



New Trends in Music Education Management in 21th Century

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ABSTRACT

The computers, laptops, and internet access that are supplied by educational leaders are essential for integrating innovation into the teaching of music in an efficient manner. If all of the necessary resources are made accessible in the classroom, active learners will have a great time exploring the facts about musical instruments. When a person's interest in musical information is piqued, the learning process starts. Furthermore, information obtained via hands-on experience has a significant influence on students' learning. Hands-on, minds-on exercise helps children develop higher order thinking skills such as mathematics and computational reasoning, which aids them in learning more advanced and abstract information by conceptualizing what they have learned. Teachers should be more enthusiastic about incorporating innovation into their lessons, which will eventually be reflected in their teaching. The use of innovation in the music classroom should be prioritized because, when compared to a traditional setting, students' performance improves when they are exposed to new ideas.

Keywords: New Trends, Music, Education Management

Introduction

Innovation integration is defined as the smooth integration of innovation into educational processes such as transacting curriculum material and students working on innovation in order to complete real assignments. It is expected that the application of innovation in music education would either enable the teacher or the student to accomplish something that would otherwise be impossible, or allow the instructor or the students to learn something more effectively and efficiently (Bundick, 2014)

Support from administrative staff may have an impact on whether or not teachers adopt new technologies. According to the findings, administrators who promote the use of innovation not only in words but also in deeds contribute to acceptance of the use of innovation as a cultural norm. Success in incorporating Innovation into teaching-learning processes, especially in music courses, is highly reliant on the support offered by the school's principal. (Lawless et al., 2017)

Teachers' competency is improved as a result of trainings and workshops that are held at their individual educational establishments. Reading articles that are linked to music education may also assist to increase one's understanding of the subject. (Hunter, 2011).

Even if parents are not ordered to do so, they should be encouraged to participate more actively. The majority of active parents are attentive to the requirements of their children, which is why they make every effort to have an internet connection. However, those who cannot afford to do so still make every effort to meet the expectations of their children. The use of innovation, particularly computers and the Internet, has had a significant impact on every area of the workforce, including schools, all over the globe. Schools are investing tens of billions of dollars to prepare today's pupils for the technology problems that will face them tomorrow (NGSS, 2013).

The use of many websites in the classroom is encouraged, and many are accessible to educators. Examples include YouTube, Google, Wikipedia, brainPOP, the Web-based Inquiry Music Environment, and many more. On top of the websites, new educational technology tools are being introduced into the classroom. These include virtual reality (VR), simulation, animation, idea mapping, Web 2.0, and many more new technologies. Instructors can make the classroom a more lively and enjoyable place to learn if they use creativity and imagination. Parents think that innovation is critical to the education of their children and are happy about the prospect of a high-tech educational environment. They also want that schools would accept innovation and teach students using innovation as a teaching tool. He also said that adopting innovation in the classroom allows teachers and students to come up with innovative solutions to challenges that they encounter in their everyday lives. Innovation aids in the development of improved educational syllabuses, learning materials, and future goods and services in the field of education. I believe that it is really vital to include innovation into schools (Plenderleith, J & Adamson, 2019)

Furthermore, the application of innovation strategies in learning and teaching has a significant favorable impact on a student's ability to learn as a result of the tactics. It has been proved that when students use computers to do tasks assigned to them, they reflect in a very positive way on their work and education, encouraging and inspiring them to absorb the information. Students who utilize creativity to learn in school have higher self-esteem and self-confidence than those who do not employ innovation (Johnson et al, 2005).

Instructors faced a number of difficulties while using Innovation technologies, including restricted accessibility and network connectivity, inadequate technical assistance, a lack of appropriate training, a lack of resources and an inability to demonstrate instructors' competence, among others.

Music standards are essential in order to ensure that music is uniform throughout the country. Standards are being adopted in schools with the goal of improving students' music learning. It is possible to find many sets of standards that do not have any instructional coherence. There are several things that may be learnt in the field of music. If there are no criteria to educate teachers of what to teach in various grade levels, teaching music may become overwhelming. The objective of education, in addition, is to equip students to "become competent problem solvers, both alone and in collaboration with others."

Because music is always changing, teaching and learning should not be centered on recalling or memorizing facts (Jones, 2016) or scientific knowledge. It is essential that students be able to access or retrieve information whenever and wherever they are required, since scientific knowledge is stable but evolves by being rectified slowly and having its bounds progressively enlarged. Because of this, the emphasis of standards should be on encouraging children to learn via experimentation and knowledge acquisition rather than simply remembering facts and statistics. As a result, students will be able to apply their information in a real-world setting when they develop their knowledge based on their own personal experience.

