Practice of Play-based Learning in Online Classes at Preprimary Level (age 4-5) During COVID-19 Pandemic

By

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A thesis submitted to Brac Institute of Educational Development in partial fulfillment of the
requirements for the degree of
Master of Science in Early Childhood Development

Brac Institute of Educational Development
Brac University
December 2021

Declaration

It is hereby declared that

1. The thesis submitted is my own original work while completing degree at Brac University.

2. The thesis does not contain material previously published or written by a third party, except where this is appropriately cited through full and accurate referencing.

3. The thesis does not contain material which has been accepted, or submitted, for any other degree or diploma at a university or other institution.

4. I have acknowledged all main sources of help.

Student's Full Name & Signature:

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Approval

The thesis titled "The practice of play-based learning in online classes at the pre-primary level (age 4-5) during the COVID-19 pandemic."

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of Fall, 2021 has been accepted as satisfactory in partial fulfillment of the requirement for the degree of Master of Science in Early Childhood Development on December 13, 2021

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Ethics Statement

Title of Thesis Topic: The practice of play-based learning in online classes at the pre-primary level (age 4-5) during the COVID-19 pandemic

Student name: Shakera Mursalin

 1. Source of population: Pre-primary level teachers who teach the children age 4 - 5

2. Does the study involve (yes, or no)

    a) Physical risk to the subjects (No)
    b) Social risk (No)
    c) Psychological risk to subjects (No)
    d) discomfort to subjects (No)
    e) Invasion of privacy (No)

3. Will subjects be clearly informed about (yes or no)

    a) Nature and purpose of the study (Yes)
    b) Procedures to be followed (Yes)
    c) Physical risk (N/A)
    d) Sensitive questions (Yes)
    e) Benefits to be derived (Yes)
    f) Right to refuse to participate or to withdraw from the study (Yes)
    g) Confidential handling of data (Yes)
    h) Compensation and/or treatment where there are risks or privacy is involved (Yes)

4. Will Signed verbal consent be required (yes or no)

    a) from study participants (Yes)
    b) from parents or guardians (N/A)
    c) Will precautions be taken to protect the anonymity of subjects? (Yes)

5. Check documents being submitted herewith to Committee:

    a) Proposal (Yes)
    b) Consent Form (Yes)
    c) Questionnaire or interview schedule (Yes)

 Ethical Review Committee:

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 (chair/co-chair/other)

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Abstract

The COVID-19 pandemic had turned the education sector on its head. When schools were shut down worldwide as a preventive measure to minimize the spread of the virus, educators were sent scrambling to adjust with an almost new teaching method - online classes. Pre-primary education was not an exception to this upheaval. As the education at this level is tailored for play-based learning depending on physical proximity, teachers had to develop new ideas to be effective in the online classes. This study shed light on the perception and practice of play-based learning in the pre-primary online classes during the COVID-19 pandemic.

The study is a qualitative study conducted on pre-primary level teachers. The data has been collected through 6 in-depth interviews and 2 class observations.

The study findings show that the teachers know the basics of pre-primary education and practice play-based learning in their classes. However, most of them lack in-depth knowledge regarding the objectives and purpose of using play-based learning for pre-primary education. Instead of helping the students attain their developmental milestones, the teacher employs play-based learning for academic purposes. The study also shows that teachers are hampered by problems like- network and electricity issues, inability to retain students' attention, not attending classes, and insufficient teaching materials while taking online classes.

Keywords: Pre-primary education; play-based learning; COVID-19 pandemic; online classes

Dedication

To all of my ECD mates, my mother, my only one daughter Asbah and my husband

Acknowledgment

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List of Acronyms

ECD: Early Childhood Development

IDI: In-depth Interview

UNESCO: United Nations Educational, Scientific and Cultural Organization

CAMPE: Campaign for Popular Education

NCTB: National Curriculum and Textbook Board

UNICEF: United Nations International Children's Emergency Fund

STEM: Science, Technology, Engineering And Mathematics

COVID-19: Coronavirus Disease Of 2019

Chapter I

Introduction & Background

Introduction

Play-based learning appeals to children's natural curiosity and desire to engage in experiences based on their unique interests as they make sense of the world around them. In play-based learning programs, educators tailor their teaching opportunities to align with the type of play the children are engaging in. Play teaches children to love, connect, understand, and recognize shapes and colors, sound, and pre-school children learn cooperation, competition, self-respect, mutual respect, and friendship through playing with their peers (Elkind, 2008). Apart from this, there are different kinds of play-based activities that help a lot in children's learning, such as play is the primary arrangement of storytelling. Moreover, it is how children learn to discuss, solve problems, and improve with peers. In the framework of play, children test new information and concepts. They reproduce the experience to strengthen the understanding. And it is here that children first learn and express symbolic thought, which is a necessary precursor to literacy (O'Leary, 2021).

Teachers can practice telling stories about what they have learned or practice math concepts such as creating patterns using plastic farm animals. The child should be taught through a game-based curriculum full of STEM-centric activities to encourage young ones to develop and grow in a friendly and engaging environment (Ward, 2020), and before the COVID pandemic, pre-primary education classes were usually conducted in this way. Teachers usually apply the principles of play-based learning at the pre-primary level through various activities. A variety of materials are used for play-based learning that

children can learn using on their own in the classroom. In addition to social and emotional learning, children take classes in language development, numeracy, physical education, visual arts in pre-primary classes, each of which is emphasized through play-based learning. However, in 2020, due to the COVID-19 pandemic, the whole world plunged into turmoil, and the schools were closed simultaneously. At that time, 107 countries simultaneously announced the closure of schools on March 18 (UNESCO, 2021), and the Education system came to a standstill. However, to prevent the loss of education even after the closure of schools, countries have started various parallel education systems primarily based on various online mediums. Nevertheless, the effectiveness of such education is still in doubt. As of October 2021, situation is yet to normalize, and education is still mainly based on the online medium for one and half years, which is not very promising. According to the survey report 'Learning Together: The Opportunity to Achieve Universal Education' conducted in classes 1 to 6, 92% of children have forgotten the basic language lessons learned in school. 62% of students have forgotten the numbers like simple addition and subtraction (The Anandabazar, 2021). Pre-primary level education is equally hampered during this time, and play-based learning is challenging to practice over a virtual medium. So, it is imperative to find out effective and efficient ways to practice play-based learning for the pre-primary level in these online-based classes.

Statement of the problems

Children are naturally driven to play. Based on this motivation, a play-based program uses it as a setting for learning. In this context, children can discover, experiment, learn and solve problems in imaginative and humorous ways. They also expand their executive work skills through the practice of data retention (O'Leary, 2019). There are different kinds of

play-based activities that help a lot in children's learning, such as Play-based physical exercise. There are ten physical exercises prescribed for pre-primary classes in Bangladesh (TGB, 2013), which not only provide the children with enjoyment and a sense of discipline and concentration but also promote children's brain activity, circulate limbs and organs, remove idleness, and maintain the balance of the body (ibid). Through different types of play, children learn different things such as how to hold things like pencils, erasers, toys, glass properly, learn to use and coordinate various senses, take part in, present, and represent things by acting and gesturing, sharing, ask and answer, count, draw, distinguish between right and wrong, avoid, praise, follow and maintain leading (Pre-Primary Curriculum, 2011). However, the type of play that takes place in pre-school holds significant social interaction and substantially contributes to language and communication development. While playing on their own, children improve their planning and decision-making skills. It makes children imaginative and creative, and it stirs up important physical activity and competencies (Walsh et al., 2017). For these reasons, it is very important to engage the children in play-based learning to ensure their proper development.

Before the pandemic, the classes of Pre-primary and Early Learning Class level education were usually conducted following the principle and guidelines of play-based learning. But as the physical classes were suspended as a preventive measure against the spread of the COVID-19 pandemic, the education sector shifted to the online medium to continue the classes. Although traditional teacher-centric lecture-based classes are easier to put into practice in an online medium, play-based education through virtual class presents several challenges as this type of class have a significant number of physical interactions as a learning tool. So, arranging a proper play-based class is very difficult in

pandemic-stricken times. In many parts of Bangladesh, online classes are only nominal classes at the pre-primary level, and most of them are study-based classes, where students are taught the subjects only through lecture-based learning. As a result, the younger students in the pre-primary class are being deprived of the joy of learning according to their age, as a result of which they are losing interest in learning, and many students are becoming irregular in the class. Moreover, since the pre-primary learning curriculum is designed to be taught through play-based learning, students are less likely to learn properly in the online class.

Overall, these students will be deprived of proper education, which will have lifelong consequences in terms of learning abilities. The practice of play-based learning in the online class during the Covid pandemic should be further strengthened. To do that, we need to learn what kind of difficulties and challenges pre-primary class teachers have to face to implement play-based learning in this online system and how teachers can use play-based learning in an online class. This is also imperative to find out how play-based learning can be used efficiently in parallel learning and what kind of materials are convenient to use in an online class.

Purpose of the study

The play prepared the ground for the development of critical social and psychological knowledge, and through play, children learn to connect with others and share, discuss and resolve conflicts, as well as learn self-advocacy skills. Play educates children in leadership as well as group skills. Moreover, play is a natural instrument that children can use in their construction of resilience and coping skills as they learn to navigate relationships and behave socially, overcoming challenges as well as their fears (THE LEGO FOUNDATION

& UNICEF, 2018). For this reason, play-based learning is very important for children at the pre-primary level. But now, due to Covid Pandemic, children are not able to go to school physically and learn, and it is not possible to teach them through play-based physical classes. So, it is important to do play-based learning in online classes so that their development is not hampered. One of the purposes of this study was to find out if this play-based learning is really happening in online classes and how successful it is.

One of the objectives of the study was to find out how much online play-based learning of pre-primary classes was being focused on or used. Since another reason for pre-primary classes was to conduct and teach children through play, schools can take classes through play when children are present physically in class. But because of the Covid-19, since the children are attending online classes, it is important to teach them through play in this online class as well. So, this study was conducted to find out if it was practiced properly and what kind of challenges teachers faced with conducting play-based classes while teaching online.

