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Creative Dance as Experiential Learning in State Primary Education: The Potential Benefits for Children

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Abstract

Background: In the United Kingdom, creative dance is classified as part of physical education rather than an important core subject. **Purpose:** Taking the U.K. National Curriculum as an example, the article's primary aim is to examine literature exploring the benefits of creative dance, for children aged 3 to 11 years in mainstream state education, to evaluate whether creative dance can be categorized as experiential learning. **Methodology/Approach:** The literature review included key words in several databases and arrived at potential benefits which can be framed within experiential learning. **Findings/Conclusions**: The findings identify benefits of creative dance in socioemotional, arts-based, transferable, embodied, physical, and cognitive learning. Conceptualizing creative dance as experiential learning could support it filling a more central role in the curriculum. **Implications:** This article recontextualizes the role of creative dance in children's learning through reviewing related literature. Creative dance might play a more central role in the curriculum when the benefits and its process are framed as experiential learning.

Keywords

primary school, experiential learning, creative dance, children, benefits

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Dance has long been a communal activity, employed as ritual and in social/religious settings, during courtship, in shamanism, for fertility, war, hunting, and at rites of passage. It can stimulate, modify, and express emotions. Dance, as an art form, is the physical expression, through movement and rhythm, of relationships, feelings, thoughts, and ideas. Sutherland and Acord (2007) stated thinking in the arts takes us from situated knowing to experiential knowledge.

The current emphasis on sedentary learning in schools is symptomatic of dualistic conceptions of mind and body. Creative dance is more than exercise objectifying the body—it connects body with mind in a holistic process of learning. Seaman et al. (2017) called for research in experiential learning to revisit assumptions in current theory and practice, situate it in wider practical and scholarly traditions, and develop new vocabularies concerning the relationship between experience and learning. Following a summary of dance's role in U.K. schools and a literature review on the benefits of dance, we offer views on how creative dance for primary children may be framed as experiential learning when considering the learning benefits, with the aim of expanding the role of dance in education.

Dance in Education

In U.K. state primary schools, the National Curriculum (NC; Department of Education, 2013) must be taught as a statutory requirement with clear subject boundaries, viewed as a hidden curriculum (Costas, 2015) in which some subjects have greater importance. In the primary and secondary sectors (Key Stages 1, 2, 3, and 4), physical education (PE) remains a *foundation* as opposed to a *core* subject which is more important, that is, English, mathematics, and science, and dominates the primary school curriculum. PE has six areas of physical activity, of these dance sits alongside athletics, games, swimming, gymnastics, swimming, and outdoor adventure. The time to be given to these activities, or PE overall, is not stated, although the U.K. Association for Physical Education (2010) recommended a minimum of 2 hr per week. By comparison, physical development in the early years' foundation stage is on an equal footing with mathematical and language development and other areas of learning.

The U.K. political educational climate's emphasis is on increasing achievement in traditional *academic* skills (the NC 2013, is 223 pages, 181 are on English, maths, and science—only 43 for the remaining nine subjects). Even if dance were separated from PE as an arts subject alongside visual art, music, and drama, its status is unlikely to change because of the design of the U.K. national curriculum. This relatively low status is partly a consequence of the high standing of conventional academic subjects whereby intelligence is associated with cognition and verbal and mathematical/scientific reasoning. By contrast, movement patterns in dance appear to be learned and remembered as easily as language for children, often accompanied by a sense of enjoyment. Costas (2015) has shown children thoroughly enjoy movement and, for dance, found 38.3% of 236 Year 6 primary children interviewed "loved it." Empirical research from Eisner (2002), The

National Dance Teachers Association (2004), Hanna (2008), and Youth Dance England (2010) demonstrated the empowering capacity of dance education pedagogies to shift children's creative learning and personal journeys of becoming (Chappell et al., 2012). Hanna has drawn on extensive research to argue for dance in the curriculum to be framed as a nonverbal language for imaging and learning. In what follows, we review selected literature on dance and learning, arguing that dance can be considered a form of experiential learning, and thus should be given greater priority in education.

