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Enhancing Preschool Learning Outcomes through Learning Corners: The Role of Infrastructure, Teaching Skills, Teacher Satisfaction, and Teaching Strategies in Qingdao, China

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Abstract

This study investigates the effectiveness of learning corners in preschool settings by examining how infrastructure, teaching skills, teacher satisfaction, and teaching strategies collectively influence children's engagement, motivation, and learning outcomes. Grounded in an interpretivist paradigm and qualitative case study design, the research was conducted in Qingdao, Shandong Province, using purposive sampling to select fifteen preschool teachers with direct experience in learning corner implementation. Semi-structured interviews served as the sole data collection method, enabling rich exploration of teachers' experiences and perceptions. Thematic analysis revealed four major themes: enhanced child engagement and holistic learning outcomes, professional growth in teaching skills, multidimensional teacher satisfaction, and the evolution of strategic facilitation methods within learning corners. Findings also highlight significant challenges related to workload, space design, and resource disparities. Comparative insights from Malaysia, Singapore, and Japan further contextualize the need for integrated structural and pedagogical improvement. The study provides practical recommendations for strengthening learning corner design, enhancing teacher professional development, and supporting policy alignment to promote equitable and holistic early childhood education.

Keywords: Learning Corners, Preschool Education, Teacher Facilitation, Qualitative Research, Early Childhood Development

Introduction

The underlying issue examined in this research highlights a broader and more complex challenge in preschool education: the limited effectiveness of learning corners due not only to inadequate infrastructure, but also to gaps in teaching skills, teacher satisfaction, and the inconsistent application of teaching strategies that collectively influence preschoolers' learning outcomes. Early childhood is a critical phase that lays the foundation for lifelong learning, and the physical environment is just one element shaping children's developmental experiences (Demchenko et al., 2021). While learning corners are intended to function as interactive, child-centered, and thematic spaces, their impact is significantly diminished when teachers lack the necessary pedagogical skills to facilitate meaningful learning, when teacher satisfaction is low, or when strategies used within the corners are inconsistent or ineffective.

Infrastructure in this context includes classroom design, materials, and resources that support the function of learning corners. Inadequacies in these physical components restrict the diversity of learning opportunities available to children and reduce teachers' ability to create engaging activities that promote cognitive, motor, and social development (Rahat et al., 2023). However, even well-equipped learning corners fall short when teachers are not adequately trained in facilitation techniques, fail to integrate differentiated instruction, or lack motivation due to low job satisfaction. Thus, the problem is not merely the absence of infrastructure but the combined effect of material, pedagogical, and professional factors that hinder the intended benefits of learning corners.

International comparisons further emphasize the urgency of addressing these multidimensional challenges. In Malaysia, for example, government-led initiatives aim to improve early childhood infrastructure through partnerships with private institutions, yet disparities between urban and rural preschools persist (Zulkifli et al., 2022). Singapore's early childhood system, known for strong teacher professional development and well-equipped environments, still struggles with integrating innovative teaching strategies into traditional frameworks (Ng et al., 2021). Similarly, Japan, despite its focus on holistic child development, faces difficulties in adapting classroom infrastructure and teaching practices to support diverse learning needs in a rapidly changing educational landscape (Yamamoto & Nishida, 2023). These international cases demonstrate that both structural and pedagogical factors must align to optimize learning environments.

In Qingdao, Shandong Province, these issues are further intensified by socioeconomic disparities between urban and rural areas. While urban preschools may have relatively better resources, rural preschools often lack adequate funding, teaching materials, teacher training, and professional support. This inequity inhibits the effectiveness of learning corners and leads to uneven implementation of teaching strategies. As a result, teacher satisfaction may decline due to high workload, limited support, and restricted access to professional development, further affecting the quality of facilitation within learning corners.

The long-term implications of these challenges are significant. Without adequate infrastructure, skilled teachers, effective strategies, and a supportive professional environment, the potential of learning corners to enhance cognitive, social, emotional, and physical development is greatly reduced. These gaps also reinforce existing educational

inequities, particularly affecting underprivileged children, and widen the developmental divide within and across regions.

