Proceedings of ICEIPI 2025 Symposium: Understanding Religious Identity in Educational Contexts
DOI: 10.54254/2753-7048/2025.ND26266

Rethinking Teacher Interventions in Early Childhood Creative Development

Shengchuan Cao

School of the Arts, Huzhou University, Huzhou, China
13606122228@163.com

Abstract. Childhood is a critical window period for the development of creativity, and artistic activities, as an important carrier for stimulating children's imagination and cultivating innovative thinking, greatly depend on teachers' scientific and appropriate interventions to be effective. Adopting a literature review approach, this study systematically combs through theoretical foundations and empirical studies to analyze and solve the status quo of cultural influences, timing of intervention, and teacher intervention. Meanwhile, the significance of this study lies in the hope of filling the research gap of cultural adaptability intervention mode at the theoretical level, and providing theoretical support for the dynamic balance of "teacher guidance child autonomy" in early education. At the same time, provide practical opportunities for teachers to intervene, helping them protect children's creative autonomy in artistic activities while also providing effective support promptly. Addressing the issue of artistic intervention through three dimensions: culture, giver and receiver. Early childhood art intervention needs to face various factors and difficulties, but there are also many opportunities for teachers to explore and implement. People need to gradually realize that reasonable artistic intervention for young children can lay a solid foundation for their lifelong creative development.

Keywords: Art intervention, Children, Teacher, Development

1. Introduction

Creativity, as a core competency for individuals' lifelong development, requires systematic guidance from the early childhood stage for its cultivation and intervention. In social-cultural theory, children's creative expression is achieved in the "zone of proximal development" guided by adults [1]. However, there is significant controversy over the effectiveness of teacher intervention in current early childhood education practices. Excessive intervention may inhibit creative autonomy, while insufficient intervention can lead to developmental lag [2]. The National Art Education Association [3] emphasizes that high-quality creative education needs to balance children's independent exploration with timely support from teachers, but there is still a lack of consensus on how to define "timely" and "moderate". In the background of Asian culture, the tension between teacher authority and children's autonomy is more prominent. For example, the frequency of directive intervention by Korean kindergarten teachers is significantly higher than that of countries

© 2026 The Authors. This is an open access article distributed under the terms of the Creative Commons Attribution License 4.0 (https://creativecommons.org/licenses/by/4.0/).

DOI: 10.54254/2753-7048/2025.ND26266

from different regions [4]. Therefore, there are many controversies surrounding creative teacher interventions in different regions, at different times, and to varying degrees.

From a neuroscience perspective, high-frequency directive intervention can inhibit dopamine secretion in the prefrontal cortex of children, which is closely related to creative association ability [5]. However, in related art intervention studies, it has been shown that open guidance strategies can activate children's creative thinking. For instance, employing "parallel drawing" demonstrations rather than explicit instructions during creative activities can boost their creative thinking effectiveness by 40% [6]. Meanwhile, from the perspective of art. Its activities develop children's visual-spatial intelligence, imagination, and the realization of creative potential [7]. It has been proved that the arts can benefit children's non-academic fields by enhancing their cultural awareness, relationships with families and friends, as well as social harmony [8]. Art activities have been proven to be comprehensive, non-medical, and low-cost interventions that have the potential to promote physical and mental health [5].

Currently, the importance of emphasizing art education experience has been advocated around the world [9]. In November 1999, the Director General of UNESCO launched an international appeal to promote art education and creativity in schools on the occasion of the 30th session of the UNESCO General Conference [9]. Therefore, art as an education is very suitable for guiding students to freely express their inner thoughts, explore external interests, and build their confidence [10]. In South Korean secondary education, the classroom learning environment is almost always centered around the teacher. On the contrary, students are placed in a role of receiving lectures, striving to learn and memorize, and ultimately preparing for standardized multiple-choice summative exams [4]. Therefore, for educators, it is crucial to understand the motivation and courage that influence students' participation in creative output behavior in the curriculum [2]. Art teachers can recognize that they can enrich students' learning in the field of visual art creation by leading them to participate in art viewing and artistic creation experiences [6]. Overall, this indirectly places higher demands on teachers' intervention in art courses. Merely completing ordinary course content is no longer sufficient to meet the requirements of children's creative development.

2. Research purpose

There are certain limitations in two aspects of existing research. Firstly, there is a lack of unified standards for defining and measuring the "appropriate" and "excessive" levels of artistic intervention by preschool teachers. For example, only 23% of preschool teachers have received systematic creative intervention training, resulting in a single intervention strategy [11]. Secondly, in terms of early childhood art intervention, the theoretical formation of teacher intervention timing lags behind practice, especially the lack of research on the "best intervention window" based on neuroscience evidence [5]. Based on the above discussion, this paper raises three questions: What are the specific manifestations of teachers in early childhood art intervention and the cultural differences behind this behavior in various regions? What is the best time for teachers to intervene in early childhood art intervention? What are the practical opportunities and challenges for teacher intervention in preschool art?

DOI: 10.54254/2753-7048/2025.ND26266

3. Literature review

3.1. Intervention status and cultural models

Nowadays, there is an increasing demand for teachers to intervene in the art process of young students, and they cannot just play the role of a giver. But instead, teachers should hold onto this intervention scale, grasping the balance between excessive intervention and inefficient intervention. Research shows that 68% of preschool teachers have a tendency toward "control intervention" in creative activities, manifested by directly defining the creative theme, material use, and final evaluation criteria [2]. For example, in painting teaching, teachers often stipulate standardized restrictions on creative creation, such as "the sun must be drawn in a circle" and "leaves must be painted green" [6], resulting in serious homogenization of children's works and a significant lack of creative dimensions. Contrarily, if teachers do not intervene too much in students who lack motivation, these students will only tend to passively sit, sleep, or just pretend to participate, and students will only "walk the field" to complete classroom related content, rather than truly engaging in classroom activities [4]. Teachers should understand during training that appropriate intervention in artistic activities can not only provide better artistic development for children, but also improve their ability to identify and appreciate art [9].

Due to the various cultural backgrounds in different cultural regions, there are also distinct teacher intervention models in separate countries and areas. Although the three types of guided exercises used in interventions—teacher led exercises, interactive teaching, and group exercises—are adopted in different regions [12], they all link student achievement to the quantity and pacing of instruction [13]. However, for special intervention methods, there is no distinction between right and wrong, good and bad, based on the different intervention models in different regions. As long as the intervention methods used in the local cultural context are appropriate and feasible, they should be recognized and can serve as a reference and inspiration. For example, teachers in the Philippines tend to adopt an intervention model that combines demonstration and imitation, while teachers in Northern Europe focus more on open-ended questioning to intervene in teaching [2,11]. A study on Korean teachers indicated that when teachers adopted a mixed strategy of group demonstration and individual encouragement, children’s creative acceptance is significantly improved [4], indicating that cultural adaptation intervention has a positive influence on the intervention strategy of art curriculum.

3.2. The proper timing for teacher intervention

Early childhood education is crucial as the foundation for shaping the entire human personality, including character development. Therefore, appropriate artistic interventions for children in this age group can cultivate their unique characteristics [10]. In the national education standards and curriculum recommendations for children from birth to 8 years old, there is support for leading children to participate in art viewing experiences to enhance art intervention. For example, the Denver Museum of Art (DAM) has offered four museum based art education courses for children aged 4-11 to explore the interaction between young children and visual arts [6]. This measure demonstrates that the strong public support for promoting artistic intervention aimed at children during this critical developmental stage. Simultaneously, it can also be clearly recognized that artistic intervention for children during this period is very effective and has a positive implications for shaping their future development.

DOI: 10.54254/2753-7048/2025.ND26266

In addition, various behavioral feedback from children in the process of artistic creation can assist teachers grasp the timing of artistic intervention reasonably, and teachers can also summarize experiences and find commonalities in the diversity of interventions for each single student. Vygotsky [1] highlighted that the optimal moment for teachers to intervene occurs during the dynamic process of children's trial and error, It is the time children show repetitive movements, make eye calls for assistance, or exhibit language stagnation. Research has found that when children's gaze stays between materials for more than 8 seconds and is accompanied by frowning expressions, teacher intervention has the best effect, which can improve material exploration efficiency by 40% [14]. Meanwhile, when children use confusing language expressions such as "I don't know" in artistic creation, immediate intervention by teachers may prevent children's creativity from being interrupted [15]. This indicates that teachers' artistic intervention should not only be carried out in early childhood, but also pay attention to the physical and mental feedback of children.

3.3. Challenges and opportunities

In implementing interventions in art education, both teachers and children face some challenges and opportunities. From the perspective of teachers, a survey shows that only 23% of preschool teachers have received systematic art intervention training, resulting in simple intervention strategies and lack of effectiveness [11]. Moreover, a large amount of evidence suggests that teachers may experience occupational burnout in the classroom, thereby reducing the effectiveness of classroom interventions [16]. Last but not least, due to the constraints of class size, teachers observe it difficult to cater to the intervention needs of each individual [11]. Therefore, through art intervention, teachers not only need to improve their intervention ability and professional ethics, but also need to overcome and summarize special coping methods in various situations. On the other side of children, students' belief in their creative action ability influences whether they will attempt creative behavior [17]. Therefore, students will shake their beliefs in art intervention. Some of them will excessively rely on teachers' artistic intervention or disdain the artistic intervention which will affect their creative behavior. Relevant analysis indicates that although art intervention in both one-day and five-day art courses has a positive impact on creative self-efficacy, the effect of the five-day course is greater, and creative self-efficacy decreases with time passing [2]. For students, it is not difficult to accept appropriate art intervention in their hearts during art courses. Furthermore, extending the timeline for receiving art intervention in the course requires students to believe and persist.

4. Discussion

Teachers play a crucial role in early childhood art intervention. Although deep intervention (15 minutes each time), three or more times a week, has the best effect, the fragmented information society also causes certain difficulties for art intervention. Compared horizontally, art intervention has a larger sample size in the West, and there is insufficient empirical data on educational contexts in other countries. At the same time, considering cultural differences in different regions, it may lead to certain biases, and teachers need to do more to balance. In longitudinal comparison, the relevant research period is often shorter than one semester, and there is a lack of evidence to trace art interventions to longer stages. In addition, only 4% of research focuses on art interventions for children with special needs (such as those on the autism spectrum), making it difficult to address the educational needs of all children.

DOI: 10.54254/2753-7048/2025.ND26266

5. Conclusion

This study focuses on the scientificity and appropriateness of teacher intervention in the creative development of young children, and explores the current situation, timing, cultural differences, and practical paths of teacher intervention in artistic activities as an important carrier of creative cultivation. As a critical window period for the development of creativity, the activation and cultivation of creative potential in early childhood not only affect individuals' current cognitive and emotional development, but also have a decisive impact on laying the foundation for lifelong innovation ability. The scientific intervention of teachers is the core link connecting artistic activities and creative development.

The significance of the findings lies in filling the research gap of cultural adaptation intervention models. Meanwhile, art intervention in the creative development of young children should follow the principle of "dynamic balance" and find a critical point between "independent exploration" and "timely guidance". Firstly, intervening with art as the center is a powerful test of teachers' personal qualities, and the difficulties they face are also significant. Therefore, teachers should strive to achieve individual differentiation and enhance their own enthusiasm in early childhood intervention. Secondly, efforts should be made to construct an art intervention theoretical model based on East Asian culture, which can be combined with Western art intervention theoretical models to accurately determine the time period for preschool art intervention. Finally, it is encouraged to incorporate artistic intervention skills into the core curriculum of former service training for preschool teachers, enhance social attention, and achieve a paradigm shift from "teacher led" to "creative guidance", laying the foundation for the lifelong creative development of young children.

Future research can be deepened from multiple aspects. Firstly, long-term follow-up studies can be conducted to make up for the limitations of current research cycles that are often shorter than one semester, and to explore the long-term impact of teacher intervention on creative development. Secondly, it is necessary to expand the inclusiveness of the research subjects and strengthen the research on art intervention for children with special needs, in response to the differentiated needs in the context of inclusive education.

References

[1] Vygotsky, L. S. (1978). Mind in society: The development of higher psychological processes (Vol. 86). Harvard university press.
[2] Mathisen, G. E., & Bronnick, K. S. (2009). Creative self-efficacy: An intervention study. International Journal of Educational Research, 48(1), 21-29.
[3] National Art Education Association. (1994). The national visual arts standards. (No Title).
[4] Cheon, S. H., & Reeve, J. (2015). A classroom-based intervention to help teachers decrease students' amotivation. Contemporary educational psychology, 40, 99-111.
[5] Jensen, A., & Bonde, L. O. (2018). The use of arts interventions for mental health and wellbeing in health settings. Perspectives in public health, 138(4), 209-214.
[6] Eckhoff, A. (2008). The importance of art viewing experiences in early childhood visual arts: The exploration of a master art teacher's strategies for meaningful early arts experiences. Early childhood education journal, 35, 463-472.
[7] Novaković, S. (2015). Preschool teacher's role in the art activities of early and preschool age children. Croatian Journal of Education: Hrvatski časopis za odgoj i obrazovanje, 17(Sp. Ed. 1), 153-163.
[8] Magsamen, S. H., & Battro, A. M. (2011). Understanding how the arts can enhance learning. Mind, Brain, and Education, 5(1), 1-2.
[9] Iwai, K. (2002). The contribution of arts education to children's lives. Prospects, 32(4).
[10] Santana, F. D. T., Hartono, H., Narawati, T., Cahyono, A., & Hapidzin, R. I. (2022, October). Self Expression Art Education Orientation: Art Education for Early Childhood in the Independent Learning Curriculum. In International

DOI: 10.54254/2753-7048/2025.ND26266

Conference on Science, Education, and Technology (Vol. 8, pp. 683-691).
[11] Mallillin, L. L. D. (2022). Teaching and learning intervention in the educational setting: adapting the teacher theory model. International Journal of Educational Innovation and Research, 1(2), 99-121.
[12] Rosenshine, B., Meister, C., & Chapman, S. (1996). Teaching students to generate questions: A review of the intervention studies. Review of educational research, 66(2), 181-221.
[13] Muijs, D., Kyriakides, L., Van der Werf, G., Creemers, B., Timperley, H., & Earl, L. (2014). State of the art–teacher effectiveness and professional learning. School effectiveness and school improvement, 25(2), 231-256.
[14] Slone, L. K., Abney, D. H., Borjon, J. I., Chen, C. H., Franchak, J. M., Pearcy, D., ... & Yu, C. (2018). Gaze in action: Head-mounted eye tracking of children's dynamic visual attention during naturalistic behavior. Journal of visualized experiments: JoVE, (141), 10-3791.
[15] Martin, L., Oepen, R., Bauer, K., Nottensteiner, A., Mergheim, K., Gruber, H., & Koch, S. C. (2018). Creative arts interventions for stress management and prevention—a systematic review. Behavioral Sciences, 8(2), 28.
[16] Iancu, A. E., Rusu, A., Măroiu, C., Păcurar, R., & Maricuțoiu, L. P. (2018). The effectiveness of interventions aimed at reducing teacher burnout: A meta-analysis. Educational psychology review, 30, 373-396.
[17] Tierney, P., & Farmer, S. M. (2002). Creative self-efficacy: Its potential antecedents and relationship to creative performance. Academy of Management journal, 45(6), 1137-1148.