Significance & justification of the study

Bangladesh has come a long way in the last few decades in term of establishing pre-primary education and access to it. Net enrolment in pre-primary education increased by 28% between 2013 to 2019 among children of both genders and urban and rural areas alike (APSC, 2013; APSC,2019). Moreover, a government census in 2019 found that a total of 1,10,290 institutions are ready to provide pre-primary education to 2.8 million children (APSC, 2019). But this remains a huge challenge to ensure the quality of that education due to several reasons like- Lack of skilled, trained teachers, the traditional way and perception of learning and teaching, lack of knowledge about proper teaching materials,

big class size, etc. are some of them (Islam et al., 2016). According to the Annual Primary School Census, 2019 there are almost 30,000 pre-primary teachers, among which although most teachers have received curriculum training, but few have received any other type of professional development training., around 10% of them have a certificate in education, 3% completed a diploma in primary education and only around 5 percent have a bachelor's degree or above in education. As a result, these teachers lack the necessary training and skill to deal with students of pre-primary age and apply traditional teaching techniques, which is mainly book-based. Techniques developed for pre-primary students like play-based learning and individualized teaching are mostly absent in Government-run pre-primary schools ((The World Bank, 2020; APSC,2019). So, going by this information, it can be conferred that, even before the pandemic, play-based education was not being properly practiced, and the onset of preventive measures against the COVID-19 pandemic made this difficult situation even more trying. The ECD Framework asks to include materials for play-based learning in the classroom, and the ECD curriculum also mentions the four play corners: books and art corners, blocks corners, sand corners, and water corners that should be present in the pre-primary classroom to assist in the development of children. One of the aims of this study was to look into the methods through which play-based learning is being used at the pre-primary level when physical classes were suspended due to pandemics and what kind of complications teachers were facing in conducting classes following the guidelines designed for the physical classes in online classes. Also, the study tried to find how did teachers overcome these obstacles and, in case they could not, what are the reasons for not doing it. Another reason for this study was to know how the materials intended for the physical class were improvised to implement play-based learning in this

online class and the suitability of different materials in remote learning. We were also trying to learn about the teacher's ideas on how to improve and promote play-based learning in online mediums and their thoughts regarding the internationally suggested methods of remote learning in pre-primary and Early Learning Class level education through this study.

Research topic & research questions

The practice of play-based learning in online classes at the pre-primary level (age 4-5) during the COVID-19 pandemic

Research Objectives

1. To understand what is the perception of the teachers about play-based learning.
2. To find out how play-based learning is being practiced in online classes at the pre-primary level.

Research questions

1. What is the perception of the teachers about play-based learning?
2. How are they practicing play-based learning in the online classes during Covid Pandemic?

Operational definition

Play-based learning: Play-based learning is early childhood education based on child-conducted and open play. Game-based education supports children in developing social abilities, learning enthusiasm, and even language and number skills. Taking the initiative, attentive attention, and interest in the world are all a part of the play (Vogel, 2021). UC

Online classes: Online Classes are a combination of video recordings and live lectures with course reading and tests. They are generally conducted using a virtual portal through which students gather reading materials, interact with teachers and classmates, view grades, and monitor progress (Teachmint, n.d.).

"Online education is electronically supported learning that relies on the Internet for teacher/student interaction and the distribution of class materials."(indiaeducation, n.d.)

Preprimary Education: Initially planned education for children from the age of 3 to the beginning of primary school. The educational structures of pre-primary education are categorized by interaction with peers and educators, through which children improve their use of language and social skills and begin to develop logical and reasoning skills. Children are also introduced to the alphabet and mathematical concepts and are encouraged to explore the world and environment around them. Supervised total motor activities (such as physical exercise through games and other activities) and play-based activities can be used as learning opportunities for social interaction with peers and the development of skills, autonomy, and school readiness. (Source: UIS 2012). (Pre-Primary Education, n.d.)

Chapter II

Literature review

Play-based learning

Play-based learning involves the students in a planned and developmentally suitable play that encourages specific learning goals. This child-centered and self-directed approach

provides the children more choice to discover their choice of enjoyment, encourages active participation in learning, helps in their cognitive, physical, and social-emotional development (Lugo-Gil & Dang, 2020).

Online education during covid-19 pandemic

The COVID-19 pandemic has driven education systems worldwide to look into alternatives of physical classes in all levels of education (Schleicher, 2020). As a result, since early 2020, various online mediums are being used as teaching and learning tools by teachers and students on an unparalleled scale. Even though extensive use of Information and Communication Technology (ICT) in educating young children is still debatable, several studies are already done to find out about the realities of online education at the Early Learning Class and pre-primary level. Studies have shown that e-learning tools have played an important role during this pandemic, helping schools and universities to facilitate students' learning during school closures (Subedi et al., 2020). Depending on the skills of both educators and students and their access to information and communication technology (ICT), different approaches are needed for online learning when adapting to new changes. Also, staff and student readiness need to be calculated and supported accordingly (Dausett et al., 2020; Pokhrel, S., & Chhetri, R.,2021). An article by UNICEF also identified unequal access to the internet as one of the major obstacles in online teaching in Bangladesh, where 63% do not have reliable internet access at home (Chowdhury, 2020). A study of COVID-19 impacts on the education of Bangladesh identified several key complications faced by students and educators during the COVID-19 pandemic in Bangladesh. Obstacles faced by teachers included lack of required knowledge about technology, communication gap between student and teacher because of an absence of interaction between teacher and

student, feeling uneasy while delivering lectures due to lack of student feedback, length of classes being too limited to provide all necessary instructions. Likewise, students are suffering due to inconsistent network coverage over the country, expensive internet connection, lack of access to digital devices, and lapse in concentration during class time (Mahmud et al., 2021). One of the options discussed is flipped classroom where education properties like pre-class articles, pre-recorded videos, and YouTube links are provided beforehand, and online class time is used to deepen understanding through discussions with faculty and classmates (Dawsett et al., 2020). This is a very effective way to encourage skills such as problem-solving, critical thinking, and self-directed learning. That study also mentioned, the most widely identified challenges with e-learning are accessibility, affordability, flexibility, pedagogical learning, lifelong learning, and education policy (Murgatrotd, 2020). Not many countries have a reliable internet connection and access to digital devices, especially in developing countries, a lot of children cannot afford online learning devices. Also, online education creates the risk of increasing screen time and a lack of parental overseeing for the student. Therefore, it has become crucial for students to be involved in offline activities and self-investigative learning along with online education (Pokhrel, S., & Chhetri, R.,2021). Another research shows that it is important to draw teachers' attention to providing a suitable and safe online environment for children to understand their skills and technologies for learning in the 21st century (Edwards et al. 2017; McPack et al. 2013). Research in Hong Kong opinioned, online learning for very young children has introduced difficulties like lack of focus and interest of early childhood, the interruption from other family members during the virtual meeting, and limited resources and materials for online classes (Lau & Lee, 2020). As pre-primary level

students, it is difficult to keep concentration for the duration of online classes. As a result, Children's behaviors' such as jumping on the chair, rolling on the floor, or bringing their pets or toys to an online class, are unavoidable during the virtual class (Pramling Samuelsson et al., 2020).

Preprimary education during covid 19 pandemic

In an article, the Regional Education Adviser at UNICEF's Regional Office for South Asia, Dr. Jim Ackers, advised involving the parents in a more active role for the preschooler children's education. He proposed that ECCD facilitators should provide necessary guidance and instruction material to the parents through various mediums like- WhatsApp chat, national TV, radio, or printed home-learning packs. These materials should explain to the parents what their children are supposed to learn and the type of tasks that their children should be able to perform by a certain age also when to contact for expert support if their child may have a learning impairment. Checklists of learning goals in a language that the parents understand with simple icons and drawings so that illiterate parents can understand to track and monitor their children's progress (*Early Learning during the Coronavirus Pandemic*, n.d.). UNICEF also published several guidelines and articles regarding Pre-primary and Early Learning Class level education during pandemic times. In another research brief, UNICEF also mentioned several measures and initiatives to design an effective remote learning program. Firstly, to have a greater reach of the program, multiple modes of information transfer should be used, and this mix of modalities should be based on the technologies available and commonly used by the intended population. Such as, although broadcast and the internet can reach a large number of people but to reach people who do not have access to these mediums, paper-based supplements should

be utilized. Secondly, the brief emphasizes that the program should be pedagogically sound. Pre-primary remote-learning solutions should include clear learning goals, logical sequencing, and coverage of all key development domains that use engaging and interactive content for young learners and caregivers relating to their daily life. Thirdly, the role of parents and caregivers is exceptionally important for supporting children`s learning. A promising practice should recognize caregivers' crucial role as they are not trained teachers, so they need support and guidance for caregivers to be effective. Last but most importantly, pre-primary facilitators need a lot of support for their new role. In practice, ECCD facilitators have to use phones or other mediums to provide outreach and individual support but, in most cases, these teachers were not provided with any training or instructions on implementing remote learning in pre-primary education, despite their important new role in this changing environment (Nugroho, et-al, 2020). An article published by Regional Educational Laboratory (REL) Midwest shared some strategies to develop play-based learning in online classes from their experiences. Regional Educational Laboratory (REL) identified access to the learning materials as the primary challenge in practicing play-based learning through virtual media. To overcome this issue, they distributed learning materials at designated pick-up sites, posted resources on the school website for caregivers to access so that all the children have access to similar material, and updated the materials from time to time as students' lessons shift in focus. The article also mentioned the importance of incorporating caregiver interactions into the classroom activities to have a better environment and simultaneously reduce screen time. To achieve that, educators frequently communicate with the caregiver to provide them all the required support to adjust to the new and unfamiliar situations and challenges of online classes. To

address the shorter attention span of the children, the article emphasizes the need to develop remote play-based learning experiences that keep students engaged. Their approach involves a mix of whole-group, small-group, and independent activities, followed by a whole-group reflection at the end of a session. The center is also encouraging the children to find new ways to play using the materials provided by the center and various household items as well to facilitate the students to explore various materials, activities, and surroundings (Ibis, 2020). A survey conducted by the United Nations Children's Fund (UNICEF) across six states in India revealed at least 80% of reported lower levels of learning at home during the Covid-19 pandemic compared to when they attended classes in schools (Iftikhar, 2021). Indonesian research acknowledged unequal access to the internet connection, the inequality in teacher qualifications and education quality, and also the limited ICT skills are becoming major barriers in implementing online education, especially during the COVID-19 Pandemic. Teachers need to equip with the knowledge to use and deliver the lessons by using ICT because it is not easy to deliver lessons for early childhood with online learning (Azzahra, 2020).

Preprimary education during covid 19 pandemic in Bangladesh

Considering the pandemic situation, Bangladesh imposed nationwide school closure on 19th March 2020, and it remained in place until 12th October 2021. During this period, all physical classes were suspended, and all academic activities shifted to an online medium. A handful of studies and articles have already been published focusing on various aspects of these online classes in the last one and a half years, but very few of them focus on the predicament of the pre-primary students and educators. According to a survey by brac.net, only 44% of students joined in online

education programs.

