

# **Influence of Play-based Learning in Early Childhood Education (ECE) in Bangladesh: Lessons from Japan\***

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## **Abstract**

Universally, Early Childhood Education (ECE) received considerable attention among the stakeholders, and multiple international studies have emphasized the critical nature of the high-quality ECE facilities that integrate learning and play. Several studies have demonstrated the positive influence of decent learning environments on prospects and the comprehensive development of children. This research focuses on play-based learning through gamification to characterize the excellent ECE environments and provide the importance of play-based learning in Bangladesh. This case study research focuses on the necessities of play-based learning in Bangladesh for ECE development, considering the Japanese experience. This study shows that the absence of children's play and play-based learning in Bangladesh is due to a lack of government policy initiatives and parental socioeconomic situations. A theoretical analysis has been included through Vygotsky's sociocultural approach to understanding the necessities of play-based learning for the welfare of children in Bangladesh. The findings show that the government policy formulation and stakeholders' engagement might create the opportunity for establishing play-based learning in ECE.

**Keywords:** early childhood education, play-based learning, Bangladesh, Japan.

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## **Introduction**

In the 21st century, the curriculum and education methods have undergone significant changes and modifications. To keep pace with these constant changes, education policymakers and parents are putting extra pressure on children. This pressure deprives children of their wonderful childhood (Bulunuz, 2013). Instead of toys, parents provide their children with only academic books. Since early mornings, they have been rushing behind the school bus. In the afternoons, kids take extra tuition instead of playing in the park. It is also hampering their mental and physical health (Alam, 2019). George and Bennett (2005) argued that two broad categories are apparent in many western countries: first, the pre-primary tradition, which emphasizes cognitive goals and school readiness, and second, the social pedagogic tradition that emphasizes children's play and socialization; the latter approach strengthens developmental goals, allowing staff to customize ECE programs to local context and assess children based on a larger scale of objectives rather than predetermined outcomes (Fung & Cheng, 2012). As a result, these methods are completely linked to various perspectives on children (Kangas et al., 2020). By concentrating on the deeper structures of ECE and the cultural construct of play-based learning in different nations, we may understand how play-based learning is defined and interpreted in policy documents that play should be a part of ECE's daily activities. This term elucidates and explains children's cultural variations, attitudes, values, and play in their early years. While children have many opportunities to play with creative activities, their imaginations will be stimulated to think beyond the box. Many studies have discovered the worldwide crisis of play in many early childhood institutions; play is widely regarded as the most effective way for young children to learn. Moreover, a global play crisis has been observed in many early childhood institutions (McInnes et al., 2011). Children's rights to play have been increasingly compromised as a result of preschool teachers encouraging them to learn mathematics. The idea of learning through play is at odds with the reality of preschool instructors' pressure to prepare children for primary school (Wong et al., 2011). As a result of this work-play divide, children's playtime has been severely restricted to prepare them for formal schooling. The importance and potential of creative play activities for children's overall learning and development should be recognized by preschool stakeholders. They should encourage

preschool teachers to use it in their teaching and learning methods (Nicolopoulou et al., 2009). This research aims to address the hurdles and importance of ECE play-based learning in Bangladesh, considering the Japanese experience.

### **Conceptualizing the Play-based Learning**

Play-based learning is a type of ECE that focuses on child-led, open-ended play. Play-based learning refers to finger painting or ‘playing house,’ which is the everyday activity of preschoolers which assists them in finding out their world (Berggren et al., 2018). Although it has no aim or original goal, play is usually recognized as a voluntary and delightful activity. However, as a long-term asset, it provides benefits in the future. These activities strengthen a child’s foundation by making them curious and enthusiastic about learning and becoming good learners in their later life (Fisher et al., 2008). Play-based learning supports a child to develop their communication skills, as they interact with many children every day while playing. It also motivates children to learn by assisting them significantly with language and math comprehension. Play encompasses taking the initiative, paying close attention, and being curious about the world (Huisman, 2000). In research, the precise interpretation of the play and what activities may be called play are still a topic of debate. Playing has a larger definition, but play-based learning relates to the information that children gain while playing. Although learning is not required for an activity considered play, it is essential to the notion of play-based learning (Milteer et al., 2012). Previous studies have found that play can be viewed as two different types. The first is free-to-play, in which children are allowed to do whatever they like; the second is guided play, which is initiated by professional teachers who have completed professional play-based learning training (Danniels & Pyle, 2018). Training in Play-based learning entails educating while having fun. However, the specific role of play, including what exercises can be considered during teaching, is separate from the broader concept of play.