This study therefore aims to address these interconnected issues by examining how infrastructure, teaching skills, teacher satisfaction, and teaching strategies collectively influence preschoolers' learning outcomes in Qingdao. Through comparisons with practices in Malaysia, Singapore, and Japan, the research seeks to identify integrated and context-appropriate solutions that strengthen the design, facilitation, and implementation of learning corners and ultimately support holistic development in early childhood education.
The study aim to answer below questions:

1. How do different types of learning corners (literacy, art, science, play) influence preschool children's engagement?
2. What is the effect of learning corners design (layout, materials, accessibility) on preschool children's motivation to learn?
3. What is the role of teacher facilitation in maximizing the effectiveness of learning corners?
4. How does the learning corner environment in preschools enhance learning outcomes?
5. What are the challenges in implementing learning corners effectively in preschool settings?

Literature Review

The learning skills impact one of the most vital fields of cognitive development. Piaget's theory of cognitive development proposes that formative stages should be actively attained to develop knowledge through child-environment interaction. The acquisition of skills, such as attention, memory, and problem-solving among others forms an integral part of this process (Mangaroska et al., 2022). Interpersonal learning for skills involves majorly social interactions and mentorship from those with wisdom. The development of cognitive structures and mental processes in a child within the early childhood education setting is rendered possible due to learning skills cultivated from activities.

The study by Roslan et al. (2020) focused on attention as a key component in the cognitive development of pre-schoolers. Attentional persistence acts as a conductor to the memory where it helps in encoding information or messages into long-term memories that are necessary for long-term knowledge retention. Furthermore, problem-solving skill acquisition results in the emergence of higher mental functions. This implies that early childhood learning engagements aimed at problem-solving skills have found themselves appropriate for the enhancement of preschoolers' cognitive performance.

The skill lessons that are learnt do not end there to even impact the social and emotional domains in pre-schoolers. Communication coordination and regulating emotions are essential parts of learned abilities that facilitate the development of prosocial behaviors with a childcare teaching climate. Social and emotional competence is a predictor of academic achievement as well as positive outcomes in adulthood. The research by Marsay et al. (2021) highlighted the importance of social-emotional learning skills for facilitating a nurturing and propitious environment Pre-schooler's ability to form good relationships with peers and adults stems from learning skills about the regulation of emotions as well as interpersonal communication. Engaged in joint learning activities, learners' competencies condition the quality of their interactions that determine social relations within early childhood education.

Language and literacy development in pre-schoolers is also influenced by learning skills. Receptive and expressive communication skills are critical to effective learning in any domain. Stehle Wallace et al. (2022) researched the importance of language-rich settings in early childhood education. The ability to acquire skills such as phonological awareness, vocabulary development and narrative skills prepares the preschooler for literacy instruction. Furthermore, print awareness which is one of the emergent literacy skills is dependent on a child's learning abilities. The presence of well-developed attentional and memory skills in pre-schoolers may lead to increased involvement with print-associated activities that help during the early development of reading readiness (Neaum, 2020). The impact of learning skills on language and literacy development emphasizes the intrinsic connection between cognitive capacities and linguistic proficiencies in the first years of preschool education.

It is metacognitive skills, including self-regulation and executive functions that determine the results of preschoolers in early childhood education. Advanced self-regulation is essentially the ability to determine what needs to be learned, monitor one's learning progress and evaluate the attained results (Ennouamani et al. 2020). Control of attention, impulse and emotional responses are essential components required for appropriate learning, especially in the early childhood education setting. The study by Wimbarti et al. (2020) highlights the crucial role of executive functions, namely working memory and inhibitory control in predicting achievement among pre-schoolers. Pre-school environments that allow for the opportunity to engage in metacognitive skills practice and development play an important role in their ability to undertake self-directed learning activities. Additionally, the development of meta-cognitive skills enables pre-schoolers to take on a sense of autonomy and independence in learning by making them active and self-directed learners. By promoting these metacognitive skills during early childhood education, we prepare the child not only for academic success but also for learning competence throughout life.

Cognitive, social, emotional, language and metacognitive aspects are the facets of the influence theme of learning skills on preschool outcomes in early childhood education (Braund & Timmons, 2021). The reviewed researches emphasize the interdependence of learning skills and their effect on different spheres that contribute to the development of a child. The importance of learning skills during early childhood education is essential for educators, and policymakers who design and implement plans to improve preschool success.