	Participate	Not Participate
OVERALL	44.1	55.9
MADRASA	32.4	67.6
BANGLA MEDIUM	45.9	54.1
CHILDREN WITH DISABILITY	39.0	61.0
ETHNIC MINORITIES	25.3	74.7
BANGALEE	45.6	54.4
URBAN	55.8	44.2
RURAL	39.8	60.2
FEMALE	45.5	54.5
MALE	42.7	57.3
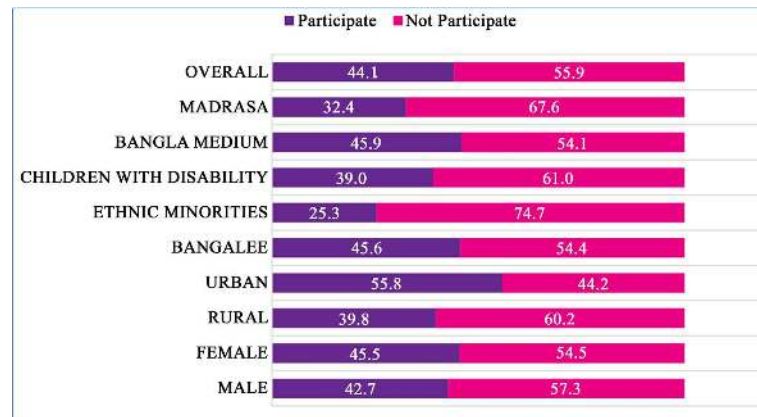
Fig: Participation in online learning by different categories by percentage

Campaign for Popular Education (CAMPE) has already published a survey report on the rapid response of the education sector to the COVID-19 pandemic. This report outlined various challenges of the education sector during and after the COVID-19 pandemic in Bangladesh. According to this report, more than half a million pre-primary students were affected due to this pandemic. Challenges mentioned in the research include loss of teaching hours, trained teachers' employment termination in non-government and private education institutions, coping with new technology (Campaign for Popular Education (CAMPE), 2020). An article by UNICEF also identified unequal access to the internet as one of the major obstacles in online teaching in Bangladesh, where 63% do not have reliable internet access at home (Chowdhury, 2020). Another study identified several key complications faced by students and educators during the COVID-19 pandemic in Bangladesh. Obstacles faced by teachers included lack of required knowledge about technology, communication gap between student and teacher because of an absence of interaction between teacher and student, feeling uneasy while delivering lectures due to

lack of students' feedback, and length of classes being too limited to provide all necessary instructions. Likewise, students are suffering due to inconsistent network coverage over the country, expensive internet connection, lack of access to digital devices, and lapse in concentration during class time (Mahmud, Dasgupta, Hasan, & Gupta, 2021).

Chapter III

Methodology

The chapter aims to provide a brief overview of the research design used for the study. The multi-stepped procedure of research methodology begins with study design & method, research site, research participants, participants characteristics, tools used, followed by a brief discussion about data collection, data analysis process, ethical considerations, and limitations of the study.

Research approach/ Design

According to Creswell (1998), qualitative analysis is an investigative technique of comprehension that examines a social or individual phenomenon centered on various analytical traditions of study. To know teachers' perceptions and practice of play-based learning of 4-5 years old children in online classes in the COVID-19 situation, a qualitative approach was followed.

Qualitative research is a process of gathering an in-depth understanding of human behaviors and the reasons that shape such behaviors through observation and subjective experience (Gay et al., 2012). This study is designed as qualitative research to understand the hindrance, thoughts, applicability, and perceptions of the ECD facilitators regarding

implementing play-based learning in online education programs at the pre-primary level. This study has developed a hypothesis that would help future quantitative studies.

Research participants

The participants of this study were the teachers of two private pre-primary schools who teach children aged 4-5 years. They have to have at least three years of teaching experience to have formed a valid understanding of play-based learning in pre-primary class.

Research site

The study will be conducted in Banasree, Dhaka & Gazipur

Sampling/ participant selection procedure

Samples of the study were the six pre-primary class teachers of two private schools in the Banasree & Gazipur area who were selected through the purposive sampling method.

Data collection methods

Six IDIs followed by two class observations were conducted to collect the necessary data. Six teachers in total took part in in-depth interview sessions with a semi-structured guideline. The duration of the interview session was 40-60 minutes. A face-to-face interview was done. For the pandemic, all kinds of safety measures were taken. They have answered questions about play-based learning in online classes and its merits, demerits, obstacles, and how they conduct a play-based online class. The Class Observation was written note, and IDI was recorded by mobile audio recorder. The tools were finalized after piloting. The pre-primary Curriculum published by National Curriculum and Textbook Board (NCTB) document was also reviewed.

Data analysis

After all the data were collected, it needs to be checked for completeness. Then, the IDI answers were transcribed, and the Class Observation and researcher's observation notes were written in a descriptive form to elaborate the thoughts and reflections of the researcher. Then, all three sources of data were cross-checked for discrepancies and contradictions among the information and also had a preliminary idea of the data. After that, the data were examined and analyzed in an orderly manner and then sorted into themes to be easier to detect the trends, patterns, and relationships in the data. Lastly, the researcher has used those patterns and relationships in an attempt to comprehend the implications of the findings relevant to the topic and develop a workable hypothesis.

Validity and reliability of research tools

This study was conducted via In-depth Interviews (IDI) and Class Observations to find out both general and individual ideas, thoughts, and perceptions of the ECD facilitators regarding the topic. Although lack of privacy during the interview process and lack of repeatable study has raised the question of the dependability and rationality of IDIs and Observations in providing accurate information, this study was tried to perform both the action in such a way that one process can negate the shortcoming of the other one. To ensure transferability, detailed descriptive information was collected. Appropriate methods and techniques were maintained based on research questions and questionnaires for an in-depth interview. Validity of the tools would be assured through integrating the data collected by IDI's, and the Class Observation as integrating these two tools provides an iterative process where an early model of the facilitator's views and ideas was established through individual accounts in the IDI's, and successive Observation has further enriched

the conceptualization of the early model; these two tools helped identify individual and related circumstances about the topic and provided the dominant features of the topic across individual interviews, which was improved the trustworthiness of findings. The tools were be finalized after piloting. The tools were reviewed by the experts and the Academic Committee of BRAC University.

Ethical issue

The study was followed a strict ethical principle in all steps of the research and had complete transparency to all the related contributors involved in different stages of the research. Before carrying out the study, the authority of the school was informed about the researcher's intention of carrying out the study in their program and sought permission from them for the study via email. They were given all relevant details of the study like-rationale, background, objective, and purpose of the study. After they consent to allow the study to be carried out, the researcher was requested for the list of teachers involved in the pre-primary class. From that list, participants will be contacted and informed about joining the study to seek their consent. Only those who consent to take part in the study will be short-listed as the study population. Before the study began, all participants were assured of their privacy and the right to refuse to participate if they became uncomfortable. They were also assured that the information collected through the IDIs and Class Observation will only be used for this study and will not be shared anywhere else. The Proposal of the study was reviewed by the experts, Faculties, and the Academic Committee of BRAC University.

Limitations of the study

Due to the COVID-19 threat, it was not possible to visit different places and take in-depth interviews with wide-ranging participants. In the case of class observation, some schools were reluctant to grant permission for observation on the issue of their privacy. It was a limitation of the research. Also, due to the lack of time, it was difficult to reach the parents and students to take their opinion regarding the effectiveness of play-based learning in online classes. This limits the research to consider only the feedback from the teachers to form the hypothesis. Due to time constraints and the COVID pandemic, the study was done only on schools in urban areas.

Chapter IV

Results & Discussion

Result

This section of the study is based on data collected from class observation & Interviews, which generated all the in-depth information on teachers' perception of pre-primary education and play-based learning along with their practice of it during the COVID-19 pandemic. Data was first assembled from In-depth-Interview, and the class observation was conducted personally. Findings were gathered from both the Class observation and In-depth interviews on the teacher's understanding and experience about play-based learning in the COVID-19 situation in their pre-primary classes. Then results were collected on teachers' practices of play-based learning in the COVID-19 situation. The themes were categorized & coded, following the research questions**.**

Teacher's Demographic Details

Here six in-depth interviews were conducted, and two online classes were observed. Six in-depth interviews were conducted for this study with six pre-primary level teachers. Almost all teachers have completed at least graduation in educational qualification, and a few have even completed Masters. Aged between the ages of 26 and 38, all of them are teaching at the pre-primary level for two years, and some have ten years or more of experience. Most of the teachers are from Gazipur and Banasree or its vicinity. In the case of professional qualification, only a few of them have done professional teacher training courses.

In the class observation, two online classes of a pre-primary class of 2 schools have been observed for this study. In each class, one teacher conducted the class via zoom classroom.

Demographic Table of the teachers: General Information (In-Depth Interview)

Serial	Date of IDI	Name of the Participants	Educational qualification	Teacher's professional training	Teaching experience
1	22.10.21	A	B. A	No	Ten years
2	23.10.21	B	B. A	No	Eleven years
3	24.10.21	C	B.Ed.	B.Ed.	Nine years
4	25.10.21	D	Master's	No	Four years
5	26.10.21	E	BSc in Electrical Engineering	Teacher training	Five years

				(Two-month course)	
6	27.10.21	F	MBA	No	Two years

Table 1: participant's demographic details

Theme 1: Perception of the teachers about play-based learning

This research aims to find out the realities of the practice of play-based learning in pre-primary level education during the pandemic period. So, it is imperative to find out the teacher's perception of pre-primary education and their knowledge about its relationship with play-based learning. In the subsequent sections, this topic is discussed by dividing it into pertinent subtopics.

Sub-theme 1: Knowledge about pre-primary education

In this section, the teacher's knowledge about the pre-primary class is discussed. How much the teacher knows about pre-primary education and the teacher's idea about the relationship between pre-primary education and play-based learning is discussed here.

- **Teacher's understanding of pre-primary education**

The teacher's idea about the education given to the children in the pre-primary class is discussed in this section. In fact, most teachers have been unable to define what it meant by pre-primary education adequately; very few explained it accurately. One of the teachers said that pre-primary education means the education given to the children through play. "It explains how the children learn basics, how children will learn by observing at things." (IDI # 1, 22.10.2021) Teacher "E" expresses those pre-primary deals with students at the preceding stage of the primary level, from early-stage to a

standard, which is one year before starting at class one; they count it as pre-primary stage. (IDI # 5, 26.10.2021) Teacher "C" stated,

> "*By pre-primary education, I understand knowledge imparted to children from the age of three to the time they enroll in the primary class, the ability to mix with their friend, the ability to live without their parents.*" (IDI # 3, 24.10.2021)

- **Teacher's view about the relationship between Play-based learning and Pre-primary education**

According to all the teachers interviewed, play-based learning is closely associated with pre-primary education. They stated that play-based education is more suitable in pre-primary education because of their age. The lessons learned through play are appropriate for children because they cannot learn efficiently by only reading books. Still, they can quickly learn the same thing when they are taught through play. Teacher "E" explains

> "*The relationship is very close because when the students are in pre-primary but will not learn much by relying on books, they like learning through play, story, and through the teacher. That's exactly why they're going to get into the book so slowly. Here they are preparing for the next level, if they learn through play, then that ability will work for them to relate which will help them grow.*" (IDI # 5, 26.10.2021)

Teacher B expresses a similar opinion that

> "*Kids at this age can't understand anything if we don't show it directly. So, I think, because of that if I want to teach in this class (from books), kids will not be*

able to learn anything, so to teach kids, I must teach through play, so in this class,

play is more of a relationship." (IDI # 2, 23.10.2021)

Sub-theme 2: Knowledge about play-based learning

Teachers' perceptions of play-based learning, their level of training in play-based learning, and their views on the differences between play-based and traditional learning are discussed here. Some of the teachers interviewed here have some training on play-based learning, but only one of them has formal training. Most of the teachers have some idea about play-based learning, and they know about the difference between play-based learning and traditional learning. Still, they do not have a clear concept about the development goal these play-based activities should bring about for children.

