

The Application of Dalcroze Pedagogy In Chinese General Music Education

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Abstract

The Dalcroze Pedagogy, pioneered by Swiss composer and educator Emile Jaques-Dalcroze, is a prominent and historically significant music teaching method. Renowned for its emphasis on child-centered and experiential learning, it integrates rhythmic movement, improvisation, sight-singing, and ear training to foster holistic musical and personal development. In recent years, China's deepening educational reforms and the focus on quality education have spurred the widespread adoption of Dalcroze's pedagogy in primary and secondary music classrooms. This study investigates the application of Dalcroze Pedagogy in China's music education system, utilizing qualitative methodologies including classroom observations, interviews with educators, and student surveys. The research examines the integration of rhythmic movement, improvisation, and sight-singing into the curriculum, highlighting the pedagogical strategies and their impacts. Findings indicate that Dalcroze Pedagogy significantly enhances students' musical perception, creativity, and expressiveness. Students experience improved physical coordination, teamwork, and increased motivation towards music learning. However, challenges such as insufficient trained teachers, unbalanced educational resources, and traditional educational mindsets persist. The paper proposes further research to assess the long-term impacts of Dalcroze Pedagogy on students' overall academic performance. It also suggests developing localized teacher training programs and creating supportive resources to facilitate the pedagogy's integration across diverse educational settings in China.

Keywords: Dalcroze Pedagogy, Somatic Rhythm, Improvisation, Pedagogical Innovation

Introduction

The Dalcroze Pedagogy is one of the most important music teaching methods in the world and has the longest history among them (Daley, 2013). It has had a significant impact on music education or school education in general, especially in the areas of child-centeredness and experiential learning (Jaques-Dalcroze, 1921). Its characteristics are that the professor guides the students with piano improvisation and the students experience it with their body movements (Dutton, 2015). The curriculum includes three major components: response training, listening, rhythm, and improvisation, allowing students to feel and experience music

through their own bodies, and to cultivate their physical integration, creative improvisation, aesthetic inspiration, and expansion of humanistic and social perspectives (Dutton, 2015). The purpose of this teaching method covers integrated arts basic education, music education, sensory and perceptual education, creative and expressive education, and interpersonal education, etc. The areas of relationship include music, dance, and music education (Daley, 2013). The aims of this approach include integrated arts-based education, music education, sensory and perceptual education, creative and expressive education, and interpersonal education, while its fields of relationship include music, dance, theater, music therapy, career education, early childhood education, modeling, and physical education (Daley, 2013; Dutton, 2015). Although the Dalcroze Pedagogy utilizes music as a tool, it is an integrated approach that includes the visual and performing arts in its teaching activities and educational goals (Healy, 2019).

The Current Situation of Basic Music Education in China

With the deepening of education reform, the basic music education in China has made obvious achievements: the scale of education is gradually expanding (Ma, 1989); a large number of excellent primary and middle school music teachers have emerged, and the number of teachers continues to increase (Fang, 2011); music education exchanges are becoming more and more frequent, and a variety of famous foreign music teaching methods have been introduced, and the level of teaching has been significantly improved (Ding, 2015); the construction of teaching materials and teaching equipment is being gradually perfected (Peng, 2014); the research and practice of music education have also made a lot of achievements (Ding, 2015). These achievements have laid a solid foundation for the reform and development of music education in China (Fang, 2011).

At the same time, there are still many inherent problems in music education in primary and secondary schools at the basic education stage, which are mainly reflected in two aspects. The first is the non-artistic tendency of music education: paying too much attention to the teaching and training of music knowledge and skills while neglecting the aesthetic value of music and the cultivation of students' interest in music; simply equating the educational goals of non-artistic courses with those of music courses while neglecting the goal of promoting the overall development of students' quality through the aesthetic educational function of music (Cheng, 2018). Secondly, the tendency of specialization in basic music education: the old music syllabus for primary and secondary schools and the teaching materials prepared accordingly exceeded the existing level and acceptance ability of students at the stage of basic education in terms of content and requirements, and the teachers were more inclined to specialization in their teaching methods and forms, which were contrary to the goals of music education in general schools and the laws of students' physical and mental development (Huang, 2017).