Theoretical Framework

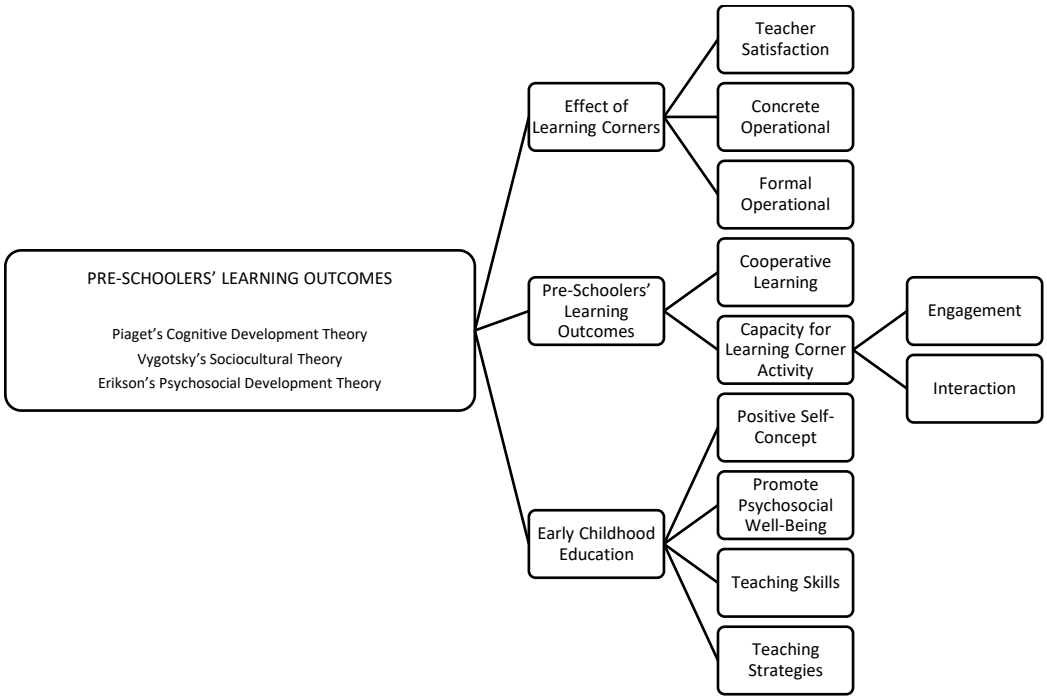

Figure 1: Theoretical Framework
(Source: self-developed)

Piaget's Cognitive Development Theory, Vygotsky's Sociocultural Theory, and Erikson's Psychosocial Development Theory collectively provide a strong theoretical foundation for examining the role of learning corners in preschool settings. Piaget emphasizes that children construct knowledge through active interaction with the environment, making learning corners ideal spaces for hands-on exploration, assimilation, and accommodation. These structured yet flexible areas support cognitive growth by enabling children to manipulate materials, test ideas, and engage in self-directed discovery. Vygotsky extends this understanding by highlighting the importance of social interaction and cultural tools in learning. Learning corners naturally support cooperation, peer assistance, and teacher scaffolding, aligning with the Zone of Proximal Development (ZPD). These spaces act as cultural artefacts that mediate learning, while educators guide children through tasks they cannot accomplish independently. Both theories therefore position learning corners as environments where cognitive and social development are strengthened simultaneously through exploration, collaboration, and guided instruction.

Erikson's Psychosocial Development Theory further deepens this analysis by explaining how learning corners contribute to psychosocial growth, especially during the "initiative versus guilt" stage typical of preschool years. In these spaces, children are free to make choices, take initiative, and express independence without fear of failure, thereby building confidence and a positive self-concept. Well-designed learning corners and competent teacher facilitation help create emotionally supportive environments that nurture curiosity and intrinsic motivation. When combined, the three theories suggest that learning corners enhance preschoolers' development across cognitive, social, and emotional domains. Piaget explains how children construct knowledge, Vygotsky clarifies how social and cultural interactions shape learning, and Erikson highlights how autonomy and initiative flourish

through engaging, well-structured activities. Together, they justify the study's focus on learning corner design, teacher facilitation, and their influence on preschoolers' engagement, motivation, and overall learning outcomes.