- **Teacher's understanding of Play-Based Learning**

Play-based learning is not about teaching the students using textbooks; instead, teaching them through play so that they can relate the lessons with the practical life and match it with the book is the basis of play-based learning. One teacher said,

> *"If I were to teach students to recognize color, I would not use the book to show the color red; I would actually use paint, put the color in his hand, recognize the color through play."* (IDI # 3, 24.10.2021)

Another teacher stated that when teaching letters, the teacher would prompt the students to say a word starting with the letter, then the teacher would write the letter on the board, and the student would copy it in a flashcard. After finishing a set, the student will be asked to pick a letter from the pile of flashcards and say a word starting with it. (IDI # 6, 27.10.2021)

- **Teacher's training on play-based learning**

Play-based learning is slightly different from traditional teaching, so teachers will not be able to implement play-based learning appropriately in practice without proper training. Some of the interviewed teachers have professional training, while others got this training from their schools. But one or two of them have no training in this regard. One teacher said, "As for play-based learning training, I did not receive any training from outside. However, there is some training in our school, where play-based education and training is given, that is how I got some training." (IDI # 4, 25.10.2021) Another teacher's statement is entirely different, and she said that "No, we have not received such training, but we do it on our own." (IDI # 2, 23.10.2021) Teacher "F" explains what she's trained and how to use it,

> *"We give them a basic idea of counting using pencils, then we're going to introduce the numbers, that is how we were trained, that we don't start with numbers first. We give them the concept of 1,2, with some tangible objects. Then we show them what it looks like, and we teach the numbers step by step, do not go straight to numbers."* (IDI # 6, 27.10.2021)

- **Difference between traditional lecture-based learning and play-based learning**

Some teachers pointed out that the main difference is that students learn through books in the traditional learning method, and in play-based education, the children learn through play-like activities. One of the teachers explained the difference between play-based learning & traditional learning in the following way;

> *"Play-based learning is where the children learn practically with all the materials, we can teach through play, but with the traditional system, we cannot*

teach through play. So, the little ones can learn things easily and give attention

when taught through play, but if we use the traditional teaching approach, they

lose attention, as they are not shown any toys. I think the main difference is that

traditional education is taught only through books, and play-based learning is

learning through fun and play." (IDI # 5, 26.10.2021)

Some teachers agreed that play-based learning is a fun way to teach the children as they play with actual materials. Still, in traditional learning, they are taught only from books or by opening the book directly, not making the study interesting or enjoyable.

Sub-theme 3: Practical application of the knowledge

Most teachers said that it is not a difficult task to implement play-based learning in the classroom. Some teachers think that it requires proper training for teachers then play-based learning can be implemented in the class. Some even added that play-based learning helps a lot in achieving learning competencies.

- **Teacher's perception about implementing knowledge into practice**

One of the teachers thinks that "if the teachers in all the institutions are encouraged

by giving proper training, then the implementation will be more." (IDI # 1,

22.10.2021) One teacher said that

"If we entered the classroom with a ball, they would share the ball and answer

one by one. We can read like this, we can do something colorful again, and we

can show some toys, this is how we can implement." (IDI # 6, 27.10.2021)

Teacher C explains that;

"In fact, implementing play-based learning is not a difficult task if we have the

motivation. For example, I start a rhyme at the beginning of the week, show it on

a projector, then, after the show and group work, everyone else recites it together.

For a whole week, they practice it with their body posture, reciting with friends,

doing this, and by then they memorized these rhymes." (IDI # 3, 24.10.2021)

- **Influences of play-based learning in achieving the learning competencies**

In this case, almost all the teachers think that play-based learning influences learning achievement. Some teachers think that children who do not like to come to school, if they learn through play, their school attendance rate will increase, and they will be interested in learning which will influence their learning competence to increase. But none of the teachers could mention the relationship between play-based learning and achieving learning competencies. One teacher said,

"*Play-based learning affects learning skills because when I teach through play, that learning is ingrained in his mind, but when I teach traditionally through books, it will not affect him in that way; it will not be ingrained in his mind.*" (IDI # 2, 23.10.2021)

Sub-theme 4: Guidelines for practical implementation of NCTB curriculum & Teacher's Guide

In this study, all the teachers who took part in the interview followed the NCTB curriculum in their school. Half of the teachers said they have a teacher's guide that mentions play-based learning, which helps them conduct their classes, while others do not have a teacher's guide or, although there is a guide, that does not explicitly mention play-based learning. One of the teachers stated that,

"*We have a teacher's guide that mentions where, how long to teach, which game to teach, or which activity to teach, how long to play a game, how many minutes*

to play, how to do it. At work, I can learn about these things by looking at the

Teacher's Guide, which benefited me." (IDI # 3, 24.10.2021)

According to most teachers, the Teacher's Guide is a handy tool. Without it, it would

be challenging to conduct play-based classes properly. So those who do not have a

teacher's guide also think that a guide is very convenient and needed. Teacher A said,

"*We don't have any teacher guide, but it would have helped a lot if we had it.*" (IDI #

1, 22.10.2021)

Theme 2: Practice of play-based learning in online classes

Sub-theme 1: Practice of play-based learning before Covid pandemic

All the teachers responded that they practiced play-based learning before the school

closure due to the Covid-19 pandemic. They described a positive environment where

students enjoyed the learning process and eagerly responded to the teaching. Both

teachers and students actively participated in various activities like reciting poems and

stories, naming the objects.

- **Use & effectiveness of learning materials**

The respondents mentioned several learning materials. Most common among them

are blocks of different kinds, flashcards, posters, and storybooks. Although, according

to most of them, there is no ineffective learning material. However, some of them

voiced their preference for soft toys over wooden or plastic toys due to safety

concerns. All of them agreed that the effectiveness of those materials varies from

student to student, depending on personal preference. One respondent, "D,"

summarized it quite nicely,

"I would say again, toys, blocks, soft toys, various flashcards, and then there are pictures of storybooks, posters which we hang on chart paper. Soft toys, blocks, these are the ones (more effective). None of them are less effective, but maybe the children are more attracted to a toy, less to another; for *example, a child enjoys a block, another might prefer a soft toy, like this."* (IDI # 4, 24.10.2021)

Sub-theme: 2: Teacher's practice or implementation of play-based pedagogy in online classes

In all the interviews and class observations, it is noted that teachers are using various body parts and readily accessible household materials along with flashcards, posters, and charts as learning materials when practicing play-based learning in online classes. Such as, during class observation # 1, the teacher is seen using eye blinks, whereas, during class observation # 2, the teacher used her fingers for counting. On the other hand, in interviews, teachers mentioned using common vegetables, stationery items to teach their students various topics using play-based learning. In one case, teacher C contacted parents beforehand to prepare the necessary paper ball and bucket to substitute the basketball she was supposed to use for a particular lesson. (IDI # 3, 24.10.2021)

Planning for online classes

- **Lesson plan for online classes**

Most of the teachers mentioned that they follow a lesson plan for online classes. But some of them could not correctly express the elements or objectives of a lesson plan. Especially during IDI- 1, the teacher needed clarification about what a lesson plan means before answering. (IDI # 1, 22.10.2021)

- **Differences between online class and physical class lesson plans**

All the teachers in their interviews have acknowledged that although they mostly followed the existing lesson plan for their online classes, they had to adjust it for online classes. The primary reasons behind this modification are the time constraints in online classes, lack of proper learning materials, the difference in environment between home and school, and lack of physical interaction between student and teacher. In IDI-6, the interviewee mentioned,

> *"No, it was not different, almost the same. But we could not maintain the time in the same way because pre-primary is block teaching. So, a class may end earlier, and some may be a little late. But in the case of online classes, we have to finish each class within a certain time."* (IDI # 6, 27.10.2021)

Play-based activities and materials for online classes

The types of play-based activity the teacher did in the online class, the kind of play-based materials they used, arrangement of their classroom environment during the Corona Pandemic are discussed in this section. Some of the teachers here said they could do play-based activity online, while others said it was challenging to do it online, which was impossible in many cases. Some teachers said that they could not keep enough materials for themselves due to pandemics. Some teachers' workplaces were well-equipped, while others did not have much.

- **Types of play-based activities**

In the case of online play-based activities, most teachers did storytelling, drew pictures, and made rhymes with the children in the classroom. Two or three teachers said that it is not easy to do play-based activities in the online class; sometimes, the

teacher's instruction is not understood by the students. It is impossible to show it physically, so there is a communication gap between students and teachers. One teacher, however, said that she was able to practice some games in the online class, which she described as

> *"Then there was another game like 'throwing the ball in the basket. This game was tough to play because not everyone had such a basket at home, or maybe someone didn't have the ball at home."* (IDI # 4, 24.10.2021)

Moreover, the classroom observation also showed that numbers have been taught through a game of opening-closing the eyes and also using a flower-shaped flashcard while taking a math class. (Observation#1, 26-10-2021) Although several teachers described various play-based activities, none of them talked about the development goals these activities aim to achieve. But teacher B said, "It's challenging to do play-based activity in the online class because we can't work with them in person, so we could do very little activities online."

- **Use of play-based materials**

Some teachers said that they used the ball as a play-based material-because it is available in almost everyone's home. Some teachers said they tried to take online classes using plastic blocks, flashcards, charts, wooden blocks. In addition, two or three teachers said that they used materials based on readiness, such as what they have at hand, like, they used potatoes, onions available at home to teach counting. Two teachers said that they also used the mother's bangles of the students to teach the circle shape. Teacher E stated,

"Actually, I used the materials I was able to collect, such as flashcards, charts. Moreover, we used some soft toys. We also had pencils, and we used those pencils for counting. And I had color. There was a color pencil for recognition." (IDI # 5, 25.10.2021)

During the class observation, teacher "X" had a few handmade flowers to count the numbers as play-based materials (Observation#1, 26-10-2021), and teacher "Y" had play-based material such as dolls in the classroom. (Observation# 2, 28-10-2021) Another teacher, on the other hand, spoke differently about the use of play-based materials in online classes. She said,

"*In online, it becomes difficult to work through play, storytelling, rhyme is not always done together, but I often call one by one to listen to the rhyme, then show a picture and tell me to draw a picture like this. But it is not possible to do play-based activities with children online."* (IDI # 1, 22.10.2021)

Most of the teachers stated they informed the parents in advance about the materials to be used by the students to collect before the class. In the case of effective materials for online classes, the teachers said that the materials that attract the students' attention, the available ones, and the colorful ones are effective for taking online classes. One teacher said,

"*In this case, I would say that I need to sit down with the parents first to find out what materials they can collect or give to the children during the online class. Which we can show them online."* (IDI # 3, 24.10.2021)

Teacher B stated that the materials that attract the child's attention, attract their attention, are effective." (IDI # 2, 23.10.2021)

- **Classroom equipped with play-based materials**

Some of the teachers mentioned in the interviews that their classroom is decorated with charts, flashcards, and posters; some have common materials like balls and dolls in their workplaces. Two or three teachers think it would be helpful to take a play-based online class if they have some more materials in their workplace. Teacher 'B' expressed that, "I think it would be nice to have some more materials added to the tools that my work area is equipped with, some more charts, posters, flashcards." (IDI # 2, 23.10.2021) On the other hand, another teacher stated,

