Darwin University, Australia, adebreceny@verizon.net

### Abstract

Teaching is always a challenging profession, and one in which teachers are constantly looking for ways to improve their teaching methods. In this paper I will argue that the use of song in the classroom can provide both an enhanced learning experience for the students and improved learning outcomes.

Why use song to enhance learning? Music is the soundtrack of our students' lives, and is virtually omnipresent in today's culture. Multiple studies show that music instruction has positive benefits, enhances spatial & arithmetic skills, and raises student achievement and retention. Singing is a multi-modal activity, positively affecting brain development and neural processing. It provides an enjoyable, low-stress learning method in the classroom. Young students in particular find memorization is improved through repetition and constant retrieval, as when singing songs over a period of time. ESL/EFL/TESOL language teachers frequently use songs, while the use of songs for bilingual or Content and Language Integrated Learning, where curriculum content is taught in the second language, is expanding worldwide. However, many educators point out the lack of good teaching materials, including songs, which hinders the use of song in the classroom, whether it be ESL, CLIL, or general academics. One solution to the problem is creating multimedia presentations of songs, enabling teachers who are not musicians to teach curriculum-based songs without concern about their musical abilities. Integrating relevant visuals with audio also improves retention, as well as student engagement and motivation.

The research shows that using song improves learning and retention, and is a valuable teaching tool for both general and language teachers. This paper examines the current literature about the use of song in the school classroom and documents the creative process of writing curriculum-based songs for middle school.

**Keywords:** Song, benefits, curriculum-based songs, retention, learning, EFL, TESOL, teaching materials

### INTRODUCTION

Education in the twenty-first century is rapidly changing and developing to answer the new demands and needs of society. Far from the educational model of the Industrial Revolution, designed to produce obedient, well-trained workers (Davis, 2013), schools now seek to produce flexible, creative problem-solvers who are proficient with technology and design. Indeed, some would argue that information is now so readily available digitally, students do not need to memorise facts, but more importantly, be capable of accessing information and its sources. However, there is still a need for learning and retention of information and concepts. Lynne Munson, Executive Director of Common Core curriculum in the United States, writes that, "Being able to Google is no substitute for true understanding. Students still need to know and deeply understand the history that brought them and our nation to where we are today. ... Twenty-first-century technology should be seen as an opportunity to acquire more knowledge, not an excuse to know less" (Berry, Cator, & Munson, 2010, p. 4).

In times when education budget cuts are common, and schools and teachers are frequently assessed through their students' test results (Hosking, 2014; Rothstein et al., 2010), many educators look for new ways to impart curricula successfully. Song can be a suitable vehicle to enhance students' learning.

Song has been an integral part of human civilisation and culture since language first evolved (Levitin, 2008; Nettl, 1972), used for ceremony, worship, entertainment, and to pass on information. In every culture there are examples of song, from mothers' lullabies to the Greek chorus (Nagy, 2010), the song-lines of the Australian Aboriginal culture used as oral maps to navigate the continent (Dyer, 2009), the bards,

*troubadours* and *jongleurs* of medieval and Renaissance Europe (Abraham, 2012; Lesser, 2012), sailors' sea shanties (Terry & Ashley, 2013) and the *griot* historians of Africa (Hester, 2004; Oliver, 1970). Genghis Khan (c. 1162-1227) used songs to communicate orders among his uneducated army as he conquered most of Europe (Weatherford, 2004). Epics or sagas, long poems chanted or sung, provided oral histories and entertainment in most illiterate societies, sometimes reaching up to 15,000 lines (Paksoy, 1995; Sheppard, 2012), an extraordinary feat of memorisation.

In today's world, song is the soundtrack for young people's lives. In 2013, 15,000 songs were downloaded every minute from iTunes ("iTunes Store Sets New Record with 25 Billion Songs Sold," 2013). In 2009 American teens averaged 7 hours and 38 minutes daily using media. Almost half of them listened to music at the same time as accessing books, websites, and video games (Rideout, Foehr, & Roberts, 2010, pp. 28-29). Young people also use the music they prefer to listen to as a statement of their changing identity (Stålhammar, 2006). Song is a natural form of self-expression and communication for our students.

## THE BENEFITS OF MUSIC IN LEARNING

There is power in the combination of words and music in the context of education. The integration of rhyme, rhythm and melody has been shown to be beneficial to children's learning processes and their retention of curriculum. Students who have difficulty with absorbing new materials discover song is a non-stressful medium for learning, while those with dyslexia or low vision find singing easier than decoding text. Students with different learning styles, as described by Gardner's multiple intelligences (Gardner, 1993, 2006), respond well to this alternative pedagogy. Long-term retention is enhanced, with some students able to sing their subject songs flawlessly more than a decade after first learning them (Officer, personal email).

Multiple studies report benefits of singing in enhanced retention of materials (Butler & Newman, 2008; Pindale, 2013), improved student attitudes and socialisation in the classroom (Brouillette, 2009; Hallam, 2010), learning (Crowther, 2011; Moreno et al., 2011), and in brain development (Rauscher et al., 1997; Schellenberg, 2008). Song is already widely used by language teachers around the world (Alipur, 2012; Ara, 2009; Bista, 2010; Engh, 2013; Iwasaki, 2013; Ludke, 2013; Millington, 2011; Setia et al., 2012; Shen, 2009; Tse, 2015; Yang, 2011).

