Volume : 2 | Issue : 1 | Received-12-01-2026 | Accepted-17-01-2026 | Published-31-01-2026

UAI JOURNAL OF EDUCATION, HUMANITIES AND LITERATURE (UAIJEHL)

Abbreviated Key Title: UAI J Eud Huma Lit.
ISSN: 3049-3196 (Online)
Journal Homepage: https://uaipublisher.com/uaijehl-2/
Volume- 2 Issue- 1 (January- February) 2026
Frequency: Bimonthly

A Practice-Oriented Study on Teachers' Guidance in Supporting Young Children's Multiple Intelligences in Gamified Contexts

Yili Shen

Graduate University of Mongolia, Ulaanbaatar, Mongolia

Corresponding Author: Yili Shen

ABSTRACT

Gamified learning has become increasingly prevalent in early childhood education due to its potential to enhance children's engagement and participation in classroom activities. Despite growing interest in game-based and play-oriented pedagogies, existing research has tended to emphasize activity design or learning outcomes, while paying comparatively limited attention to how teachers guide children's participation within gamified learning contexts. This study adopts a practice-oriented qualitative approach to examine how teacher guidance operates in everyday early childhood classrooms and how different forms of guidance shape children's learning processes across diverse gamified activities. Data were collected through classroom observations, documentation of gamified learning activities, and teacher reflective records in a regular early childhood education setting. Participants included 24 children aged 4–6 years and three early childhood teachers. Gamified learning activities were embedded in daily classroom instruction and categorized into role-play games, rule-based games, and creative construction games. Thematic analysis was conducted to identify recurring patterns in teacher guidance strategies and children's participation behaviors. The findings indicate that teacher guidance plays a central mediating role in gamified learning. Distinct patterns of engagement were observed across activity types: dialogic guidance supported sustained verbal interaction and social negotiation in role-play games; explicit guidance facilitated self-regulation, attention, and goal-oriented behavior in rule-based games; and open-ended guidance encouraged exploration, originality, and reflective thinking in creative construction games. Across all activity contexts, teachers flexibly adjusted their guidance in response to children's engagement and developmental needs, thereby shaping the quality and depth of learning experiences. The study concludes that the educational value of gamified learning in early childhood education is closely linked to intentional, context-sensitive teacher guidance, highlighting the importance of viewing gamification not merely as a set of activities, but as a pedagogical approach grounded in professional judgment and responsive interaction.

KEY WORDS: Gamified learning; Teacher guidance; Multiple intelligences; Play-based learning; Early childhood education

DOI: 10.5281/zenodo.18438498

Introduction

Gamified learning has gained increasing attention in early childhood education due to its potential to enhance children's engagement, motivation, and active participation in learning experiences. Within early childhood classrooms, play and game-like activities are widely regarded as developmentally appropriate approaches that support children's cognitive, social, and emotional growth. International policy documents and empirical research have emphasized that meaningful learning in the early years is closely associated with playful, interactive, and child-centered pedagogies that encourage exploration and collaboration (OECD, 2021; Zosh et al., 2022). As a result, gamified and play-based learning approaches have become prominent features of contemporary early childhood education practice.

Alongside this growing interest, research on gamified and game-based learning has expanded across educational contexts. Previous studies have examined the motivational affordances of games, the design of game elements, and their impact on learners' engagement and achievement (Howard-Jones, 2018; Howard-Jones et al., 2020; Sailer & Homner, 2020). In early childhood education, scholars have also explored how play-based and digital play pedagogies can support young children's learning through interactive and exploratory activities (Edwards et al., 2019; Kervin & Mantei, 2022). These studies collectively suggest that games and playful learning environments can create rich opportunities for learning when thoughtfully integrated into classroom practice.

However, despite the growing body of research on gamified and play-based learning, less attention has been paid to the role of teachers in shaping children's participation within gamified learning contexts, particularly in everyday early childhood classrooms. Much of the existing literature focuses on the characteristics of games or learning outcomes, while the instructional processes through which learning opportunities are constructed remain underexplored. In play-based settings, learning does not occur automatically through play itself; rather, it is mediated through social interaction, guidance, and pedagogical decision-making. Several scholars have highlighted that teachers' actions, positioning, and responsiveness are critical in determining how play-based activities support learning (Nolan & Paatsch, 2020; Nolan et al., 2021; Pyle & Danniels, 2021). Yet, empirical studies that closely examine how teacher guidance operates within gamified learning activities in early childhood classrooms remain relatively limited.