Method

The traditional view is that dance plays a role in education (Smith-Autard, 2002) such as teaching physical skills, engagement, or performance. This article reviews the literature demonstrating benefits of creative dance for children's learning more broadly, using the following keywords/phrases: "creative dance for children," "benefits of creative dance," "dance in schools/education," "experiential learning," "experiential learning and dance," and "creative dance and embodied learning." Education Research Complete, Google Scholar, and PsycINFO were searched with the inclusion criteria of evidence for employing creative dance for primary school children and any benefits with a view to exploring whether creative dance can be understood as experiential learning. The articles were read and analyzed by the first author using a traditional content analysis approach (Hsieh & Shannon, 2005) to obtain a sense of the whole (Tesch, 1990) and sorted into the following features: population, setting, purpose, sample, methods, analysis, and outcomes. Articles ($N = 107$) were grouped according to benefits (i.e., inductive category development—Mayring, 2000). Some articles ($N = 32$) were discarded due to the irrelevant population, traditional/technical genre of dance, or other redundant content.

From the analysis, it appears that insufficient research/evaluation of dance programs has marginalized dance education in the primary curriculum. Specifically, more evidence is required to demonstrate the worthiness of creative dance as more central for learning in U.K. primary education (Theocharidou et al., 2018). However, there were some benefits found: socioemotional and arts-based/creative learning; transferable, embodied, cognitive learning; and learning through physicality. These benefits are detailed later with reference to experiential learning.

Experiential Learning and Creative Dance

Exploring how creative dance can be framed within experiential learning according to the benefits is important because it is a relatively new way of conceptualizing how and why creative dance might be taught in primary schools, where the learners' experiences are central and valued as a pedagogical tool. This is different from seeking to address set-criteria to meet examination requirements. Proposed benefits may provide a new vocabulary for articulating the importance of creative dance playing a more fundamental part in the curriculum.

Experiential learning theory defines learning as "the process whereby knowledge is created through the transformation of experience" (Kolb, 1984, p. 41). Learners build deep understanding and expertise through the four steps of the experiential learning cycle: concrete experience, reflective observation, abstract conceptualization, and active experimentation (Kolb et al., 2002). Reflection in experiential learning includes personal experience, cognitive elements, feelings, emotions, meanings, and interpretations from different perspectives (Fook & Gardner, 2007)—all these are present in creative dance.

Experiential learning has its roots in the human potential movement. Creative dance could be viewed as a humanistic, self-expressive pedagogy. Its subjective nature, fostering agency, where affect and emotion play a role in learning-by-doing, is from the perspective of embodiment. Seaman et al. (2017) proposed revisiting the importance of the sociocultural context for learning (Sawyer, 2006) and the valuing of all experiences as embodied and situated as opposed to only utilized for abstract reflection aimed at self-understanding. Our body in movement is essentially how we experience the physical world—the basis for Kolb's (1984) experiential learning approach—where there is somatic interaction with the environment in which sensation, perception, and cognition play a significant part.

Kolb's theory (1984) is not without criticism, for example, Rogers (1996) and Forrest (2004) contended a set of learning stages is too simplistic and that several might occur at the same time. Jarvis (1987) and Tennant (1997) argued the theory was flawed because it does not account for global cultural differences, being largely a Western concept, and that claims made for the four learning styles were extravagant.

Dance engages the learner in a process of knowing through the transformation of the concrete experience of moving creatively, reflecting on their own or others' movements, evaluating them, and forming new shared meanings (Vygotsky, 1986) about movement and the creative process. Subsequently, reengaging in active experimentation with those creative movements provides opportunities to assess their accurate communication and representation of the idea or feeling. These activities can challenge previously held assumptions (such as collaborative creativity) developing dispositions rather than absorbing facts or theories in the subject. Learning can become self-motivated, critically reflective and sustained independently (Perkins, 2008). "Action closes the learning cycle and reconnects the processing inside the brain with the world. It generates consequences there that create new experiences that begin the cycle anew" (Zull, 2011, cited in Kolb, 2014, p. 142). Zull referred to changing the sensory experience into action that is, from the sensory cortex to the adjoining motor cortex, and, through the reflecting/thinking cortex, creating transformation.