Neurological research shows that "Music making is a multimodal activity that involves the integration of auditory and sensor motor processes" (Wan, Ruber, Hohmann, & Schlaug, 2010, p. 287). Many studies show that neural networks serving musical behaviours are widely distributed through the brain (Hodges, 2007), thus improving retention and retrieval. Research also shows that musical training induces dynamic structural changes in the brain over time, increasing the volume of grey matter (Groussard, 2014), and enhancing speech encoding (Tierney, 2013). While singing and speech share common networks in the brain (Hallam, 2010), language processing is centred in the left temporal lobe, and singing is processed across the whole brain (Collins, 2014). Executive functioning, or cognitive capacity, is also improved through music training, leading to enhanced language skills, academic performance, reading ability, mathematical achievement, cognitive flexibility, working memory, and processing speed (Barrett, 2013; Moreno et al., 2011; Zuk, 2014).

Research shows arts education in general improves learning in many areas. A U.S. analysis of 62 studies of student outcomes associated with arts learning experiences (Deasy, 2002) found strong evidence that arts education helps students develop cognitive and social capacities such as critical thinking, problem solving, spatial temporal reasoning, empathy, tolerance, and collaboration, as well as student engagement and attendance (Stevenson, 2006). A Minneapolis, U.S. study of an art-based school reform initiative found "a significant relationship between arts integrated instruction and improved student learning in reading and mathematics" (Ingram, 2003, p. 32). The study also found that "In some cases, the relationship between arts integration and student achievement was *more powerful* for disadvantaged learners, the group of students that teachers must reach to close the achievement gap" in education (p. iv, italics in original).

Catterall et al. (2012) used four large national databases in the U.S. to analyse the relationship between arts involvement and academic and social achievements over time, concentrating in particular on teenagers and young adults who came from lower socio-economic status (SES) backgrounds. They found that low-SES students with arts-rich experiences attended college in greater numbers, achieved higher grades, and were more likely to earn mostly A's in college (Catterall et al., 2012).

Other studies do not account for SES students, but focus on the nexus between arts-based education

and educational achievement. A U.S. National Governors' Association report provides examples of arts-based education as a "money- and time-saving option for states looking to build skills, increase academic success, heighten standardized test scores, and lower the incidence of crime among general and at-risk populations" (NGA, 2002, p. 1). Arts-infused education programmes are found to result in increased student engagement, lower absenteeism (p. 5), and improvements in discipline, student self-esteem, teacher/student attitudes, and academic and thinking skills (p. 6). At risk students and incarcerated youth also benefit from arts education, with lower juvenile crime rates, reduced recidivism, and improved behaviour (pp. 8-12).

Within the field of arts education, some studies investigate links between specifically music education and educational achievement. A positive correlation between achievement in music courses and achievement is shown in the core subjects of English, mathematics and biology (R. A. Baker, 2011; Gouzouasis, Guhn, & Kishor, 2007), and reading (Corrigall, 2011; Darrow, 2009). A study of test scores of over 6,000 middle school students in Maryland found that those enrolled in instrumental or choral instruction outperformed their peers in algebra (Helmrich, 2010).

These results align with a U.S. 2011 report from the President's Committee on the Arts and Humanities that summarised recent research into arts education in schools. It found that low income students who participated in arts education were four times more likely to have high academic achievement and three times more likely to have high attendance than those who did not (Dwyer, 2011). An arts integrated programme in Maryland over three years showed the greatest positive results for minority and low-income students, reducing the reading gap by 14% and the math gap by 26% (Dwyer, 2011, p. 3). The College Board in the U.S. found in 2006 that SAT test scores were higher for students with coursework or experience in music performance (verbal – 57 points higher, math – 43 points higher), and music appreciation (verbal – 62 points higher, math – 41 points higher) (College, 2006, p. 6).

The American Council of Music Therapy has supported studies that prove the benefits of using music for special needs populations. These include improved literacy skills (Colwell, 1994) and increased learning and retention of number concepts (Claussen, 1997). Research by Schlaug, Kraus and Patel found that music training "can improve language skills in developmentally challenged school-age children," and that "...the very responses that are enhanced in musicians are deficient in clinical populations such as children with developmental dyslexia and autism" (Bois 2010).

## **SONG IN THE CLASSROOM**

As well as the general benefits found in using song in learning, many studies have shown that using song to learn a second language promotes language acquisition. Internationally English is the most popular second language, as it is the common international language of research, science and technology, business, trade and diplomacy, and popular culture. In Europe, 94% of high school students and 83% of primary or lower secondary students study English (Euractiv, 2013), and in China there are an estimated 400 million English language students (Murphy, 2013), some starting as young as two years old (Yamaguchi, 2013). Songs in English could be used in many countries to assist with learning English.

Many studies demonstrate the efficacy of using songs to teach and practice languages. Learning language with rhythm, melody and symmetrical phrasing helps with long term memorization (Lake, 2002). Also, "music tends to reduce anxiety and inhibition in second language learners. Learning a new concept through a song or listening to music is less threatening than a lecture or worksheet" (Merrell, 2004, p. 8).