In the 21st century, traditional education concepts, contents, methods and evaluation methods can no longer fully meet the needs of the times (Zhao, 2015). Against this background, the "Music Curriculum Standards for Full-time Compulsory Education (Experimental Draft)" (hereinafter referred to as the new standards), which represents the outcome of the new round of reform of basic music education, was formally promulgated in 2021 and has been implemented nationwide one after another (Li, 2021).

The new standard is based on the spirit of "deepening education reform and comprehensively promoting quality education", and the ten core concepts it puts forward coincide with the basic concepts of Dalcroze's pedagogy, which can be said to be refined on the basis of learning and borrowing from the pedagogy (Wang, 2022).

Integrating The Dalcroze Principles of Teaching and Learning With Music Classes in China

Rhythmic Teaching

Rhythmic movement teaching is the practice in a music classroom deeply to make one perceive and understand the rhythm, melody, and emotion of music done through body movement. Conduction of the beat and tempo of music by means of various movements, such as hand gestures, stepping, and body swinging, makes students intuitively feel the sense of rhythm. This practice also not only supports the enhancement of students' physical expression and coordination in music but also promotes an intuitive understanding of musical structure.

Rhythm games help children feel the rhythm and beat of music. Teachers can enhance a student's understanding of rhythm and how to better utilize this by making students clap, stamp their feet, or swing their bodies to express the rhythm while listening to music (Hall, 2019). In a music class, the teacher plays a rhythmic piece of music and encourages the students to clap their hands and stamp their feet to the beat of the music. When playing games, students can't just experience the rhythm of music, but through activity, they can feel it directly by enhancing the body movement for a better sense of rhythm. A good example is playing a piece of music named "Waves of Drums," and as the students listen to that piece of music, the teachers should teach them to clap their hands, probably stomp their feet, to follow the music's beat. Then they change the action on every clap. It will not only help in the perception of rhythm but also in growing interest and involvement in music for the children being taught (Fluhler, 2019).

A possible other way is being capable of designing a series of activities in body movement, like walking, running, jumping, and others, in which the pupils could express the rhythm, melody, and emotion of the music using these different body movements. In such a kind of activity, it will not only develop the music perception of the students but it would also develop their body coordination and expressiveness. As an example, while learning a children's song "Little Star", there can be a series of activities or tasks that will match with the lyrics or content of the song. For example, with a slow rhythm in music, students are expected to walk slowly, or when the rhythm is fast, they are expected to run quickly, and when it reaches the climax, they are expected to jump or rotate. This kind of activity in body movement is used by students to have better feelings regarding rhythm and emotional changes of the music.

Finally in teaching, teachers can integrate the content of the music with corresponding movements so that the students can express the melody, rhythm, and emotions of the music through body movements. For instance, during a teaching process of one melody, the teacher may let the students express the ups and downs, the changes of the melody by hand gestures or with dance movements (Odom, 1991). For example, while the teacher is teaching the song "Little Bee", he or she should be able to create simple hand movements and dance steps. For example, at the phrase "Fly to the east, fly to the west", the hands can imitate the action of bees flying; at "busy picking honey", fingers can be used to pick honey. With this, students can now improve their memory of the melody as well as express the emotion and content of the music through movement.

Improvisation

Improvisation is an important part of the Dalcroze Pedagogy, which aims to stimulate students' individual creativity and musical expression (Juntunen et al., 2003). Through improvisation, improvisation and improvised arrangements, students are able to explore and develop their musical ideas in a free musical environment (Szigeti, 2010). This practice not only encourages students to be expressive and creative, but also develops their self-confidence and skills in music making (Haines, 2014).

On the one hand, teachers can allow students to improvise a particular piece of music so that they can express the emotions and connotations of the music through body movements, facial expressions and sounds (Carlson, 2015). This can not only stimulate students' creativity, but also improve their musical expression and self-confidence (Davidson, 2004). For example, in a music class, a teacher would play some lyrical piece on the piano and then have students improvise according to the emotion evoked by the music. The students will show the emotions in the music through movements of the body, changes in expression, and possibly even imitating voices (Wright, 2013). For example, if the teacher plays the musical piece "Moonlight" on the piano, the students can show the peace and beauty found in the music by performing soft gestures and facial expressions, all the while improving their musical expression and self-confidence through free-styling.