Kolb (1984) tried to extend his model by the possibility for experiential learning to include somatic activities, but that unfinished effort resulted in several big philosophical questions, of which this review of some relevant literature seeks to illuminate by investigating how creative somatic activities (creative dance) may be understood as a form of experiential learning.

Kolb argued learning occurs when individuals (or groups) create knowledge through experiential transformation, which naturally involves the physical senses and movement, as we interact with others and environment/s. By embedding embodiment into the curriculum through implicit strategies, such as experiential learning (Kolb & Kolb, 2012), embodied practices can be valued without comparing children's bodies as in competitive sports.

Experiential learning incorporates a "repertoire of learning instruments" involving body and mind (Claxton, 2015, p. 240). Thus, the corporeal experience informs and enables experiential learning. Experience here is perceived holistically, mediated by internal and external contexts, as theorized in grounded cognition theory (Barsalou, 2008). Recall is facilitated by partial/total replication of a learning situation due to relevant memory cues (visual, tactile, kinesthetic).

Sutherland (2012) suggested that in arts-based learning, meaning is made through emerging associations between the art object/activity and human interactions: an experience of "embodied selves in the moment" (p. 34) transitioning from "experiential learning to aesthetic knowing" (p. 25). Knowledge from creating dance, viewed as experiential learning, can be constituted in phenomenological terms involving feeling, thought, imagination, sensation, sensitivity, corporal, and relational experiences in a bidirectional process between body, brain, and mind. The body "communicates social practices and cultural meanings through voice, gesture, and movement" (Cancienne & Snowbar, 2003, p. 244) and dance, as a codified expression of the body, provides alternative embodied ways of making meaning/thinking and expressing knowledge.

Our body is not only functional, instrumental in getting us from a to b or an object to dress or get fit, but also subjective and expressive (Barr & Lewin, 1994; Bassetti, 2014). Our inner world of emotions, sensation, intuition, impulse, instinct, thought, and imagination is reflected in how we move, gesture, and take postures. We recognize and resonate, or not, with others through our bodies—their moods as reflected in their posture/movement. Experiential learning emphasizes subjective experience is fundamental to both cognitive and emotional perspectives (Davis, 2011). The moving body as expressed through the subjective body (imaginative dance/movement play/improvisation) can realize and communicate thoughts, ideas (Bassetti, 2014), and feelings. When employing the concepts of experiential learning in creative dance, there is immersion of the whole being in the dance activity, followed by reflection and evaluation of that activity, although not always necessary for learning through the body and sensation (embodied ways of knowing). Thereafter, active experimentation takes place.

This contrasts with the dominant discourse in Western education (Moore, 2004) tending to view learning as mostly separate from physical and/or subjective experiences. When perceived as solely an intellectual activity, learning is in specific areas in the brain as a disembodied process, reflecting aspects of 17th-century Cartesian philosophy. Yet, experiencing the world is dependent on sensory perceptions of the body and the brain. Eisner (2002) argued concept formation begins with sensory experience and interactions among sensory modalities. Embodied learning arises from Merleau-Ponty's (1962) phenomenological philosophy in

which learners are viewed as within external and internal lived experience. The body mediates and shapes behavior and ways of relating with others, artifacts, and organizations (Kupers, 2008). This lived bodily knowing goes beyond tactile and kinesthetic learning styles.

Preverbal expression continues once language has developed. Literacy involves translating movement expression and communication into words. The learning of language and movement expression is crucial to communication and understanding (Hanna, 2008; Kirsh, 2010). Paterson et al.'s (2015) integrated model for learning and moving links movement studies with experiential learning—supportive of the argument for experiences gained through dance to be framed as experiential learning. Here, the concept of experiential learning is viewed as knowledge creation through the transformation of experience. An overview of the benefits creative dance might offer as experiential learning in the primary curriculum follows.