> *"Yes, as we have charts, we will read consonants, then we can show those charts.*
> *Then we have flashcards, then we make masks, all of which we can show online."*
> *(IDI # 6, 27.10.2021)*

Experience about play-based learning in online classes

This section discusses teachers' experience of online classes while trying to implement play-based learning. Most of the teachers voiced their dissatisfaction with online classes with regards to practicing and implementing play-based learning. As the online classes do not have any physical interaction between the teacher and the students, the teacher found it difficult to engage the students properly in the play-based activity. As seen in the class observations, despite having play-based activities, none were student-directed as recommended by the play-based learning guidelines. (Observation #1,26/10/21; observation #2,28/10/21) Neither of the IDI respondents mentioned student-directed free play activity in their classes

- **Teacher's experience in conducting online classes at pre-primary level**

As stated in the previous paragraph, none of the teachers responded positively

about their experience of conducting online classes for pre-primary students. Noteworthy points of frustration were class disruption due to electricity or internet failure and a lack of interaction with the students. Some also pointed out the difficulty of keeping the children involved in the lessons only by talking through the screen. According to teacher "B,"

> *"My online class experience is not very good due to various problems arising during the class period. For example, the first problem is not getting the kids to pay attention, and we cannot execute the class the way we did in physical classes. Then there is network disturbance; the words are distorted; students are more focused on what is happening around them. Again, if I ask anything to one student due to the network problem, they do not understand which student I asked."* (IDI # 2, 23.10.2021)

- **Teacher's training on how to address play-based learning in online classes.**

Although none of the teachers received any formal training on online classes and implementing play-based learning in those classes, they got some necessary guidance from their schools on conducting online classes. Respondent B stated,

"Yes, we got some training from school. It was not possible to do what we did in school, exactly online, but we tried, it was not possible to do exactly, but we tried to present as much as possible in online class." (IDI # 2, 23.10.2021)

- **Teacher's view about implementing play-based learning in online classes.**

Most teachers believe that play-based learning can be implemented in online classes, but learning materials and processes need to be adjusted for the changed situation. They emphasize devising new learning materials from household materials so that those can be used to help in play-based learning even when students join classes from their homes. A teacher put it in this way,

> *"It is possible to implement play-based education in the online class. If the methods of the physical class are modified, then play-based education is possible. I have to make sure that the materials needed for the activity are available in their home and they can collect the materials from home."* (IDI # 4, 24.10.2021)

Sub-theme 3: Parents' involvement in online classes to ensure play-based learning

Most of the teachers agreed upon the presence and role of parents in the play-based online class, but one teacher had a different opinion. Most of them think that having a student's parent present in the online class is helpful, and they can help the student understand the class correctly. If the students become inattentive, then the parents will play a role in helping them to be more attentive in the class. On the other hand, one teacher said that the presence of a parent makes the child more inattentive, and they pay more attention to the parents than to the teacher, so taking online classes is not adequate. One teacher stated

> *"Children are young, so their parents must be by their side. If they don't understand what I am saying, the parents can explain that, and they can also make sure that no one disturbs the child during class."* (IDI # 1, 22.10.2021)

But teacher 'F' said that she disagrees with this view. Instead, she feels that some students pay more attention to the parents than in the class. Most of the teachers stated

that the role of parents must be friendly. If the student has a friendly relationship with the parents, the online class can be very effective. It will be easier to teach him online. If the teacher cannot get the student to understand a lesson, they can try through the parents. So, of course, parents have an essential role to play since they are doing the online class at home with their parents.

Sub-theme 4: Challenges in online Play-based classes

This section discusses the challenges teachers face in online play-based classes and how to reduce them. The common challenge from all the interviews was the network problem, and another issue was not being able to touch them and not physically approach them. Some teachers think that since the use of the internet has increased due to Corona Pandemic, there will be a problem with the network, so they will have to adapt to it and continue online classes. They also think the rest of the problems will be minimized after the pandemic when the physical class can be resumed.

- **Challenges in implementing the lesson plan in online classes.**

Some of the teachers mentioned some difficulty in implementing the lesson plan in online classes. According to them, time limitation and difficulty keeping the students' attention in the lesson created most of the problems. Moreover, the teacher's inability to control the classes environment directly compounded this issue. As most online classes have a fixed time, it was problematic for the teacher to cover the lesson plan and overcome the issues mentioned above at the same time. In the interview, teacher "B" mentioned

> *"Of course, it is difficult because managing kids online is the first thing, then taking classes, then implementing lesson plans. These were quite difficult. The*

plan had to be followed, but sometimes I could not implement it because I could not finish all the lessons mentioned in my lesson plan when I was supposed to finish my class." (IDI # 2, 23.10.2021)

- **Challenges of online play-based classes**

Some teachers said that they felt that it was a bit of a challenge to understand the children. For example, when taking play-based online classes, the student may not understand what the teacher is showing because the teacher could not demonstrate it physically or correct the student's mistake personally. Teacher 'A' said,

" If I ask something in the online class, all the students start responding, and then it becomes a problem for me because I can't go to them and explain to them personally. If I listen to one, the other gets upset. Moreover, the net is often disconnected, and another big problem is that due to net disruption, children do not understand and often do not see well. " (IDI # 1, 22.10.2021)

- **Ways to mitigate the challenges**

Some teachers have suggested that reducing the challenges or disadvantages of online classes may not be easy. It can be difficult for these pre-primary school children to manage if they cannot physically approach them. It is almost impossible to reduce this disadvantage in online classes: the network and electricity problem is out of teachers' control. Teachers A and D opined that some challenges could be overcome with parents' help. (IDI #1& 4, 25.10.2021)

Teacher 'E' said,

"It takes much time; over time, it might get better. Now that the kids are a little more accustomed to the online classes, maybe the problems will gradually reduce." (IDI #5, 26.10.2021)

Discussion

This study has analyzed teachers' perceptions and practices from their understanding, experience, and challenges on Play-Based Learning in online classes for 4-5-year-olds in the Covid-19 situation. In the previous section of this chapter, results acquired during the study were explained and provided an analysis of the research evidence regarding the existing literature. In this section, the interpretation of the findings is presented in two themes.

The demographic details of the teachers in this study show that all the teachers have at least completed their graduation and have more than two years of teaching experience in their pre-primary classes. Some teachers have received professional training.

Theme 1: Perception of the teachers about play-based learning

Sub- Theme 1: Knowledge about pre-primary education

According to ISCED 2011, The educational properties of pre-primary education are characterized by interaction with peers and educators, through which children improve their use of language and social skills. Also, they start to develop logical and reasoning skills. Children are also introduced to alphabetical and mathematical concepts and encouraged to explore their surrounding world and environment (UNESCO Institute for Statistics, 2012). Among the respondents, only a few correctly stated that getting a baby ready for primary

school, developing their social and emotional development skills, such as mixing with friends and giving these lessons to 3 to 5-year-old children, is the goal of pre-primary education. The rest of them misperceived pre-primary education and could not describe pre-primary education entirely or adequately. So, the study findings show that, although few of them have a concise idea about the objective and process of pre-primary education, most of the teacher's knowledge about pre-primary education is vague and incomplete.

All teachers interviewed here agree that play-based learning and pre-primary education have a critical relationship. They all feel that play-based learning is more beneficial for children in primary education than the traditional teaching method. Most of the teachers think that play-based learning is playing with different materials or real-life objects in the class, which is more appropriate for children of this age, and they think that pre-primary class education should be through this method. Ceglowski (1997) mentioned that play is a child's work. Wanner (2000) proved positively the relation between play and academic success. According to Mastrangelo (2009), children acquire knowledge about their surrounding world by questioning and questioning ideas. Elkind (2008) states that play means doing some activity in which children help to identify color, shape, tests, and sound, the building blocks of reality. They use play to learn love and social connection such as friendship, cooperation, competition, and mutual respect (Rahman et al., 2020). Therefore, from the study findings, we can assert that almost all teachers view the relationship between play-based learning and pre-primary education as a vital

element and consider play-based learning an essential part of pre-primary education, which corresponds to that research.

Sub- Theme 2: Knowledge about play-based learning

It has been found that most of the teachers refer to play-based learning as a teaching practice given to children of 3-5 years of age through various games and materials. But none of them mentioned that the play should be under the direction of children and open-ended, and the class observations also show the same tendency. But according to Wonderschool.Com's definition, Play-based learning is a type of early childhood education based on child-led and open-ended play. Play-based learning helps children develop social skills, motivation to learn, and even language and numeracy skills. (What Is Play-Based Learning? 2017). So while teachers here have more or less the same idea about play-based learning, according to the definition, there is some deficiency in their idea about play-based learning.

Among the teachers interviewed, two teachers had no training in play-based learning, three teachers attended workshops organized by the school, and only one teacher had formal play-based teaching-learning training. And only one has an education-related teaching degree. On the other hand, OECD countries require a minimum of Bachelor's degree with mandatory ECED training. In Singapore, pre-school teachers require minimum professional qualifications of 470 hours of training. Also, 25% of teachers must have a diploma in pre-school education training, and all other teachers must be at least certificate-trained to ensure that pre-schools are staffed with adequately trained teachers (Bhatta et al.,

2020). So, if we compare with international standards, our pre-school teachers fall far behind in educational training related to pre-primary or play-based education.

According to most teachers, the main difference between traditional lecture-based learning and play-based learning is that textbooks are used in traditional lecture-based teaching as teaching aids. But no extra teaching materials are used to help the children learn. Also, they think that this type of learning depends on memorization. Play-based education is taught through materials, charts, blocks, posters, and real-life materials. None of the teachers here referred to Lecture Based Education as Teacher-Centered Learning. However, they all agreed that play-based learning is more suitable for pre-primary students.

According to Dr. Helge Wasmuth, Assistant Professor in the Department of Early Childhood and Childhood Education at Mercy College (USA), "In the play-based pre-school, it's not only about academics; it's about the whole child. So it's a much more holistic approach and focuses on physical, socio-emotional, and cognitive development. However, teacher-directed they don't develop the skills they need like creativity, self-regulation, problem-solving." ((Smith & Wasmuth, 2017). Research has also acknowledged that young children in lecture-based programs can experience adverse effects. These include stress, decreased motivation for learning, and behavior problems. These effects are particularly prevalent for children who are not yet ready for more formal academic education. (Robertson, Morrissey, 2018). Although the teacher understood the nature of play-based learning, they did not comprehend it thoroughly.