The play training emphasizes the educational relevance of this realm of experience- the importance of this type of experience, and the claim that play includes the two most significant educational principles. On the one hand, there is the impulsive and spontaneous

direction, and on the other hand, there is the deliberate direction of play-based learning (Nicolopoulou, 2010). It is usually considered that play pedagogy is exclusively concerned with the second principle, as mentioned earlier of play-based learning in ECE. Rather than creating and controlling play experiences and resources with specific educational goals in mind, this curriculum assesses the whole play experience to understand its potential outcomes, material circumstances, and ultimate significance as the matter develops (Farné, 2005).

### **Why does play-based learning matter in ECE?**

Children learn through play, and while playing, they discover, take risks, use their imaginations, and solve issues. They acquire the necessary skills to advance socially, physically, and intellectually. Play-based learning appeals to children's innate curiosity and willingness to engage in activities based on their specific interests as they understand their surroundings. Instructors in play-based learning curriculums customize their teaching methods to the form of play that engage children (Chowdhury & Rivalland, 2011).

Several studies have found that children's linguistic skills improve while they play. A child learns many necessary vocabularies in their preschool years, and play-based learning facilitates children to execute natural conversation. Even engaging in solitary, play-based learning promotes language and communication skills. Play-based learning is essential for a child's social and behavioral development, including the formation of meaningful relationships with classmates and peers (Figure 1). They learn to share, assist one another, solve issues, and form bonds as they play together.

Most children acquire imagination and creativity naturally. Therefore, we can consider imagination or creativity an innate trait of every child (Shin & Partyka, 2017). However, these are fundamental skills that children must acquire during their learning phase. Play is essential in supporting children in traversing a variety of situations in their lives, both imaginary and real. One of the essential traits gained via play-based learning is confidence (Yin et al., 2021). A child's confidence allows them to broaden their horizons and take measured risks. Encouraging children to decide the form they prefer to play makes it easier

for them to comprehend topics since they are more interested and involved with what they are learning. It also promotes self-directed and independent learning by allowing them to take the lead (Alam, 2021).



*Figure 1. Multiple Benefits of Play-based Learning*

*Note.* The figure was developed based on Wong et al., 2011.

### **Play-based Learning: The Japanese Context**

The National Curriculum Standards for Kindergarten (NCSK), an organization of the Japanese government that works for the welfare of children, supports the significance of play-based learning in Japanese Early Childhood Education (ECE). The NCSK interprets play's meaning in ECE as the foundation for the entire life. The NCSK also describes that, through playful learning, children can develop various skills, such as physical, mental, emotional, communicative, and language (Synodi, 2010). People in Japan believe that other people are crucial in their everyday and social lives; they believe that play-based learning is unavoidable and essential for children in ECE. It provides a safe atmosphere for children to play and learn while forming friendships with their peers. Japanese ECE is based on the concept that children develop their knowledge and field of imagination by playing in the environment provided by the preschools, where they participate as members of groups of children. They

also believe that play makes children strong, care about each other, and be responsible (Izumi-Taylor et al., 2010).

Teachers play the most significant roles in play-based learning in ECE, so the teachers must be well trained for this sector. In the Japanese context, teachers must have two years of associate degrees in ECE and in-service training. In Japan, ECE college programs suggest teachers two distinct kinds of degrees. The first concern is working in a childcare center, and the second concern is working in preschool programs for children aged 3 to 5 (Recchia et al., 2018). Play-based learning in ECE is emphasized a lot by the teachers in Japan. Teachers encourage children to get involved in the play by allowing them to play what they like while learning something for their lives. Teachers constantly update the play pedagogy by their choices, findings, and understanding for the proper development of the children. Japanese play-based learning focuses entirely on practical learning. They do not force students to learn from the books; instead, teachers set up a play-based learning environment to provide children with those lessons in enjoyable circumstances (Izumi-Taylor et al., 2014).

### **Play-based Learning: The Bangladesh Context**

Bangladesh is currently an emerging and developing country in the world. The educational system has had a massive improvement in comparison to previous decades. Higher education institutions have made such strides that several have risen to worldwide rankings. However, not every portion of the education sector is developed equally. The ECE substantially lacks school infrastructure and a learning environment that is friendly for children to learn. Play-based learning is not widely available in the Bangladeshi ECE system (Das et al., 2021). Primary schools providing ECE facilities lack the necessary equipment for children to build up play-based learning facilities. Simultaneously, qualified, and trained teachers for play-based learning, a crucial component of this learning opportunity, are limited. Enough trained faculty members are compulsory for initiating play-based learning in Bangladesh. Nonetheless, one of the primary reasons for the loss of play-based learning in Bangladesh is the lack of qualified teachers to teach children through play-based learning (Harju-Luukkainen & Kangas, 2021).