Dance and Socioemotional Learning

Notwithstanding the issues raised earlier, school is also concerned with the development of social, emotional, and communication skills. Still valid today, Goleman claimed the entire educational system is geared to developing cognitive skills, neglecting emotional competencies, empathy, or flexibility "drawn from other areas of the brain" (Goleman, 1995, p. 244). The social brain has a biological basis whereby a set of neuronal connections are "orchestrated as people relate to each other" (Goleman, 2006, p. 80). Socioemotional skills are vital when handling complex life events or excess pressure. Including dance in a cognitive-biased curriculum may support socioemotional and communication skills development equipping children with, for example, a sense of identity, increased self-confidence, self-awareness, relationship skills, empathy, creativity, and the capacity for decision-making. Heightening awareness of somatic cues through attention to the body can improve interoceptive accuracy, essential for emotional regulation (Füstös et al., 2012; Williams et al., 2015). In addition, physical activity supports emotional/mental health (Biddle & Asare, 2011)—mental health is now a key challenge in many schools (Quinn et al., 2007).

Bojner Horwitz et al. (2015) found dance activity seemed to be involved in the body's emotional interplay with others. Pereira and Marques-Pinto (2017) studied dance for socioemotional learning, showing it significantly improved pupils' self-management and relationship skills. Relationships develop nonverbally when collaborating in a creative endeavor in a group to make dances. By nurturing this social encounter, interaction, and co-operation, children can learn to communicate feelings and ideas through the immediate, concrete, tangible vehicle of body movement, rather than relying solely on words.

Dance can increase emotional literacy (the capacity to communicate emotions through words, read them in others, and recognize, understand, handle, and appropriately express emotions) by children learning to manage their emotions symbolically to increase their capacity to have positive, sustained relationships. Creative dance can

promote psychological health, well-being, and maturity because children enjoy expressing their emotions, imagination, and thoughts. It offers a structured, safe outlet for the physical expression of emotions while gaining awareness and appreciation of oneself and others. This peer-to-peer relating is also found in experiential learning where interaction between children is emphasized.

Dance as a Form of Arts-Based Learning

Although dance is one of the performing arts, a staged performance is less often the focus when employing creative dance as an educational tool for children's learning. Informally performing their group dances to each other (Laban, 1988), though, can be valuable. Organizing movement into an aesthetic experience, where expressive movement becomes consciously structured and performed with awareness for its own sake, is a unique learning opportunity. Gardner's (2006) theory of multiple intelligence (although with some weaknesses) examined different types of human intelligence, arguing the arts could be central to learning experiences. The arts transcend verbal language offering opportunities to articulate feelings through the artistic process and product, thereby increasing communication. Arts education improves knowledge and understanding about life. Dance supports metaphoric and symbolic functions, natural in humankind, and may improve negative body image and self-perception. Theodorakou and Zervas (2003) found creative dance fostered self-esteem in children compared with the traditional teaching method. Through engagement in expressing individuality physically and aesthetically, feelings of physical, emotional, and social well-being may be gained (Gilbert, 2015; Sanderson, 1988).

Creating dances has implications for experiential learning. Once the dance product has been completed, reflections and evaluations may follow, increasing abstract thought, conceptualization, meaning-making, reflection, critical thought, and transferable elements—all claimed to be outcomes from experiential learning.

Creative dance enhances divergent/creative thinking/problem-solving capacities (Keun & Hunt, 2007; Robinson, 2001), the invention of original ideas (Esquivel & Hodes, 2003), and brings a range of personal attributes (Steinberg, 2006). These can be rewarding, giving a sense of achievement and value for creativity building confidence, skills, and perhaps the innovative edge later in life.

