HiLL PUBLISHING

The Educational Review, USA, 2025, 9(4), 421-425
https://www.hillpublisher.com/Journals/er/
ISSN Online: 2575-7946
ISSN Print: 2575-7938

# Research on the Connotation, Value, and Path of Adult Scaffolding Construction in Guided Games in Kindergartens

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**How to cite this paper:** Xinran Ma, Xiaoyue Hu, Deming Li. (2025). Research on the Connotation, Value, and Path of Adult Scaffolding Construction in Guided Games in Kindergartens. *The Educational Review, USA*, 9(4), 421-425.
DOI: 10.26855/er.2025.04.004

**Received:** February 28, 2025
**Accepted:** March 29, 2025
**Published:** April 27, 2025

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## Abstract

Games serve as a vital and effective approach for facilitating early learning and comprehensive development among children, and are extensively utilized as indispensable teaching tools in teaching activities within kindergartens. This research centers on guided games situated precisely in the middle ground between free play and direct teaching, and delves deep into the construction status and long-standing existing issues of adult scaffolding in guided games across various countries. By meticulously analyzing the current state of scaffolding construction in different nations, a comprehensive and detailed comparison of practical cases from various countries is conducted regarding the problems in three crucial key aspects: the role of adults in scaffolding construction, cues, and participation, thereby uncovering the significant and far-reaching application potential of adult scaffolding in guided games. There exist notable and distinct disparities in the implementation of scaffolding among different countries, and it is necessary to provide appropriate and precisely tailored support based on children's zone of proximal development.

## Keywords

Guided games; Adult scaffolding; Teacher guidance; Path research

## Introduction

In recent years, the simplistic dichotomy between children's free play and direct instruction has frequently caused young children to fluctuate between "laissez-faire" and "high control", representing two extreme tendencies. The latest research advocates for establishing a middle ground between free play and direct instruction-guided play. It simultaneously emphasizes both children's autonomy and adult guidance, which can effectively facilitate children's optimal learning. In guided play, how adults can support children's learning and development through "scaffolding" has emerged as a crucial research topic.

## 1. Exploration of the Basic Connotations of Adult Scaffolding in Guided Play

The concept of "scaffolding," originally derived from temporary support structures in construction, has been adapted by the education field to describe the support and guidance provided by adults during children's learning processes. This support is intended to assist children in bridging the gap between their current abilities and potential developmental capabilities, thereby fostering comprehensive development in cognitive, emotional, and social skills.

Nevertheless, variations in cultural contexts and educational systems across countries lead to significant differences in the implementation methods and effectiveness of adult scaffolding. This study aims to conduct a comparative analysis of

the current practices and challenges associated with scaffolding implementation globally, drawing on practical cases from various countries and integrating examples from Chinese kindergartens, to illuminate the potential applications of adult scaffolding within guided play settings.

## 2. The Value Definition of Adult Scaffolding in Guided Play

In the realm of early childhood education, adult scaffolding plays a crucial role in facilitating children's growth. It encourages children to observe and think critically, thereby enriching their cognitive experiences and fostering cognitive development. By providing emotional support and encouragement, it contributes to the nurturing of emotional well-being (Sysoev et al., 2022). Through organizing collaborative play activities, it develops communication and teamwork skills, enhancing social competencies. Moreover, it enables educators to tailor instruction to individual needs, optimize teaching practices, and provide comprehensive support for holistic child development.

### 2.1 Promoting Cognitive Development

From the perspective of cognitive psychology, children's cognitive development involves the gradual construction of a knowledge system. Adult scaffolding offers tailored support to assist children in bridging the gap between their current and potential capabilities (Amanullah, Wulaningsih, & Sari, 2022). Through adult-guided activities, children actively engage in thinking, observing, and experimenting, thereby enhancing their spatial perception, logical reasoning, and problem-solving skills (Song et al., 2024). This process not only promotes cognitive advancement but also contributes to the establishment of a more comprehensive knowledge structure.

### 2.2 Facilitating Emotional Development

Emotional development constitutes a critical component of children's overall growth. Within the framework of scaffolding, adults' proactive support and guidance foster emotional security and trust among children (van Nooijen et al., 2024). For example, when children face challenges in painting, encouragement and constructive feedback from adults can strengthen their confidence and self-efficacy. Such positive emotional experiences are instrumental in cultivating an optimistic and resilient personality, laying a solid foundation for mental health, and enhancing psychological adjustment abilities.

### 2.3 Enhancing Social Skills

The development of social skills is pivotal for children's successful integration into society. In collective play scenarios, adults serve as essential scaffolders by facilitating collaboration and teamwork. For instance, during team-based building block games, adults encourage role differentiation and cooperation, enabling children to recognize the value of each member's contribution while learning to listen and coordinate effectively. This interactive process enhances children's cooperative, communicative, and interpersonal skills, thereby supporting their adaptation to social environments.

### 2.4 Optimizing Educational Practices

From an educational standpoint, adult scaffolding equips educators with scientifically grounded methods and concepts. It encourages educators to focus on individual differences and developmental needs, allowing for the flexible adjustment of teaching strategies. By observing children's performance during play, educators can identify the zone of proximal development and provide targeted guidance. This approach not only personalizes instruction but also improves its effectiveness, ultimately fostering innovation in early childhood education practices.