Young children whose brains are still developing learn differently from adolescents or adults, so the traditional language teaching methods of reading, writing, and grammar exercises are not always successful at this level. It is important to recognise the crucial role that age plays in learning a second language, as students' cognitive abilities and competences change over time (Bhamare, 2011; Komur, 2005; Ozturk, 2007; Salli-Copur, 2010).

Language is learned through the modes of listening, speaking, reading and writing (Lake, 2002; Sevik, 2012). The skills of listening and speaking or singing are fundamental, and do not require the more advanced elements of reading and writing. Therefore, song with its primary emphasis on listening is an appropriate medium for young students' introduction to another language (Sevik, 2011).

Eken (1996, p. 46) lists eight common reasons why song is used in language classrooms:

- to present a topic, a language point, lexis, etc.

- to practice a language point, lexis, etc.
- to focus on common learner errors in a more indirect way
- to encourage extensive and intensive listening
- to stimulate discussion of attitudes and feelings
- to encourage creativity and use of imagination
- to provide a relaxed classroom atmosphere
- to bring variety and fun to teaching and learning.

Another benefit of song is that singing reduces classroom stress, thereby facilitating learning (Adkins, 1997; Coufalikova, 2010). If students are anxious, frustrated, bored or embarrassed, their emotional state is raised. Krashen describes this as their affective filter, which will affect students' receptivity to input (Bhamare, 2011; Krashen, 1982). When students have a low affective filter, they have less anxiety and are more relaxed, so are more receptive to language learning (Engh, 2013).

Songs can also provide an introduction to colloquial or idiomatic language (Schoepp, 2001). Listening to and reproducing recorded songs also teaches correct pronunciation, intonation, word rhythm, stress and pitch (Sevik, 2012). A Malaysian study found that using You-tube song videos significantly improved vocabulary acquisition (Abidin, 2011). Songs are also useful in learning conversational speech, as students learn their vocabulary as part of a sequence, rather than as single words in isolation.

Repetition through singing is particularly helpful for young students, who require reiteration and revision for memorization and long-term learning (Karpicke, 2012; Miller, 2008; Ozturk, 2007).

Another tool to improve the learning experience is to add visuals to song, in a multimedia format. Multisensory education utilises more of the brain, as it processes verbal, auditory and visual information in different areas, thus facilitating learning (Gangwer, 2009). Like music, visual art has been part of human culture, expression and communication since the first civilisations, from cave art and Egyptian hieroglyphs to contemporary graphics and symbols. Incorporating visuals in teaching is shown to improve learning outcomes and student engagement (Plotnik, 2013; Seitz, Kim, & Shams, 2006). Though some studies show no change in learning performance, students' enjoyment of the learning process and attitude was increased (Sankey, Birch, & Gardiner, 2010). While using any graphics raises student positive feelings about learning and retention of materials, recall is greatest with the use of relevant visuals (Sung & Mayer, 2012). My goal is to produce multimedia presentations including visuals for my teaching song materials.

Beyond the language classroom, song has been used for learning for centuries. African griots (Hester, 2004), Greek and British bards (Morganwg, 2008; Ponczoch, 2011), the chants of priests and pilgrims (Blackburn, 2010; Crawford & Kelley, 2005; Friedmann, 2012; Sajoo, 2011) all use song to communicate, to instruct, or to inspire.

Most teachers who use song in their classrooms utilise popular songs, or for younger students, nursery rhymes (G. Baker, 2011; Burroughs & Hare, 2008; Cameron, 2005; Soper, 2010; White, 2005; Wright, 2010). However, there are a growing number of teachers who are writing curriculum-based songs for their students, and researching the success of this pedagogical approach. In the United States, the Schoolhouse Rock (1973-2013) series of educational animated short videos was very popular on children's television, with 64 episodes or songs about a wide variety of subjects, including history, math, grammar, science, and ecology.

Teachers are creating and using original songs in their classrooms about mathematics (Fagan, 2007; Warburton, 2013), science (Bintz, 2010; Estevez, 2014; Governor, 2011; Last, 2009), grammar (Hancock, 1999), and social studies (Hayes, 2009; Scro, 2006). These curriculum-based songs have led to positive learning outcomes, similar to those I have seen in my own teaching practice.

## **CREATING CURRICULUM-BASED SONGS**

I have been composing teaching songs for over two decades. While composition may be daunting to teachers, I have developed a process that may be useful to follow. Once I have decided on the subject for a song, I research the topic, collecting curriculum outlines and vocabulary lists as well as subject information. Technology and the Internet have enabled this type of research, but accuracy is not always guaranteed from online sources. I find at least two legitimate sources for each fact I include.

I rank the data in order of importance and relevance, ascertaining what is essential, versus what is merely of interest. It is important to keep in mind the age and grade level of the intended students. This will

determine the length of the song, and the amount of detail to be included. The next stage is to create word lists with their rhymes, to build up potential couplet endings. An excellent rhyming dictionary is essential in this exercise. By this stage, I am starting to write couplets or verses. Depending on the amount of information to be included, and the style and rhythm of the words, I will decide on metre, verse structure (four, six or eight lines to a verse), and whether or not to include a chorus. I place the most important information in the chorus, as it will be repeated several times, thus leading to greater retention.