Using music as a means of teaching children to learn is to model, analyze, and design. By integrating students in various tasks such as analyzing, interpreting, computational thinking (problem solving), and assessing data, we may see improvements in their academic performance. Furthermore, in recent years, only a small number of students have pursued careers in the domains of music, innovation, engineering, and mathematics (STEM). Standards, with their demanding material and application that reflects how music is practiced in the real world, may be considered to prepare students for the rigors of college and the prospects available in STEM fields (Labrador, 2016).

As a result, teachers should use creativity in their music instruction to assist students in learning music in a constructivist manner. Music Learning with Innovation is a method for exploring, discovering, and learning about musical ideas and concepts. Music is a powerful tool for connecting with the actual world, and technological advancements are opening up new options to learn music by making it more interactive. Students' attitudes about the subject matter improve as a result of innovation, as does their motivation in learning (Valdez et al., 2016).

Students' curiosity is piqued, and they are motivated and engaged in learning activities as a result of innovative teaching methods. Students benefit from innovation because it allows them to see the broad picture and engage with the outside world. In classrooms where instructors employ innovation responsibly as a learning tool, students' performance in the classroom and outside of the classroom improves, as does their overall performance. Technology is thus required in order to enhance teaching and learning in the music education classroom (Lawless and Pellegrino, 2017).

Aside from these factors, the amount of participation in the classroom and at school has an impact on pupils' academic performance. When it comes to engagement, kids who reported a high degree of involvement had greater attendance rates, as well as better test scores, and ultimately, they had a higher graduation rate. Students' learning development is hampered when they are not actively involved in their education. Increased student involvement in school is associated with improved academic performance and a reduced dropout rate.

In schools and in music instruction in particular, innovation may be a powerful tool for engaging pupils. When it comes to engaging students in music subject, teachers should be able to inspire interest and curiosity in students through including them in music-related activity. Additionally, these activities encourage pupils to have a good attitude toward learning and engagement in class. As a result, the use of innovation as an educational delivery technique may be utilized to stimulate students' interest, make music learning more relevant to their lives, improve students' engagement, and engage students in activities (Plenderleith & Adamson, 2009).

Teachers and students benefit from using computers or innovation as educational tools since it allows them to communicate ideas, engage with other students in a more personalized manner, acquire and access information from across the globe, and exhibit their work. In order to understand the learning process through innovation, instructors should first be frequent computer users; second, they should relinquish control by holding students accountable for their own learning process; and third, students should be given the opportunity to lead their own learning process through inquiry and innovation. The goal of incorporating innovation into the 21st century classroom is to shift the focus away from the didactic instructor-centered classroom and toward the student-centered classroom environment.

Innovation does not, by itself, bring about positive changes in the classroom. Learner-centered approaches to teaching require teachers to be effective planners, implementers, and evaluators by ensuring that instruction is correctly chosen, designed, and presented via innovation in order to have

an impact on students' learning. Instructional practices shift from a student-centered constructivist approach to one that is active, appropriate, and frequent when instructors employ innovation actively, appropriately, and often in the classroom. A recent study, conducted by Becker and Ravitz (2016), found that regular computer and Internet users are more likely to relinquish their control and teach in student-centered classrooms using a constructivist approach. As a result, it is critical for instructors to apply innovation in the classroom on a constant basis in order to effect change in their teaching practice as well as to support students' development of knowledge via the use of innovation.

A 21st century music classroom incorporates a variety of non-traditional teaching technologies, one of which being PowerPoint, which is used most often by teachers to provide music lessons. Students get involved and develop an interest in music when teachers give them with an interactive medium or a new invention. In order to fully use innovation for learning, educators must plan and prepare ahead of time in order to make innovation a learning and instructional tool for their students. Scaffolding refers to the use of a number of instructional methods to help students advance and become autonomous learners as a result of their experiences. Instructors must take into account students' existing knowledge and abilities in order to do this. Music learning may be enhanced via the use of appropriate scaffolding and the delivery of material through innovation (Tsai, 2014).

Several researchers, including Chen and Howard (2014), have shown that teachers' preparation for simulation is essential for students to have a favorable attitude about music and to demonstrate scientific comprehension. Innovation alone will not result in significant improvements in students' music learning; rather, it is instructors' preparation for the appropriate use of innovation, instructors' effective pedagogy, appropriate scaffolding for innovation use, as well as instructors' instructional strategies, that will result in significant improvements in students' music learning and understanding.