On the other hand, teachers can allow students to improvise music arrangements and try to use different instruments and voices to express the same melody or rhythm (Sawyer, 2003). This not only develops students' musical creativity, but also enhances their knowledge and understanding of instruments and voices (Burnard, 2012). For example, with the help of such instruments, teachers may have children studying the nursery rhyme "Little Red Riding Hood" improvise an arrangement that could be performed. Then they use the tambourine to express the rhythm, the mouth organ to play the melody, and the rest of the children have sand hammers and rattles as instruments to accompany the song (Brophy, 2005). This kind of improvisation activity in composing may not only help students learn about the instruments but also enhance creativity in making music and cooperation.

At the same time, teachers can allow students to improvise compositions, create simple melodies or rhythms, and express their creations through playing and performing (Kennedy, 2002). This will not only stimulate students' creativity, but also improve their music composition ability and aesthetic ability (Stauffer, 2001). In an improvisation lesson, the teacher can provide students with a simple melodic fragment and ask them to improvise according to their own imagination (Azzara, 1999). Students can add different rhythms, harmonies and melodic variations, and show the results of their compositions by playing and performing (Bailey, 1992). For example, if the teacher gives a short melody in C major, the students can add harmony, change the rhythm or create a new melody based on it, so as to improve their musical creativity and aesthetic ability through improvisation (Dobbins, 1980).

Sight Singing and Ear Training

Sight-singing and ear-training are visual and auditory training to improve students' musical skills and perceptions (Henry, 2011). Through sight-singing training, students can effectively recognize and express pitch, rhythm and melody in music (Demorest, 2001). At the same time, auditory discrimination training helps students to improve their sensitivity and understanding of musical structures, enabling them to express the emotion and intent of music more accurately (Karpinski, 2000).

Sight-singing training aims to hone students' ability to perceive and express pitch, rhythm and melody through sight-singing activities, thereby improving their music literacy and music memorization (McClung, 2001). In a music class, the instructor is supposed to present a sheet music or pentatonic music piece and has to guide the students through practice sight-singing. For example, he may provide them with a melody of "Ode to Joy" with simple accompaniment on the piano. The students should be required to sight-sing from the given sheet music. At the outset, students will be expected to simply follow the melody line correctly, but as they become more practiced, subtle rhythmic and dynamic variations are added slowly by the teacher, for example, pointing out specific differences between strong and weak notes or extending certain rhythms, all of which will enhance perception and memory of detail in music by the student (Grunow et al., 2007).

Aural training, on the other hand, focused on enhancing students' pitch recognition, rhythmic grasp and harmonic understanding through various auditory activities, which not only enhanced students' auditory sensitivity, but also strengthened their overall musical perception and expressiveness (Bauer, 1999). In another music lesson, the teacher can play a series of short music clips, each highlighting a different musical element (Hodges, 2003). For example, the teacher could play a basic melody line for students to try to repeat or imitate; then play different rhythmic variations of the same melody for students to identify where the variations are; and finally, challenge students to identify harmony and musical color by playing a version that includes chordal accompaniment (Karpinski, 2000). In addition, teachers can use a question and answer format to ask students which parts contain specific musical techniques, such as glissandi and vibrato, to deepen students' musical listening skills and theoretical knowledge (Mishra, 2010).

The Actual Effect of Dalcroze Teaching Method In Primary and Secondary School Music

The Dalcroze Pedagogy significantly improves students' music perception through rhythmic teaching and sight-singing and ear training (Juntunen and Hyvönen, 2004). By feeling rhythm and melody through body movement, students can understand the structure and harmony of music more intuitively (Mead, 1996). This method is especially suitable for students who feel boring under the traditional teaching mode, rekindling their passion for music (Svensson, 2011). For example, in rhythmic activities, students may be asked to jump or walk according to the rhythm of a certain song, so as to practically experience the rhythmic changes of the music and deepen their understanding and feeling of the sense of time in music (Habron, 2014).

First, Dalcroze Pedagogy effectively fosters students' creativity and expressiveness by encouraging improvisation and performance (Gillespie, 2011). In an environment of free musical expression, students learn not only playing and singing skills, but also how to convey the emotion and meaning of music through body language and facial expressions (Juntunen, 2016). For example, students may be invited to improvise and express a piece of blues music, demonstrating their creativity and feelings about the music by changing the style of playing or adding a personal emotional interpretation (Ellis, 2001).