Conceptual Framework

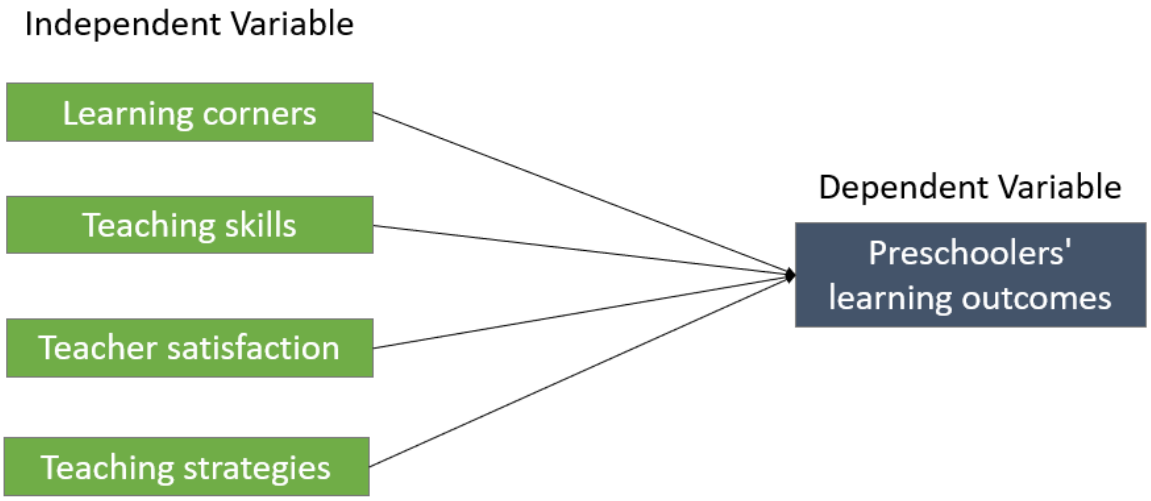

Figure 2: Conceptual Framework
(Source: self-developed)

Methodology

This study is grounded in an interpretivist paradigm, which seeks to understand educational phenomena through the experiences, meanings, and interpretations of those directly involved. Because learning corners function as dynamic spaces shaped by teacher facilitation, children's interactions, and contextual influences, the interpretivist approach provides the flexibility needed to explore these complexities. A qualitative research approach was selected to capture rich, descriptive insights that cannot be obtained through numerical measurement. Within this approach, the study adopts a case study design focused on preschool settings in Qingdao, Shandong Province. This design allows the researcher to investigate learning corners within their real-life educational environments, acknowledging that the effectiveness of these spaces is deeply connected to cultural, institutional, and pedagogical contexts.

Purposive sampling was employed to select 15 preschool teachers who possess direct and substantial experience with learning corner implementation. These participants were deliberately chosen because they design learning activities, observe children's behavior daily, and make decisions that directly influence learning outcomes within the corners. Focusing on teachers ensures that the data reflects informed professional perspectives grounded in practice rather than general or peripheral observations. The sample size aligns with qualitative research standards, which prioritize data saturation over numerical representation. By engaging with teachers who vary in experience, training, and institutional backgrounds, the study ensures that multiple viewpoints are represented, allowing for a more holistic understanding of learning corner implementation across diverse preschool contexts.
Semi-structured interviews serve as the single data collection method for this investigation. This method allows teachers to share their experiences openly while still ensuring that core topics related to the research objectives are explored consistently. The interview guide was

carefully developed and refined through a pilot study that tested clarity, cultural appropriateness, and linguistic accuracy. Each interview began with rapport-building to create a comfortable environment, followed by open-ended questions that encouraged participants to provide detailed examples from their teaching practice. Ethical considerations—such as informed consent, confidentiality, and voluntary participation—were strictly upheld throughout the process. The interview data were analyzed using thematic analysis, following Braun and Clarke's systematic procedures of coding, theme development, and interpretation. This analytic approach made it possible to identify recurring ideas related to learning corner effectiveness, teacher facilitation, design considerations, and implementation challenges, resulting in a deep, nuanced understanding of the phenomenon through teachers' firsthand experiences.