It is recommended by Bang and Luft (2013) that the use of innovation in the classroom should be used to promote inquiry-based music teaching and learning rather than just as an extra instructional tool in order to maximize student learning. However, in order to bring about change in teaching via innovation, instructors may need to begin utilizing innovation as an instructional tool and incorporating it into their pedagogy as soon as possible.

Music instructors' use of computers, according to Dana (2015), was primarily for information retrieval from the Internet, online communication, as a presentation tool for instruction, and as data collection probes. This suggests that instructors are incorporating innovation into their teaching practices, even though this does not require critical thinking. Instructors, on the other hand, go through a number of phases as part of the innovation integration process. One of the early phases of innovation is the adoption stage, during which instructors are just beginning to experiment with new teaching tools and putting them to use on a regular basis. The invention stage is often the only stage in which educators become creative and practice student-centered teaching while incorporating innovation.

Students-centered collaborative and project-based pedagogies might also be used in the music classroom via the use of innovation and creativity. Consequently, innovation as an educational delivery tool is critical to bringing about a significant shift in teaching from an instructor-centered to a student-centered approach. Innovation as a Teaching and Learning Tool However, despite the fact that innovation is present in the music classroom, the application of innovation as a learning tool is quite limited. In order to facilitate students' music learning, educators must use educational technology as a tool. Furthermore, innovation should serve as a catalyst for educational reform, a spark that piques the attention of students and a teaching instrument that helps them acquire new concepts. Simple software and hardware, such as simulation, multimedia, and videogames, may be utilized as learning aids, as can simple software and hardware. The development of computer simulation, modeling, and visualization approaches was made feasible by technological developments. There are several examples of these technologies being used in education that can be found in the literature. Virtual reality simulation software creates 3-D models and animations of items for visual representation, which is particularly useful in the sciences of physics and chemistry since they deal with abstract concepts (Koh, 2017).

According to the findings of Garrido (2016), multimedia offers up a whole new universe of exploration and learning possibilities for students, encouraging them to take the initiative in acquiring scientific concepts and information. In addition, multimedia enables students to complete task-based projects, communicate their accomplishments, establish constructive teamwork, develop multiple intelligences, and enhance their technical abilities while still learning. As a result, multimedia may be employed in the music classroom for pleasure and discovery, resulting in a favorable link between students' learning habits and multimedia. After being exposed to innovation on a regular basis in the classroom, students get comfortable with it.

In a research conducted by Zhiao (2017), pupils were given the opportunity to use a laptop computer. This research found that regular use of innovation, around 3 hours per day, along with high-quality time spent with innovation enhanced students' GPA, demonstrating that both quantity and quality of innovation usage are significant in students' intellectual progress at the high school level. The findings of the research revealed that using innovation integration as a learning tool to do homework, look for material for schooling, work with software such as PowerPoint, and utilize Photoshop for school-related work helped students enhance their learning outcomes overall. However, the same research found that spending lengthy periods of time in front of a computer was detrimental since it is possible that learners may get diverted from the subject, resulting in worse academic performance. Students began conversing online, sending and receiving emails, playing computer games, and perusing the internet for entertainment, all of which resulted in a reduction in their grade point average. The findings of this research demonstrated the value of employing supervised innovation as a learning technique to improve students' academic performance. Students' interest in music learning may be piqued by innovation, which can help them stay in school and learn more about the subject matter.

Video games are another invention that aids in the learning of music by pupils. According to a research conducted by Marino (2014), video games may be used to teach music material to students with impairments as a "way to promote cognitive and social accessibility." Educational games educate students with material and problem-solving skills through engaging students, and as a result, they improve students' academic performance and accomplishment. As well as fostering collaboration, video games help to develop decision-making abilities, interpersonal skills, and leadership abilities. The games used in the classroom should be designed to assist the learning goals of the students. Students' outcomes improve as a result of the constant feedback that video games provide to help them master a skill and level up. When considering the benefits of video games, innovation provides students with the opportunity to learn, as video games aid in the development of logical imagination through inductive and deductive learning processes.