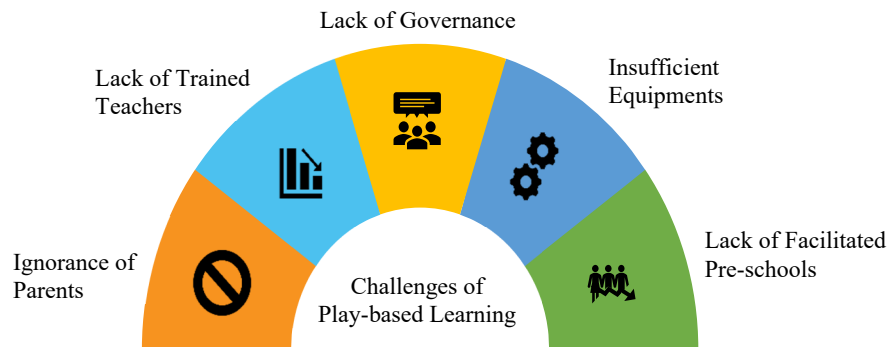


Figure 2. Challenges for Play-based Learning in Bangladesh

Note. The figure was developed based on Alam, 2019.

Play-based learning in the ECE is a western educational approach that Bangladesh is trying to adapt to its educational system. Every bold initiative comes with its challenges; a play-based learning method is no exception, as it faces challenges in Bangladesh. Bangladeshi parents are unfamiliar with play-based learning as it is a western concept and new in the Bangladeshi context. Almost all parents consider 'play' a waste of time and do not understand the true purpose of learning through playing. There are few private and government schools available with play-based learning features in Bangladesh. However, because of being ignorant of play-based learning in ECE, Bangladeshi parents do not feel comfortable sending their children to private preschools; instead, they enroll them in mainstream government institutions that provide ECE facilities (Alam et al., 2022).

### Theoretical Framework of Play-based Learning

In this study, the author attempted to explain the phenomena of play-based learning of ECE through the lens of Lev Vygotsky's Socio-cultural theory. Over the last several decades, Vygotsky's (1967) work has served as the foundation for much perceptual development for early childhood learning. According to sociocultural theory, human development is a socially moderated procedure wherein children adopt cultural values, perceptions, and critical thinking skills through interactive discussion with more experienced members of society.

Vygotsky's theory includes children's engagement in the learning process and cultural-specific resources for private social communication. Since he was a firm believer in the critical role of community in the process of attempting to create meanings, Vygotsky's theories highlight the importance of social contact in the creation of intellect through engagement (Vygotsky, 1978). Further, "Learning is an important and fundamental component of the act of socially ordered, and particularly human psychological functioning growth" Vygotsky is considered the founder of the socio-cultural perspective on intellectual growth through play. Individual growth is hard to comprehend without considering the social and cultural contexts. The roots of individuals with higher cognitive capabilities can be traced back to socially engaging stakeholders. Due to interaction with the socio-cultural environment, these cognitive activities develop more comprehensively and efficiently, which Vygotsky called "higher mental functions." Each society affords its children intellectual adaptation tools to employ better and alter basic cognitive processes via engagement (Vygotsky, 1987).

Table 1. *Vygotsky's Sociocultural Approach for Play-based Learning*

| Features and Domain                                   | Vygotskian Approach                                                                      |
|-------------------------------------------------------|------------------------------------------------------------------------------------------|
| <b>Sociocultural context</b>                          | Vygotskian theory emphasizes sociocultural context strongly.                             |
| <b>Constructivism</b>                                 | This theory is a social constructivist                                                   |
| <b>Critical processes in development and learning</b> | Zone of proximal development; language/conversation; tools of culture.                   |
| <b>Role of language</b>                               | Language plays a decisive role in shaping children's thoughts.                           |
| <b>Teaching implications</b>                          | Establish opportunities for children to learn with their teacher and more skilled peers. |

*Note:* Created by Author based on Vygotsky's Sociocultural Theory.

