

Kinetic Drama and Hand Puppets as Didactic Tools for Child Development in Physical Education: An Expanded Analytical Approach.

Imen Ghalmi ⁽¹⁾, Nabil Nadjem ⁽²⁾, Meroua Behnas ⁽³⁾

^{1,3} Institute of Sciences and Techniques of Physical and Sports Activities, Mohamed Cherif Messaadia University, Souk Ahras- Algeria.

² Department of Educational Physical and Sports Activity- Institute of Sciences and Techniques of Physical and Sports Activities, Echahid Cheikh Larbi Tebessi University, Tebessa- Algeria.

¹i.ghalmi@univ-soukahrass.dz; ²nabil.nadjem@univ-tebessa.dz;

³m.behnas@univ-soukahrass.dz

ARTICLE INFORMATION

Original Research Paper

Received : 26/07/2025

Accepted : 10/10/2025

Published: 01/06 /2026

<https://doi.org/10.5281/zenodo.19517956>

Keywords:

Hand Puppets, Kinetic Drama, Physical Education, Educational Analysis, Symbolic Play, Holistic Development

Abstract

This study explores the use of hand puppets and kinetic drama as pedagogical tools in physical education, with the aim of fostering the development of children's motor, social, and emotional skills. Drawing on a review of existing literature, the research investigates the psychological and educational mechanisms underpinning these approaches and examines their application within primary school curricula. The theoretical framework includes principles from psychomotor psychology, symbolic learning theory, and interactive teaching methodologies. The findings underscore the significance of integrating these innovative tools into physical education programs to promote active and holistic learning experiences.

Corresponding author :

Imen Ghalmi

E-mail:

i.ghalmi@univ-soukahrass.dz

1. Introduction

In recent decades, educational methodologies have experienced a significant transformation, with a shift toward interactive teaching strategies that prioritize the active engagement of learners. These methodologies take into account the diverse learning styles as well as the psychological and motor characteristics of children. Consequently, physical education has evolved from being solely focused on physical activities to becoming a multidimensional discipline that integrates the physical with the emotional, movement with meaning, and skill with affective elements (Bailey et al., 2009; Kirk, 2010).

In contemporary educational research, there has been a growing emphasis on the utilization of tools that facilitate children's self-expression and promote safe, meaningful interactions with their environment. Notably, kinetic drama and hand puppets have emerged as prominent educational tools; these techniques extend beyond mere entertainment to serve as didactic instruments with significant symbolic and psychological implications (Wright et al., 2012; Østerlind, 2008). Such tools enable children to participate in role-playing, simulation, and reconstruction of reality through movement and imagination, thereby encouraging active learning and enhancing social and emotional development.

The incorporation of drama and puppetry into physical education enhances both the aesthetic and human aspects of teaching, fostering a balance between physical skills and psychological and social development objectives (Brown & Gillespie, 2016). When such tools are employed, physical education sessions transcend mere muscular training exercises and become comprehensive educational experiences that promote the holistic and integrative development of children (Ennis, 2017).

1. Method and Materials

2.1. Participants

The studies were selected based on strict criteria, including their recency (2000-2024), direct relevance to the research topic, and use of recognized evaluation tools.

2.2. Materials

The current study employed various teaching materials, including the EPPI-Centre methodology assessment scale as an analytical tool and a classification matrix for educational interventions. The findings were categorized across three primary dimensions: the motor dimension, which encompasses improvements in fine and gross motor skills; the emotional

dimension, involving the development of self-esteem and self-confidence; and the social dimension, which pertains to the enhancement of group interaction and communication skills.

2.3. Design and Procedure

This study employed an expanded qualitative analytical methodology, grounded in a comprehensive review of existing literature and prior research concerning the use of hand puppets and kinetic drama as educational tools within physical education. A dual theoretical framework was utilized, integrating principles from educational psychology alongside theories of motor and social development in children. The primary objective was to analyze the effectiveness of these tools in supporting multiple facets of holistic development. Methodologically, thematic analysis and content analysis were conducted to identify recurring educational and psychological patterns across the reviewed studies, with particular attention to the variables influenced by the integration of these tools in physical learning environments. Data sources consisted of peer-reviewed articles indexed in international databases such as Scopus, Web of Science, and ERIC, in addition to academic theses and official educational reports. The findings underwent rigorous critical evaluation, including the use of comparison tables and classification schemes to assess the impact of the tools. To ensure scientific validity and reliability, the analysis was independently reviewed by experts in physical education and educational psychology.