Research on play-based pedagogy has increasingly emphasized the importance of adult participation and guidance in extending the learning potential of play. For example, studies have shown that teachers' involvement in play can support children's language development, social interaction, and conceptual understanding when such involvement is responsive and intentional rather than directive (Fleer, 2021; Fleer et al., 2021). Similarly, dialogic approaches to teaching highlight the role of purposeful interaction and dialogue in supporting children's thinking and meaning-making (Alexander, 2020). These perspectives suggest that teacher guidance is not an external addition to play or gamified activities, but an integral component of how learning is co-constructed in early childhood contexts.

Within this theoretical landscape, understanding teacher guidance as a dynamic and context-sensitive process becomes particularly important in gamified learning environments. Gamified activities often vary in structure, ranging from open-ended imaginative play to rule-governed games and creative construction tasks. Each activity type places different demands on children's participation and offers distinct learning opportunities. Consequently, teachers must continuously adjust their guidance strategies in response to activity structure, children's engagement, and developmental needs. Previous research has noted that effective play-based teaching involves ongoing pedagogical judgment and flexible decision-making rather than the application of fixed instructional strategies (Nolan & Paatsch, 2020; Pyle et al., 2020). However, there remains a need for empirical studies that document how such guidance is enacted across different gamified activity contexts within everyday classroom practice.

Another limitation in existing research concerns the tendency to treat gamified learning as a homogeneous pedagogical approach. While gamification is often discussed as a unified concept, early childhood classrooms typically incorporate diverse forms of gamified activities that differ in their level of structure, interactional demands, and developmental focus. Without examining how teacher guidance functions across these varied contexts, it is difficult to fully understand the pedagogical mechanisms through which gamified learning supports children's development. Addressing this gap requires practice-oriented research that attends closely to classroom interaction and instructional processes as they naturally occur.

In response to these gaps, the present study adopts a practice-oriented qualitative approach to examine how teacher guidance operates within gamified learning contexts in early childhood education. Rather than evaluating the effectiveness of specific games or measuring predefined learning outcomes, the study focuses on how teachers guide children's participation during different types of gamified activities and how such guidance shapes children's learning processes. By examining role-play games, rule-based games, and creative construction activities within a regular classroom setting, the study aims to provide a nuanced account of teacher guidance as it unfolds in everyday instructional practice.

Specifically, this study seeks to explore how different forms of teacher guidance are enacted across diverse gamified activity types and how these forms of guidance relate to children's participation behaviors and learning processes. Through detailed classroom observation and qualitative analysis, the study contributes to a deeper understanding of the instructional role of teachers in gamified learning environments. In doing so, it responds to calls for more practice-informed research on play-based and gamified learning and offers insights that may inform both early childhood teaching practice and teacher professional development.

Materials and Methods

This study employed a practice-oriented qualitative research approach to investigate how teacher guidance within gamified learning contexts supports young children's learning processes and developmental domains in early childhood education. The methodological orientation of the study was grounded in the view that learning in early childhood is best understood through the observation of naturally occurring classroom interactions, particularly those that emerge during play-based and gamified activities. Rather than isolating variables or implementing controlled experimental interventions, the study focused on documenting authentic teaching practices and children's participation as they unfolded within routine instructional settings. This approach was chosen to ensure ecological validity and to capture the complexity, fluidity, and context-sensitive nature of teacher–child interactions that characterize gamified learning environments in early childhood classrooms.

DOI: 10.5281/zenodo.18438498

The research was conducted in a regular early childhood education setting during normal instructional hours. Gamified learning activities were embedded within the existing curriculum and implemented as part of everyday classroom instruction rather than introduced as experimental tasks. The classroom followed a play-based pedagogical framework consistent with contemporary early childhood education practices, in which learning is understood as emerging through active engagement, social interaction, and guided participation. The physical learning environment was organized to support multiple forms of play and learning, including areas designated for role-play activities, spaces for structured games with rules, and zones for open-ended creative construction. Materials appropriate to each type of activity were readily available, allowing children to move between different game contexts while remaining under teacher guidance. Because these learning formats were familiar to the children, their participation was less likely to be influenced by novelty effects, thereby providing a more accurate representation of typical classroom learning behaviors (Edwards et al., 2019).