Sub- Theme 3: Practical application of the knowledge

The study got diverse responses from the teachers regarding the practical application of their knowledge about pre-primary education and play-based learning. One of the teachers stated that they needed better training on play-based learning to increase their knowledge and implement it properly. Hunter, in his research, supported this view as he stated, ". They also need to have a strong knowledge of Play-Based Learning." (Hunter, 2019). Some others opinioned that using materials like blocks, posters, charts, and dolls will facilitate implementing play-based learning in practice. But they could not suitably describe any new materials other than the ones they used. Most of them did not mention learning corners as learning aids, although these are mandated by several government policies to be part of the pre-primary classroom. According to Matthew Lynch's study, for implementing the teacher's knowledge in practice, teachers should use puzzles for the mathematics class and allow unrestricted, unstructured playtime. The teacher should also mingle with the learners, assisting them through prompting and guiding questions and end the learning activity with a group discussion of what students learned. (LYNCH, 2021). This information was not found explicitly in the teachers' interviews, although some did say about the importance of learning material.

All the teachers agreed that play-based learning influences the child's learning competence. According to some, children are more interested in learning through play, so their learning is very spontaneous, which helps to increase their

learning competence. Some said that in play-based learning, the child's development is done according to age and in a traditional way, which increases their learning competency. According to Elkind, Play-based learning appeals to children's natural curiosity and desire to engage in experiences based on their unique interests, as they make sense of the world around them. Thus, tailoring the teaching opportunities to align with the type of play the children are engaging teachers can help them learn with less effort." (Elkind, 2008). So, the teachers have correctly co-related the relationship between play-based learning and students' learning competencies.

Sub-theme 4: Guidelines for practical implementation of NCTB curriculum & Teacher's Guide:

All the teachers who participated in the interview said they follow the pre-primary curriculum published by NCTB in their school. Half of the teachers said that their school has a teacher's guide, and from there, they take support to teach play-based learning. However, the Journal of Economics and Development Studies reports ample research evidence for the use and usefulness of teacher guides in various contexts. The teacher's guide is a manual full of ideas and notes on organizing instruction in the classroom (Harmer, 2007). Teacher guides should be flexible so that they can adapt to different contexts and meet the needs of teachers (Cunningswoth, 1995). Teacher guides also need to provide clear guidelines for planning and how the various values included in the curriculum best match teachers' learning, belief and practice. These guidelines will also provide age-appropriate learning paths for the students.

Theme 2: Practice of play-based learning in online classes:

Sub- Theme 1: Practice of play-based learning before Covid pandemic

All teachers stated that they practiced play-based learning in the pre-primary level before the school closed due to the Covid-19 pandemic. They described the classroom as a positive environment where students enjoyed learning and responded to teaching with interest. Both teachers and students actively participated in various activities such as reciting poems and stories, naming objects.

Respondents mentioned several common learning materials such as blocks, flashcards, posters, and storybooks. Most of them also said to have no preference for material regarding the usefulness, but some preferred soft toys over wooden or plastic toys for safety reasons. They all agree that the effectiveness of the material varies from student to student due to their personal preference. A research stated that there is a need to carefully select the materials so that the young children can use them without any difficulty. Materials like wooden blocks for the building, baby dolls, balls of different shapes and sizes, floor puzzles with large pieces, and simple games requiring no reading are very suitable for the pre-primary level. (The Environment: Materials, n.d.). In their interviews, the teacher also mentioned some of these materials, but no teacher mentioned puzzles or learning corners.

Another point to be noted, although some of the teachers identified that different material is suitable for different students. But none of them mentioned any effort to identify the learning style of their students and adjust the activity or material to match the learner type. According to the VARK model proposed by

Fleming and Mills (1992), there should be four different learning styles: Visual, Aural, Read/Write, and Kinesthetic.

So, this study finds that almost all the teachers used the material in their class before Corona Pandemic, but they are not familiar with many types of materials. They also lack knowledge about the proper use of teaching material at the pre-primary level.

Sub-theme: 2: Teacher's practice or implementation of play-based pedagogy in online classes

Although most teachers mentioned that they follow a lesson plan for online classes, some of them could not accurately express the content or purpose of the lesson plan. In their interviews, all the teachers admitted that even though they followed the general lesson plan for their online class, they had to change their existing lesson plan for their physical class to suit the online class. The main reasons for this change are time constraints in online classes, lack of proper teaching materials, differences in environment between home and school, and lack of physical interaction between students and teachers.

From all the interviews and class observations, it was noticed that teachers were using various body parts and easily accessible household items, including flashcards, posters, and charts, while practicing play-based learning in online classes. For example, during class observations 1 and 2, the teachers are seen using the blink of an eye or fingers or handmade materials and use puppets in class as teaching tools. On the other hand, in the interview, teachers mentioned using common vegetables, stationery items to teach their students various subjects using

play-based learning. Most teachers in this study said that the parents were contacted in advance about the materials used by all the students to collect them before the online class. In the case of effective materials for online classes, the teachers said that the materials that attract the students' attention, available materials, and colorful materials help take online classes.

As for online play-based activities, most teachers have been able to tell stories, draw pictures, create rhymes with the children in the online class. In addition, during classroom observation 1, students were seen learning numbers through a game, but in classroom observation 2, the teacher did not demonstrate any play-based activity. According to the baby sitters association of UK, there are many types of play-based activities like Sand play, Water play, Dress-Up and Role Play, Drawing, Painting, Blocks, Jigsaws, Shape Sorters, Music, Dancing, and Singing which are helpful for the pre-primary students, (Sitters.Co.Uk - The 15 Best Activities for Children to Learn Through Play, n.d.). So, the study finds that teachers are using a variety of activities to keep the students interested in the classroom as they are using most of the activities mentioned by the association. A few teachers said that doing play-based activities in an online class is not easy. Because They could not work with the students directly, it was not feasible to do all the activities. Moreover, students often do not understand the teacher's instructions, which creates a communication gap between students and teachers. However, most teachers thought it was possible to do play-based activities in the online class. Both class observations and interviews showed that although play-based activities were practiced in the classroom, none were student-directed

activities as recommended by the play-based learning principles. Instead, these activities are designed to fulfill academic requirements rather than achieve the students' development goals.

Some of the teachers interviewed said that their classrooms were decorated with charts, flashcards, various posters, some of which contained common materials, balls, and dolls at school. Two or three teachers think that it would be helpful for them to take a play-based online class if they have some other materials or equipment same as their workplace.

Most teachers are dissatisfied with their practice and implementation of play-based learning in online classes. The lack of physical interaction between the teacher and the students in the online class makes it challenging for the teacher to properly engage the students in play-based activities. No teacher responded positively to the experience of conducting online classes for pre-primary students. Notable points of frustration were class interruptions due to power or internet failure, and lack of communication with the students. Some even pointed out the difficulty of keeping children involved in the lessons only through speaking across the screen.

None of the teachers has received formal training on how to implement online classes and play-based learning in online classes; however, they have all received some necessary guidance or training from their schools. According to Paulette Delgado's research, it was found that the epidemic has exposed many flaws in the education system and exacerbated inequality. According to a survey conducted by UNESCO, UNICEF, and the World Bank, only half of the surveyed

countries of south-east Asia provide distance learning training to their teachers (Delgado, 2020). Therefore, the training status of the interviewed teachers is a common phenomenon in neighboring counties, but the development of teaching skills is imperative for early childhood teachers to practice dealing with various challenges which influence teaching efficacy in practice (Johnson et al., 2017; Kim, 2020). So, the teachers lack proper training to handle the online classes properly.

Most teachers believe that play-based learning can be implemented in the online classroom by adopting the learning materials and processes to changing situations. They emphasize creating learning materials from household materials to be easily collected, available, and used to aid play-based work. So, the main idea for implementing play-based education is material-based. They did not focus on any of the issues, such as making more interactive learning and giving children more play-based learning in less screen time, which would have been consistent with the principles of early childhood education.

In their interviews, most teachers mentioned that the lack of physical interaction in the online class compared to the offline class is hindering their implementation of play-based learning. Teachers are accustomed to a hands-on approach to teaching where they directly assist students in their activities that are not possible in online classes. The teacher also mentioned that the students were more focused on their lessons and activities while participating in the physical class and were engaged to play with their friends, thus making the lesson more enjoyable. These aspects make physical classes more preferred by teachers for implementing play-based learning.

Sub-theme 3: Parents' involvement in online classes to ensure play-based learning

Although one teacher opined that presence of a parent in the online class hampers the student's attention, most of them think that having a parent next to them in the online class is helpful for the class. They can help understand the class correctly, and if the students become inattentive, the parents will play a role to help them become more concentrated in the class. Most of the teachers expressed that the role of parents must be friendly. With a friendly relationship with the parents, online classes would be more effective as the parents can help the student during and after the class to understand the topic. So, of course, parents have to play an essential role in practicing play-based learning in online classes as the students are physically present in their homes, and they need to practice the lessons with the parents. Regional Education Adviser at UNICEF's Regional Office for South Asia, Dr. Jim Ackers, advised involving the parents in a more active role for the pre-primary level children's education. By providing them, necessary guidance and instruction material through ECCD educators via various mediums like-WhatsApp chat, national TV, radio, or printed home-learning packs. These materials should explain to the parents what their children are supposed to learn, the type of tasks their children should perform by a certain age, and when to contact for expert support if their child may have a learning impairment. *(Early Learning during the Coronavirus Pandemic, n.d.)*. Therefore, the study findings agree with the research as that most teachers emphasized that parental presence and role are required for online play-based classes.

Sub-theme 4: Challenges in online Play-based classes

Some teachers have mentioned some complications in implementing lesson plans in online classes. According to teachers, time constraints and difficulty keeping students focused on lessons have created the most problems. Moreover, the teacher's inability to control the classroom environment has personally complicated the problem. Due to the limited time frame of most of the online classes, it was difficult for the teacher to overcome the problems mentioned above and cover the lesson on time.

According to some teachers, the biggest challenge in play-based online classes is network problems. While network failures lead to class interruptions that make it impossible to take classes properly, low network quality makes it difficult for the teachers and the students to understand each other. Additionally, not all play-based activities can be used in online classes, mainly due to the lack of physical interaction between teacher and student in an actual location. Also, the unavailability of material in the student's home is another issue that limits the possible play-based activities in online classes. Moreover, following the class management and rules, keeping the students in the manners and discipline is not always possible in the online class.

Some teachers have suggested that reducing the challenges or difficulties of the online class is not an easy task, as teachers in these pre-primary schools may find it a bit difficult to manage if they cannot physically approach the students. Reducing this difficulty in online classes is almost impossible. And the network and electricity problem is entirely out of control of the teachers to solve,

so it seems a bit impossible to reduce from the teacher's effort. In essence, the teachers did not share any promising insight that might solve or mitigate the challenges they face in practicing play-based learning in their online classes. One of the primary purposes of applying play-based activities in pre-primary classes is to improve children's physical and mental development, such as fine and gross motor development and enhancing hand-eye coordination. But it was noticed that none of the activities practiced in the online class had any physical movement for the students to perform. Neither the teachers tried to remediate this issue nor commented on facing it, which implies they are unaware of the problem. According to 2018 research, those who are learning in early childhood classrooms require physical stimulation to ensure proper physical development throughout their early childhood years. Through play-based learning, students will holistically gain access to more fine and gross motor opportunities (Ali, Kaitlyn M, Hussain, & Akhtar, 2018). So, teachers should be more attentive to this issue to give the students the full benefit of play-based learning.