When asked about innovation (gaming) in a survey conducted by Arellano (2013), 44 percent of the participants said that it was an effective technique to engage and involve students in the learning process. Apart from that, the participants reported an increase in the performance of their students as a result of the game's inclusion in their classroom, demonstrating that games may be used to motivate students to study in the music classroom. Participants reported a good influence on learning outcomes when they were given the opportunity to be creative, demonstrating that games may create an atmosphere that is conducive to learning. The GoPro camera, 3D printer, Ocular Rift, 3 Doodler, and Google Glass are just a few of the technologies that can be used to transform music learning. Other technologies that can be used to transform music learning include GPS, robotics, drones and many others. These technologies make music learning interactive, interesting, and engaging.

Thornburg (2013) believes that technologies such as the Celestia simulator, NetLogo, PhET (software), 3D printers, and Arduino (hardware) may be used as a music-education tool in conjunction with other technologies. Open inquiry activities may benefit from the addition of innovation, and students can benefit from engaging in genuine inquiry-based learning. Using Innovation as a Tool for Knowledge Construction Another use of innovation in music education is the construction of knowledge. Students cannot learn until and unless they are able to construct knowledge on their own behalf. Under the principles of constructivist learning theory, students generate knowledge via the use of language and through interaction with other students in the group.

With the advent of the digital age, innovation has provided a means for people to communicate with one another. When utilized appropriately, online social media, Blackboard, Canvas, and Web 2.0 are all tools that may be used to boost students' engagement in group work and peer cooperation when they are introduced into the classroom. Examples include Edmodo, a social networking site that has the ability to engage students in learning by allowing them to participate in discussions and build their own expertise (Kongcha M., 2013). Edmodo is a safe learning platform that allows users to work at their own speed, giving them the opportunity to further their knowledge and skills. As a result, online social media may be a powerful instrument for knowledge creation that students can utilize in the classroom to study music while also having fun.

Computers give information that has been stored, and students retrieving that knowledge is not considered to be "learning." Learning takes place when knowledge is transformed into something helpful and meaningful, rather than just taking information from the Internet and putting it together. Students should be able to critically examine data in order to make sense of the information they are presented with. They should use the information gleaned from the invention to generate and construct their own knowledge, rather than just regurgitating it. As a result, the purpose of innovation should be to extend their knowledge—thinking aloud, questioning, sharing ideas, or generating some form of creative representation—rather than to create anything new or different.

While innovation should not be used to highlight the drill and practice approach to acquire material and skill, it should be utilized to develop knowledge via conversation and engagement with other students as well as the surrounding environment instead. Using innovation (a video) as a resource to give knowledge for instructional objectives was the focus of Ramirez's (2017) research study on the subject. The knowledge offered by innovation, on the other hand, was utilized by the students to study, debate, and make choices for their project. At the conclusion of the process, students created their own knowledge via the application of innovation and gained information through cooperation. In this instance, creativity was used only as a tool of learning, rather than as an aim in itself.

Another innovation is the use of multimedia to provide students with an additional resource that clarifies their misunderstandings or doubts and provides definitions of terminologies, thereby assisting students in understanding the content more effectively. Cognitive tools that are multimedia-enhanced provide students with additional assistance in comprehending the content of the music (Liu, 2015). Sound, visuals, text, and ultimately bodily feeling combine to generate hypermedia, which presents exciting possibilities for education since learning does not occur in a linear fashion; hypermedia and hypertext enable students to travel from subject to subject while linking components to construct meaning. According to one research, after two weeks of integrating innovation (hypermedia) in the classroom, students' music knowledge rose, and students were also better able to remember the material. Hypermedia as a type of innovation, thus, offered students with access to knowledge, assisted students in understanding multiple terminologies, and enabled students generate meaning for themselves.

It is recommended by Walker (2015) that instructors' use of innovation in the music classroom should be aimed at improving the attitude of children towards music, improving the students' understanding of musical concepts and principles, increasing the richness of middle-school music and innovation instruction, and expanding the range of classroom tools available to music instructors

Incorporating Information and Communications Technology (ICT) into Music Education

Due to the fact that internet technology is being considered as a potential delivery system for recent traditional computer functions in music instruction, it is appropriate to consider the applications of Information and Communication Technology (ICT), specifically computer technology and other digital devices in music education, as well as their historical development. Since the 1950s, information and communication technology (ICT) has emerged as a crucial role in music education and learning. At the time, most music instructors and researchers believed that technology would bring many challenges and changes to teaching and learning approaches, as well as the roles of instructors and students but the barriers included 1) cost; 2) technological development; 3) lack of technical skills in the use of technology; 4) lack of familiarity and experience with technology; 5) lack of study regarding the use of technology; and 6) a lack of study regarding the use of technology in the classroom. Despite these reservations, the majority of researchers, instructors, and students began to incorporate some form of technology into their musical lives and experiences in order to be supportive of fundamental and practical changes and opportunities for composing music, as well as teaching and learning music, in order to be supportive of fundamental and practical changes and opportunities. Few practical studies in music education were carried out throughout the early stages of computer development, as well as during the early stages of real instructional computers in the classroom (Berz & Bowman 1995).