The participants in the study included both children and teachers who were directly involved in the gamified learning activities. A total of 24 children aged between 4 and 6 years participated as part of their regular classroom cohort. This age range represents a critical developmental period in early childhood, during which language abilities, social competence, self-regulation, and cognitive engagement develop rapidly. The children participated in gamified learning activities during normal instructional time, engaged in peer interaction, and responded to teacher guidance across different game contexts. Three teachers also participated in the study. All teachers held bachelor's degrees in Early Childhood Education and had between 3 and 10 years of teaching experience. Their professional backgrounds enabled them to design developmentally appropriate learning activities, manage classroom dynamics, and adjust instructional strategies in response to children's needs. Teachers were not provided with scripted instructions; instead, they were encouraged to rely on their professional judgment when guiding activities. This allowed the study to document naturally occurring variations in teacher guidance practices that reflect authentic classroom teaching. A structured overview of participant characteristics and their roles in the study is provided below.

Table 1. Participants' Characteristics

Group	Number	Age Range	Background /Experience	Role in the Study
Children	24	4-6 years	Not applicable	Participated in gamified learning activities, engaged in classroom interactions, responded to teacher guidance, and demonstrated diverse learning behaviors during play-based tasks
Teachers	3	25-38 years	Bachelor's degree in Early Childhood Education with 3-10 years of teaching experience	Designed and implemented gamified learning activities, guided children' s participation, scaffolded learning processes, and adjusted instructional strategies based on children's responses

Gamified learning activities constituted the core instructional context of the study and were designed to support children's engagement while aligning with widely accepted goals of early childhood education. These activities were integrated into daily classroom routines and reflected commonly used play formats in early childhood settings. Three categories of gamified learning activities were included in the study: role-play games, rule-based games, and creative construction games. These categories were selected because they represent distinct modes of play that support different learning processes and developmental domains, while also allowing for varied forms of teacher guidance and child participation.

Role-play games involved scenario-based activities situated in familiar contexts such as family life, shops, or classroom environments. These activities emphasized imagination, narrative construction, and social interaction. Children were encouraged to assume different roles, negotiate storylines, and engage in dialogue with peers during play. Teacher guidance in role-play contexts focused on supporting communication and interaction rather than directing outcomes. Teachers prompted dialogue, modeled appropriate language use, guided turn-taking, and assisted children in managing social interactions when challenges arose. Guidance was provided flexibly, allowing children to maintain agency over the direction of play while benefiting from instructional support. This approach reflects the view that adult participation can enrich the learning potential of play without diminishing its voluntary and engaging nature.

Rule-based games were characterized by simple rules, clear goals, and turn-based actions designed to promote structured participation. These games required children to attend to instructions, follow agreed-upon rules, coordinate actions with peers, and engage in goal-oriented problem-solving. Teacher guidance in rule-based games involved explaining and reinforcing rules, scaffolding participation processes, monitoring children's engagement, and providing timely feedback. Teachers adjusted the level of guidance according to children's understanding of the rules and their ability to sustain attention, ensuring that the games remained accessible while still offering appropriate challenge. Through this process, children were supported in developing self-regulation, persistence, and cognitive flexibility.

Creative construction games consisted of open-ended building or art-related tasks that allowed flexible use of materials and encouraged creative exploration. These activities did not have predetermined outcomes, enabling children to experiment, design, and express individual ideas. Teacher guidance in creative construction contexts emphasized encouraging exploration, asking open-ended questions, valuing individual ideas, and supporting creative expression without imposing fixed solutions. Teachers focused on facilitating discussion and reflection about children's creative processes rather than evaluating final products. This form of guidance supported creativity as an ongoing process and encouraged children to articulate their thinking and share ideas with peers.

Across all activity types, teacher guidance was conceptualized as intentional instructional action aimed at supporting children's engagement, learning processes, and developmental growth within gamified contexts. Teachers actively adjusted their guidance strategies in response to children's behaviors, interests, and learning needs. Guidance strategies included verbal prompting, modeling

DOI: 10.5281/zenodo.18438498

behaviors, scaffolding participation, monitoring engagement, and providing feedback. These strategies were not applied uniformly but were adapted to the demands of different activity types and the developmental characteristics of individual children. To clarify the relationships among activity categories, teacher guidance strategies, children's participation behaviors, and targeted developmental domains, an overview of the gamified learning activities and instructional guidance framework is presented below.