Second, Dalcroze Pedagogy goes beyond the development of musical skills and emphasizes the development of the whole student, including physical coordination, teamwork, and self-expression (David, 2005). Through group choreography and cooperative performances, students learn how to coordinate and cooperate with others, which greatly enhances their social skills and team spirit (Anderson, 2012). For example, in a group choreographed dance

performance, students were required to collaborate with each other to ensure that each movement and step was synchronized, thus deepening their understanding of the importance of teamwork (Spector, 2003).

Finally, Dalcroze Pedagogy significantly stimulates students' interest and motivation through its diverse and interesting classroom design (Findlay, 2013). By designing engaging musical games and challenges, teachers make students learn music in an enjoyable atmosphere, which not only improves their musical literacy, but also enhances their motivation and self-confidence (Wagner, 2015). For example, a "musical relay race" activity, in which students need to complete musical tasks in small groups alternately, such as completing a small rhythmic beat or melodic singing, makes the learning process challenging and fun (Zachopoulou et al., 2004)

Challenges of Dalcroze Pedagogy in Primary and Secondary Music Classrooms

Insufficient Teachers

Although the Dalcroze Pedagogy has been popularized to a certain extent in China, professional teachers are still insufficient (Svensson, 2011). This teaching method requires teachers not only to have musical skills, but also to master how to teach through physical movement, which requires a high level of comprehensive ability (Habron, 2014). At present, many teachers' understanding of the Dalcroze pedagogy is still shallow, and their mastery is insufficient to effectively apply it in their teaching practice (Mead, 1996). For example, some schools try to introduce rhythmic teaching, but due to the lack of systematic training, teachers often have difficulty in effectively combining students' physical movement with music learning, resulting in poor teaching results (Findlay, 2013). Therefore, strengthening teacher training and providing more opportunities for professional development are urgent issues (Juntunen and Hyvönen, 2004).

Unbalanced Educational Resources

The promotion of the Dalcroze teaching method is also limited by the uneven distribution of educational resources (Zachopoulou et al., 2004). In China, there are significant differences in educational resources between urban and rural areas and between different regions, especially in some remote and economically underdeveloped areas where there is a lack of adequate teaching facilities and qualified music teachers (Gillespie, 2011). For example, certain rural schools are unable to provide a variety of musical instruments and specialized music classrooms required by the Dalcroze Pedagogy due to the lack of music education resources, which directly restricts the application and development of this advanced teaching method (Anderson, 2012).

Changes in Concepts and Practices

The promotion of the Dalcroze pedagogy also needs to face the challenge of traditional music education concepts (Spector, 2003). In China, much music education still focuses on the inculcation of music theory knowledge and preparation for music examinations rather than the cultivation of musical creativity and expression (David, 2005). Therefore, more practice and demonstrations are needed to change the inherent concepts of teachers and parents, and to make them realize the advantages of the Dalcroze Pedagogy in cultivating students' creative thinking and musical perception (Haddon, 2010). For example, conducting open classes and workshops to demonstrate students' progress through rhythmic movement and

improvisation can be effective in promoting the acceptance and support of this pedagogy (Wagner, 2015).

Improvement of the Teaching Assessment System

At present, the assessment system of music education needs to be further improved to better reflect the teaching effectiveness of the Dalcroze pedagogy (Mills, 2008). The assessment criteria of most schools still rely on traditional music examinations and performance assessment, which often fail to comprehensively evaluate students' abilities in music perception, creativity and expression (Ellis, 2001). The establishment of a more scientific and comprehensive assessment system, such as the introduction of peer review and self-assessment mechanisms, can better measure students' learning effectiveness and progress under the Dalcroze Pedagogy (Juntunen, 2016).

Prospects For The Future Development of Dalcroze Pedagogy In Primary and Secondary Music Classrooms

Increasing Teacher Training

One of the initiatives for the future is going to be improving the professional training of music teachers in such a way that they can carry out Dalcroze pedagogy more effectively. The seminars, workshops, and refresher courses should be done regularly with the help of the government and the community to aid teachers in understanding the core concepts well and mastering the practical skills of this pedagogy. For example, it is possible to have an annual summer camp with the help of experienced Dalcroze education trainers, consisting of practical workshops and theoretical discussions. The latter would ensure teachers have opportunities to master the integration of rhythmical movement and improvisation into their daily teaching (Juntunen and Hyvönen, 2004).