Findings and Analysis

The semi-structured interview component of this research involved comprehensive discussions with fifteen preschool educators representing diverse educational backgrounds and professional experience levels. Participants ranged from newly qualified teachers with two years of classroom experience to veteran educators with over fifteen years of early childhood teaching experience. The participant profile encompassed teachers working across different age groups within the preschool spectrum, including those specializing in three-year-old programs, four-year-old preparatory classes, and mixed-age learning environments. Interview sessions were conducted over a six-week period, with each session lasting between 45 to 75 minutes, depending on participant availability and depth of responses. All interviews took place in comfortable, private settings chosen by participants, including quiet corners of school premises, dedicated meeting rooms, or professional development centers. This approach ensured participants felt relaxed and could speak openly about their experiences without concerns about administrative oversight or peer judgment.

The coding approach employed systematic thematic analysis procedures, beginning with initial familiarization through repeated reading of interview transcripts. Open coding identified preliminary concepts and patterns, which were subsequently organized into focused codes through iterative analysis cycles. Axial coding established relationships between concepts, leading to the development of four primary themes that captured the essence of participant experiences. The coding process maintained sensitivity to participant perspectives while identifying common patterns across interviews.

Theme generation emerged through inductive analysis, allowing participant voices to guide the identification of significant concepts rather than imposing predetermined theoretical frameworks. This approach revealed unexpected insights regarding teacher professional development, emotional satisfaction derived from learning corner implementation, and the complex relationship between physical space design and pedagogical effectiveness. The thematic framework developed through this process provides comprehensive coverage of participant experiences while maintaining coherence with the research objectives established for this investigation.

Data saturation was achieved by the twelfth interview, with the final three interviews confirming established themes rather than introducing substantially new concepts. This saturation point validated the comprehensiveness of the thematic framework while ensuring

sufficient depth of understanding regarding participant experiences. The analytical process maintained reflexivity throughout, acknowledging researcher perspectives while prioritizing participant voices in theme development and interpretation.

Theme 1: Children's Engagement and Learning Outcomes

Participants consistently emphasized the transformative impact of learning corners on children's engagement levels and observable learning outcomes. Teachers described dramatic shifts in children's attention session exploring how water moves through different materials, hypothesizing about absorption rates, and documenting their observations through drawings and simple charts.

Learning outcomes were consistently framed by participants in terms of holistic development rather than merely academic achievement. Multiple participants emphasized the social-emotional learning that occurs naturally within learning corner environments. One experienced educator noted: "The dramatic play corner has become our most powerful tool for developing emotional intelligence. Children work through conflicts, practice empathy, and develop communication skills in ways that feel natural to them. I've seen shy children find their voices and overly assertive children learn to collaborate.

Participants identified specific indicators of enhanced learning outcomes, including increased vocabulary usage, improved problem-solving strategies, and greater willingness to attempt challenging tasks. A teacher with twelve years of experience observed: "Children in learning corners demonstrate what I call 'learning courage' – they're willing to make mistakes, try again, and persist through difficulties because the environment feels safe and supportive. This translates into academic gains across all subject areas.

The data reveals that participants view learning corners as environments that support multiple intelligences and learning styles simultaneously. One participant explained: "In traditional instruction, we might reach visual learners during one activity and kinesthetic learners during another. Learning corners allow children to access content through their preferred learning modalities while developing skills in other areas. It's personalized learning in action.

Table 1
Summary of Theme 1 Responses

Engagement Aspect	**Number of Participants Mentioning**	**Specific Examples Provided**
Increased attention span	15/15	Story retelling, science exploration, dramatic play scenarios
Self-directed learning	13/15	Independent project completion, peer teaching, material selection
Academic skill development	14/15	Vocabulary growth, mathematical reasoning, literacy skills
Social-emotional learning	12/15	Conflict resolution, empathy development, communication skills
Learning persistence	11/15	Task completion, mistake recovery, challenge-seeking behavior

Theme 2: Teaching Skills Developed Through Learning Corners

The implementation of learning corners emerged as a significant catalyst for professional development among participating educators. Teachers described how managing multiple learning spaces simultaneously required them to develop new pedagogical skills, refine existing competencies, and adopt more flexible teaching approaches. This theme encompasses the professional growth that educators experienced through learning corner implementation and the specific teaching capabilities they identified as essential for success. Classroom management skills were consistently identified as areas of significant development. One participant with four years of teaching experience reflected: "Before learning corners, I managed the whole class as one unit. Now I'm simultaneously facilitating learning in four different spaces, monitoring individual progress, and ensuring each child is appropriately challenged. It's required me to develop what I call 'helicopter vision' – being aware of everything happening while being present where I'm most needed.