Table 2. Gamified Learning Activities and Teacher Guidance

Activity Category	Game Description	Game Features	Teacher Guidance Strategies	Children's Participation Behaviors	Targeted Development Domains
Role-play games	Scenario-based role play such as family, shop, or classroom situations	Imaginary roles, narrative structure, peer interaction	Prompting dialogue, modeling language use, guiding turn-taking	Active verbal interaction, collaborative play, role negotiation	Language development, social competence, interpersonal intelligence
Rule-based games	Games involving simple rules, goals, and turn based actions	Clear objectives, structured rules, performance feedback	Scaffolding rule understanding, monitoring participation, providing feedback	Sustained attention, rule compliance, problem- solving behaviors	Cognitive development, self-regulation, logical-mathematical intelligence
Creative construction games	Open-ended building or art-related	Freedom of choice, material manipulation, creative	Encouraging exploration, asking open- ended questions,	Experimentation with materials, original designs, peer sharing	Creativity, spatial intelligence, imaginative thinking

Data collection was conducted using multiple qualitative methods to capture a comprehensive picture of classroom practice. Classroom observations served as the primary data source and were carried out during regular instructional sessions in which gamified learning activities took place. Observations focused on teacher guidance strategies, children's participation behaviors, and interaction patterns across different activity contexts. Detailed field notes were recorded to document instructional decisions, interaction episodes, and changes in children's engagement over time. Particular attention was paid to both verbal and nonverbal aspects of teacher–child interaction, as these elements play a central role in early childhood learning environments.

In addition to observational data, documentation related to gamified learning activities was collected to support interpretation of instructional design and implementation. This documentation included descriptions of activity structures, materials used, and general instructional intentions. These records provided contextual information that complemented observational data and helped clarify how different activity types were designed and implemented within the classroom setting.

Teacher reflective records were also collected to gain insight into teachers' pedagogical reasoning. Teachers were invited to reflect on their instructional decisions, perceived challenges, and observations of children's learning during gamified activities. These reflections provided additional context for understanding why particular guidance strategies were employed and how teachers interpreted children's responses. Teacher reflection was treated as a supplementary data source that supported interpretation of observed practices rather than as a primary source of evidence (Nolan & Paatsch, 2020).

Data analysis followed a thematic qualitative approach. All observational notes, activity documentation, and teacher reflections were systematically reviewed and coded to identify recurring patterns related to teacher guidance, children's participation, and learning behaviors. Initial coding focused on descriptive categories such as types of guidance strategies, forms of child engagement, and characteristics of gamified activities. Through iterative comparison and refinement, these descriptive codes were organized into broader analytical themes that captured relationships between gamified learning contexts, instructional guidance, and developmental domains. Analytical attention was directed toward understanding how teacher guidance supported children's language use, social interaction, cognitive engagement, self-regulation, creativity, and imaginative thinking. This analytic process allowed the study to move beyond surface descriptions of activity participation and toward a deeper interpretation of learning processes within gamified classroom contexts (Pyle et al., 2020).

Ethical considerations were addressed throughout the research process. All research activities took place within the scope of regular classroom instruction and did not impose additional demands on children beyond their usual learning routines. Identifying information was excluded from all records to protect participant confidentiality. The study emphasized respect for children's well-being and ensured that all gamified learning activities were developmentally appropriate, inclusive, and supportive of positive learning experiences, in line with widely accepted principles of early childhood education (OECD, 2021).

Results and Findings

The analysis of classroom observations and instructional records revealed clear and consistent patterns in how children participated in gamified learning activities and how teacher guidance shaped these participation behaviors across different activity types. Rather than presenting isolated outcomes, the findings highlight recurring forms of engagement, interaction, and learning-related behaviors that emerged within role-play games, rule-based games, and creative construction games. Across all activity contexts, children's participation was closely intertwined with the nature of teacher guidance, indicating that instructional actions played a central role in structuring learning opportunities within gamified environments.