2. Theoretical Framework of the Study (Results)

2.1. Conceptual Analysis: From Symbolic Play to Conscious Motor Learning

Conceptual analysis functions as a fundamental step in establishing an understanding of the theoretical foundations of this research. It serves to elucidate key concepts and to contextualize them within the educational and didactic framework. The core concepts examined pertain to three primary dualities: play versus learning, representation versus movement, and imagination versus reality.

2.1.1. Symbolic Play as a Cognitive and Educational Tool:

Jean Piaget (2018) conceptualizes symbolic play as a more advanced stage in children's cognitive development, wherein children begin to utilize symbols to represent real-world concepts. This developmental process facilitates children's ability to comprehend and articulate reality in a flexible and secure manner. For instance, when a child feeds a cloth doll or engages

in conversation with it, the child is not merely engaging in play; rather, they are conducting an internal reenactment of social or emotional experiences.

Within this framework, hand puppets exemplify a more sophisticated form of symbolic play, providing children with an imaginative "medium" that mitigates psychological and social barriers. Puppetry thus creates a supportive environment for children to express emotions, enact social roles, and explore scenarios that may be challenging to confront directly.

3.1.2 Movement as a Means of Expression and Psychological Construction:

Kinetic drama refers to the utilization of the body and performative actions to convey ideas, scenes, or emotions within a space that resembles a stage. However, this space is characterized by greater flexibility and informality compared to traditional theatrical settings. Unlike conventional physical education, which primarily emphasizes motor performance, kinetic drama incorporates emotional and imaginative dimensions, thereby reaffirming the body's role as a vessel for knowledge rather than merely a means of movement.

Research in educational psychology indicates that movement extends beyond physical activity; it functions as a form of expressive language capable of embodying a range of emotions such as joy, fear, hesitation, success, and failure. Consequently, movement serves as a medium for reconstructing reality, alleviating emotional tension, and fostering both physical and psychological well-being in children.

3.1.3 The Relationship Between Imagination and Reality in Education:

Symbolic play and kinetic drama converge at a critical juncture: the utilization of imagination as an educational instrument. Imagination is not merely an act of escapism from reality; rather, it serves as a means to comprehend, rehearse, and potentially transform it. When a child assumes the role of a puppet or enacts a scene from the forest, marketplace, or classroom, they are actively reconstructing reality in a manner that facilitates internalization, critique, or modification.

In the context of physical education, this imaginative component can function as an instructional framework whereby children incorporate physical movements such as jumping, balancing, and crawling within a narrative context. This integration infuses physical performance with emotional significance and enhances motivation and engagement.

Analytical Summary: This conceptual analysis demonstrates that hand puppets and kinetic drama extend beyond mere entertainment tools; they embody two pedagogical approaches grounded in symbolic play and bodily expression. Their application in physical education signifies a shift toward

more profound learning dimensions, including self-awareness, emotional release, character development, and the enhancement of social intelligence. Any educational approach committed to holistic child development should therefore adopt an integrative perspective, combining play, movement, imagination, and interaction as fundamental components of contemporary pedagogical practice.

3.2. Supporting Theoretical Frameworks:

This article employs a variety of educational and psychological theories as its epistemological foundation to analyze the influence of hand puppets and kinetic drama on child development within the context of physical education. These theoretical frameworks seek to elucidate the ways in which such tools can facilitate the development of learners' cognitive, emotional, and motor skills..

➤ **Piaget's Theory of Cognitive Development:** According to Piaget (2018), children develop through distinct stages of cognitive growth, during which symbolic play emerges as a crucial method for understanding interpersonal relationships, exploring social roles, and interpreting symbols. Puppetry facilitates the construction of mental representations of the environment in a flexible and safe manner, thereby supporting the development of comprehension, imagination, and inferential skills. This process prepares children for more advanced learning in subsequent developmental stages.

➤ **Embodied Learning Theory:** According to Gibson and Liddell (2020), this theory argues that the body functions not only as a tool for action execution but also as an active participant in the construction of knowledge. Kinetic drama is identified as a particularly effective educational practice that utilizes the body to foster the integration of sensory perception and emotional expression. This approach enhances the depth, dynamism, and personal significance of learning.

➤ **Vygotsky's Sociocultural Constructivist Theory:** Vygotsky posited that learning is inherently social, occurring through mediated interaction and language use. Within this framework, the use of hand puppets serves as a methodological tool to foster communicative interaction among children. This approach contributes to the development of language proficiency, social skills, and role-playing abilities by facilitating symbolic dialogue during group play activities.

➤ **Multiple Intelligences Theory – Howard Gardner:** This theory advocates for the recognition of various types of intelligence in children, including bodily-kinesthetic, linguistic, and interpersonal intelligences. The use of puppetry and kinetic drama in educational settings fosters an environment that stimulates these different intelligences. This approach not only makes physical education more inclusive and adaptable to diverse learners but also supports the achievement of comprehensive developmental goals.

➤ **Interactive and Active Pedagogy:** This pedagogical model underscores the role of the learner as an active participant in the construction of knowledge, rather than as a passive recipient. The incorporation of puppets and drama redefines the traditional teacher-student relationship by providing children with opportunities to initiate, experiment, and express themselves within a collaborative and communicative learning environment.

These theoretical frameworks indicate that the incorporation of puppets and kinetic drama into physical education is supported by solid scientific principles. This integration enhances the credibility of these practices and underscores their importance as fundamental components of an interactive educational curriculum focused on holistic child development.

3.3. The Impact of Hand Puppets and Kinetic Drama on Child Development:

Hand puppets and kinetic drama serve as valuable educational tools that promote comprehensive child development across motor, psychological, social, and linguistic domains. Recent empirical studies (e.g., Cavicchiolo et al., 2023; Anderson et al., 2024) provide evidence of the significant positive effects associated with the systematic integration of these tools into classroom practices, especially during early childhood.

➤ **Motor development:** Kinetic drama provides children with opportunities to develop gross motor skills such as jumping, running, balancing, and crawling within a stimulating and imaginative context. Rather than engaging in repetitive, abstract exercises, children perform movements as part of a narrative or adventure, which can enhance motivation and engagement. Such dramatic activities also support motor coordination and reinforce spatial and temporal awareness.

➤ **Emotional and psychological development:** Puppets serve as tools for children to express their emotions indirectly and safely by projecting feelings onto symbolic characters. This approach is particularly beneficial

for children experiencing anxiety or shyness. Additionally, kinetic drama offers opportunities for emotional release, affective interaction, and the body to be recognized as an expressive medium.

➤ **Social and communicative development:** These activities foster skills related to group interaction, dialogue, listening, and respect for roles. Participation in group-based theatrical activities helps children articulate their opinions, negotiate, and collaborate toward common goals within a narrative framework. This also enhances their sense of belonging within the classroom community.

➤ **Creative and imaginative thinking:** Puppetry and drama stimulate imagination by encouraging children to invent characters, devise solutions, and modify scenarios. These activities promote divergent thinking, cognitive flexibility, and creativity.

➤ **Language and verbal expression:** Puppets provide engaging contexts for children to experiment with dialogue, expand their vocabulary, and improve articulation and sentence structure. Role-playing in drama further stimulates verbal and non-verbal communication in an organic and expressive manner.

In this context, the integration of hand puppets and kinetic drama into physical education should not be regarded as a luxury, but rather as a purposeful didactic approach. Such methods facilitate the comprehensive development of children by connecting cognitive and physical domains, as well as emotional and movement-based learning.

3.4. An Expanded Analytical Perspective on Current Practices:

Despite international trends promoting the integration of expressive and symbolic media into educational practices, the implementation of such approaches in numerous schools—especially within Arab contexts—remains limited by traditional pedagogical models that underestimate the pedagogical potential of hand puppets and kinetic drama. To bridge the gap between theoretical advocacy and practical application, it is crucial to conduct a comprehensive analysis of the systemic barriers that hinder the effectiveness of these educational strategies.

✓ **Lack of Systematic Integration in Official Curricula:** Although numerous pedagogical texts emphasize the significance of interactive learning, curricula frequently do not incorporate structured and explicit use of dramatic and symbolic tools. In the context of physical education, there is a tendency to focus primarily on technical motor skills, often neglecting the

emotional, affective, and creative dimensions of child development (Bailey et al., 2023).