## 3. Analysis of the Current Situation of Adult Scaffolding in Guided Play

Based on the theories of Vygotsky and Piaget, many countries have acknowledged the critical role of scaffolding in guided play within early education. Through various educational programs and practices, scaffolding has been effectively integrated into play to foster children's holistic development.

### 3.1 The "3B" Curriculum in Australia

Traditionally, Australian early childhood education emphasized free play. However, recent discussions highlight the importance of "play-based learning." In this approach, children actively interact with others and objects in environments thoughtfully designed by adults. Through these interactions, children construct an understanding of social and material

phenomena within their surroundings. Adults provide intentional teaching by carefully and purposefully constructing scaffolds to support children's learning.

### 3.2 The Piramide Project in the Netherlands

The Piramide Project in the Netherlands exemplifies how teachers offer multi-level support and intervention for children's learning. During theme-based activities, teachers first create a rich and stimulating environment that encourages children to explore and learn according to their cognitive abilities while enhancing their self-regulation skills. When children are deeply engaged in play, teachers intervene minimally, offering support only when necessary. If children struggle or fail to delve deeper into their play, teachers provide mid-level intervention by building scaffolds to elevate the complexity of the game before gradually withdrawing their support.

### 3.3 The Tools of the Mind Curriculum in the United States

In the early education stage in the United States, games were initially conducted in a free-form manner, providing children with an open space for activities. However, after the implementation of the No Child Left Behind Act, direct classroom teaching largely replaced game time, weakening children's initiative in game-based learning (Reuter-Lorenz & Park, 2024). Research shows that child-centered teaching methods are more conducive to children's development in multiple areas. Teachers can significantly enhance educational outcomes by integrating guided games and providing appropriate scaffolding.

In conclusion, transitioning from free play or direct instruction to guided play aligns more closely with children's cognitive developmental needs. Adult scaffolding plays a pivotal role in this process by providing structured environments and timely, targeted support to facilitate children's comprehensive growth.

## 4. A Comparative Study on Issues of Adult Scaffolding Construction in Guided Games Among Different Countries

The construction of adult scaffolding is a commonly emphasized and practiced approach in education across various countries. The following is a comparative research on the existing problems in scaffolding construction among different countries from three dimensions: adult role, adult cues, and adult participation.

### 4.1 A Comparison of Problems in Adult Roles During Scaffolding Construction

During the process of scaffolding construction, the role positioning of adults often gravitates towards two extremes: "teacher-centered" and "child-centered". Research reveals that some adults struggle to balance the role relationship with children. In some Chinese kindergartens, teachers overly focus on maintaining classroom discipline and order while neglecting children's emotions and interests. For instance, in a jigsaw puzzle game, teachers directly inform children of the sequence and steps of the puzzle instead of stimulating their thinking and hands-on abilities through questioning, encouragement, and demonstration. Conversely, when the understanding of children's autonomous education is overly idealized, teachers might refrain from intervention altogether. For example, in painting activities, teachers merely provide materials for children to exercise their creativity but fail to offer explicit guidance on tool usage and creative expression. This leaves some children bewildered, unsure of where to start or how to improve their work, ultimately losing interest in the activity.

The Piramide project in the Netherlands anticipates that teachers offer support to children within their zone of proximal development. In reality, however, teachers impose overly strict regulations, restricting children's free exploration. For example, although the series of balance activities progresses in a sequential manner, they impede the implementation of theme games outside the project. Likewise, in early education in the United States, teachers' game teaching emphasizes direct instruction while disregarding children's autonomy. In locations such as Los Angeles and New York, children have limited playtime, which is disadvantageous for their comprehensive growth. Conversely, in traditional education in Australia, there is a propensity towards children's free play with minimal adult guidance, with the belief that it can preserve children's autonomy and independence in play. Nevertheless, research has revealed that in the absence of adult intervention, children have difficulty spontaneously learning concepts such as buoyancy, which is detrimental to the expansion of their thinking.

### 4.2 A Comparative Analysis of Problems in Adult Prompting During Scaffolding Construction

Adult prompts have constituted a crucial challenge in education in China in recent years, primarily entailing two aspects of problems. Firstly, the timing of prompts is improper. Whether the questioning occurs too late or too early, it will impact

children's independent thinking. Take the building blocks activity as an illustration. When children encounter difficulties in constructing a tower, if adults intervene prematurely and directly indicate that the tower is unstable, children lose the chance to think of solutions independently. If the intervention is belated, when children are already frustrated and on the verge of giving up before the prompt is offered, the children's impetus to solve the problem has already decreased (Zuo et al., 2023). Secondly, the content of the prompts is inappropriate. The content of the prompts should be based on children's existing experience and be in alignment with their zone of proximal development. Either being overly simplistic or overly complex will interfere with the children's game process. Still referring to the aforementioned tower-building case, if adults simply say "Add a block", it is difficult to assist children in resolving the problem. If they say "Change the center of gravity, maintain symmetry to enhance stability", it is overly complex for children lacking relevant experience, which is likewise not conducive to problem-solving.