During role-play games, children demonstrated high levels of verbal engagement and social interaction. Observations showed that children frequently initiated dialogue with peers, negotiated roles,

DOI: 10.5281/zenodo.18438498

and collaboratively constructed narratives within familiar scenarios such as family, shop, or classroom contexts. These interactions were characterized by spontaneous language use, turn-taking, and expressive communication. Teacher guidance in these contexts often took the form of subtle prompts or modeling rather than direct instruction. When teachers introduced open-ended questions or modeled appropriate language, children responded by extending conversations, refining role identities, and sustaining narrative coherence over longer periods of play. As a result, role-play activities consistently supported sustained engagement and rich peer interaction, with children remaining involved for extended durations without signs of disengagement.

In addition to verbal interaction, role-play games fostered observable social cooperation behaviors. Children were seen negotiating access to roles, resolving minor conflicts, and coordinating actions to maintain shared storylines. Teacher interventions during moments of tension or misunderstanding were typically brief and targeted, focusing on redirecting attention or clarifying expectations rather than resolving issues on behalf of the children. These interactions allowed children to practice social problem-solving while maintaining ownership of the play process. The findings indicate that role-play games provided a context in which language use, social competence, and interpersonal engagement developed simultaneously through guided interaction.

Rule-based games presented a different pattern of participation characterized by structured engagement and goal-oriented behavior. Children participating in these activities demonstrated increased attention to rules, turn-taking procedures, and task objectives. Observations showed that children were generally able to follow simple rules and adjust their behavior in response to feedback. Teacher guidance played a more explicit role in these contexts, particularly during the initial stages of gameplay. Teachers frequently clarified rules, reminded children of game objectives, and monitored participation to ensure equitable turn-taking. As children became more familiar with the game structure, the need for direct teacher intervention decreased, and children increasingly regulated their own behavior.

Sustained attention was a notable feature of children's participation in rule-based games. Compared to other activity types, children were more likely to remain focused on task goals and to complete game sequences without interruption. Instances of rule violation or disengagement were typically addressed through brief teacher prompts, after which children quickly reoriented to the task. Problem-solving behaviors were also observed, particularly when children encountered challenges related to rule interpretation or task completion. In these situations, children often consulted peers or experimented with alternative strategies before seeking teacher assistance. These findings suggest that rule-based games supported the development of self-regulation and cognitive engagement within a structured but still playful environment.

Creative construction games revealed patterns of participation distinct from both role-play and rule-based activities. Children engaged in these activities with a strong focus on exploration, experimentation, and individual expression. Observations indicated that children spent considerable time manipulating materials, testing ideas, and modifying their designs. Unlike rule-based games, participation in creative construction tasks was less synchronized across the group, with children progressing at different paces and pursuing diverse outcomes. Teacher guidance in these contexts was intentionally open-ended, emphasizing encouragement and inquiry rather than directive instruction.

Children's behaviors during creative construction games included frequent experimentation with materials, generation of original designs, and voluntary sharing of ideas with peers. Teachers' open-ended questions often prompted children to reflect on their choices or to articulate their intentions, leading to increased verbal expression related to creative processes. Peer interaction in these contexts was less structured than in role-play games but still present, particularly during moments of idea exchange or collaborative problem-solving. The findings indicate that creative construction games supported creativity, spatial thinking, and imaginative engagement by providing children with autonomy and flexible guidance.

Across all three activity types, teacher guidance emerged as a key factor influencing the quality and depth of children's participation. While the form of guidance varied by activity context, several common patterns were observed. Teachers consistently adjusted their level of involvement based on children's engagement, offering more direct support when children appeared uncertain and withdrawing support when children demonstrated independence. This adaptive approach allowed children to remain challenged without becoming frustrated, thereby sustaining engagement across activities.

Another recurring finding was the alignment between teacher guidance strategies and children's participation behaviors. In contexts where teachers emphasized dialogue and modeling, children demonstrated increased verbal interaction and social cooperation. In contexts where teachers focused on rule clarification and feedback, children exhibited greater self-regulation and task persistence. In creative contexts where teachers encouraged exploration and inquiry, children showed higher levels of originality and reflective thinking. These patterns suggest that teacher guidance functioned as a mediating mechanism that shaped how gamified activities translated into specific learning-related behaviors.

Importantly, children's engagement across activity types was not uniform but context-dependent. Individual children displayed varying strengths depending on the structure and demands of the activity. Some children were particularly active during role-play games, while others demonstrated stronger engagement during rule-based or creative construction tasks. Teacher guidance played a critical role in supporting these individual differences by providing multiple entry points for participation. Teachers' flexible responses enabled children to engage meaningfully regardless of their preferred modes of interaction or expression.