Conclusion

This research attempted to understand the situation of the online classes while trying to implement play-based learning during the Covid-19 pandemic induced home quarantine. From the above findings, it can be concluded that teachers did face some problems conducting play-based online classes in the COVID -19 situation as it was a completely new environment for them to conduct classes that came with its own set of problems. The Coronavirus (COVID-19) pandemic and related lockdown measures have introduced

teachers' need to take online classes instead of physical classes, but most of the activities in the pre-primary class were designed for the physical class.

This study finds that most teachers have a passing knowledge about pre-primary level education and play-based learning. But the most glaring deficiency in their knowledge is that they do not know the development goals of pre-primary education and the objective of practicing play-based learning during early childhood. They utilize play-based activities for academic purposes. This deficiency resulted from the teacher's lack of formal training in pre-primary education and play-based learning.

This research has shown that some teachers have been able to conduct play-based classes reasonably well despite the limitations of online classes. However, all of them have faced similar problems like network and electricity issues, inability to retain students' attention, not attending classes, and insufficiency of suitable teaching materials while conducting play-based online classes. The teachers in the pre-primary class cannot do many of the activities mentioned in the curriculum as those activities require physical proximity between teacher and student. As a result, there is a shortfall in student development. The experience of online classes was challenging for some teachers as the lack of eye or physical contact with the students hinders the teachers from making the lessons understandable. Another significant finding in the study is that most teachers do not understand the goal of play-based learning, resulting in the child's mental, physical, and cognitive development. To summarize the study findings, teacher need to undergo further in-depth training on the fundaments of early childhood education to improve their knowledge of pre-primary education and material development to properly implement play-based learning in online classes at the pre-primary level.

Recommendations

This research aims to study how the pre-primary level teachers perceive and practice play-based learning in an online class with children aged 4-5 in the COVID-19 situation. Here, the perception was examined in terms of how they understand, experience, and practice their knowledge about play-based learning in online classes during this COVID-19 pandemic. The teacher should think about the children's development through play-based learning in an online class in a broader head, but there are many limitations in this Covid-19 condition. For this, here are some recommendations based on the findings of this research.

- Teachers need to have well-defined and precise ideas about pre-primary education and play-based learning to understand how to teach easily. Adequate training should be provided for teachers to become more proficient in practicing play-based learning and be aware of how the activities help the physical and mental development of the child.

- The teachers try to conduct the class using materials in the online class, but it is not possible to use all the materials used for the physical classes in the online classes because it requires physical proximity, so alternative materials need to be developed which can be made from available items present in any household.

- The curriculum mentions play-based learning using four types of corners for fine motor, gross motor, and imagination development in the physical class,

but it was not possible to play through these corners in the online class.

Instead of these activities, more project-based activities can be attempted,

requiring less screen time but helping the children in similar development.

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Annex -1

IDI Questionnaire

The practice of play-based learning in online classes at the pre-primary level (age 4-5) during the COVID-19 pandemic

Research Objectives:

3. To understand what is the perception of the teachers about play-based learning.
4. To find out how play-based learning is being practiced in online classes at the pre-primary level.

Research questions

3. What is the perception of the teachers about play-based learning?
4. How are they practicing play-based learning in the online classes during Covid Pandemic?

Demographic Questions:

- Name:
- Gender:
- Educational qualification:
- How long have you been a preschool teacher?
- Do you have any teaching degrees or have done professional courses?

Perception of the teachers about play-based learning
1. What is your understanding of pre-primary education?
2. What do you know about Play-Based Learning?
3. Have you received any training on play-based learning?

4. (If yes) then please explain how have you been implementing your knowledge into practice

5. What is your view about the relationship between Play-based learning and Pre-primary education?
6. In your opinion, between traditional lecture-based teaching and play-based learning which one is more suitable for pre-primary education? Why?
7. What is the main difference between traditional lecture-based learning and play-based learning?
8. Do you think play-based learning influences achieving the learning competencies of the pre-primary education? How?
9. What do you know about implementing play-based learning for pre-primary classes?
10. Do you follow the pre-primary curriculum published by NCTB in your school?

11. Do you have any teacher's guide for pre-primary teachers where play-based learning is followed? If yes, how have you been benefited from that?

12. Do you see any differences in students' performance between online classes and physical classes?

The practice of play-based learning in online classes during the Covid Pandemic:

13. Do you implement play-based learning in your pre-primary classes? How did you implement play-based learning in the classroom before Covid Pandemic?
    a. What kind of learning materials did you use in your classes?
    b. Among the learning tools you have used, which ones were most effective and which ones were least effective?
14. What is your experience in conducting online classes at preprimary level?
15. Have you received any training on how to address play-based learning in online classes? If yes, please explain.
16. Do you think it is possible to implement play-based learning in online classes? Please explain.

17. how do you practice or implement play-based pedagogy in online classes? Please share your experiences.

18. What is the main difference between implementing play-based learning in online and physical classes at the pre-primary education?
19. Are you following any lesson plan for your online classes?
    a. Was the lesson plan any different than the one you followed for the physical classes?
    b. Was it difficult to implement the lesson plan in online classes? Please share your experience.
20. What type of play-based activities do you use to perform with your children in your online class? Please describe one or two activities.
    Note for the researcher
    - (Reading storybooks and storytelling.
    - Singing rhymes and songs together.
    - Painting or coloring picture
    - Frog jump, throwing the ball in the basket, and play,
    - Pretend play
    - Learning through peer sharing)

21. Do you use play-based materials in online classes?
    a. If yes, then what type of play-based materials are you using in online classes?
    b. How do you ensure that all the students are using similar materials?
    c. What kind of materials are effective for online classes?
    d. Do you have any suggestions about the kind of materials appropriate for online classes?
22. Is there any parents' involvement required in online class to ensure play-based learning? If yes, how do you expect parents to be part of this and how are they performed?

23. Do you think your work area is appropriately equipped with play-based materials for online learning? If yes, how it has been equipped with?

24. Do you face any challenges while practicing online play-based classes? Please explain.
25. How do you mitigate the challenges?

বাংলা অনুবাদ

ডেমোগ্রাফিক প্রশ্নমালা

* নাম:

* লিঙ্গ:

* শিক্ষাগত যোগ্যতা:

* আপনি কতদিন ধরে প্রিস্কুল এ শিক্ষকতা করছেন ?

* আপনার কি কোন শিক্ষণ ডিগ্রি বা পেশাদার কোর্স করা আছে?

খেলা ভিত্তিক শিক্ষা সম্পর্কে শিক্ষকদের ধারণা:

১. প্রাক-প্রাথমিক শিক্ষা বলতে আপনি কি বুঝেন ?

২. আপনি খেলা-ভিত্তিক শিক্ষা সম্পর্কে কি জানেন?

৩. আপনি কি খেলা-ভিত্তিক শিক্ষার কোন প্রশিক্ষণ পেয়েছেন?

৪. (যদি হ্যাঁ হয়) তাহলে অনুগ্রহ করে ব্যাখ্যা করুন কিভাবে আপনি আপনার জ্ঞানকে

অনুশীলনে প্রয়োগ করছেন?

৫. খেলা-ভিত্তিক শিক্ষা এবং প্রাক-প্রাথমিক শিক্ষার মধ্যে সম্পর্ক সম্পর্কে আপনার দৃষ্টিভঙ্গি কী?

৬. আপনার মতে, প্রথাগত শিক্ষা এবং খেলা-ভিত্তিক শিক্ষার মধ্যে কোনটি প্রাক-প্রাথমিক শিক্ষার জন্য বেশি উপযুক্ত? কেন?

৭. প্রথাগত লেকচার-বেসড শিক্ষা এবং খেলা-ভিত্তিক শিক্ষার মধ্যে প্রধান পার্থক্য কি?

৮. আপনি কি মনে করেন খেলা-ভিত্তিক শিক্ষা প্রাক-প্রাথমিক শিক্ষার শেখার দক্ষতা অর্জনকে প্রভাবিত করে? কিভাবে?

৯. প্রাক-প্রাথমিক শ্রেণির জন্য খেলা-ভিত্তিক শিক্ষা কিভাবে বাস্তবায়ন করা যায় বলে আপনি মনে করেন?

১০. আপনি কি আপনার স্কুলে NCTB দ্বারা প্রকাশিত প্রাক-প্রাথমিক পাঠ্যক্রম অনুসরণ করেন?

১১. প্রাক-প্রাথমিক শিক্ষকদের জন্য আপনার কি কোন শিক্ষক নির্দেশিকা আছে যেখানে খেলা ভিত্তিক শিক্ষা অনুসরণ করা হয়? যদি থাকে, তাহলে আপনি কিভাবে উপকৃত হয়েছেন?

১২. আপনি কি অনলাইন ক্লাস এবং ফিজিক্যাল ক্লাসের মধ্যে শিক্ষার্থীদের পারফরম্যান্সে কোন পার্থক্য দেখতে পান?

কোভিড মহামারীর সময় অনলাইন ক্লাসে খেলা ভিত্তিক শেখার অভ্যাস:

১৩.   আপনি কি আপনার প্রাক-প্রাথমিক ক্লাসে খেলা-ভিত্তিক শিক্ষা বাস্তবায়ন করেন? কোভিড মহামারীর আগে আপনি শ্রেণিকক্ষে খেলা-ভিত্তিক শিক্ষা কীভাবে বাস্তবায়ন করেছিলেন?

ক) আপনি আপনার ক্লাসে কোন ধরনের শিক্ষা উপকরণ ব্যবহার করেছেন?

খ) আপনি যে শিক্ষা উপকরণ ব্যবহার করেছেন তার মধ্যে কোনটি সবচেয়ে বেশি কার্যকরী এবং কোনটি সবচেয়ে কম কার্যকর?

১৪.   প্রাক প্রাথমিক স্তরে অনলাইন ক্লাস পরিচালনায় আপনার অভিজ্ঞতা কেমন?

১৫.   আপনি কি অনলাইন ক্লাসে কিভাবে খেলা-ভিত্তিক শিক্ষা দেয়া যায় এ বিষয়ে কোন প্রশিক্ষণ পেয়েছেন? যদি হাঁ হয়, তবে দয়া করে ব্যাখ্যা করুন।

১৬.   আপনি কি মনে করেন অনলাইন ক্লাসে খেলা ভিত্তিক শিক্ষা বাস্তবায়ন করা সম্ভব? দয়া করে ব্যাখ্যা করুন।

১৭.   অনলাইন ক্লাসে আপনি কিভাবে খেলা ভিত্তিক পেডাগোজি অনুশীলন করেন বা বাস্তবায়ন করেন? আপনার অভিজ্ঞতা শেয়ার করুন।

১৮.   প্রাক-প্রাথমিক শিক্ষায় খেলা-ভিত্তিক শিক্ষা বাস্তবায়নের ক্ষেত্রে অনলাইন এবং ফিজিক্যাল ক্লাসের মধ্যে প্রধান পার্থক্য কী?

১৯.   আপনি কি আপনার অনলাইন ক্লাসের জন্য কোন পাঠ পরিকল্পনা অনুসরণ করছেন?