The zone of proximal development (ZPD) is defined as the gap between the overall development and the degree of potential growth as indicated by problem-solving under adult supervision or in partnership with more capable peers through engagement as play-based. According to Vygotsky, children should be instructed by the teachers in the ZPD, which develops when they can realistically execute a task without the help of teachers but not entirely through play-based learning. They can, nevertheless, achieve success with the appropriate guidance. A good teacher recognizes a child's ZPD and encourages them to

overcome it while learning through play. Based on Vygotsky's sociocultural theory, this hypothesis explains why children who appear to lack skills when examined often perform better when they are in proximity of somebody who has the essential knowledge. The zone of proximal development incorporates skills demonstrated in this social context but not in an isolated setting. A better knowledgeable individual such as a teacher should assist the child in their cognitive progress for lifelong learning through play-based engagement.

## **Methods**

### **Case Study Approach**

This exploratory study uses case studies to better understand the value of play-based learning in early childhood education. This strategy encourages the creation of re-energized debates, which is a useful tool for teaching ideas and demonstrating how many aspects of a person's life are linked to their children's early learning. Qualitative research relies on open-ended and conversational interaction to gather data. A qualitative case study was adopted for this study, and data were collected through in-depth interviews (IDIs). This case study drew on various sources and indicators, including direct observation of the event and interviews with parents directly involved with ECE settings. On the other hand, this case study research focused on various events that may or may not apply to diverse circumstances, contexts, or perspectives. This method features a case study of Bangladesh's play-based learning process and an analysis of Early Childhood Educational potentials, benefits, and challenges. For this study, documents are a significant source of data, and research is particularly relevant to pedagogical sciences, as educational processes continually generate an abundance of documentary data (Punch & Oancea, 2014). National, regional, unit, and child-specific curriculums documenting child growth and additional day-to-day evaluation in the operational environment are all part of the contested ECE and care. This study focuses on the critical theory, which has been significant in ECE. Cohen and Arieli (2011) reported that it had been claimed that the most acceptable explanation of the curriculum is provided by a progressive, materialist standpoint of the evolution of education and society for many years.

### Definition of Case and Sample Framework

This study considered cases based on the school types as the ECE settings in Bangladesh are diverse, and the government could not ensure an inclusive system for the ECE due to policy limitations. Parents are considered the leading stakeholders in their child's learning. As a result, this study considered interviewing parents with children enrolled in ECE among the available types of ECE schools to explore the research objectives and in-depth understanding. Only looking at quantitative characteristics of human behavior is unlikely to provide insights into the subjective extent and experience.

This study used a qualitative multiple-case approach in the Rajshahi and Dhaka district in Bangladesh because these areas contain the country's average and the most considerable number of ECE school facilities. The multiple cases were selected based on a random purposive sampling method to explore the gamification and play-based learning in ECE. Data are collected from rural and urban areas among the available five types of schools: public schools (government), private schools (kindergarten), NGO-based schools, Madrasa-based schools (religious), and others (mosque, Indigenous, non-formal Schools) (Table 2). Semi-structured in-depth questionnaire interviews with parents with children aged 3 to 5 years as principal participants.

Table 2. *Data Collection and Participants*

| Area            | School Types                             | No. of Parents    |                |
|-----------------|------------------------------------------|-------------------|----------------|
|                 |                                          | Rajshahi District | Dhaka District |
| Urban and Rural | Government Primary School                | 2                 | 2              |
|                 | Private School (Kindergarten)            | 2                 | 2              |
|                 | NGO (Non-Government Organization) School | 2                 | 2              |
|                 | Madrasa (Religious)                      | 2                 | 2              |
|                 | Others (Mosque, Temple, Indigenous)      | 2                 | 2              |
| Total           |                                          | 10                | 10             |

*Source:* Created by Author based on field research

This study included twenty cases from Bangladesh: ten from Dhaka and ten from Rajshahi Division, Bangladesh (10-Dhaka; 10-Rajshahi). These cases determined children's cognitive

and intellectual cognition, who obtained ECE with and without gamification and play-based learning. The primary qualitative data collected using IDI was processed and analyzed for coding and theme generation based on respondents' reactions and perceptions. All respondents were fully informed regarding the research purpose and their freedom of participation. Furthermore, research ethics and considerations were maintained throughout the data collection, processing, and analysis. This study used pseudonyms and codes to keep the respondent's identity anonymous for ethical consideration.