✓ **Insufficient Pedagogical Training for Teachers:** Most educators do not receive formal training in their academic careers on how to incorporate puppetry or symbolic play into their teaching practices. According to Flear and Ridgeway (2022), teachers who lack specialized preparation tend to avoid expressive techniques that require personal and performative skills, despite evidence of their educational effectiveness.

✓ **Stereotypical Perceptions of Play and Imagination:** In numerous educational institutions, prevailing traditional perceptions tend to regard play as merely entertainment, deeming it unworthy of inclusion in formal educational settings. Such attitudes foster a defensive stance among certain educators, who hesitate to incorporate puppetry or role-playing, fearing that these activities might undermine their authority in the classroom or compromise the perceived seriousness of physical education lessons (Gibson & Liddell, 2020).

✓ **Organizational and Time Constraints:** Limited class time and overcrowded classrooms constrain teachers' capacity to effectively manage interactive activities that necessitate adequate time for planning, experimentation, and assessment. Furthermore, the absence of multifunctional spaces impedes the safe implementation of drama-based motor activities (Wright et al., 2021).

✓ **Shortage of Educational Materials and Resources:** Many educational institutions, particularly those situated in under-resourced areas, face significant deficiencies in essential teaching materials such as puppets, masks, and auditory tools. Additionally, there is a notable lack of Arabic-language resources that provide guidance on the pedagogical application of these tools. Consequently, educators are often constrained in their capacity to innovate pedagogically, despite their willingness to do so.

✓ **Limited Qualitative Assessment Tools:** Current educational curricula frequently do not include methodologies for assessing the influence of symbolic activities on children's emotional, social, and motor development. The lack of qualitative evaluation tools renders these activities difficult to measure, which consequently undermines their perceived value among curriculum evaluators (Cavicchiolo et al., 2023).

✓ **Lack of Incentives and Institutional Support:** Teachers who choose to implement non-traditional teaching methods often face a lack of support from administrative authorities and may not receive professional recognition. Conversely, these educators frequently encounter

misunderstandings or implicit rejection of their practices. The lack of educational policies that promote experimentation and innovation constitutes a significant barrier to adopting alternative pedagogical approaches.

This analytical approach clearly demonstrates that the marginalization of kinetic drama and puppetry within educational settings is not merely a consequence of resource limitations. Instead, it signifies a deeper cultural and professional crisis associated with outdated school models, insufficient teacher training, and fragile institutional infrastructure. While the theoretical framework recognizes children as imaginative and interactive beings, the prevailing educational practices tend to depict children as disciplined, passive individuals. Consequently, significant opportunities for holistic and humane education are being overlooked.

3.5 Educational Prospects for Effectively Integrating Hand Puppets and Kinetic Drama in Physical Education:

Following a conceptual analysis and critical evaluation of current educational practices, it is imperative to develop alternative pedagogical approaches that reinstate the value of kinetic drama and hand puppets as meaningful teaching instruments, rather than solely as sources of entertainment. Their incorporation into physical education and the broader educational curriculum necessitates addressing existing challenges through comprehensive, multi-faceted strategies.

- **Deep and Interdisciplinary Teacher Training:** The initial and ongoing training programs for physical education teachers should be revised to incorporate modules on expressive movement, educational theater, and symbolic media. Educators proficient in expressive and performative skills are better equipped to transform motor activities into experiences that engage students both emotionally and cognitively. Integrating such training with insights from child development and applied psychology enhances the pedagogical depth and humanistic approach of the educational process (Fler & Ridgeway, 2022).

- **Curriculum Redesign with an Integrative Vision:** Developing physical education curricula that acknowledge drama and puppetry as valid pedagogical tools is crucial for enhancing motor, emotional, and linguistic skills. This approach necessitates moving beyond a reductionist perspective that views physical education solely through a biomechanical lens. Instead,

it calls for adopting a framework of embodied learning, which considers the body as a vital means of cognition and expression (Gibson & Liddell, 2020)..

▪ **Improving Learning Environments and Providing Educational Resources:** Educational environments ought to be designed to be both stimulating and adaptable, incorporating straightforward yet symbolic materials such as puppets, masks, props, and sound effects. Additionally, readily accessible and modifiable instructional scenarios should be provided. Just as a ball is fundamental to playing football, symbolic media are crucial components of educational drama.

▪ **Fostering Collaborative Approaches with Parents and the Community:** Educational reform initiatives cannot succeed without incorporating the child's broader social and environmental context, beginning with family involvement. Encouraging parental participation in school activities such as drama performances and fostering community awareness about the importance of symbolic play can help restore trust in educational institutions as spaces dedicated to emotional development, in addition to knowledge acquisition. This approach aligns with UNESCO's (2022) conceptualization of the creative school.

▪ **Rethinking Assessment Tools:** The assessment of puppet and drama activities should extend beyond limited quantitative measures to incorporate qualitative criteria. These criteria should consider aspects such as interaction, expression, imagination, individual progress, and group harmony. It is therefore imperative to develop observation frameworks and behavioral-motor analysis instruments to substantiate the educational significance of these media (Cavicchiolo et al., 2023).

▪ **Integrating Educational Research into Practice:** Promoting action research within classrooms serves as an effective instrument for the assessment, refinement, and dissemination of pedagogical practices. In this framework, the teacher-researcher transitions from solely transmitting knowledge to actively producing it. Developing a comprehensive database of Arabic-language case studies focusing on the integration of puppetry and drama would facilitate the dissemination and adaptation of successful models across diverse educational contexts.

Children do not learn solely through repetition and rigidity; rather, they learn through stories, movement, and play. In puppet play, children see a reflection of themselves; in drama, they find a means to release fears and express dreams. Can an educational approach that excludes opportunities for dreaming truly foster a sense of freedom in children?

The reintegration of puppetry and kinetic drama into educational curricula is more than a technical matter; it represents a humanistic choice. Such an approach recognizes children as feeling, imaginative, and interactive beings. Educational institutions that adopt this perspective lay the groundwork for the holistic development of learners as complete human beings.

Practical Example: "Layla the Puppet's Adventure in the Forest of Movements"

To demonstrate the practical potential of using hand puppets and kinetic drama, a model modeled after a recent educational intervention was implemented. A theatrical activity entitled "Layla the Puppet's Adventure in the Forest of Movements" was developed to facilitate the enhancement of motor skills and social interaction in children (Cavicchiolo, Passarelli, & Lucchese, 2023).

Description: This is a dramatic motor activity specifically designed for primary school children aged 6 to 8 years. The activity incorporates the use of hand puppets within an imaginative narrative framework to promote motor development and enhance social engagement.

Educational Objectives:

- Enhance balance and motor coordination.
- Encourage group interaction and communication.
- Support imaginative movement and emotional expression.

Activity Stages :

Stage 1: Motivation (5 minutes):

The instructor introduces the puppet character "Layla" to the children, explaining that she has become lost in the "Forest of Movements" and requires assistance to navigate obstacles and return home.

Stage 2: Motor Interaction (15 minutes):

Children engage in physical activities alongside Layla, including jumping between colored circles representing rocks, crawling through foam barriers simulating tunnels, and balancing on an imaginary beam to enhance their motor skills.

Stage 3: Creativity (5 minutes):

Children are invited to propose an alternative ending to the adventure and to dramatize it using their own inventive movements.

Stage 4: Reflection and Feedback (5 minutes):

During this stage, Layla prompts the children with the question: "Which movement did you find most enjoyable, and what were the reasons for your choice?" The children are then encouraged to articulate their feelings and to reflect critically on their experiences during the activity.

3.6. Critique of Current Practices:

Although increasing academic acknowledgment emphasizes the significance of incorporating hand puppets and kinetic drama into educational settings, field observations indicate a notable discrepancy between theoretical frameworks and practical implementation in physical education classrooms, especially within the Arab context. The critique of existing practices can be summarized as follows:

- **Lack of Systematic Integration in Official Curricula:** In many countries, official educational programs lack a deliberate and structured incorporation of expressive tools. Be summarized to purely technical performance, at the expense of emotional, symbolic, and creative dimensions.
- **Deficiency in Teacher Preparation:** Many physical education teachers are unfamiliar with methods for using drama or symbolic media due to limited exposure in their training programs.
- **Resistance to Innovation:** Institutional rigidity and fear of disrupting traditional classroom dynamics limit experimentation with alternative pedagogical approaches.
- **Limited Educational Resources:** Schools often lack the necessary materials (puppets, costumes, space) and references to effectively implement these tools.
- **Evaluation Challenges:** Current assessment tools are poorly suited to measure emotional, imaginative, and social learning outcomes, which may lead to undervaluing these practices.