ক) পরিকল্পনাটি কি আপনি ফিজিক্যাল ক্লাসের জন্য যে পাঠ পরিকল্পনা অনুসরণ করেছিলেন তার চেয়ে আলাদা ছিল?

খ) অনলাইন ক্লাসে পাঠ পরিকল্পনা বাস্তবায়ন করা কঠিন ছিল কি? আপনার অভিজ্ঞতা শেয়ার করুন।

২০.   অনলাইন ক্লাসে আপনি শিশুদের সাথে কোন ধরনের খেলা-ভিত্তিক কার্যক্রম ব্যবহার করেন? অনুগ্রহ করে একটি বা দুটি কার্যক্রম বর্ণনা করুন

গবেষকের জন্য নোট

- (গল্পের বই পড়া এবং গল্প বলা।

- একসঙ্গে ছড়া এবং গান গাওয়া।

- ছবি আঁকা বা রঙ করা

- ব্যাঙ লাফ, ঝুড়িতে বল নিক্ষেপ, এবং খেলা,

- অভিনয়ের মাধ্যমে খেলা

- পিয়ার শেয়ারিং এর মাধ্যমে শেখা)

২১.   আপনি কি অনলাইন ক্লাসে খেলা ভিত্তিক উপকরণ ব্যবহার করেন?

ক) যদি হ্যাঁ হয় , তাহলে আপনি অনলাইন ক্লাসে কোন ধরনের খেলা-ভিত্তিক উপকরণ ব্যবহার করছেন?

খ) আপনি কিভাবে নিশ্চিত করবেন যে সব ছাত্র একই ধরনের উপকরণ ব্যবহার করছে?

গ) অনলাইন ক্লাসের জন্য কোন ধরনের উপকরণ কার্যকর?

ঘ) অনলাইন ক্লাসের জন্য উপযোগী ধরনের উপকরণ সম্পর্কে আপনার কোন পরামর্শ আছে?

২২.   খেলা ভিত্তিক শিক্ষা নিশ্চিত করার জন্য কি অনলাইন ক্লাসে কোনো অভিভাবকের অংশগ্রহণ প্রয়োজন? যদি হ্যাঁ হয়, তাহলে বাবা -মা এর অংশগ্রহণ এবং ভূমিকা কেমন হওয়া উচিত বলে আপনি মনে করেন?

২৩.   আপনি কি মনে করেন যে আপনার কর্মক্ষেত্রটি অনলাইন শিক্ষার জন্য খেলা-ভিত্তিক উপকরণ দ্বারা যথাযথভাবে সজ্জিত? যদি হ্যাঁ হয়, এটি কিভাবে সজ্জিত করা হয়েছে? দয়া করে ব্যাখ্যা করুন।

২৪.   অনলাইনে খেলা-ভিত্তিক ক্লাস অনুশীলনের সময় আপনি কি কোন চ্যালেঞ্জের মুখোমুখি হন? দয়া করে ব্যাখ্যা করুন।

২৫.   অনলাইন ক্লাসের প্রতিকূলতাগুলো আপনি কিভাবে কমাতে পারবেন?

Annex-2

Online Class Observation Checklist

Name of teacher:

Name of Observer:

Class:

Date:

SL	Observation criteria	Observed	Not Observed
1.	Teachers could encourage everyone to listen, watch, participate through the device from beginning to end of the class		
2.	The teacher started the class by greeting everyone and whether there has been any playful manner is followed to greet children.		
3.	Materials are ready, and proper use of materials.		
4.	There is a lesson plan for the class and teacher has been following that.		
5.	There is an online class routine for the class and teacher has been following that		
6.	Objectives are communicated clearly at the start of the lesson.		
7.	Instructional materials were appropriate for the play-based learning' on.		
8.	The teacher has knowledge about the topic of the subject		
9.	Topic is made relevant and interesting for the students. and children are enjoying the session		
10	The lesson is linked to previous learning.		
11	Play-based materials are used in the class.		
12	Uses a variety of visual aids and props to support student play-based learning		
13	Teacher encourages active participation of the students		
14	Uses class activities to promote peer support for achieving the competencies		
15	Structures heterogeneous and cooperative groups for play based learning		

16	Uses probing and clarifying techniques to assist students to answer		
17	Uses eye contact and vocal expressions to convey a message that all students' questions and opinions are important		
18	A variety of play-based activity and questioning techniques are used.		
19	Instructions & explanations are clear and specific.		
20	The teacher involves with all the students, listens to them, and responds appropriately.		
21	Students are praised for their achievements.		
22	Mistakes & misconceptions are recognized and used constructively to facilitate learning.		
23	Student's ownership & responsibility in doing play-based activities		
24	Students show initiative or curiosity.		
25	There are some physical activities by the students		
26	Number of play-based activities are practiced in the class		
27	Duration of each play-based activity		
28	Teacher's movement and body language during conducting play-based pedagogy		

অনলাইন ক্লাস পর্যবেক্ষণ চেকলিস্ট

শিক্ষকের নাম:

পর্যবেক্ষকের নাম:

ক্লাস:

তারিখ:

ক্রম	পর্যবেক্ষণ মানদণ্ড	পর্যবেক্ষণ এ পাওয়া যায়	পর্যবেক্ষণ এ পাওয়া যায়নি
১.	শিক্ষকরা ক্লাসের শুরু থেকে শেষ পর্যন্ত ডিভাইসের মাধ্যমে সবাইকে শুনতে, দেখতে, অংশগ্রহণ করতে উৎসাহিত করতে পেরেছেন		
২	শিক্ষক সবাইকে শুভেচ্ছা জানিয়ে ক্লাস শুরু করেছিলেন এবং শিশুদের খেলার মাধ্যমে শুভেচ্ছা জানানো হয়েছে।		
৩.	উপকরণ প্রস্তুত, এবং উপকরণের সঠিক ব্যবহার।		

৪.	ক্লাসের জন্য একটি পাঠ পরিকল্পনা আছে এবং শিক্ষক তা অনুসরণ করছেন।		
৫.	ক্লাসের জন্য একটি অনলাইন ক্লাস রুটিন আছে এবং শিক্ষক তা অনুসরণ করছেন		
৬.	পাঠের শুরুতে উদ্দেশ্যগুলি স্পষ্টভাবে জানানো হয়।		
৭.	খেলা-ভিত্তিক শিক্ষার জন্য নির্দেশনামূলক উপকরণ উপযুক্ত ছিল		
৮.	শিক্ষক যে বিষয়ে পড়াবেন ,সে সম্পর্কে শিক্ষকের স্পষ্ট জ্ঞান আছে		
৯.	পড়ার বিষয়টি শিক্ষার্থীদের জন্য প্রাসঙ্গিক এবং আকর্ষণীয়। এবং শিশুরা সেশন উপভোগ করছে		
১০.	পাঠটি পূর্ববর্তী শিক্ষার সাথে যুক্ত।		
১১.	ক্লাসে খেলা-ভিত্তিক উপকরণ ব্যবহার করা হয়.		
১২.	শিক্ষার্থীদের খেলা-ভিত্তিক শিক্ষাকে অনুসরণ করার জন্য বিভিন্ন ধরনের বাস্তব উপকরণ ব্যবহার করে		
১৩.	শিক্ষক,শিক্ষার্থীদের সক্রিয় অংশগ্রহণকে উৎসাহিত করেন		
১৪.	দক্ষতা অর্জনের জন্য সহপাঠিদের সাথে মিলেমিশে শ্রেণী কার্যক্রম কে ব্যবহার করে		
১৫	খেলাভিত্তিক শিক্ষার জন্য ভিন্নধর্মী এবং একইরকম গ্রুপ গঠন করে		
১৬	শিক্ষার্থীদের উত্তর দিতে সহায়তা করার জন্য অনুসন্ধান এবং ব্যাখ্যা করার কৌশল ব্যবহার করে		
১৭	শিক্ষক,চোখের যোগাযোগ এবং ভোকাল এক্সপ্রেশন ব্যবহার করে বার্তা পৌঁছে দেয় যে সকল শিক্ষার্থীর প্রশ্ন এবং মতামত গুরুত্বপূর্ণ		
১৮	বিভিন্ন ধরনের খেলা-ভিত্তিক কার্যকলাপ এবং প্রশ্ন করার কৌশল ব্যবহার করা		
১৯	নির্দেশাবলী এবং ব্যাখ্যা স্পষ্ট এবং নির্দিষ্ট।		
২০	শিক্ষক সকল ছাত্রদের সাথে যুক্ত থাকে, তাদের কথা শোনে এবং যথাযথভাবে সাড়া দেয়।		
২১	শিক্ষার্থীরা তাদের কৃতিত্বের জন্য প্রশংসিত হয়।		
২২	ভুল এবং ভুল ধারণাগুলি শুধরে দিয়ে শিক্ষার সুবিধার্থে গঠনমূলকভাবে ব্যবহার করা হয়।		
২৩	খেলা-ভিত্তিক কার্যক্রম করার ক্ষেত্রে শিক্ষার্থীর ওনারশিপ ও দায়িত		
২৪	শিক্ষার্থীদের দ্বারা কিছু ফিজিক্যাল একটিভিটি করানো হয়		
২৫	শিক্ষার্থীদের দ্বারা কিছু ফিজিক্যাল একটিভিটি করানো হয়		
২৬	ক্লাসে যথেষ্ট পরিমানে খেলা-ভিত্তিক একটিভিটি অনুশীলন করা হয়		
২৭	প্রতিটি খেলা-ভিত্তিক কার্যক্রমের সময়কাল		
২৮	খেলা ভিত্তিক পেডাগোজি পরিচালনার সময় শিক্ষকের মুভমেন্ট এবং শারীরিক ভাষা		

Annex-3

Participants' Consent Form

Title of the Research:
The practice of play-based learning in online classes at the pre-primary level (age 4-5) during the Covid pandemic

Purpose of the research:
As a part of my degree requirements from the Institute of Educational Development - BRAC
University, I am doing this study to learn about the perception and practice of play-based learning in online classes at the pre-primary level for students aged 4-5 during the COVID-19 pandemic.

Risks and benefits:
There is no risk to you for participating in this study. Still, participants will have the opportunity to review and improve their knowledge and application of that knowledge regarding play-based learning.

Privacy, anonymity, and confidentiality:
All information collected from you will remain strictly confidential. I am happy to answer all of your queries regarding the study, and you are welcome to contact me for any inquiries about the study

Future use of information:
Some of the information collected from this study may be kept for future use; however, in such

cases information and data supplied to other researchers, will not conflict with or violate the

maintenance of privacy, anonymity, and confidentiality of information identifying participants in

any way.

Right not to participate and withdraw:
Your participation in the study is entirely voluntary, and you are the sole authority to decide for and against your participation in this study. Refusal to take part in the study will involve no penalty. If you agree to take part in my research as a participant, please indicate that by putting your signature in the specified space below

Thank you very much for your cooperation

_____   _____
 Signature of Investigator   Signature of Participant
Date: Date: