Journal of Humanities, Music and Dance

ISSN: 2799-1180

Vol: 03, No. 01, Dec 2022 – Jan 2023

http://journal.hmjournals.com/index.php/JHMD **DOI:** https://doi.org/10.55529/jhmd.31.1.12



Advantages Children May Gain from Participating in Creative Dance Lessons While Attending a Public Elementary School

Merrenisa E. Balato¹, Mary Leigh Ann C. Perez², Glinore S. Morales³, Almighty C. Tabuena^{4*}

^{1,2,3,4*}Philippine Normal University, Manila, Philippines

Corresponding Email: 4*tabuena.ac@pnu.edu.ph

Received: 05 September 2022 Accepted: 25 November 2022 Published: 30 December 2022

Abstract: Instead of being seen as an essential component of the core curriculum, creative dance is often considered to be within the purview of the physical education department. In order to determine whether or not creative dance can be categorized as experiential learning for children aged 5 to 12 who are engaged in standard state education, the primary objective of this study is to conduct a literature review on the benefits of creative dance for this population. This will allow the researchers to determine whether or not creative dance can be categorized as experiential learning. The literature study included key phrases from a number of different databases, and it arrived at possible advantages that may be articulated within the context of experiential learning. The research indicates that creative dance has positive effects on socioemotional, arts-based, transferrable, physical, embodied, and cognitive learning. Considering creative dance to be a kind of hands-on education may lend credence to the idea that it should have a more prominent place in the instructional framework. Through a study of the relevant material, this essay reinterprets the function that creative dance plays in the educational development of young children. If the advantages of creative dance as well as its method were recast as experiential learning, then maybe it would have a more prominent position in the curriculum.

Keywords: Creative Dance, Elementary School, Experiential Learning, Social-Emotional Learning, Students.

1. INTRODUCTION

Since ancient times, people have gotten together to engage in the activity of dance for a variety of reasons, including as a kind of ritual, in social and religious contexts, during romance, in shamanic, for fertility, war, hunting, and during rites of passage. It has the ability to evoke, moderate, and communicate feelings. When we speak about the art form known as dance, we are referring to the process through which relationships, feelings, thoughts, and ideas are physically manifested via movement and rhythm. Thinking in terms of the arts moves us from

Vol: 03, No. 01, Dec 2022 – Jan 2023

http://journal.hmjournals.com/index.php/JHMD **DOI:** https://doi.org/10.55529/jhmd.31.1.12



knowledge that is placed to knowledge that is experiencing. The dualism notions of mind and body are reflected in the present educational trend of placing greater focus on learning via sedentary activities. Creative dance is more than just a kind of exercise that focuses on the body; rather, it integrates the body and the intellect in an educationally comprehensive way. The purpose of this study is to establish fresh vocabularies on the nature of the relationship between experience and education via a reexamination of current assumptions in the theory and practice of experiential learning. After presenting an overview of dance's role in the classroom and completing a literature analysis on the benefits of dance, the authors provide their thoughts on how creative dance for primary school students may be recast as experiential learning when considering the benefits of dance for education.

The Value of Dance to the Learning Process

There is a "hidden curriculum" (Costas, 2018) that emphasizes some topics above others, and it is mandated that they be taught as part of the national curriculum in elementary schools. In contrast to the more central subjects of Mathematics, English, and Science, which dominate the elementary school curriculum, physical education (PE) continues to be a foundational subject throughout the elementary and secondary school years (Key Stages 1, 2, 3, and 4). Dance is one of the six subfields of physical education (PE), which also includes athletics, games, swimming, gymnastics, and outdoor adventure. There is no mention of how much time should be devoted to this or other forms of physical education. Two hours per week is the bare minimum proposed by Garcia-Hermoso et al. (2020). By contrast, during the formative years, when a child is laying the groundwork for a lifetime of learning, physical development is on pace with academic progress in subjects like arithmetic and language.

There is a political push to boost proficiency in the conventional courses (the NC 2013, which is 223 pages long, devotes 181 of those pages to English, mathematics, and science, leaving just 43 for the other nine disciplines). Even if dance were separated from physical education and taught alongside visual art, music, and theater, its status would not likely improve due to the current design of the national curriculum. This poor standing may be attributed in part to the widespread belief that intelligence is tied to the ability to think logically and solve problems using math and science, both of which are given a lot more weight in traditional educational settings. On the other hand, dance movement patterns seem to be learned and kept by young children as rapidly as language, and they are often accompanied by a feeling of joy. Movement is something youngsters appreciate much, as proven by the fact that Costas (2018) discovered that 38.3% of 236 primary school-aged children questioned in their sixth-grade "liked it" when asked about dancing. The transforming power of dance education pedagogies on children's creative learning and identity development is shown empirically by Lin and Chen (2020) and Hanna (2008). (Wilkinson, 2020). Anttila and Svendler Nielsen (2019) argue that dance should be taught in schools as a nonverbal language for visualizing and learning based on their examination of the literature. By analyzing selected academic literature on the subject, we make the case that dancing may be considered a sort of experiential learning and, as such, should be given more attention in education.

2. METHOD

The conventional wisdom is that dancing may serve as a tool for teaching things like physical competence, interest, and performance. Through the use of the terms "creative dance for

Vol: 03, No. 01, Dec 2022 – Jan 2023

http://journal.hmjournals.com/index.php/JHMD **DOI:** https://doi.org/10.55529/jhmd.31.1.12



children," "benefits of creative dance," "dance in schools/education," "experiential learning," "experiential learning and dance," and "creative dance and embodied learning,". The advantages of creative dancing for children's learning are discussed in this article. A literature review was conducted using the databases Education Research Complete and Google Scholar to determine whether creative dance may be considered experiential learning, with the inclusion criterion of evidence for employing creative dance with primary school pupils and any benefits. The first author read and analyzed each publication to acquire a sense for the field as a whole, and then he or she sorted them into groups based on their demographic, context, goal, sample, methods, analysis, and findings. Articles (N = 80) were classified based on their benefits. That's inductive category formation. Some of the papers (N= 28) were thrown out because they focused on the wrong audience, were too traditional/technical in their approach, or included unnecessary information.

The findings suggest that dance education has been pushed to the sidelines of the K–12 curriculum due to a lack of dedicated study and assessment. More research is needed to prove the value of artistic dance as a major teaching strategy in elementary schools. There were some positive outcomes discovered, too, including improved social and emotional learning, enhanced arts-based and creative thinking skills, and enhanced transferable, embodied, cognitive abilities. The advantages are explained in further depth with regard to experience learning below.

Learning Through Experience and Performing Creative Dance

This is a new way of thinking about how and why it may be done, thus further study is needed to determine how creative dance could be taught in elementary schools, where experiential learning is regarded as a pedagogical tool and is crucial to the curriculum. This is distinct from the practice of attempting to address standardized test criteria. The potential gains might provide us fresh language to argue for creative dance's central place in education. The concept of experiential learning refers to the process through which knowledge is created by transforming experience (Morris, 2020). Students may build in-depth knowledge and skills via the four stages of the experiential learning cycle: firsthand experience, introspective observation, theoretical abstraction, and practical application (Morris, 2020). Imaginative dancing contains all the elements of reflective learning, including personal experience, cognitive variables, feelings, emotions, meanings, and interpretations from many angles (Watts, 2019).

The human potential movement is where the idea of learning by experience first took hold. As a form of creative expression and education, dance has the potential to foster empathy and personal growth. Embodied learning is subjective in that it promotes agency and includes the involvement of feeling and emotion. Learning in its social context is reexamined, and all experiences are seen as valuable regardless of their use in gaining an abstract knowledge of oneself. Kolb's (1984, cited in Morris, 2020) experiential learning method is predicated on the idea that humans learn best by direct, bodily experience of the world around us, wherein feeling, perception, and cognition play key roles in somatic interaction with the environment. Chiu (2019) argued that Kolb's (1984) theory of learning phases is oversimplified since multiple of them may occur simultaneously. This is only one example of the criticisms leveled against Kolb's theory (cited in Morris, 2020). The hypothesis is incorrect because it overstates the efficacy of the four learning styles and ignores cultural variations outside of the West. Dance as a teaching tool incorporates all of these components, as well as the creative process

Vol: 03, No. 01, Dec 2022 – Jan 2023

http://journal.hmjournals.com/index.php/JHMD **DOI:** https://doi.org/10.55529/jhmd.31.1.12



of moving, reflection on one's own or other people's movements, evaluation of those motions, and creation of new, shared meanings regarding movement and the creative process. After that, you may evaluate how well the concept or emotion was conveyed by actively experimenting with those creative motions again. Rather than focusing on memorizing facts or ideas, participants in these exercises might establish attitudes about the topic at hand, which can then be used in a variety of contexts (such as in collaborative creativity). Self-directed, critically reflective, and autonomously maintained learning is possible. As the adage goes, "Action completes the learning cycle and re-establishes the connection between the brain's processing and the outside world. There, it causes effects that give rise to new experiences, which in turn restart the cycle (Zull, 2011, cited in Li 2018). To put Zull's theory into practice, one must go from the sensory cortex to the adjacent motor cortex, and then employ the reflective/thinking cortex to effect change.

This study of some relevant literature aims to offer light on these important philosophical concerns by exploring how creative somatic practices (creative dance) may be seen as a sort of experiential learning, building on an unfinished effort by Kolb (1984, cited in Morris, 2020). As Kolb claimed, learning takes place when a person (or a community) creates knowledge via experiencing transformation, which inevitably includes the body and movement as we engage with people and our surroundings. Incorporating embodiment into the curriculum via implicit strategies like experiential learning has the potential to reward embodied activities without comparing children's bodies in the same way that competitive sports do (Morris, 2020). The body and the intellect work together in a "repertoire of learning instruments" that is a part of the experiential learning method. So, the physical world provides context for and facilitates learning via experience. According to grounded theory of cognition, people here have an allencompassing, context-aware experience (Barsalou, 2020). By providing similar memory signals, partial or complete recreation of a learning event improves recall (visual, tactile, kinesthetic).

In arts-based education, students go from "experiential learning to aesthetic knowledge" (p. 34) as they form new connections between the art item or activity and their social relationships (p. 25). As a kind of experiential learning, the process of making dance involves a two-way exchange of information between the body and the mind, resulting in a wide range of possible types of knowledge. Voice, gesture, and movement all contribute to "the body's ability to convey social practices and cultural meanings" (Barker et al., 2020) in addition, dancing offers non-native, embodied strategies for conceptualizing, interpreting, and communicating information.

The human body is both objective and subjective, serving as both a means of transportation and an item with which to adorn and exercise (Demiroz, 2019; Payne & Costas, 2021). The way we walk, talk, and stand is a window into our inner lives of feeling, sensing, intuition, impulse, instinct, cognition, and fantasy. Our body allow us to read and respond to the emotions and movements of others around us. Learning via direct experience places a premium on the importance of one's own personal story from a psychological and intellectual standpoint (Roberts, 2018). A person's inner world may be explored and communicated via their physical embodiment (imaginative dance, movement play, improvisation) (Payne & Costas, 2021). Since the whole person is immersed in the dance action, then pauses to evaluate how they felt while dancing, employing the principles of experiential learning in creative dance may work without the use of the body and the senses (embodied ways of knowing). After that, real experiments are conducted.

Vol: 03, No. 01, Dec 2022 – Jan 2023

http://journal.hmjournals.com/index.php/JHMD **DOI:** https://doi.org/10.55529/jhmd.31.1.12



That's in contrast to the standard line of thinking in Western education, which often separates knowledge from students' actual bodies and their own personal experiences. Aspects of 17th-century Cartesian philosophy are reflected in the idea that learning is a purely mental process that takes place in isolated regions of the brain. The senses—both physical and mental—are crucial to having an authentic human experience. Lin and Chen (2020) stated that the genesis of concepts may be traced back to the individual senses and the interplay between them. Phenomenological philosophy gives birth to the concept of embodied learning by situating students inside their own internal and exterior lived experiences. The body functions as a mediator, shaping and influencing our actions and the manner in which we interact with one another, objects, and institutions. This visceral awareness is more than what can be taught by touch or movement.

Even after language has advanced, preverbal expressiveness persists. Literacy is the process of putting into words what may be expressed via body language and facial expressions. Teaching oneself to communicate and comprehend others requires the development of linguistic and motor skills (Anttila & Svendler Nielsen, 2019). An integrated model of learning and movement connects the field of movement studies with that of experiential education, lending credence to the idea that what one learns via dancing may be seen as education. In this context, we might define experiential learning as the process of developing new understanding via reflection on past action. The following is a brief summary of some of the potential advantages experiential learning via creative dance might bring to the elementary school curriculum.

Learning of social and emotional skills via dance

In addition to the above-mentioned concerns, educational institutions also aim to foster students' emotional intelligence and capacity for effective communication. Even today, schooling focuses almost exclusively on teaching facts and techniques, rather than soft skills like empathy, compassion, or the ability to "draw from other parts of the brain." A network of neurons is "orchestrated as individuals relate to one other," providing a neurological foundation for what we call the "social brain." In order to cope with difficult situations or intense strain, it's important to have strong social and emotional abilities. Children who participate in dance as part of a curriculum that focuses on academics may benefit from enhanced self-awareness and confidence in social situations, as well as improved communication and collaboration abilities. Improving interoceptive accuracy is crucial for emotional regulation, and paying more attention to the body is one way to do just that. Furthermore, physical exercise promotes emotional/mental health (Biddle et al., 2019)—mental health is becoming an important problem in many educational institutions.

The emotional interaction of the body with others was studied by Ubago-Jiménez et al. (2019), and they discovered that dancing seems to be involved. Research on the use of dance as a tool for fostering students' social and emotional development has shown promising results. Collaboration in the creation of dances is a great way for people to build nonverbal bonds with one another. Children may learn to express their thoughts and emotions via the immediate, concrete, physical vehicle of bodily movement by engaging in this kind of social encounter, engagement, and cooperation.

Children who learn to regulate their emotions symbolically via dance are more likely to develop the skills necessary to form and maintain healthy, long-lasting relationships (emotional literacy, or the ability to effectively express and comprehend one's own and other people's emotions). Because of the positive effects it may have on a child's mental health, creative dance is

Vol: 03, No. 01, Dec 2022 – Jan 2023

http://journal.hmjournals.com/index.php/JHMD **DOI:** https://doi.org/10.55529/jhmd.31.1.12



becoming more popular as a means of self-expression for kids. It's a healthy way to release pent-up energy while learning to appreciate and understand oneself and others in a secure, controlled environment. Experiential learning, which places a premium on children's dialogue and collaboration, also encourages this kind of peer-to-peer engagement.

Learning Through the Arts through the Form of Dance

Even though dance belongs to the realm of the performing arts, it is often employed as a teaching tool, especially for younger students. Yet, they may learn something from the practice of showing off their group dancing moves to one another informally. The chance to learn how to arrange expressive movement such that it is intentionally organized and executed with awareness for its own purpose is really one of a kind. There are many distinct kinds of intelligence in humans, and according to Howard Gardner (2006 referenced in Cavas & Cavas, 2020), who proposed the hypothesis of multiple intelligence, arts education might play a major role in developing all of them. The arts facilitate more effective communication because they allow people to express themselves beyond the bounds of spoken language, both in the creative process and in the final output. Learning about the arts is a great way to broaden one's perspective and comprehension of the world. The symbolic and metaphorical functions inherent in human beings are bolstered by dance, which may help counteract any detrimental effects on one's sense of body image. Children's confidence was boosted via creative dancing more so than through more conventional methods of education. Participation in activities that allow one to physically and artistically express oneself has been linked to improved psychological, emotional, and social health.

The act of making dances has educational ramifications. Experiential learning is said to increase abstract thinking, conceptualization, meaning-making, reflection, critical thinking, and transferable components when the final product is finished and evaluated. Divergent/creative thinking/problem-solving abilities (Robinson, 2001); the generation of new ideas (Maksymchuk et al., 2018); and a host of other personal qualities are all bolstered by engaging in creative dance. These have the potential to be gratifying, providing a foundation upon which to develop self-esteem, expertise, and, possibly, a lifetime competitive advantage via inventiveness.

Creativity isn't only something that happens in people's heads; it also spreads and becomes ingrained in communities where people feel safe trying new things. Creativity may be defined as the capacity to utilize or produce something unique, to identify ideas, alternatives, or possibilities that may be helpful in problem-solving, interacting with others, and/or amusing oneself and others. Embodied refers to the fact that creative dance blurs the lines between the mind and the body, the body and the environment, and the mind and other minds. As one's surroundings, items, gravity, other people's bodies and minds, one's own body's disposition, and one's own thoughts all interact, one's mind is prompted to form a concept. A dancer's body is an extension of their mind. In addition to increasing one's own awareness, creativity in the form of expressive movement is said by Kahneman (2011) to have a bearing on one's behavior, outlook, and emotions. That's why you may think of the creative dance process as a sort of experiential learning, where several elements of the learning cycle—action, engagement, experimentation, abstraction, and reflection—converge in an atmosphere conducive to generating novel and original insights.

Vol: 03, No. 01, Dec 2022 – Jan 2023

http://journal.hmjournals.com/index.php/JHMD **DOI:** https://doi.org/10.55529/jhmd.31.1.12



Learning That Can Be Applied Through Dance

According to Hu et al. (2021), the use of real-world scenarios as a teaching tool improved students' capacity for introspection, collaboration, and knowledge retention. They argued that unlike with traditional teaching methods, experiential education promoted the kind of in-depth understanding and long-term retention that is essential for successful transfer. The role that Kolb's iterative experiential learning approach played in fostering employable skills and character traits during a geography fieldwork assignment. Structured inquiry via improvised movement, contemplation, collaborative learning in the creation of group dances with cognitive recall; these are all things that may be facilitated through dance, making it a perfect medium for transferrable learning (of the choreography).

The concept of "transfer effects," or how learning in one area might facilitate learning in another, has been investigated in dance research. Dancing is an excellent way to boost your brain capacity and memory function because of the way it molds your body and mind. Dancing has been found to have positive effects on students' ability to think critically, as well as their classroom conduct and grades (Demiroz, 2019; Daum et al., 2021). Physical exercise was shown to have beneficial effects on many cognitive processes, including memory and focus. According to the study, dancing was shown to increase educational attainment more broadly, whereas creativity was found to improve test scores. Improvisation treatments were shown to promote both diverse thinking and creative output, while research by Jusslin and Höglund (2021) found that dancing also boosted inventiveness. By encouraging children to participate in meaning-making via "semiotic activities" (McPherson, 2018), or the investigation of novel, difficult information and ideas using their bodies as instruments, McPherson (2018) demonstrated how dancing might enhance curriculum learning, particularly in reading. As an example, because dance also has a beginning, middle, and end, it may aid children in visualizing stories, reinforcing narrative structure, and practicing text deconstruction. Dancing, like actual learning, may help you retain information longer and apply it elsewhere.

The relationship between dance, cognition and awareness

Those parts of the brain responsible for higher thought may be triggered by dancing expressively. Children learn to think in terms of physical reality when presented with dance movement challenges that need them to make decisions about how to move. Making anything move provides a mental bridge between a concept, a problem, or a goal and its eventual realization. This kind of physical understanding is crucial for a growing kid because it facilitates social interaction, language development, and emotional awareness. Children's somatic knowing may be adversely impacted by the fact that they spend less time engaging in traditionally beneficial activities like going outside, talking with classmates face-to-face, and making up their own games. Learning via the body's kinesthetic and sensory systems is at the heart of somatic knowledge, which has some similarities with experiential learning in which direct participation in activities is a key to comprehension. It is argued that students need direction when applying material, rather than exposition of content, and hence experiential learning frameworks place an emphasis on providing students with opportunity to practice such application via methods like problem-based learning. Expression via dance provides avenues for putting learned movement skills to use, under the watchful eye of an instructor.

The purpose of neuro-education is to enhance learning by altering the functioning of the brain in relation to a variety of distinct perceptual, cognitive, emotional, and kinesthetic capacities. Based on the idea that neurons may be reshaped and rearranged, Zull (2020) postulated a cycle

Vol: 03, No. 01, Dec 2022 – Jan 2023

http://journal.hmjournals.com/index.php/JHMD **DOI:** https://doi.org/10.55529/jhmd.31.1.12



of learning. Kolb's model (1984, quoted in Morris, 2020) served as the foundation for this cycle. Providing a trusting environment, moderate sympathetic arousal, activation of feeling, emotion, and cognition, embodied self-reflection activities, and the co-construction of narratives that reflect a positive self are all features of experiential learning through creative dance that contribute to its efficacy (Farber & Penney, 2020).

Learning Through the Actions and Movements of Dance

Dance is a physical discipline that involves practice, repetition, physical effort, and patience in order to perfect the product. Dance is not just an art form, a means of creativity and selfexpression. One kind of movement is dance. Dance may be used to build endurance, a sense of one's physical self (particularly in relation to item handling), and improved motor skills (Millman et al., 2021). Children get an appreciation for their bodies, an understanding of how their bodies function, the ability to exert control over it, and a better understanding of the significance of maintaining a physically active and healthy lifestyle all through the singular experience that is creative dance. Coordination may be improved via dance (Ljubojevic et al., 2020), and spatial memory and awareness can be improved through gesture (Miller et al., 2020). Dancing engages every muscle in the body, making it an excellent form of exercise that also provides opportunity to broaden one's range of movement possibilities and talents. To guarantee that kids get to try out motions that aren't their favorites, it's important to provide them plenty of different options within a variety of movement attempts and spatial aspects. This assures that youngsters will use a wide variety of muscles, break out of routines, and develop more cognitive and emotional adaptability. Many people think of experiential learning in the context of outdoor education, which often involves activities that require participants to exert themselves physically. When thinking about dancing as a kind of experiential learning, due to the physicality and concreteness of the effort needed, this makes perfect sense.

Dance as an Embodied Learning Tool

Learning may be accomplished via dance in an interactive and kinesthetic manner. Children in preschool gain knowledge through actively participating in activities such as physical play and engaging in sensory encounters. Kinesthetic learning is commonly referred to as "embodied learning," which engages the whole body in action and, more recently, is based on embodied cognition ideas, as it is interpreted by Gardner (Cavas & Cavas, 2020) and other cognitive theorists. Involving the whole body in activity, kinesthetic learning is sometimes referred to as "embodied learning" and is more recently based on embodied cognition ideas. This is related to experiential education, which places an emphasis on active learning as its primary component.

Children who participated in dance activities showed improvements in their kinesthetic sense, which is an essential component of the learning process. As a result, they were able to comprehend and recall more material, which helped them achieve greater academic success. Input from the senses is the first step in the learning process, followed by repeated effort and emotional investment (Zull, 2020). Sensation is the root of all of our mental processes, including emotions, interpretations, actions, and responses. When one participates in the tangible, physical experience of dance, they open themselves up to the possibility of learning via their body experiences. Reflection on an event may help abstract ideas create hypotheses about the world, which can then be tested in the concrete, everyday reality in which people really live. There is a connection between constructivist models and enactive, embodied

Vol: 03, No. 01, Dec 2022 – Jan 2023

http://journal.hmjournals.com/index.php/JHMD **DOI:** https://doi.org/10.55529/jhmd.31.1.12



learning, which also includes embodied teaching and learning. In the past, it was used to refer to novel approaches in science and education. Learning that is embodied takes into account not just the human body but also the intellect, the senses, and the brain. When kids are allowed to freely express themselves via dance, it opens up new avenues for them to generate meaning. In this perspective, the human body consists of the human bodily experience and the psychological fallout of that experience, and the unconscious parts of the human corporeal experience serve as the basis for all other forms of human activity, including thought and language. Lambert (2020) argues that emotional investment, sensorimotor activity, and topicrelevant gestures constitute the bedrock of embodied learning. Learning with one's body, or embodied learning, is a method through which visual data may be embedded more securely in long-term memory and thought processes. When people dance, they are certain to be using not just their muscles, but also their minds and emotions in this way (Abrahamson et al., 2020). Embodied learning is connected to experiential learning, and the active, physical experience of learning that may be achieved by creative dance can be considered as an aspect of embodied learning. Both emphasize the importance of the active, sensory, and physical experience as the primary focus.

3. CONCLUSION

Payne (2021) offers a variety of innovative dance exercises as points of departure that may be customized and expanded upon by instructors to meet a variety of educational objectives. However, in order for instructors to have self-assurance, they need to be educated in creative dance and movement, or professionals in the field (Sullivan & Bers, 2018). Before beginning to teach, it is essential for future educators to have their own personal experience with and comprehension of this kind of learning. They need to be able to think critically about the material while also being able to communicate it to children in a way that is engaging and effective. In addition to this, they have to be able to think clearly when they are in motion. It would seem, on the basis of this brief examination of the relevant research, that children's scholastic development may stand to profit from participation in creative dance. Additionally, when creative dance is seen as an experienced kind of education, it may have a case for taking a more prominent role in the educational curriculum of traditional schools. This is especially the case when creative dance is performed by children. There is a wide range of learning modes and topic areas, and it is feasible for them to complement one another. A more holistic approach, with the primary emphasis placed on the whole growth of the student, need to be used in educational settings. In order for our schools to improve students' physical, socioemotional, artistic, transferable, scognitive, and embodied learning, as well as increase students' emotional health and well-being, we need to apply treatments and methodologies that make use of alternate ways of knowing.

4. REFERENCES

1. Abrahamson, D., Nathan, M. J., Williams-Pierce, C., Walkington, C., Ottmar, E. R., Soto, H., & Alibali, M. W. (2020, August). The future of embodied design for mathematics teaching and learning. In Frontiers in Education (Vol. 5, p. 147). Frontiers Media SA. https://doi.org/10.3389/feduc.2020.00147

Vol: 03, No. 01, Dec 2022 – Jan 2023

http://journal.hmjournals.com/index.php/JHMD **DOI:** https://doi.org/10.55529/jhmd.31.1.12



- 2. Anttila, E., & Svendler Nielsen, C. (2019). Dance and the quality of life at schools: A Nordic affiliation. In Dance and the quality of life (pp. 327-345). Springer, Cham. https://doi.org/10.1007/978-3-319-95699-2_19
- 3. Barker, D., Nyberg, G., & Larsson, H. (2020). Exploring movement learning in physical education using a threshold approach. Journal of teaching in physical education, 39(3), 415-423. https://doi.org/10.1123/jtpe.2019-0130
- 4. Barsalou, L. W. (2020). Challenges and opportunities for grounding cognition. Journal of Cognition, 3(1). https://doi.org/10.5334%2Fjoc.116
- 5. Biddle, S. J., Ciaccioni, S., Thomas, G., & Vergeer, I. (2019). Physical activity and mental health in children and adolescents: An updated review of reviews and an analysis of causality. Psychology of Sport and Exercise, 42, 146-155. https://doi.org/10.1016/j.psychsport.2018.08.011
- 6. Cavas, B., & Cavas, P. (2020). Multiple Intelligences Theory—Howard Gardner. In Science education in theory and practice (pp. 405-418). Springer, Cham. https://doi.org/10.1007/978-3-030-43620-9_27
- 7. Chiu, S. K. (2019). Innovative experiential learning experience: Pedagogical adopting Kolb's learning cycle at higher education in Hong Kong. Cogent Education, 6(1), 1644720. https://doi.org/10.1080/2331186X.2019.1644720
- 8. Costas, B. (2018). Rethinking the National Curriculum: The voices of children aged 10-11 years: Their views on physical education and the implications for practice in England. Physical Education Matters. http://hdl.handle.net/2299/20863
- 9. Daum, D. N., Goad, T., Killian, C. M., & Schoenfeld, A. (2021). How do we do this? Distance learning in physical education—Part 1. Journal of Physical Education, Recreation & Dance, 92(4), 5-10. https://doi.org/10.1080/07303084.2021.1886836
- 10. Demiroz, E. (2019). Kinesthetic gaming, cognition, and learning: Implications for P-12 education. In Early Childhood Development: Concepts, Methodologies, Tools, and Applications (pp. 744-771). IGI Global. DOI: 10.4018/978-1-5225-7507-8.ch036
- 11. Farber, N., & Penney, P. (2020). Essential and neglected: Transforming classroom learning through relationship. Journal of Teaching in Social Work, 40(2), 95-113. https://doi.org/10.1080/08841233.2020.1726553
- 12. García-Hermoso, A., Alonso-Martínez, A. M., Ramírez-Vélez, R., Pérez-Sousa, M. Á., Ramírez-Campillo, R., & Izquierdo, M. (2020). Association of physical education with improvement of health-related physical fitness outcomes and fundamental motor skills among youths: a systematic review and meta-analysis. JAMA pediatrics, 174(6), e200223-e200223. doi:10.1001/jamapediatrics.2020.0223
- 13. Hu, Y., Gripon, V., & Pateux, S. (2021, September). Leveraging the feature distribution in transfer-based few-shot learning. In International Conference on Artificial Neural Networks (pp. 487-499). Springer, Cham. https://doi.org/10.1007/978-3-030-86340-1_39
- 14. Jusslin, S., & Höglund, H. (2021). Entanglements of dance/poetry: Creative dance in students' poetry reading and writing. Research in Dance Education, 22(3), 250-268. https://doi.org/10.1080/14647893.2020.1789088
- 15. Lambert, K. (2020). Re-conceptualizing embodied pedagogies in physical education by creating pre-text vignettes to trigger pleasure 'in'movement. Physical Education and Sport Pedagogy, 25(2), 154-173. https://doi.org/10.1080/17408989.2019.1700496

Copyright The Author(s) 2022. This is an Open Access Article distributed under the CC BY license. (http://creativecommons.org/licenses/by/4.0/) 10

Vol: 03, No. 01, Dec 2022 – Jan 2023

http://journal.hmjournals.com/index.php/JHMD **DOI:** https://doi.org/10.55529/jhmd.31.1.12



- 16. Li, F. (2018). Research method innovation of college students' ideological and political education based on cognitive neuroscience. NeuroQuantology, 16(5). DOI:10.14704/nq.2018.16.5.1269
- 17. Lin, P. H., & Chen, S. Y. (2020). Design and evaluation of a deep learning recommendation based augmented reality system for teaching programming and computational thinking. IEEE Access, 8, 45689-45699. doi: 10.1109/ACCESS.2020.2977679.
- 18. Ljubojevic, A., Popovic, B., Bijelic, S., & Jovanovic, S. (2020). Proprioceptive training in dance sport: effects of agility skills. Turkish Journal of Kinesiology, 6(3), 109-117. https://doi.org/10.31459/turkjkin.742359
- 19. Maksymchuk, I., Sitovskyi, A., Savchuk, I., Maksymchuk, B., Frytsiuk, V., Matviichuk, T., ... & Bilan, V. (2018). Developing pedagogical mastery of future physical education teachers in higher education institutions. Journal of Physical Education and Sport, 18(2), 810-815. DOI:10.7752/jpes.2018.02119
- 20. McPherson, K. (2018). Making video dance: a step-by-step guide to creating dance for the screen. Routledge. https://doi.org/10.4324/9781315452654
- 21. Miller, H. E., Andrews, C. A., & Simmering, V. R. (2020). Speech and gesture production provide unique insights into young children's spatial reasoning. Child development, 91(6), 1934-1952. https://doi.org/10.1111/cdev.13396
- 22. Millman, L. M., Terhune, D. B., Hunter, E. C., & Orgs, G. (2021). Towards a neurocognitive approach to dance movement therapy for mental health: A systematic review. Clinical Psychology & Psychotherapy, 28(1), 24-38. https://doi.org/10.1002/cpp.2490
- 23. Morris, T. H. (2020). Experiential learning—a systematic review and revision of Kolb's model. Interactive Learning Environments, 28(8), 1064-1077. https://doi.org/10.1080/10494820.2019.1570279
- 24. Payne, H., & Costas, B. (2021). Creative dance as experiential learning in state primary education: the potential benefits for children. Journal of Experiential Education, 44(3), 277-292. https://doi.org/10.1177/1053825920968587
- 25. Roberts, J. (2018). From the editor: The possibilities and limitations of experiential learning research in higher education. Journal of Experiential Education, 41(1), 3-7. https://doi.org/10.1177/1053825917751457
- 26. Rüth, M., & Kaspar, K. (2020). Exergames in formal school teaching: A pre-post longitudinal field study on the effects of a dance game on motor learning, physical enjoyment, and learning motivation. Entertainment Computing, 35, 100372. https://doi.org/10.1016/j.entcom.2020.100372
- 27. Sullivan, A., & Bers, M. U. (2018). Dancing robots: integrating art, music, and robotics in Singapore's early childhood centers. International Journal of Technology and Design Education, 28(2), 325-346. https://doi.org/10.1007/s10798-017-9397-0
- 28. Ubago-Jiménez, J. L., González-Valero, G., Puertas-Molero, P., & García-Martínez, I. (2019). Development of emotional intelligence through physical activity and sport practice. a systematic review. Behavioral Sciences, 9(4), 44. https://doi.org/10.3390/bs9040044
- 29. Watts, L. (2019). Reflective practice, reflexivity, and critical reflection in social work education in Australia. Australian Social Work, 72(1), 8-20. https://doi.org/10.1080/0312407X.2018.1521856

Copyright The Author(s) 2022. This is an Open Access Article distributed under the CC BY license. (http://creativecommons.org/licenses/by/4.0/)

Journal of Humanities, Music and Dance

ISSN: 2799-1180

Vol: 03, No. 01, Dec 2022 – Jan 2023

http://journal.hmjournals.com/index.php/JHMD **DOI:** https://doi.org/10.55529/jhmd.31.1.12



- 30. Wilkinson, A. M. (2020). Humanizing Creativity and the Development of Collegiate Dancers' Political Identities. Journal of Dance Education, 20(4), 177-188. https://doi.org/10.1080/15290824.2020.1722819
- 31. Zull, J. E. (2020). The art of changing the brain: Enriching the practice of teaching by exploring the biology of learning. Stylus Publishing, LLC. http://jimmytorresecuador.pbworks.com/w/file/fetch/64302662/The%2520Art%2520of %2520Changing%2520the%2520Brain.pdf