Overall, the findings indicate that gamified learning activities, when accompanied by responsive teacher guidance, created diverse opportunities for children's engagement and development. Rather than producing uniform outcomes, these activities supported a range of participation behaviors and learning processes aligned with different developmental domains. The observed patterns demonstrate that the effectiveness of gamified learning in early childhood classrooms is closely linked to how teachers structure, guide, and respond to children's participation within specific activity contexts.

Discussion

The present study examined how teacher guidance functions within gamified learning contexts to shape young children's participation and learning processes in early childhood classrooms. Rather than treating gamified activities as inherently effective learning tools, the findings emphasize that the educational value of gamification is closely linked to the ways teachers structure interaction, respond to

DOI: 10.5281/zenodo.18438498

children's engagement, and align instructional support with the demands of different activity types. This perspective is consistent with current research suggesting that learning through play depends fundamentally on the quality of adult–child interaction rather than on the presence of games alone (OECD, 2021; Zosh et al., 2022).

Across the three categories of gamified activities examined in this study, distinct patterns emerged regarding how teacher guidance influenced children's engagement. In role-play games, teachers' dialogic prompts and language modeling supported sustained verbal interaction and social negotiation among children. Rather than directing play outcomes, teachers facilitated communication and co-construction of meaning, allowing children to maintain agency while benefiting from guided interaction. This aligns with dialogic teaching principles that emphasize purposeful dialogue as a means of extending children's thinking and supporting meaning-making in educational settings (Alexander, 2020). The findings also resonate with research on conceptual and imaginative play, which highlights the role of adult participation in enriching children's narrative development and social interaction without undermining the intrinsic qualities of play (Fleer, 2021; Fleer et al., 2021).

The role-play findings further contribute to ongoing discussions about appropriate levels of teacher involvement in play-based learning. While some perspectives advocate minimal adult intervention, the results of this study suggest that strategic and responsive guidance can enhance learning opportunities within play. Teachers' selective interventions during moments of social negotiation reflect a balanced pedagogical stance that aligns with the continuum of play-based pedagogy described by Pyle and Danniels (2021). In this view, teachers act neither as controllers nor as passive observers, but as facilitators who support learning while preserving children's ownership of play.

In rule-based games, more explicit forms of teacher guidance were associated with children's sustained attention, rule adherence, and goal-oriented behavior. Teachers' clarification of rules and provision of feedback supported children's ability to regulate their behavior and persist in task completion. These findings are consistent with research suggesting that structured forms of play, when accompanied by appropriate scaffolding, can support self-regulation and cognitive engagement in young children (Howard-Jones, 2018; Sailer & Homner, 2020). Importantly, the gradual reduction of teacher intervention as children became more familiar with game structures illustrates the dynamic nature of scaffolding in gamified learning contexts.

The observed patterns in rule-based activities also highlight the importance of teachers' pedagogical decision-making. Teachers continuously adjusted their level of support in response to children's understanding and engagement, reflecting moment-to-moment instructional judgments rather than rigid adherence to predetermined strategies. This finding aligns with previous research emphasizing that effective play-based teaching requires ongoing assessment and adaptive decision-making (Nolan & Paatsch, 2020; Nolan et al., 2021). By illustrating how such decisions unfold within gamified activities, this study extends existing literature on teacher roles in play-based learning environments.

Creative construction games revealed a contrasting mode of teacher guidance characterized by open-ended support and encouragement of exploration. Teachers emphasized inquiry, reflection, and validation of individual ideas rather than directing outcomes. This approach supported children's experimentation, originality, and imaginative engagement, reinforcing conceptualizations of creativity in early childhood education as a process-oriented phenomenon (Fleer et al., 2021; Plass et al., 2020). The findings suggest that when teachers adopt a facilitative stance in creative contexts, children are more likely to engage deeply with materials and to articulate their thinking through both verbal and nonverbal expression.

Across all activity types, a central finding of the study was the alignment between teacher guidance strategies and children's participation behaviors. Different forms of guidance appeared to elicit corresponding modes of engagement, indicating that teacher actions play a mediating role in how gamified activities translate into learning opportunities. This supports perspectives that position teachers as active agents in play-based and gamified learning, whose instructional choices shape the educational potential of play (Bakhsh & Mahmoudi, 2021; Pyle et al., 2020). The findings reinforce the idea that effective gamified learning is not defined by game mechanics alone, but by intentional pedagogical practices embedded within activity contexts.