Creativity is not only a mental process, it is shared and embedded through interactions with others in a positive climate for experimentation (Sawyer, 2000). Creativity can be defined as the use of imagination or original ideas to use/create something new, to generate new solutions or recognize ideas, alternatives, or possibilities that may be useful in solving problems, communicating with others, and/or entertaining ourselves and others. Creative dance is embodied, that is, there is no separation of mental processes from action, bodily expression, and interactions. Ideas appear from the interaction between environment, objects, gravity, others' bodies and minds, from the body's disposition and ideas in the mind. Indeed, dancers use their bodies as tools to think with (Kirsh, 2010; Todd, 1979). Kahneman (2011) claimed expressive movement not only enhances self-awareness but also generates new ideas influencing action, thought,

and feeling. The creative dance process could, therefore, be framed as experiential learning whereby action, interaction, experimentation, abstraction, and reflection meet in creativity to form learning outcomes.

Dance and Transferable Learning

Furman and Sibthorp (2013) claimed experiential learning enhanced reflective and cooperative learning and fostered learning transfer. They proposed, in contrast to didactic instruction, that experiential learning fostered a depth of learning and cognitive recall necessary for transfer.

Mellor (1991) showed how transferable skills and personal qualities were promoted through a geography fieldwork project based on Kolb's cyclical experiential learning model. Dance is an ideal conduit for transferable learning as it can provide opportunities for this cycle, that is, structured exploration through movement improvisation, reflection, cooperative learning in creating group dances with cognitive recall (of the choreography).

Studies in dance have explored transfer effects, that is, how learning in one area can improve learning in others (Keinänen et al., 2000). The body and movement shape the brain (Hanna, 2014) and the mind (Gallagher, 2004), and dance can enhance brain power and memory function (Hallberg, 2017). Studies on how dance impacts cognition (Barr & Lewin, 1994; Blakemore, 2003; Giguere, 2011; Todd, 1979), critical thinking (Weiyun, 2001), and classroom behavior (Sherborne, 1974; Strong et al., 2005) have shown important connections. For example, Strong et al. (2005) found evidence that physical activity had a positive influence on memory and concentration. Pickard and Maude (2014) pointed to dance increasing wider educational attainment, whereas Lucas et al. (2013) suggested creativity raises achievement increasing test results (Watkins, 2010).

Sowden et al. (2015) showed divergent thinking and creativity were enhanced following improvisation interventions, and Chappell (2007) demonstrated dance increased creativity. Adams (2016) showed how dance could develop curricular learning for children, especially in literacy due to engagement in meaning-making through "semiotic activities" (Adams, 2016, p. 32), that is, exploring new, challenging knowledge and concepts using their bodies as tools. For example, a dance enables visualization of a story, supports story structure, and encourages text deconstruction as it too has a beginning, middle, and end. The transferability of learning can be cultivated through dance, mirroring transfer from experiential learning.

Dance, Cognition, and Knowing

Ratey (2008) stated expressive dance can stimulate areas of the brain that increase cognition. When children are offered movement problems in dance, involving selecting movement choices, they learn to think in concrete, physical reality. Creating movement affords the cognitive link between idea, problem or intent, and outcome or solution. Such somatic knowledge (Green, 2002) is essential to the developing child as

it supports empathy, communication, the ability to read emotions in others. Nowadays, children spend less time playing outdoors (Natural England, 2016), interacting person-to-person with peers, or creating imaginary games due to time spent on screens, which may lead to reduced somatic knowing, negatively affecting cognitive development (Palmer, 2006). Somatic knowing is based on active learning from the body, its kinesthetic and sensory systems which can be related to experiential learning where active experience/experimentation leads to learning. Experiential learning frameworks emphasize opportunities to practice the application of content such as problem-based learning (Hmelo-Silver, 2004), arguing students need guidance when applying content, instead of exposition of content. Creative dance affords opportunities to apply movement content with teacher guidance.

Neuro-education aims to improve learning through changing the brain functioning related to specific perceptive, cognitive, emotional, and kinesthetic abilities (Martínez-Montes et al., 2016). Building on Kolb's (1984) model, Zull (2002) suggested a learning cycle based on neuroplasticity. To enhance neuroplasticity, learning requires safe, trusting relationships; moderate sympathetic arousal; activation of feeling, emotions, and cognitions; embodied self-reflection activities; the co-construction of narratives reflecting a positive self (Cozolino, 2013); and active learning—all available in experiential learning through creative dance.

Learning Through the Physicality of Dance

Dance is not only an art—a form of creativity and self-expression—it is also a physical discipline requiring practice, repetition, physical effort, and patience to perfect the product. Dance can develop endurance, a sense of the physical self (particularly in relation to object manipulation), and improved motor functioning (Blasing et al., 2019; Laban, 1988). Through the uniqueness of creative dance, children learn physically about being in the world, to understand and value their physical selves, how their body works, to control it, and the importance of being physically active and fit. Dance improves co-ordination (Franklin, 2004), and gesture improves spatial memory/awareness (Ehrlich et al., 2006; Gouteux et al., 2001). As dance utilizes the whole body, it is an exceptional form of exercise providing opportunities to widen movement possibilities and skills.

Offering children opportunities to move within a range of movement efforts and spatial elements ensures nonpreferred movements can be experienced, involving different muscle groups, modifying habitual patterns and improving flexibility in learning, thinking, and feeling. Experiential learning is often conceptualized within outdoor education where physical effort is required to participate in activities. This resonates with dance as experiential learning due to the concreteness of the physicality of effort.

Dance as Embodied Learning

Dance integrates active, kinesthetic learning with understanding. Preschool children learn through doing—playing physically and engaging with sensory experiences.

Kinesthetic learning, understood through Piaget (1964), Gardner (1983, 2006), and other cognitive theorists, is often referred to as "embodied learning" involving the whole body in action and, more recently, is based on embodied cognition theories (Lindgren & Johnson-Glenberg, 2013; Skulmowski & Rey, 2018). This connects with experiential education that employs active learning as central.

McMahon et al. (2003) found dance benefited the kinesthetic sense, an important ingredient for learning, enabling children to understand and remember more information to excel academically. Learning begins with sensory input requiring practice and emotional engagement to take root (Zull, 2002). Emotions, interpretations, actions, and reactions arise from sensation. Actively engaging in the physical, concrete experience of dancing gives opportunities to learn through the bodily experience. Reflection on the experience can enable abstract concepts to form theories about the world to be tested in the real, lived world. Enactive, embodied learning is related to constructivist models, including embodied teaching and learning, according to Lindgren and Johnson-Glenberg (2013), used to refer to new scientific and educational practices (Wilcox, 2009). Embodied learning not only includes the body itself but also the senses, mind, and brain. As the dancing body helps learners to express themselves naturally, it is a source of meaning production. On this view, the body is defined as the human corporeal experience and the subsequent psychological consequences, and that the unconscious aspects of corporeal experience constitute the basis of cognitive activity and linguistic expression (Núñez et al., 1999). Dixon and Senior (2011) claimed the primary characteristics of embodied learning are emotional involvement, sensorimotor activity, and gestures (Lozano & Tversky, 2006) as relevant to the theme to be reproduced. Dance ensures the emotional and sensorimotor systems and relevant body movements are involved in the process of embodied learning where perceived stimuli can transform into a more stable memory and cognitive representation (Abrahamson et al., 2012). The active, somatic experience of learning in creative dance can, therefore, be viewed as an aspect of embodied learning that, in turn, relates to experiential learning. In both, it is the active, sensory, somatic experience which is central.

Conclusion

Payne (2020) provides starting points for creative dance which can be adapted and developed by teachers for educational goals. However, to be confident, teachers need to be trained in, or specialists of, creative dance and movement (Cheung, 2010). It is vital teachers have their own experience of, and understand, this way or learning before embarking on teaching. They need to be able to think in movement, engage critically with the subject, and introduce it effectively to children.

Based on this modest review of literature, it appears creative dance has benefits to children's learning and, when framed as experiential learning, could make a claim to hold a more prominent place in the education curriculum of mainstream schools. Different ways of knowing and areas of learning can complement each other. Education should be holistic, attending to the whole child. Interventions and approaches employing other ways of knowing to support physical, socioemotional, artistic, transferable,

cognitive and embodied learning, as well as promoting emotional health and well-being in all our children, are required in schools.

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