It has been developed and widely accepted as an effective mode of music teaching and learning since the 1970s, when computer-assisted instruction (CAI) was first introduced. It developed and evolved as a result of attempting to replicate a classroom setting for new CAI procedures. In the early days of computer-assisted instruction (CAI), the computer-assisted instruction (CAI) was generally used as a guide for instruction with either a drill-and-practice program or programmed instruction delivered on the computer. It was used to teach music fundamental theory and ear training. Among the first examples of CAI in music education and learning were the Programmed Logic for Automatic Teaching Operations (PLATO) system at the University of Illinois, which was a mainframe CAI system with touch sensitive panel input (Williams & Webster, 2008), and the Grade Units for Interactive Dictation Operations (GUIDO) system at the University of Delaware, which was a mainframe CAI system for teaching ear training and music theory. Microelectronic technology was created in order to broaden the scope of current computer learning applications and to increase the effectiveness of instructional tactics and delivery methods in general. It broadened the spectrum of computer-based applications by including high-speed visuals for music notation, voice input for singing instruction, and orchestral simulation for orchestration and conducting instruction. In addition, microelectronics might be used to create music notation, provide auditory stimuli, assess reaction, and identify learning difficulties (Hofstetter, 1979: 40). The potential influence of microelectronic technology on music education and learning, according to Hofstetter, was also identified as being significant. Although this technology was not only easier to use and less expensive than the computer, the fact that it was cost-effective resulted in its widespread use, making it far more accessible to students.

Since the introduction of the Musical Instrument Digital Interface (MIDI) in the early 1980s, digital sampling technology has been accessible for use. MIDI is a data transmission protocol for electronic musical instruments and computers that was created to facilitate the transfer of data between the two devices. In recent years, music educators and students have increasingly relied on MIDI technology for their own performance and composition as well as sequencing and even live performance. MIDI has also facilitated students' creative discoveries and experiences. The first MIDI piano, sometimes known as a replicating piano, was developed in the mid-1980s. The MIDI piano, not a digital piano, was created as a hybrid instrument that blends the sound of a traditional acoustic piano with the technology of the MIDI interface. All information from the MIDI piano's performance, including notes, duration, key velocity and pedal controls, is converted into MIDI data by specialized sensors in the instrument. Data can be saved and retrieved at a later time (Tsao-Lim, 2006: 24). Additional computer-based multimedia approaches have emerged, enabling users to access a wide range of high-quality digital audio and video resources through their computers. In particular, hypermedia is defined as a computer-based system of content that is structured by access points known as 'links' (Bodley, 2000: 21). Hypermedia was developed to make instruction more adaptable to various media with less cost and to allow students to explore in a non-sequential way the content information contained within the system, using the tools for movement provided within the system.

Conclusion

For the most part, hypertext was a method of information management in which data were linked by links that allowed nonlinear or non-sequential organization of text, while hypermedia was a simple extension of hypertext that included other media in addition to text. With the increasing interest in graphical browsers for the World Wide Web, this orientation of hypermedia has continued to evolve as a result of the increasing popularity of hypermedia. Hypertext links are available in the majority of browsers. These connections have spanned a much broader spectrum than individual applications. Although research into how internet browsers influence the orientation of hypermedia and its use in music educational settings was conducted in the early stages of hypermedia, little was done in this stage of the research and referred to the period between the late 1980s and the present as "the period of emerging technologies." Technological learning systems were designed with the goal of creating sophisticated, content-oriented learning environments that were more instructionally adaptable than previous learning settings. Improved delivery instruments in terms of power, speed, and flexibility were responsible for this increase in productivity.