As the lyrics are developed, I add musical rhythm notation. Usually melodic shapes and patterns come to mind as the metre and rhythm is established. I create new, original melodies for the songs, as I have found that using well-known tunes, while making the new lyrics easy to learn, can lead to later confusion as to which lyrics to sing. Interestingly, Gfeller (1982) found that students' recall was greater when familiar melodies were used, perhaps because there was less new information to process (Hayes, 2009). Other teachers may find it easier to use well-known melodies, with new, curriculum-linked lyrics.

In choosing the vocal range, most of my teaching songs are written in the adolescent voice range of A below middle C (more commonly middle C) to D a ninth above middle C. The Hungarian composer and music educator Kodály and others advocate a 6 note range from D - B as the best for the younger child's voice (Johnson, 2012; Waterhouse, 2002). The tempo / speed of each song is determined by the number of syllables in each line, the complexity of pronunciation and enunciation, and the subject matter or mood.

The form of the songs is usually *strophic*, with repeated verse and chorus melodies. Like Gfeller (1986) and Wallace (1994) I have found that repeated verse melodies appear to aid retention, rather than through-composed, which introduces new melodies throughout. Obviously younger students will be more comfortable with shorter songs, a less advanced vocabulary, and simpler melodies with a limited melodic range. The melodies I create are "kid-friendly", in that their shapes are primarily in step-wise or triadic movement. I avoid large or awkward intervals, using them only sparingly for effect. However, I have found that once students have singing experience, irrespective of age, they are impatient with simpler melodies and music. They enjoy the challenge of more complex melodic shapes, lyrics, and syncopated rhythms, and gain a sense of accomplishment and self-confidence through singing more 'difficult', demanding music.

My final stage of song-creation is adding harmony, usually at the keyboard.

I rarely write in parts for children's songs when I do not know the experience and confidence levels of the singers. I have found it is more effective to keep things as simple as possible, so that the singers can be successful immediately. This is most important when the students will be learning using multimedia or a CD, or where the teacher is not musically trained or lacks confidence in their singing abilities. When students are not accustomed to singing, there can be resistance to the concept, especially by boys, whose voices may be changing as they move through adolescence. I have re-written music specifically for boys' lower vocal ranges, as well as removing melody completely, and teaching the material as a rap song or chant. When writing for older or more experienced singers, multiple part writing becomes more frequent.

My experience in a variety of educational venues has shown that curriculum-based songs are effective, popular with students, and can benefit students with diverse learning styles.

## CONCLUSION

The use of singing in learning as a non-stressful, alternative pedagogy has been shown to be beneficial in many areas, including brain development, language acquisition, general educational achievement, and long-term retention. Though at present there are few curriculum-based materials available, their use has been proven to improve learning outcomes. This is a research area with great potential to enhance education, adding to the range of available pedagogies for diverse learners.

## REFERENCE LIST

- Abidin, M. J., Pour-Mohammadi M., Singh, K.K.B., Azman, R., Souriyavongsa, T. (2011). The effectiveness of using songs in YouTube to improve vocabulary competence among upper secondary school studies. *Theory and Practice in Language Studies*, 1(11), 1488-1496. doi: 10.4304/tpls.1.11.1488-1496
- Abraham, M. C. (2012). The rhetoric of the troubadours. *Musical Offerings*, 1(2), 10
- Adkins, S. (1997). Connecting the powers of music to the learning of languages. *The Journal of the*