### **Case Overview**

One of the twenty case studies took place in Rajshahi, Bangladesh, where ECE is provided to a high number of children in a single class. Only one teacher in this class facilitates the ECE class. According to the respondent, no other ECE providers are in their nearest vicinity. Furthermore, they do not have sufficient expertise in play-based teaching through gamification. They were dissatisfied with the ECE facilities and primarily ignorant of play-based learning and its potential benefit. As a result, parents' enthusiasm for ECE has faded. They, like the teachers, are also unaware of play-based learning through gamification in ECE due to excessive class pressure in the school.

## **Findings**

### **Play-based ECE Curriculum**

To begin with, the terminology of play-based learning in ECE is not widely adopted and practiced in Bangladesh. The parents of the children in the ECE phase are unfamiliar with the play-based learning method; however, many parents expressed their anxiety concerning the teaching technique and curriculum followed at their child's schools. Their perspectives on play are purely recreational while learning, and some parents believe that it is entirely a waste of time for the children. Bangladeshi parents are not enthusiastic supporters of play-based learning as both the government and private ECE institutions are not providing the

facilities for play-based learning. Instead of government preschools with fewer play facilities, they choose to send their children to nursery or kindergarten (private) schools. However, considering the teacher-student ratio and government school-age barrier to enrolling in ECE. The government ECE can enroll children at the age of 5 only, but the other ECE schools enroll children aged 3-5 years. Parents do not support sending their children to play in the afternoon; instead, they provide them with technological devices which lack practical knowledge and social skills.

Parents C, mentioned that

“The available ECE schools follow the rote learning system, which distracts my children from learning; my child does not find interest in attending school as the school does not provide the learning through play facilities, where she feels like playing with her friends. The government should consider a unified curriculum with gamification and play-based learning for ECE school children.”

However, some parents believe in the power of playful education, encouraging children to play and work to develop this sector in Bangladesh. Many parents reported that in ECE, the curriculum is not appropriate, and which does not reflect learning with play. Parents reported that designing a formal curriculum for preschools would be beneficial in spreading the use of play-based learning.

Table 3. *Types of ECE Schools and Curriculum*

| School Types | Public      | Private           | NGO     | Madrasa | Others<br>(Mosque, Temple) |
|--------------|-------------|-------------------|---------|---------|----------------------------|
| Curriculum   | Bangla      | Bangla            | Bangla  | Bangla  | Bangla                     |
|              | Mathematics | English           | English | English | English                    |
|              | Drawing     | Mathematics       | Math    | Math    | Math                       |
|              |             | Science           | Drawing | Arabic  | Arabic                     |
|              |             | Social Studies    |         |         | Religion                   |
|              |             | Drawing           |         |         |                            |
|              |             | Religion          |         |         |                            |
|              |             | Arabic            |         |         |                            |
|              |             | Computer          |         |         |                            |
|              |             | Word Book         |         |         |                            |
|              |             | General Knowledge |         |         |                            |

*Source:* Created by Author based on field research.

*Note.* Bangla, is the native language in Bangladesh

Considering the play-based ECE curriculum, many parents mentioned their concern regarding the curriculum as children do not get any scope to play in their schools, which mainly hamper their interest in learning. Further, the ECE schools do not follow any unified curriculum; as a result, many parents consider that it might create more inequality among the children in learning in the early years due to diverse curricula.

### **Teachers Training**

There is not enough teachers available in Bangladesh who are specially trained in play pedagogy. The main reason for the lack of qualified teachers might be the lack of facilities and equipment to train teachers for ECE and play-based learning. Correspondingly, one of the IDI participants stated that “the teachers who have already completed play pedagogy training have limitations in their training; they cannot perform well when dealing with children.” (Parent G)

Further, another respondent mentioned that

Among the teachers, especially in the rural areas, teachers do not have the required qualifications and training to teach at the ECE schools, and most of them did not receive any in-service training to teach following play-based learning. Also, the school teachers are highly engaged in class lectures only, mostly overburdened, and hardly engage with children to play while learning. The difficulties arise due to the teacher's recruitment system as most of the schools do not provide a fair salary to attract qualified teachers to teach at ECE schools. (Parent J)

Henceforth, like parents, many teachers do not support play-based learning in ECE and do not understand its necessity. Many teachers do not want to get involved in teaching at ECE schools or receive training due to excessive class burden and administrative responsibility. Contrarily, many available teachers in Bangladesh do not possess the passion and courage to deal with children, disheartening them for ECE. Many parents reported that the school usually recruits teachers without training to teach in the ECE class. Teacher training could ensure more students would receive the knowledge they need to succeed in learning. Teacher training might create a better learning environment that encourages play-based learning in ECE. Many parents reported that teacher training might play a vital role in the play-based learning method, the most necessary component for ECE.