In the Dutch Piramide project, teachers employ a four-step strategy of "orientation, demonstration, expansion, and deepening" to offer prompts. The problem lies in the "demonstration" stage, where the role of the teacher is overly emphasized, restricting children's creative thinking. For instance, in the "home" project, when teachers guide children by leading them to observe the details of houses, this may reduce children's opportunities for independent exploration and discovery. In early practices in the United States, teachers may be more inclined to use "guided questioning" as prompts; however, the problem is that the questions are overly guiding, resulting in children merely responding to adult prompts rather than engaging in independent thinking.

### 4.3 A Comparative Analysis of Problems in Adult Participation During Scaffolding Construction

Adult involvement in children's games holds significant importance for guaranteeing the quality of the games. If the degree of participation is excessively high, children are prone to rely on adults, and their autonomy and problem-solving capabilities will be compromised. Take the construction games in Chinese kindergartens as an example. When children's tower-building with blocks is unstable and adults directly intervene to build and demonstrate the "correct" method, children can only observe without having the opportunity to think or make improvements. They might even perceive themselves as incompetent due to the adults' entire process of participation and abandoning exploration. Conversely, if the degree of participation is too low and children do not receive timely support when encountering difficulties, they will be isolated and disoriented, and the quality of their game experience is bound to deteriorate.

The Piramide project in the Netherlands focuses on the tripartite cooperation among teachers, parents, and children. Nevertheless, during its actual implementation, there are doubts regarding the communication between parents and teachers as well as the coordination of scaffolding support. Although the project offers family activity handbooks, the participation of parents and the support from teachers are often inconsistent, leading to children's excessive reliance on adult guidance during play and making it difficult for their ability to solve problems independently to be effectively exercised. In American education, teachers have insufficient participation in children's games and struggle to provide timely scaffolding support. For instance, in science exploration activities, if teachers do not observe and provide feedback, children will have difficulty obtaining more knowledge from experiments. Chien's investigation indicates that children in a scaffolding learning environment interact with teachers or more capable peers, actively engage in learning, and make remarkable progress in all aspects; in contrast, children in free play show relatively limited improvement in language, literacy, and mathematics (Çakar Özkan, 2022).

## 5. Countermeasures for the Construction of Guided Play Scaffolding by Chinese Preschool Teachers

### 5.1 Optimization of Adult Role Positioning

Chinese preschool teachers should abandon the extremes of "teacher-centeredness" and "child-centeredness", and flexibly switch roles based on the type of activity and the state of the children. For example, in creative handicraft activities, teachers should allow children to freely express themselves and observe at the beginning. When children encounter difficulties, they should intervene with heuristic questions and the sharing of ideas, balancing guidance and empowerment. This ensures that children can explore independently while providing necessary guidance to support their growth.

### 5.2 Accurate Grasping of Prompting Key Points

Teachers should enhance their prompting skills and accurately grasp the timing and content. They should closely observe children during their play or learning and intervene appropriately when they are confused and persistently exploring (Li, Ortegas, & White, 2023). Prompts should be based on children's existing experiences and their zone of proximal

development, and use vivid expressions. For example, when children are building with blocks, teachers can prompt them by saying, "A wider bottom and a narrower top make the stairs more stable," providing effective guidance while ensuring children's independent exploration.

### 5.3 Reasonable Regulation of the Degree of Participation

Teachers should appropriately control the extent of their participation in children's games. In construction games, when children encounter difficulties, they should first encourage them to try independently and observe. If they fail multiple times, they should intervene as a participant to discuss, avoiding direct answers. At the same time, they should strengthen home-school collaboration, unify the use of family activity manuals, ensure that scaffolding support is consistent, and jointly enhance children's ability to solve problems independently.

### 5.4 Enhancement of Professional Training for Teachers

The kindergarten regularly conducts professional training on scaffolding construction, covering theories, cross-cultural cases, and communication skills. Through the training, teachers deepen their theoretical understanding, draw on international experience, and reflect on their teaching practices. Teachers are encouraged to carry out action research and share experiences to continuously optimize scaffolding strategies and enhance the effectiveness of educational support.

## 6. Conclusion

This study focuses on the current status of adult scaffolding in games, comparing adult roles, prompts, and participation levels across different countries, and exploring the supportive effects and challenges. The research indicates that adult scaffolding is of great significance to children's learning, but there are differences in its implementation across countries. During the scaffolding process, adults need to balance guidance and empowerment, precisely control prompts and participation levels, and avoid affecting learning motivation and effectiveness.

## Funding

Key Research Project of Jilin International Studies University in 2024, "Research on the Development and Cultivation Mechanism of University Teachers' Artificial Intelligence Competence from the Perspective of Lifelong Learning" (Project number: JW2024ZDB010); 2024 Industry-University Cooperative Education Project of the Ministry of Education, "Research on the Construction of Digital Intelligence Curriculum System and Teaching Reform in Applied Universities" (Project number: 2412104122).

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