These limitations underscore the necessity for a fundamental transformation in pedagogical approach, emphasizing movement and expression as integral elements of comprehensive education rather than as optional enhancements.

3. Conclusion

Based on the preceding analysis and investigation, it is clear that hand puppets and kinetic drama serve purposes beyond mere entertainment or classroom engagement. These methods embody pedagogical and humanistic principles, providing opportunities to stimulate imagination, promote

physical expression, and facilitate emotional release within a safe environment. Consequently, they are integral components of educational initiatives aimed at fostering the overall development of children.

Research indicates that children acquire knowledge not solely through verbal instruction but through experiential learning—engaging with activities, internalizing experiences, and reimagining them through movement and imagery. This underscores the transformative potential of dramatic and symbolic expression in physical education, transforming movement into storytelling, emotions into gestures, and learning into a creative process.

To implement an educational framework that acknowledges the complexity and richness of childhood, educational institutions should integrate these expressive modalities as fundamental elements of holistic learning, rather than peripheral additions.

References

1. Anderson, L., Pérez, J., & Smith, D. (2024). Playful Learning in Physical Education: Outcomes of Puppetry and Expressive Activities. *Journal of Childhood Education*, 100(1), 23–36.
- 2- Bailey, R., Armour, K., Kirk, D., Jess, M., Pickup, I., Sandford, R., & the BERA Physical Education and Sport Pedagogy Special Interest Group. (2009). The educational benefits claimed for physical education and school sport: An academic review. *Research Papers in Education*, 24(1), 1–27. <https://doi.org/10.1080/02671520701809817>
3. Bailey, R., Cope, E., & Pearce, G. (2023). Physical Literacy and the Early Years: Foundations for Lifelong Activity. *European Physical Education Review*, 29(2), 117–131.
4. Brougère, G. (2023). *Le jeu et l'enfant: Approches contemporaines*. Paris: Presses Universitaires de France (PUF).
5. Brown, A., & Gillespie, M. (2016). Using drama pedagogy in physical education to support the inclusion of students with disabilities. *Journal of Physical Education and Sport Pedagogy*, 21(1), 1–15. <https://doi.org/10.1080/17408989.2014.920493>
6. Cavicchiolo, E., Passarelli, M., & Lucchese, M. (2023). Drama-based interventions to enhance motor skills and social interaction in children. *Journal of Sport and Exercise Psychology*, 64, 102267.

7. Flier, M., & Ridgeway, A. (2022). Reimagining Early Childhood Education through Drama and Embodied Play. *Australasian Journal of Early Childhood*, 47(1), 65–79.
8. Gibson, J., & Liddell, C. (2020). Embodied Learning in Action: Play, Movement and Meaning in Early Education. *Contemporary Issues in Early Childhood*, 21(4), 350–365.
9. *Journal of Science and Technology of Physical and Sports Activities*. (2023). University of Abdelhamid Ibn Badis – Mostaganem, Algeria.
10. Marshall, C. (2018). Movement drama as an educational tool in children's physical development. *Journal of Physical Education and Sports Science*, 45(2), 120–134.
11. Østerlind, E. (2008). Acting out of habits – Can theatre of the oppressed promote change? *Research in Drama Education*, 13(1), 71–82. <https://doi.org/10.1080/13569780701825167>
12. Piaget, J. (2018). *The Psychology of Intelligence*. London: Routledge.
13. Sibley, B. A., & Etnier, J. L. (2003). The relationship between physical activity and cognitive function in children: A meta-analysis. *Pediatric Exercise Science*, 15(3), 243–256.
14. UNESCO. (2022). *Creative Arts in Education: Innovations in Early Learning*. Paris: UNESCO Publishing.
15. Wright, P., McNeill, M., & Fry, J. (2021). Barriers to Implementing Expressive Activities in Primary Physical Education. *International Journal of Physical Education*, 58(2), 88–102.
16. Wright, P. M., Whittaker, D. S., & Smith, D. W. (2012). The role of drama-based movement education in promoting social competence in elementary school students. *Physical Educator*, 69(3), 219–236.