*Imagination in Language Learning and Teaching, 4.*

- Alipur, M., Grojian, Bahmna, Zafari, Iman. (2012). The effects of songs on EFL learners' vocabulary recall and retention: The case of gender. *Advances in Digital Multimedia (ADMM)*, 1(3), 140-143.
- Ara, S. (2009). Use of songs, rhymes and games in teaching English to young learners in Bangladesh. *The Dhaka University Journal of Linguistics*, 2(3), 161-172.
- Baker, G. (2011). *Strategic uses of music in the U.S. history classroom*. (Doctor of Education), The University of Alabama, Tuscaloosa Alabama. Retrieved from [http://acumen.lib.ua.edu/content/u0015/0000001/0000824/u0015\\_0000001\\_0000824.pdf](http://acumen.lib.ua.edu/content/u0015/0000001/0000824/u0015_0000001_0000824.pdf)
- Baker, R. A. (2011). *The relationship between music and visual arts formal study and academic achievement on the eighth-grade Louisiana educational assessment program (LEAP) test*. (PhD), Louisiana State University and Agricultural and Mechanical College. Retrieved from <http://files.eric.ed.gov/fulltext/ED518493.pdf>
- Barrett, K. C., Ashley, R., Strait, D.L., Kraus, N. (2013). Art and science: How musical training shapes the brain. *Frontiers in Psychology*, 4, 1-13. doi: 10.3389/fpsyg.2013.00713
- Berry, B., Cator, K., & Munson, L. (2010). How do you define 21st-century learning? *Education Week*, 4(1), 1.
- Bhamare, Y. (2011). *Teaching language skills and material production through video clips, film segments and songs*. Symbiosis International University, Pune, India. Retrieved from [http://shodh.inflibnet.ac.in/bitstream/123456789/1536/1/bhamre\\_yogita.pdf](http://shodh.inflibnet.ac.in/bitstream/123456789/1536/1/bhamre_yogita.pdf)
- Bintz, W. P. (2010). Singing across the curriculum. *The Reading Teacher*, 63(8), 683-686. doi: 10.1598/RT.63.8.7
- Bista, K. K. (2010). Teaching adult ESL learners through music. Manaviki - Connecting Nepalese Intellectuals in the Humanities: Manaviki Wordpress.
- Blackburn, S. H. (2010). *The sun rises: A shaman's chant, ritual exchange and fertility in the Apatani valley* Retrieved from [http://tn3tv8rl4l.search.serialssolutions.com/?ctx\\_ver=Z39.88-2004&ctx\\_enc=info%3Aofi%2Fenc%3AUTF-8&rft\\_id=info:sid/summon.serialssolutions.com&rft\\_val\\_fmt=info:ofi/fmt:kev:mtx:book&rft.genre=book&rft.title=Sun+Rises&rft.au=Blackburn%2C+Stuart+H&rft.date=2009-12-01&rft.pub=BRILL&rft.isbn=9789004175785&paramdict=en-US](http://tn3tv8rl4l.search.serialssolutions.com/?ctx_ver=Z39.88-2004&ctx_enc=info%3Aofi%2Fenc%3AUTF-8&rft_id=info:sid/summon.serialssolutions.com&rft_val_fmt=info:ofi/fmt:kev:mtx:book&rft.genre=book&rft.title=Sun+Rises&rft.au=Blackburn%2C+Stuart+H&rft.date=2009-12-01&rft.pub=BRILL&rft.isbn=9789004175785&paramdict=en-US)
- Brouillette, L. (2009). Significant new study affirms life-changing impact of intensive, long-term arts involvement. *Journal for Learning through the Arts*, 5(1), 10.
- Burroughs, S., & Hare, D. (2008). Music and messages from the past: Tuning into history. *Social Studies Research and Practice*, 3(2), 10.
- Butler, A., & Newman, A. (2008). *The effects of using music and rhyme to increase retention*. (Master of Education), Kennesaw State University, Georgia.
- Cameron, W. (2005). Integrating music in history education. *Academic Exchange Quarterly*, 9(2).
- Catterall, J. S., Dumais, S. A., & Hampden-Thompson, G. (2012). The arts and achievement in at-risk youth: Findings from four longitudinal studies (O. o. R. Analysis, Trans.) (pp. 28). Washington DC: National Endowment for the Arts.
- Claussen, D., Thaut, M. (1997). Music as a mnemonic device for children with learning disabilities. *Canadian Journal of Music Therapy*, 5, 55-66.
- College. (2006). 2006 College-bound seniors total group profile: The College Board.
- Collins, E. (2014). A musical recovery. In L. Malcolm (Ed.), *All In The Mind*. ABC.
- Colwell, C. M. (1994). Therapeutic applications of music in the whole language kindergarten. *Journal of Music Therapy*, 31(4), 238-247. doi: 10.1093/jmt/31.4.238
- Corrigall, K. A., Trainor, Laurel J. (2011). Associations between length of music training and reading skills in children. *Music Perception*, 29(2), 147-155. doi: 10.1525/MP.2011.29.2.147
- Coufalikova, M. (2010). *Music as a pedagogical tool in an English language classroom*. Mararyk University, ISBN: 978-605-64453-2-3

- Brno. Retrieved from [http://is.muni.cz/th/146110/pedf\\_m/DP3.pdf](http://is.muni.cz/th/146110/pedf_m/DP3.pdf)
- Crawford, S. J., & Kelley, D. F. (2005). *American Indian religious traditions: An encyclopedia*. Santa Barbara, Calif.: ABC-CLIO.
- Crowther, G. (2011). Using science songs to enhance learning: An interdisciplinary approach. *CBE Life Science Education*, 11(1), 5.
- Darrow, A., Cassidy, J.W., Flowers, P.J., Register, D., Sims, W., Standley, J.M., Menard, E., Swedberg, O. (2009). Enhancing literacy in the second grade: Five related studies using the register music/reading curriculum. *Applications of Research in Music Education*, 27(2), 12-26.
- Davis, J. (2013). How a radical new teaching method could unleash a generation of geniuses. *Wired*. Retrieved from <http://www.wired.com> website: <http://www.wired.com/2013/10/free-thinkers/all/>
- Deasy, R. J. (2002). *Critical links: Learning in the arts and student academic and social development* (U. S. D. o. E. National Endowment for the Arts, Trans.). Washington DC: Arts Education Partnership.
- Dwyer, M. C. (2011). *Reinvesting in arts education: Winning America's future through creative schools*. Washington D.C.: Retrieved from [http://www.pcah.gov/sites/default/files/PCAH\\_Reinvesting\\_4web\\_0.pdf](http://www.pcah.gov/sites/default/files/PCAH_Reinvesting_4web_0.pdf).
- Dyer, J. (2009, 27 March 2009). Living songs: Music, law and culture in Aboriginal Australia. *Resonate*.
- Eken, D. K. (1996). Ideas for using songs in the language classroom. . *English Teaching Forum*, 34(1), 46-47.
- Engh, D. (2013). Why use music in English language learning? A survey of the literature. *English Language Teaching*, 6(2), 113-127. doi: 10.5539/elt.v6n2p113
- Estevez, J. (Producer). (2014, October 26, 2014). CLIL module solar system 4. Retrieved from <http://cilmodulesolarsystem4.blogspot.com/2014/02/lets-sing-planets-song.html>
- Euractiv. (2013, 30 September 2013). English reinforces its status as Europe's 'lingua franca'. Retrieved February 28, 2014, from <http://www.euractiv.com/culture/english-reinforces-supremacy-eur-news-530728>
- Fagan, E., Fagan, A. (2007). Math songs - US middle school. Retrieved January 30, 2014, from <http://www.rockingham.k12.va.us/spotlights/musicandmath.htm>
- Friedmann, J. L. (2012). *Synagogue song : An introduction to concepts, theories and customs*: McFarland & Company, Inc., Publishers.
- Gangwer, T. (2009). *Visual impact, visual teaching: Using images to strengthen learning* Retrieved from <http://web.a.ebscohost.com.ezproxy.cdu.edu.au/ehost/detail?sid=05bc7446-6382-406e-8da0-5e3661f1d372@sessionmgr4001&vid=1 - db=e000xww&AN=321321>
- Gardner, H. (1993). *Frames of mind: The theory of multiple intelligences*. New York: Basic Books.
- Gardner, H. (2006). *Multiple intelligences: New horizons in theory and practice*: Basic Books.
- Gfeller, K. E. (1982). *The use of melodic-rhythmic mnemonics with learning disabled and normal students as an aid to retention*. (Ph.D.), Michigan State University, Michigan State University. (University Microfilms International, No. 8303786)
- Gfeller, K. E. (1986). Musical mnemonics for learning disabled children. *Teaching Exceptional Children*, 19(1), 3.
- Gouzouasis, P., Guhn, M., & Kishor, N. (2007). The predictive relationship between achievement and participation in music and achievement in core grade 12 academic subjects. *Music Education Research*, 9(1), 81-92. doi: 10.1080/14613800601127569
- Governor, D. (2011). *Teaching and learning science through song*. (PhD.), University of Georgia. Retrieved from <http://athenaeum.libs.uga.edu/handle/10724/27139>
- Groussard, M., Viader, F., Landeau, B., Desgranges, B., Eustache, F., & Platel, H. (2014). The effects of musical practice on structural plasticity: The dynamics of grey matter changes. *Brain and Cognition*, 90, 7. doi: 10.1016/j.bandc.2014.06.013