The study also highlights the importance of accommodating individual differences in children's engagement across gamified learning activities. Variability in participation was observed, with some children demonstrating stronger engagement in role-play contexts and others responding more positively to structured or creative tasks. Teachers' flexible guidance strategies provided multiple entry points for participation, supporting inclusive learning experiences within a single classroom. This observation aligns with research emphasizing the value of diverse play opportunities in supporting different developmental pathways and learning preferences (Ramani & Brownell, 2021; Kangas et al., 2019).

From a broader perspective, the findings contribute to discussions on gamification in early childhood education by emphasizing its relational and instructional dimensions. While existing research on gamified learning has often focused on motivational mechanisms or digital game design (Howard-Jones et al., 2020; Kervin & Mantei, 2022), the present study underscores the importance of teacher–child interaction in non-digital, classroom-based gamified contexts. The results suggest that gamification should be understood not merely as the introduction of game elements, but as a pedagogical approach that requires deliberate instructional design and responsive teacher engagement.

Overall, this study contributes to the literature on play-based and gamified learning by offering a nuanced account of how teacher guidance operates across different activity structures. By examining the interplay between activity type, instructional support, and children's participation, the findings move beyond dichotomous views of teacher involvement as either supportive or intrusive. Instead, the study highlights the importance of attuned, context-sensitive guidance in fostering meaningful learning experiences. This perspective reinforces the view that high-quality gamified learning in early childhood education is fundamentally pedagogical, relational, and intentional.

Conclusion

This study investigated how teacher guidance operates within gamified learning contexts to support young children's participation and learning processes in early childhood classrooms. By adopting a practice-oriented qualitative approach, the study moved beyond generalized claims about the benefits of play or gamification and examined how learning opportunities are shaped through everyday instructional interactions. The findings demonstrate that gamified learning does not function as an independent pedagogical solution;

DOI: 10.5281/zenodo.18438498

rather, its educational value emerges through teachers' intentional, context-sensitive guidance across different activity structures.

A key contribution of this study lies in its differentiated analysis of teacher guidance across role-play games, rule-based games, and creative construction activities. The results show that distinct forms of guidance correspond to different modes of children's engagement, including dialogic interaction, self-regulation, problem-solving, and creative exploration. By highlighting this alignment, the study offers a more nuanced understanding of teacher involvement in gamified learning, challenging dichotomous views that frame teacher intervention as either supportive or intrusive. Instead, the findings suggest that effective teacher guidance is adaptive, responsive, and attuned to both the structure of activities and children's developmental needs.

From a theoretical perspective, the study contributes to discussions on play-based and gamified learning by foregrounding the relational and instructional dimensions of classroom practice. While previous research has emphasized motivational mechanisms or game design features, particularly in digital contexts, this study underscores the central role of teacher–child interaction in shaping learning experiences within non-digital, classroom-based gamified environments. In doing so, it reinforces the view that learning through play is fundamentally a socially mediated process that depends on pedagogical intentionality.

The study also has important implications for early childhood teaching practice and teacher education. The findings suggest that supporting high-quality gamified learning requires more than providing teachers with activity templates or game resources. Instead, professional development should focus on enhancing teachers' ability to observe children's engagement, make informed pedagogical decisions, and flexibly adjust guidance strategies in response to classroom dynamics. Encouraging reflective practice and dialogic interaction may be particularly valuable in helping teachers navigate the balance between structure and freedom in gamified learning contexts.

Several limitations of the study should be acknowledged. The research was conducted in a single classroom setting with a relatively small number of participants, which limits the generalizability of the findings. In addition, the study focused on qualitative observation and did not include quantitative measures of learning outcomes. Future research could build on these findings by examining teacher guidance in a wider range of educational contexts, incorporating mixed-methods designs, or exploring how different forms of guidance influence specific developmental outcomes over time.

In conclusion, this study demonstrates that the effectiveness of gamified learning in early childhood education is closely tied to the quality of teacher guidance embedded within classroom practice. By illustrating how teachers' instructional actions shape children's engagement across diverse gamified activities, the study contributes to a more practice-informed and pedagogically grounded understanding of gamified learning. These insights highlight the importance of viewing gamification not as a set of techniques, but as an instructional approach that relies on professional judgment, relational interaction, and intentional teaching.