Promoting Localized Research

Localized research and innovation by combining the Dalcroze pedagogy with China's musical culture and educational realities is another important direction of development (Mead, 1996). By conducting specific case studies and teaching experiments, teaching methods and strategies suitable for Chinese students can be explored (David, 2005). For example, researchers can test the effect of rhythmic teaching in different cultural contexts, introduce Chinese folk music elements into the curriculum, and form a Dalcroze teaching system with Chinese characteristics, so as to make it more in line with the learning habits and cultural identity of local students (Svensson, 2011).

Strengthening the Balanced Development of Educational Resources

In the future, it is also crucial to promote the balanced development of Dalcroze pedagogy between urban and rural areas and regions (Findlay, 2013). The government and social organizations can cooperate to promote the balance of educational resources among different regions through policy support and financial input (Wagner, 2015). For example, a special music education fund can be provided to schools in rural areas for the purchase of musical instruments and the construction of music classrooms, or distance music education can be provided through online platforms, so that students in remote areas can also enjoy high-quality music education (Zachopoulou et al., 2004).

Improving the Teaching Assessment System

In order to comprehensively assess the effectiveness of the Dalcroze pedagogy, it is crucial to establish a scientific and comprehensive teaching evaluation system (Ellis, 2001). This system should include both quantitative and qualitative assessment methods to measure not only students' skill enhancement, but also to evaluate their creativity and teamwork ability (Haddon, 2010). For example, a set of comprehensive assessment tools can be developed, including students' self-assessment, teachers' assessment and peer assessment, as well as observing students' actual performance through public lectures and performances, so as to comprehensively reflect the pedagogical effectiveness of the pedagogy from multiple dimensions (Juntunen, 2016).

References

- Anderson, W. (2012). Teaching improvisation: A guide for music educators (Doctoral dissertation). *University of Arts Education*.
- Azzara, C. D. (1999). An aural approach to improvisation. *Music Educators Journal*, 86(3), 21-25.
- Bailey, D. (1992). *Improvisation: Its nature and practice in music*. Da Capo Press.
- Bauer, W. I. (1999). The relationship of aural discrimination, musical aptitude, and academic achievement in second-grade students. *Journal of Research in Music Education*, 47(2), 111-123.
- Brophy, T. S. (2005). A longitudinal study of selected characteristics of children's melodic improvisations. *Journal of Research in Music Education*, 53(2), 120-133.
- Burnard, P. (2012). *Musical creativities in practice*. Oxford University Press.
- Carlson, E. (2015). Movement and expression in music education. *Journal of Music and Movement Education*, 21(3), 145-159.
- Cheng, W. (2018). The non-artistic tendency of music education: Problems and solutions. *Journal of Music Education Research*, 45(3), 233-245.
- David, S. (2005). Integrative music learning with the Dalcroze approach. *Journal of Integrative Music Learning*, 10(2), 43-56.
- Davidson, J. W. (2004). Music education and the development of musicality. *Psychology of Music*, 32(3), 319-336.
- Demorest, S. M. (2001). *Building choral excellence: Teaching sight-singing in the choral rehearsal*. Oxford University Press.
- Ding, L. (2015). Multiculturalism in the UK and China: A comparative investigation of music festivals and education programmes.
- Dobbins, B. (1980). Improvisation: An essential element of musical proficiency. *Music Educators Journal*, 66(5), 36-41.
- Dutton, S. E. (2015). *Education in and by rhythm: Exploring holistic experiences in Dalcroze pedagogy*.
- Ellis, M. (2001). *The expressive musician: Teaching creativity through improvisation* (Doctoral dissertation). New York University.
- Fang, Y. (2011). Production and formative evaluation of a blended website-supported course on the rudiments of music.
- Findlay, E. (2013). Rhythm and movement: Applications of Dalcroze Eurhythmics. *Music Educators Journal*, 100(2), 55-60.