- Hallam, S. (2010). The power of music: its impact on the intellectual, social and personal development of children and young people. *International Journal of Music Education*, 28(3), 21 (269-289). doi: 10.1177/0255761410370658
- Hancock, M. (1999). *Singing grammar: Teaching grammar through songs*: Cambridge University Press.
- Hayes, O. C. (2009). *The use of melodic and rhythmic mnemonics to improve memory and recall in elementary students in the content areas*. (Master of Science in Education), Dominican University of California, San Rafael, CA. Retrieved from <http://files.eric.ed.gov/fulltext/ED504997.pdf>
- Helmrich, B. H. (2010). Window of opportunity? Adolescence, music, and algebra. *Journal of Adolescent Research*, 25(4), 557-577. doi: 10.1177/0743558410366594
- Hester, K. (2004). Traditional African music. *Living encyclopedia of global African music*. Retrieved February 15, 2014, from [http://aainnovators.com/CMS/modules/wfsection/html/baje\\_ed2\\_ch1.pdf](http://aainnovators.com/CMS/modules/wfsection/html/baje_ed2_ch1.pdf)
- Hodges, D. (2007). The significance of music in the contemporary world. *Music Education Research International*, 1, 42-47.
- Hosking, W. (2014, May 8, 2014). Teacher pay graded on student outcomes, *Geelong Advertiser*. Retrieved from <http://search.proquest.com.ezproxy.cdu.edu.au/docview/1521754816/abstract?accountid=10424>
- Ingram, D., Riedel, E. (2003). What does arts integration do for students? : Center for Applied Research and Educational Improvement.
- . iTunes Store Sets New Record with 25 Billion Songs Sold. (2013). Apple Press Info.
- Iwasaki, B., Rasinski, T., Yildirim, K., & Zimmerman, B. S. (2013). Let's bring back the magic of song for teaching reading. *Reading Teacher*, 67(2), 5. doi: 10.1002/TRTR.1203
- Johnson, R. E. (2012). Singing in the key of D is best for the young child. Retrieved from <http://www.musicintelligenceproject.com/blog/singing-in-the-key-of-d-is-best-for-the-young-child/>
- Karpicke, J. D. (2012). Retrieval-based learning: Active retrieval promotes meaningful learning. *Current Directions in Psychological Science*, 21(3), 157-163. doi: 10.1177/0963721412443552
- Komur, S., Sarac, G., Şeker, H. (2005). Teaching English through songs (Practice in Mugla/Turkey). *ELT Journal*, 43(2), 109-120.
- Krashen, S. D. (1982). *Principles and practice in second language acquisition* (pp. 304). Retrieved from [http://www.sdkrashen.com/content/books/principles\\_and\\_practice.pdf](http://www.sdkrashen.com/content/books/principles_and_practice.pdf)
- Lake, B. (2002). Music and language learning: Enhancing acquisition through music. *Journal of the Imagination for Language Learning*, VII, 98-106.
- Last, A. M. (2009). Combining chemistry and music to engage students' interest: Using songs to accompany selected chemical topics. *J. Chem. Educ.*, 86(10). doi: DOI: 10.1021/ed086p1202
- Lesser, A. M. (2012). Secular music in the Middle Ages Retrieved February 5, 2014, 2014, from <http://www.andrewlessermusic.com/wp-content/uploads/2012/09/Secular-Music-in-the-Middle-Ages.pdf>
- Levitin, D. J. (2008). *The world in six songs: How the musical brain created human nature*. New York: Dutton, Penguin Group.
- Ludke, K. M., Ferreira, F., Overy, K. (2013). Singing can facilitate foreign language learning. *Memory & Cognition*, 42(1), 41-52.
- Merrell, A. (2004). The benefits of incorporating music in the classroom (pp. 12).
- Miller, J. B. (2008). Using music to teach ESL (pp. 13). Final project for APLNG 597A Fall 2008.
- Millington, N. T. (2011). Using songs effectively to teach English to young learners. *Language Education in Asia*, 2(1), 134 - 141.
- Moreno, S., Bialystok, E., Barac, R., Schellenberg, E. G., Cepeda, N. J., & Chau, T. (2011). Short-term music training enhances verbal intelligence and executive function. *Psychological Science*, 22(11), 1425-1433. doi: DOI: 10.1177/0956797611416999

- Morganwg, I. (2008). A short account of the ancient British bards. Retrieved February 5, 2014, from [http://www.iolomorganwg.wales.ac.uk/gwaith-shortaccount.php-tud-\(239\)](http://www.iolomorganwg.wales.ac.uk/gwaith-shortaccount.php-tud-(239))
- Murphy, C. (2013, November 7, 2013). English may be losing its luster in China, *The Wall Street Journal*. Retrieved from <http://blogs.wsj.com/chinarealtime/2013/11/07/learning-english-may-be-losing-its-luster-in-china/>
- Nagy, G. (2010). Ancient Greek elegy. In K. Weisman (Ed.), *The Oxford Handbook of the Elegy* (pp. 13-45). Oxford: Oxford University Press.
- Nettl, B. (1972). *Music in primitive culture*. Cambridge: Harvard University Press.
- NGA. (2002). *The impact of arts education on workforce preparation*. NGA Retrieved from <http://www.nga.org/files/live/sites/NGA/files/pdf/050102ARTSED.pdf>.
- Oliver, P. (1970). *Savannah syncopators: African retentions in the blues*: Littlehampton Book Services Ltd.
- Ozturk, E. (2007). *Teaching English to young learners through integrated skills approach*. (M.A.), Gazi University. Retrieved from <http://www.scribd.com/doc/29918098/thesis-of-something>
- Paksoy, H. B. (1995). DASTAN genre in Central Asia *Modern Encyclopedia of Religions in Russia and Soviet Union* (Vol. VI, pp. 222-231): Academic International Press.
- Pindale, A. (2013). *The effect of musical mnemonics and musical training on word recall*. (Master of Music), University of Miami, Open Access Theses. Paper 439. Retrieved from [http://scholarlyrepository.miami.edu/cgi/viewcontent.cgi?article=1447&context=oa\\_theses](http://scholarlyrepository.miami.edu/cgi/viewcontent.cgi?article=1447&context=oa_theses)
- Plotnik, R., Kouyoumdjian, H. (2013). *Introduction to psychology*: Cengage Learning.
- Ponczoch, J. A. (2011). Need the poet know it?: Anglo-Saxon poets and ancient Greek bards. *Studia Antiqua*, 1(1), 12 (21-31).
- Rauscher, F. H., Shaw, G. L., Levine, L. J., Wright, E. L., Dennis, W. R., & Newcomb, R. L. (1997). Music training causes long-term enhancement of preschool children's spatial-temporal reasoning. *Neurological Research*, 19, 7 (2-8).
- Rideout, V. J., Foehr, U. G., & Roberts, D. F. (2010). *Generation M2: Media in the lives of 8- to 18-years olds*: The Henry J., Kaiser Family Foundation.
- Rothstein, R., Ladd, H. F., Ravitch, D., Baker, E. L., Barton, P. E., Darling-Hammond, L., . . . Shepard, L. A. (2010). Problems with the use of student test scores to evaluate teachers. Economic Policy Institute: EPI.
- Sajoo, A. B. (2011). *A companion to Muslim cultures In Muslim Heritage Series* Retrieved from [http://web.b.ebscohost.com.ezproxy.cdu.edu.au/ehost/ebookviewer/ebook/ZTAwMHh3d19fNDMzNzQ3X19BTg2?sid=244e9be5-d20b-480d-81d1-12863e897d26@sessionmgr110&vid=1&format=EB&lpid=lp\\_1&rid=0](http://web.b.ebscohost.com.ezproxy.cdu.edu.au/ehost/ebookviewer/ebook/ZTAwMHh3d19fNDMzNzQ3X19BTg2?sid=244e9be5-d20b-480d-81d1-12863e897d26@sessionmgr110&vid=1&format=EB&lpid=lp_1&rid=0)
- Salli-Copur, D. (2010). Teaching English to young learners. Retrieved January 11, 2014, from [http://ocw.metu.edu.tr/pluginfile.php/2209/mod\\_resource/content/0/Week\\_1\\_Who\\_are\\_Young\\_Learners.pdf](http://ocw.metu.edu.tr/pluginfile.php/2209/mod_resource/content/0/Week_1_Who_are_Young_Learners.pdf)
- Sankey, M., Birch, D., & Gardiner, M. (2010). *Engaging students through multimodal learning environments: The journey continues*. Paper presented at the ascilite 2010 Curriculum, technology & transformation for an unknown future, Sydney, Australia. <http://www.ascilite.org.au/conferences/sydney10/procs/Sankey-full.pdf>
- Schellenberg, E. G. (2008). Music training and nonmusical abilities: Commentary on Stoesz, Jakobson, Kilgour, and Lewycky (2007) and Jakobson, Kewycky, Kilgour, and Stoesz (2008). *Music Perception*, 27(2), 139-143. doi: DOI:10.1525/MP.2009.27.2.139
- Schoepp, K. (2001). Using songs in the ESL/EFL classroom. *The Internet TESL Journal*, VII(2).
- Scro, M. (2006). *Lyrical lessons: Using music that relates to lesson plans in order to stimulate better recall of course material*. (Honors). Retrieved from <http://www.learningace.com/doc/5341173/af7bc7150cda646b06663cbcb4e30ac/honors-thesis-tscro>

- Seitz, A. R., Kim, R., & Shams, L. (2006). Sound facilitates visual learning. *Current Biology*, 16(14), 1422-1427. doi: 10.1016/j.cub.2006.05.048
- Setia, R., Rahim, R. A., Nair, G. K. S., Mohd, A., binti, A. F., Husin, N., . . . Seman, N. A. (2012). English songs as means of aiding students' proficiency development. *Asian Social Science*, 8(7), 270-274.
- Sevik, M. (2011). Teacher views about using songs in teaching English to young learners. *Educational Research and Review*, 6(21), 1027-1035. doi: 10.5897/ERR11.250
- Sevik, M. (2012). Developing young learners' listening skills through songs. *Kastamonu Education Journal*, 20(1), 327-340.
- Shen, C. (2009). Using English songs: An enjoyable and effective approach to ELT. *CCSE - English Language Teaching*, 2(1), 88-94.
- Sheppard, T. (2012). Traditional storytelling. Retrieved February 13, 2014, from <http://www.timsheppard.co.uk/story/dir/traditions/index.html>
- Soper, C. (2010). Rock and roll will never die: Using music to engage students in the study of political science. *PS: Political Science and Politics*, 43(2), 363-367.
- Stålhammar, B. (2006). *Musical identities and music education*. Aachen, Germany: Saker Verlag.
- Stevenson, L. M. (2006). The arts: New possibilities for teaching and learning. *Principal's Research Review*, 1(2), 6.
- Sung, E., & Mayer, R. E. (2012). When graphics improve liking but not learning from online lessons. *Computers in Human Behavior*, 28(5), 1618-1625. doi: 10.1016/j.chb.2012.03.026
- Terry, R. R., & Ashley, S. (2013). *The shanty book: Sailor shanties*: CreateSpace Independent Publishing Platform: Part 1 edition.
- Tierney, A., Krizman, Jennifer, Skoe, Erika, Johnston, Kathleen, Kraus, Nina. (2013). High school music classes enhance the neural processing of speech. *Frontiers in Psychology*. doi: 10.3389/fpsyg.2013.00855
- Tse, A. Y. H. (2015). Malaysian teachers' perspectives on using songs in English language teaching. *International Journal of Social Science and Humanity*, 5(1), 87-89. doi: 10.7763/IJSSH
- Wallace, W. (1994). Memory for music: Effect of melody on recall of text. *Journal of Experimental Psychology: Learning, Memory, and Cognition*, 20(6), 15 (1471-1485).
- Wan, C. Y., Ruber, T., Hohmann, A., & Schlaug, G. (2010). The therapeutic effects of singing in neurological disorders. *Music Perception*, 27(4), 287-295.
- Warburton, M. (2013). Switch the sign: An algebra song gd 7-8 math. Retrieved January 30, 2014, from <https://http://www.teachingchannel.org/videos/switch-sign-in-algebra>
- Waterhouse, C. (2002). *Music education in the early years: The British Kodaly Academy*.
- Weatherford, J. (2004). *Genghis Khan and the making of the modern world*: Crown Publisher.
- White, C. (2005). Integrating music in history education. *Academic Exchange Quarterly*, 9(2), 8.
- Wright, L. (2010). Mother Goose in use: Rhymes that teach. Retrieved December 6, 2014, from <http://www.learnnc.org/lp/editions/mothergooselessons/?ref=search>
- Yamaguchi, M. (2013, January 29, 2013). Chinese students strive to learn English to enhance futures, *The State Press*. Retrieved from <http://www.statepress.com/2013/01/29/chinese-students-strive-to-learn-english-to-enhance-futures/>
- Yang, L. L. (2011). *Using music in English as a second language classroom*. (Masters of Science in Education), University of Wisconsin-Platteville. Retrieved from [http://minds.wisconsin.edu/bitstream/handle/1793/52409/Yang\\_Liu.pdf?sequence=1](http://minds.wisconsin.edu/bitstream/handle/1793/52409/Yang_Liu.pdf?sequence=1)
- Zuk, J., Benjamin, Christopher, Kenyon, Arnold, Gaab, Nadine. (2014). Behavioral and neural correlates of executive functioning in musicians and non-musicians. *PLoS ONE*. doi: 10.1371/journal.pone.0099868