### **Government Education Policies for ECE**

The Bangladesh government does not value play-based learning through its policy, as evidenced by a study of its educational policies since independence in 1971. The Bangladesh government has clarified that it does not prefer including play-based learning in the ECE system; otherwise, it would have been included in school curricula. However, playful learning is essential in the ECE. Around 3 to 5 is the proper age for a child to learn social norms, communications, responsibilities, language, and other skills. There is a massive lack of pre-schooling institutions recognized in Bangladesh. “The Bangladesh government does not devote significant funding to establish ECE schools with play facilities and does not invest much in training programs for play-based learning.” (Parent K)

For instance, one parent reported about ECE schooling policies

We desired to send our child to a government school, but it did not allow it because he was 4, but the private school allowed us to enroll. First, we choose government school because of distance but later to this private school.....we never think about the money for our child's education. The government should change the ECE schooling policy for children 3-5 years old, considering the socio-economic conditions of households. (Parent B)

As a result, all stakeholders and parents may be able to influence the revitalization of children's play and the formulation of appropriate play-based learning in ECE. Many parents notified a lack of resources, unified curriculum, distinctive teachers training, and guidance for parents who want to teach their children at school through play-based learning. The government policy formulation might reduce the inequality among children in Bangladesh at an early age considering play-based learning.

### **ECE School Environment**

School environments are supportive surroundings for all young children's growth during the early childhood years. Classrooms, play areas, locations, and outdoor areas are among them. The school environment provides children opportunities to play, grow, explore, and develop appropriately. One participant strongly expressed that “Bangladeshi educational institutes do not provide a children-friendly educational environment. Almost all the

classrooms are overcrowded, and the teacher faces difficulties dealing with many students. It proves to be an overburden for teachers.” (Parent R)

The global standard for the teacher-student ratio is 10:1 in ECE, which means one teacher for every ten students; however, in Bangladesh, one teacher deals with approximately more than 40 students in ECE institutions. Eventually, teachers focus less on individual students on average due to highly occupied classes. Children require time to play and time to acquire social and emotional skills. On the other hand, the educational environment is not pleasant for the children in ECE schools as most schools do not have child-friendly toilet facilities and playgrounds. Parents constantly report that the ECE school environment is very unhygienic, and the building is ancient and risky for the students. Play-based learning is required for children irrespective of socio-economic background and capabilities to ensure social justice in education. The school environment might create an equal opportunity for all children.

We think that the school environment is admirably considered enrolling children in ECE schools. We believe that diverse social classes and class size matter for our children in their early years. Although we were looking for a school with a low teacher-student ratio, there were no such schools. Many schools do not have a playground except for the government ECE schools. (Parent K)

### **Child Engagement**

The participation method through play-based learning in the ECE program is unimpressive in Bangladesh. Children are not motivated to participate in various activities in school; instead, they are compelled to concentrate only on textbooks. Children do not get opportunities to participate in group work, which is necessary to learn leadership, teamwork, responsibility, and communication skills. Bangladeshi children do not get the opportunities to gain experience from practical experiences in their primary education process. Many parents conversed about child engagement and the importance of play-based learning as most of the time, and parents are having difficulties preparing the same lessons at home.

Child engagement in school is not considered as the teachers only follow the textbook. The teaching style of my child's school is not worthwhile, and we always have concerns to prepare for the school. While we have little time with children, fathers' engagement is almost absent to prepare children for schooling. So, we think the school teacher should teach all children to engage them through play-

based learning. (Parent S)

The term 'play' carries diverse meanings, including the act of playing games and sports or playing about or doing frivolous things in ECE learning. Children need unstructured and unconstrained time to develop their cognitive skills, whether through imaginative play, playing with friends, or playing different instruments. Children need the support of their teacher, who will provide them the scope to play while learning. They should also arrange and design the educational formats through games to make them enjoyable and create those educations as learning for life.