References

- Arellano, D. S. (2013). Factors Affecting Innovation Integration in K to 12 Classrooms: A Path Model. ProQuest Database. Assessment (PISA).
- Bang, K. and Luft, P. (2013). Secondary Music Teachers' Use of Innovation in the Classroom During the First Five Years. Google Scholar.
- Becker, H. J. and Ravits, C. (2016). How Exemplary Computer-Using Teachers Differ from Other Teachers. Contemporary Issues in Innovation and Teacher Education. VA: Queens Press.
- Berz, WL & Bowman, J 1995, 'An Historical Perspective on Research Cycles in Music Computerbased Technology', Bulletin of the Council for Research in Music Education, no. 126, Fall, pp. 15-28. The Integration of E-learning in Higher Music Education in Thailand 247
- Bodley, D 2000, 'The Development and Testing of an Interactive Listening Guide System for Instructors of Music Appreciation', PhD thesis, University of the Pacific Stockton.
- Bundick, M. J., Quaglia, R. J. Corso, M. J. and Haywood, D. E. (2014). Promoting Student Engagement in the Classroom. Teachers College Record Journal.
- Chen, G. and Howard, S. (2014). Effect of Live Simulation on Middle School Students' Attitudes and Learning Toward Music. Google Scholar.
- Dana, T. (2015). Teachers' Beliefs About the Nature of Music and Their Relationship to Classroom Practice. ProQuest Database.
- Garrido, A. D. (2016). Application of Multimedia and Network English Teaching in Multiple Intelligence Development. ProQuest Database.
- Hunter, RW 2011, 'Learning in an Online Jazz History Class', PhD thesis, Arizona State University. Ichinose, CL 2011, 'Learning Mathematics in the 21st Century: High School Students' Interactions while Learning Mathematics Online', PhD thesis, the Claremont Graduate University.
- Johnson, J, Killion, J & Oomen, J 2005, 'Student Satisfaction in the Virtual Classroom', the Internet Journal of Allied Health Sciences and Practice, vol. 3, no. 2, pp. 1-7. The Integration of E-learning in Higher Music Education in Thailand 256
- Jones, PM 2010, 'Music Education and the Knowledge Economy: Developing Creativity Strengthening Communities', Arts Education Policy Review, vol. 106, no. 4, pp. 5-12.
- Koh, J. L. (2017). Teacher Beliefs and Student Achievement in Innovation Rich Classroom Environments. ProQuest Database.
- Kongcha, M. (2013). Effects of Music Center Outreach Lab on School Students' Achievement. Google Scholar.
- Labrador, J. (2016). Review of the Policies and Practices in the Implementation of the K to 12 Music Curriculum. Malay. 28 (2). 45-56. Republic Act no.10533 (Enhanced Basic Education Act of 2013) Fifteenth Congress of the Republic of the Philippines <http://www.senate.gov.ph/lisdata/1417511918!.pdf&p=DevEx.LB.1,5446.1>
- Lawless, K. A. and Pellegrino, J. W. (2017). Professional Development in Integrating Innovation into Teaching and Learning. Review of Educational Research.
- Marino, D. (2014). Support Student Collaboration: Edmodo in the Classroom. Philippine Normal University. ProQuest Database.
- NGSS (2013). Music Education in the 21st Century: Why K to 12 Music Standards Matter and Why The Time is Right to Develop Next Generation Music Standards. Retrieved from <http://www.nextgenmusic.org/sites/ngss/files/Whv%20KI>
- Plenderleith, J & Adamson, V 2009, 'The Policy Landscape of Transformation', in T Mayes, D Morrison, H Mellar, P Bullen & M Oliver (eds), Transforming Higher Education through Technology-enhanced Learning, The Higher Education Academy, York, pp. 6-18.
- Plenderleith, J & Adamson, V 2009, 'The Policy Landscape of Transformation', in T Mayes, D Morrison, H Mellar, P Bullen & M Oliver (eds), Transforming Higher Education through Technology-enhanced Learning, The Higher Education Academy, York, pp. 6-18.
- Ramirez, P. (2017). Learning Styles and Learning Spaces: Enhancing Experiential Learning in Higher Education. ProQuest Databases.
- Thomburg, H. (2013). Teacher Beliefs Toward Using Alternative Teaching Approaches in Music and Mathematics Classes Related to Experiences in Teaching. Google Scholar.
- Valdez, G., McNabb, M. Foertsch, M., and Anderson, M. (2016). Computer-Based Innovation and Learning: Evolving Uses and Expectations.
- Walker, F. (2015). Enhancing Music Teachers' Continuous Professional Development in the Field of Inquiry-Based Music Instruction. Google Scholar.
- Zhiao, P. (2017). Teaching Music through Inquiry. Google Scholar.