References

1. Alexander, R. J. (2020). *A dialogic teaching companion.* Routledge. https://doi.org/10.4324/9781351040143
2. Bakhsh, S., & Mahmoudi, F. (2021). Teachers' roles in play-based learning environments: A qualitative study. *Early Childhood Education Journal, 49*, 623–635. https://doi.org/10.1007/s10643-020-01073-6
3. Edwards, S., Mantilla, A., Henderson, M., & Nolan, A. (2019). Digital play-based learning in early childhood education. *Australasian Journal of Early Childhood, 44*(3), 280–294. https://doi.org/10.1177/1836939119841459
4. Fleer, M. (2021). Conceptual play and learning in the early years. *Learning, Culture and Social Interaction, 28*, 100455. https://doi.org/10.1016/j.lcsi.2020.100455
5. Fleer, M., Rey, F., & Veresov, N. (2021). Play, imagination and creativity in early childhood education. *Cultural-Historical Psychology, 17*(4), 4–14. https://doi.org/10.17759/chp.2021170401
6. Howard-Jones, P. (2018). Evolution of game-based learning: New perspectives on learning and play. *Educational Psychology Review, 30*(3), 1037–1059. https://doi.org/10.1007/s10648-018-9420-7
7. Howard-Jones, P., Holmes, W., Demetriou, S., Jones, C., Tanimoto, E., Morgan, O., Perkins, D., & Davies, N. (2020). Toward a science of learning games. *Mind, Brain, and Education, 14*(2), 89–105. https://doi.org/10.1111/mbe.12243
8. Kangas, M., Ojala, M., & Venninen, T. (2019). Children's play and playfulness in early childhood education: A cultural-historical perspective. *Early Child Development and Care, 189*(9), 1496–1508. https://doi.org/10.1080/03004430.2017.1352455
9. Kervin, L., & Mantei, J. (2022). Digital play pedagogies in early childhood education. *Australasian Journal of Early Childhood, 47*(1), 3–16. https://doi.org/10.1177/18369391211054409
10. Nolan, A., & Paatsch, L. (2020). Teachers' pedagogical decision-making in play-based learning. *Teaching and Teacher Education, 94*, 103099. https://doi.org/10.1016/j.tate.2020.103099
11. Nolan, A., Paatsch, L., & O'Donnell, M. (2021). Play-based pedagogies and teacher positioning in early childhood education. *Early Childhood Education Journal, 49*, 803–814. https://doi.org/10.1007/s10643-020-01103-3
12. OECD. (2021). *Starting strong VI: Supporting meaningful interactions in early childhood education and care.* OECD Publishing. https://doi.org/10.1787/f47a06ae-en
13. Plass, J. L., Mayer, R. E., & Homer, B. D. (2020). *Handbook of game-based learning.* MIT Press.
14. Pyle, A., & Danniels, E. (2021). A continuum of play-based learning: The role of the teacher in play-based pedagogy. *Early Education and Development, 32*(3), 364–380. https://doi.org/10.1080/10409289.2020.1846464
15. Pyle, A., DeLuca, C., & Danniels, E. (2020). A scoping review of research on play-based pedagogies in kindergarten education. *Review of Education, 8*(3), 685–716. https://doi.org/10.1002/rev3.3205

DOI: 10.5281/zenodo.18438498

16. Ramani, G. B., & Brownell, C. A. (2021). The role of play in supporting young children's learning and development. *Annual Review of Developmental Psychology, 3*, 401–424. https://doi.org/10.1146/annurev-devpsych-121318-084945

17. Sailer, M., & Homner, L. (2020). The gamification of learning: A meta-analysis. *Educational Psychology Review, 32*, 77–112. https://doi.org/10.1007/s10648-019-09498-w

18. Zosh, J. M., Whitebread, D., Hopkins, E. J., Jensen, H., Liu, C., Neale, D., Hirsh-Pasek, K., & Golinkoff, R. M. (2022). Learning through play: Current evidence and future directions. *Early Childhood Research Quarterly, 60*, 82–95. https://doi.org/10.1016/j.ecresq.2021.10.007

DOI: 10.5281/zenodo.18438498