## **Discussion**

Play is unquestionably vital for childhood development in early childhood education (Danniels & Pyle, 2018). It is how children learn about themselves, their friends, and their world. They utilize it to express themselves creatively and explore their surroundings. Play-based learning is an approach that focuses on fostering a child's innate curiosity and sense of adventure in practice (Abington & Blankenau, 2013). It promotes active investigation through purposeful, open-ended, hands-on, task-oriented experiences in a caring environment where children build cognitive skills while having fun (Chowdhury & Rivalland, 2012). Play-based learning is among the methods to cultivate children's creativity and imagination. In recent years, there has been a surge in interest in using this approach in Bangladesh (Rashid & Jahan, 2021). However, while there has been some progress on this front, many challenges still need to be addressed if we want ECE children to enjoy these benefits of play-based learning (Allen, 1988). The traditional education system in Bangladesh is based on the paradigm of formal schooling, where children are taught to read and write. Concentrating on theoretical knowledge without practical experiences of gamification and play-based learning will never make them much acquaintance (Mullarkey et al., 2005).

Teacher training is an important part to be considered for the case of Bangladesh as this study found that among the available types of schools, teachers are not well trained, and they have limited scope to get training due to class engagement. The government should reduce

the class burden and provide mandatory in-service teacher training following the play-based learning curriculum. A recent study conducted by a US-based company found that it is challenging to use play-based learning as a form of education in Bangladesh. The study found that the country has significant barriers to accessing quality education and lacks the necessary infrastructure for learning due to teacher training (Blair & Raver, 2012). The state has an annual literacy rate of 78%. This figure is lower than the global average of 86%. The report also revealed that more than 50% of children and adults in Bangladesh could not read and write, making it challenging for them to learn play-based learning at school or at home, considering proper training of school teachers (Shirin, 2020; Burger, 2010). In Bangladesh, the absence of play-based learning significantly contributes to the country's productivity problems (Alam et al., 2022). Due to a shortage of funds for equipment and infrastructure and access to secured outdoor spaces, play options in Bangladesh are limited. In addition, many Bangladeshi parents believe that their children should focus on academics rather than playing. Stressing on this matter, they do not prioritize play-based learning-related institutions much (Banu, 2014).

This research asserted that government policy related to ECE should be considered to make it inclusive for all children irrespective of socio-economic conditions and age. Recently, play-based learning has been promoted in Bangladesh to emphasize early development, creativity, and flexibility. However, not enough instructors are educated in this teaching style, making it challenging to find the proper teaching personnel to promote and carry it out (Cross & Islam, 2021; Heidemann & Hewitt, 2009). Furthermore, similar studies show that play-based learning training programs are scarce, making it difficult to find people who can provide this type of education. The government should initiate inclusive ECE (Chan & Tan, 2008). This situation leaves parents and teachers frustrated as they have no one to teach or train them effectively (Das et al., 2021; Gupta, 2010; Hegde & Cassidy, 2009). A critical shortage of competent educators for play-based learning in Bangladesh is significant. The government is making strenuous efforts to address the scarcity of qualified educators. They are attempting to increase the number of educators capable of providing quality education to children in these styles of learning environments (Parvin & Alam, 2016).

Japan emphasizes the ECE broadly as they consider it the backbone of a student. Play-based learning is highly prioritized in ECE in Japan. Their children's educational institutions

consist of play areas and well-trained teachers, and they have access to innovative technology (Cao & Asakawa, 2019). Henceforth, Japan's educational system prioritizes practical learning over academic education. Students play every kind of play they want under the supervision of teachers. Their academic lessons are also turned into games or practical knowledge, making academic life more enjoyable (Ogawa & Takai, 2017). Bangladesh should analyze and implement the ECE curriculum of Japan. Bangladeshi education is textbook-based, but practical learning and enjoyable education encourage students to educate (Parvin & Alam, 2022). Developing the systems of ECE can even increase the literacy rate of Bangladesh while improving the overall quality of education.

Early childhood education centers on government-mandated play-based programs (Mulyadi, 2020). Early childhood education in Japan is directly associated with supporting children in developing essential human attributes. Rather than concentrating on academic ability. Japanese ECE teachers provide children with age-appropriate capabilities to promote play (Burke & Duncan, 2016). Exhibit children's ability by giving opportunities to participate in play-based activities based on individual needs (Organisation for Economic Co-operation and Development [OECD], 2016). To improve the children's interest in learning while also strengthening their abilities with diverse communities through play-based learning (Inoue, 2020). Simultaneously, Japanese ECE instructors place a great value on the development of cultural knowledge; this play-based approach to teaching young children improves their lifetime learning chances and educational equity. Japanese early childhood education integrates a play-based school system for ECE children to achieve equality (Chesky, 2011).