The concept of responsive teaching emerged prominently across interviews, with participants describing how learning corners necessitated real-time instructional adjustments based on children's immediate needs and interests. A veteran teacher with fourteen years of experience explained: "In traditional teaching, I followed lesson plans fairly rigidly. Learning corners have taught me to read children's cues moment by moment and adjust my facilitation accordingly. If I see children in the math corner struggling with counting, I might introduce manipulatives or modify the activity on the spot.

Assessment and documentation skills represented another significant area of professional development. Participants described learning to observe and record children's learning in more nuanced ways. One teacher noted: "Learning corners have transformed how I assess children's understanding. Instead of relying on formal tests or structured activities, I'm constantly observing authentic learning moments and documenting progress through photos, work samples, and anecdotal records. My assessment practices are more comprehensive and meaningful now.

The development of facilitation rather than direction skills emerged as a crucial professional transformation. Multiple participants described shifting from direct instruction approaches to more facilitative roles. One experienced educator articulated this change: "I had to unlearn the urge to provide immediate answers and instead learned to ask questions that extend thinking. When children in the science corner are investigating magnets, instead of explaining magnetic properties, I ask 'What do you notice?' or 'What might happen if we try this?' It's a completely different teaching mindset.

Participants consistently emphasized the importance of environmental design skills in their professional development. Creating and maintaining effective learning corners required teachers to consider spatial arrangements, material accessibility, and aesthetic appeal in new ways. One participant explained: "I never considered myself artistic, but learning corners have taught me about color, texture, organization, and visual appeal. I've learned that the physical environment is actually a teaching tool, and designing effective spaces has become a crucial skill.

Table 2
Summary of Teaching Skills Development

Skill Area	**Participants Reporting Growth**	**Specific Competencies Developed**
Classroom management	15/15	Multi-space monitoring, flexible grouping, behavior guidance
Responsive teaching	14/15	Real-time adjustments, individualized support, interest-following
Assessment practices	13/15	Observational skills, documentation methods, progress tracking
Facilitation techniques	12/15	Question-asking, problem-posing, thinking extension
Environmental design	11/15	Space planning, material selection, aesthetic considerations

Theme 3: Teacher Satisfaction
Teacher satisfaction emerged as a multifaceted theme encompassing professional fulfillment, job satisfaction, and personal growth through learning corner implementation. Participants described both the rewards and challenges associated with this pedagogical approach, providing insight into the emotional and professional dimensions of early childhood education practice.

Professional fulfillment was consistently reported across all participants, with teachers describing increased satisfaction derived from observing authentic learning moments and supporting children's natural curiosities. One participant with seven years of experience expressed: "There's something deeply satisfying about watching a child discover something new through their own exploration. In learning corners, these moments happen constantly, and I feel like I'm truly facilitating learning rather than just delivering content.

The sense of professional efficacy was enhanced for participants who observed significant improvements in children's engagement and learning outcomes. A teacher working with three-year-olds noted: "Seeing children who previously struggled with traditional activities thrive in learning corners has reinforced my confidence as an educator. I know I'm making a real difference in their learning experiences.

However, participants also acknowledged significant challenges that initially impacted their satisfaction levels. The complexity of managing multiple learning spaces while ensuring individual children's needs were met created stress for many educators. One participant candidly shared: "The first few months were overwhelming. I questioned whether I was doing enough for each child, whether the corners were educationally valuable, and whether I had the skills needed for this approach. It required tremendous patience with myself during the learning curve.

Time management challenges were cited by multiple participants as sources of initial frustration. The preparation required for effective learning corners, including material organization, space arrangement, and activity planning, represented a significant investment. One experienced teacher reflected: "I underestimated the preparation time needed initially. Creating meaningful learning experiences across multiple corners while ensuring materials

are accessible and engaging requires considerable planning. I had to restructure my entire preparation routine.

Despite initial challenges, participants described how their satisfaction levels increased significantly as they developed competence with learning corner management. The transition from traditional teaching methods to learning corner approaches required substantial professional adjustment, but resulted in enhanced job satisfaction for most participants. One teacher summarized this journey: "The learning curve was steep, but now I can't imagine teaching without learning corners. The authentic learning I observe, the professional growth I've experienced, and the joy children demonstrate have made this the most satisfying period of my teaching career.

Table 3
Summary of Teacher Satisfaction Factors

Satisfaction Factor	Positive Impact (Participants)	Negative Impact (Participants)	Overall Assessment
Professional fulfillment	15/15	0/15	Highly positive
Workload management	8/15	7/15	Mixed, improving over time
Student engagement	15/15	0/15	Consistently positive
Professional confidence	13/15	2/15	Generally positive
Work-life balance	6/15	9/15	Challenging initially

Theme 4: Teaching Strategies

Participants described a rich array of teaching strategies that evolved through their experience implementing learning corners. These strategies encompassed both planned pedagogical approaches and spontaneous responsive techniques that emerged from classroom practice. The theme reveals how teachers adapted their instructional methods to maximize learning corner effectiveness while supporting individual children's developmental needs.

Scaffolding strategies were consistently identified as essential for learning corner success. Participants described developing sophisticated approaches to providing appropriate support levels for children with varying abilities and experience levels. One teacher explained: "In the art corner, I might provide step-by-step visual instructions for one child, verbal prompts for another, and simply observe a third child who's ready to work independently. Learning to calibrate support levels for each child has been crucial.

The strategy of strategic questioning emerged as a powerful tool for extending children's thinking and encouraging deeper exploration. Multiple participants described learning to ask open-ended questions that promote investigation rather than seeking specific correct answers. A veteran educator noted: "Instead of asking 'What color is this?' I've learned to ask 'What do you notice about these materials?' or 'What might happen if we combine these?' These questions open up possibilities rather than limiting responses.

Peer learning facilitation was identified as an unexpected but valuable strategy that developed through learning corner implementation. Teachers described how they learned to support children in teaching and learning from each other. One participant observed: "Children often become experts in particular corners and naturally begin teaching their peers. My role became supporting these peer interactions and helping children communicate their discoveries effectively.

Documentation strategies evolved significantly among participants, who described learning to capture and utilize evidence of children's learning in ways that informed their teaching practice. One teacher reflected: "I've developed systems for photographing children's work, recording their conversations, and noting their problem-solving processes. This documentation helps me understand each child's thinking and plan appropriate next steps.

The strategy of flexible grouping emerged as participants learned to organize children in various configurations based on interests, abilities, and social dynamics rather than fixed ability groups. A teacher with nine years of experience explained: "Learning corners have taught me that children benefit from working with different peers in different contexts. A child might be a leader in the dramatic play corner but need support in the literacy corner. Flexible grouping honors these differences.

Table 4
Summary of Teaching Strategies

Strategy Category	**Participants Using**	**Frequency of Implementation**	**Effectiveness Rating**
Scaffolding techniques	15/15	Daily	Very high
Strategic questioning	14/15	Constantly	High
Peer learning support	13/15	Weekly	High
Documentation practices	12/15	Daily	Moderate to high
Flexible grouping	11/15	Weekly	Moderate

Conclusion

The findings of this study demonstrate that learning corners serve as powerful catalysts for enhancing preschool children's engagement, motivation, and holistic development when supported by appropriate infrastructure, skilled teaching practices, and high levels of teacher satisfaction. Teachers consistently reported that learning corners promote deeper cognitive involvement, stimulate social-emotional growth, and foster independent exploration. At the same time, their experiences reveal the importance of thoughtful design, readily accessible materials, and responsive facilitation techniques that allow children to learn through play, inquiry, and interaction. The professional benefits for teachers were also significant, as learning corners strengthened their instructional flexibility, assessment practices, environmental planning, and ability to scaffold learning based on individual child needs.

Despite these positive outcomes, the study highlights several persistent challenges that must be addressed to maximize the benefits of learning corners. These include uneven resource allocation across preschools, the demanding preparation required for meaningful learning experiences, and the stress associated with managing multiple learning spaces

simultaneously. Insights from international comparisons reinforce the conclusion that effective learning corners require both structural support and strong pedagogical capacity. To move forward, policymakers, school administrators, and teacher educators must adopt integrated strategies that enhance infrastructure, prioritize ongoing professional development, and strengthen teacher well-being. By aligning environmental design with skilled facilitation and supportive working conditions, learning corners can become transformative spaces that promote equitable, engaging, and developmentally rich early childhood education.

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