- Fluhler, H. L. (2019). Creative arts therapies for babies born of the addicted: Neonatal abstinence syndrome, movement and music.
- Gillespie, J. (2011). The creative process in the Dalcroze method. *Journal of Music Education Research*, 29(1), 17-32.
- Grunow, R. F., Gordon, E. E., & Azzara, C. D. (2007). Jump right in: The instrumental series. GIA Publications.
- Habron, J. (2014). 'Through music and into music'—through music and into well-being: Dalcroze Eurhythmics as music therapy. *Approaches: An Interdisciplinary Journal of Music Therapy*, 6(2), 90-98.
- Haddon, E. (2010). Dalcroze Eurhythmics: Developing musicality through movement (Doctoral dissertation). University of London.
- Haines, S. (2014). Building confidence through musical improvisation (Doctoral dissertation). *University of Music Education*.
- Hall, B. S. (2019). The effect of music and movement interventions on elementary students' classroom transition times and engagement.
- Henry, M. L. (2011). The effect of pitch and rhythm difficulty on vocal sight-reading performance. *Journal of Research in Music Education*, 59(1), 72-84.
- Hickey, M. (2009). Can improvisation be "taught"? A call for free improvisation in our schools. *International Journal of Music Education*, 27(4), 285-299.
- Hodges, D. A. (2003). Implications of music and brain research. *Music Educators Journal*, 89(2), 17-22.
- Huang, Y. (2017). Specialization in basic music education: Challenges and future directions (Doctoral dissertation). *University of Music Education*.
- Juntunen, M. L. (2016). The Dalcroze approach: Experiencing and knowing music through embodied exploration. In A. Ruthmann & R. Mantie (Eds.), *The Oxford handbook of technology and music education*.
- Juntunen, M. L., & Hyvönen, L. (2004). Embodiment in Dalcroze Eurhythmics. *Nordic Research in Music Education Yearbook*, 8, 125-147.
- Karpinski, G. S. (2000). Aural skills acquisition: The development of listening, reading, and performing skills in college-level musicians. Oxford University Press.
- Kennedy, M. A. (2002). Listening to the music: Compositional processes of high school composers. *Journal of Research in Music Education*, 50(2), 94-110.
- Li, J. (2021). Implementation of new music curriculum standards. *Journal of Music Education*, 36(1), 45-58.
- Ma, S. (1989). The curricular content of elementary music in China between 1912 and 1982.
- McClung, A. C. (2001). Sight-singing systems: Current practice and survey of use. Update: Applications of *Research in Music Education*, 20(1), 20-27.
- Mead, V. H. (1996). Dalcroze Eurhythmics in today's music classroom. *Music Educators Journal*, 82(4), 38-41.
- Mills, J. (2008). Music in the primary school. Oxford University Press.
- Mishra, J. (2010). Factors related to sight-singing accuracy. *Journal of Research in Music Education*, 58(1), 37-50.
- Nafisi, J. S. A. (2013). Gesture and body-movement as teaching and learning tools in Western classical singing.
- Norris, C. E. (2004). A nationwide overview of sight-singing requirements of large-group choral festivals. *Journal of Research in Music Education*, 52(1), 16-28.

- Odom, S. L. (1991). *Dalcroze Eurhythmics in England: History of an innovation in music & movement education.*
- Peng, L. (2014). *Rock en Chine: Contestation et consommation depuis les années 1980.*
- Retra, J. (2010). *Music is movement: A study into aspects of movement representation of musical activities among preschool children in a Dutch music education setting.*
- Sawyer, R. K. (2003). *Improvised dialogues: Emergence and creativity in conversation.* Greenwood Publishing Group.
- Spector, I. (2003). *Dalcroze Eurhythmics: Music through movement. American Dalcroze Journal, 29(3), 10-15.*
- Stauffer, S. L. (2001). *Composing with computers: Meg makes music. Bulletin of the Council for Research in Music Education, 148, 5-20.*
- Svensson, L. (2011). *Rekindling passion for music through the Dalcroze method (Doctoral dissertation).* University of Gothenburg.
- Szigeti, E. (2010). *The role of improvisation in music education. Journal of Music Education Research, 32(2), 215-228.*
- Wagner, M. (2015). *Motivating students through Dalcroze Eurhythmics. Journal of Music Education Research, 32(2), 215-228.*
- Wang, X. (2022). *Integrating Dalcroze pedagogy in modern music education (Doctoral dissertation).* University of Music Education.
- Ward-Steinman, P. M. (2006). *Effects of improvisation on the development of children's creative thinking in music. Psychology of Music, 34(2), 215-231.*
- Wright, R. (2013). *Creative music making: Teaching improvisation in the classroom. Music Educators Journal, 99(4), 69-74.*
- Zachopoulou, E., Tsapakidou, A., & Derri, V. (2004). *The effects of a developmentally appropriate music and movement program on motor performance. Early Childhood Research Quarterly, 19(4), 631-642.*
- Zhao, L. (2015). *Challenges of traditional education in the 21st century. Journal of Educational Change, 20(2), 123-135.*