Additionally, ECE teachers can enlighten their students about the necessity of play to establish children's thoughts and actions (Izumi-Taylor, 2008). Teachers must provide children with self-initiated play scenarios to assist their development and daily life roles (Hayashi, 2011). In the first stage of Vygotsky's theory, the children naturally behave based on their observations. Pretend play stage, as children's observational abilities improve via their imagination when they execute ordinary activities like playing at home, riding trains, or going shopping (Tobin, 2005). Play is a natural activity that supports the development of children's physical and emotional health through creative play (Hoffman, 2000). In ECE, there are 15 children per teacher in Japan, compared to 40 children per teacher in Bangladesh. In Japan, funding is shared between the national and municipal governments (Hellman, 2016),

but in Bangladesh, funding is exclusively the responsibility of parents.

In this study, the finding shows the importance of the theoretical lens of Lev Vygotsky, which is applicable considering the sociocultural issues of Bangladesh. In Bangladesh, the members of the society are interrelated and primarily consider their child's education, assuming the social values and future benefits. This study finds that the Japanese context of ECE play-based learning is essential to be followed for Bangladesh to reduce the hurdles of ECE and lifelong learning. As the government could not ensure all the children, those are aged 3-5 should have an equal opportunity to be enrolled in school; but in the context of Bangladesh, parental aspirations are the essential factors for their child enrollment in schools for children to learn believed to be more skilled human resources through play-based learning (Ducan & Magnuson, 2013; Alam, 2022).

## **Conclusion**

Play-based learning in ECE is essential for children's development, considering its extensive importance. Developing children need play to grow into capable adults. Children learn through engagement in activities that they can control or that allow them to explore. In this way, play facilitates exploration, creativity, and social skills that would not otherwise be developed through more formal ECE. In Japan, play-based learning has been found to increase the opportunity for children to experience success in a friendly school environment and offer individual attention for children's development. Throughout this research, it is evident that rote memorization and repetition have negative consequences for children; play-based learning is a concept that must be adopted in Bangladesh for inclusive child development. Play-based learning can be promoted in Bangladesh by developing programs for parents and teachers to teach their children at home and school. The government should prioritize establishing preschools with play-based learning facilities. The government should give adequate facilities to ECE institutions and provide state-of-the-art training for teachers interested in play-based teaching or anything else associated with it. This study suggests that Bangladesh needs to create an environment where play-based learning can succeed for ECE children, like Japan. Schools must develop ways to make class time more enjoyable through

play and keep students engaged with what they are learning through play.

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## Appendix

Table 4. *Participants Characteristics*

| Parents | Age group | Location | Area  | Parental Education Qualifications | No of Children | No of Family Members |
|---------|-----------|----------|-------|-----------------------------------|----------------|----------------------|
| A       | 25-30     | Dhaka    | Urban | Bachelor's degree                 | 1              | 5                    |
| B       | 30-35     |          |       | Master's degree                   | 2              | 4                    |
| C       | 25-30     |          |       | Higher Secondary Education        | 1              | 3                    |
| D       | 30-35     |          |       | Secondary Education               | 2              | 4                    |
| E       | 35-40     |          | Rural | Master's degree                   | 3              | 5                    |
| F       | 25-30     |          |       | Secondary Education               | 1              | 4                    |
| G       | 30-35     |          |       | Bachelor's degree                 | 2              | 4                    |
| H       | 30-35     |          |       | Bachelor's degree                 | 1              | 3                    |
| I       | 30-35     | Rajshahi | Urban | Secondary Education               | 1              | 3                    |
| J       | 40-45     |          |       | Higher Secondary Education        | 2              | 5                    |
| K       | 25-30     |          |       | Bachelor's degree                 | 1              | 3                    |
| L       | 35-40     |          |       | Bachelor's degree                 | 2              | 4                    |
| M       | 30-35     |          | Rural | Higher Secondary Education        | 2              | 4                    |
| N       | 25-30     |          |       | Master's degree                   | 1              | 5                    |
| O       | 40-45     |          |       | Secondary Education               | 3              | 5                    |
| P       | 25-30     |          |       | Higher Secondary Education        | 1              | 4                    |
| Q       | 30-35     |          | Rural | Higher Secondary Education        | 2              | 5                    |
| R       | 25-30     |          |       | Bachelor's degree                 | 2              | 6                    |
| S       | 30-35     |          |       | Secondary Education               | 1              | 7                    |
| T       | 25-30     |          |       | Secondary Education               | 1              | 3                    |