

The Study of School-Based Learning through Play Positive Practices Tanzania



Report prapared for the International Rescue Committee (IRC)
PlayMatters Project

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Table of Contents

Executive Summary	3
<u>List of Figures</u>	5
<u>List of Plates</u>	Ę
Aknowledgement	6
Chapter 1: Introduction	7
Background to the Study	
Context of Child Education in Tanzania	
The Problem	
Goals and Objectives	
Main Objectives	
Research Methodology	
Data Management and Analysis	
Ethical Considerations	
The Organization of the Report	
Chapter 2: Understanding Learning through Play	13
Introduction	
Play as a Pleasurable and Physical Activity	
Play as a Beneficial for Children's Development and Wellbeing	
Chapter 3: Overview of Learning through Play	17
Introduction	
LtP Activities and Approaches Used in Schools	
Gender and Play	
<u>Use of Real Objects (Local Materials)</u>	
LtP and its Association with the Curriculum, Lesson Plan, and the General Pedagogy of the School	
Support from School Leaders	
Teacher Professional Development	
Inclusivity and Accessibility of LtP Activities in Case Study Schools	
Chapter 4: Opportunities and Barriers to the Use of LtP	25
Introduction	
<u>Opportunities</u>	
Barriers to LtP	
Conclusion and Way Forward	30
Recommendations	3
<u>References</u>	33
Annex	34
AHHVA	34

Executive Summary

This study aims to show how Learning through Play (LtP) looks like in selected public pre and primary schools in Tanzania. The study used an ethnographic 'Positive Deviance' methodological approach involving four case study schools with exemplary LtP practices on using play in teaching and Learning as their daily practice. Selected schools are located in Dar es Salaam, Morogoro, Dodoma and Mara regions.

The study was led by three crucial questions – what does LtP mean to children, educators, and parents in case study schools? What does LtP look like in the case study schools; and what barriers and opportunities challenge or facilitate the management of children, educators, school leaders, and parent at schools? Data were collected through semi-structured in depth interviews, overt observations of play activities in classrooms and outside classrooms, and focus group discussions in which different groups of children and parents were guided to react to videos and/ or photos of children engaging in playful activities.

The findings of the first question indicate that actual learning in case study schools take place through experiences that are actively engaging, the joyful, iterative, meaningful, and socially interactive that had benefit to both teachers and children. Some benefits of play to children include cognitive development, physical development, creativity, social development, and emotional development. On part of teachers, play simplifies the teaching and learning activities in classrooms and outside classrooms. In terms of gender and play teachers reveal no discrimination of children based on gender although children show preferences in the kinds of play they engage in.

The findings of the second question indicate that there are about 14 plays through which children learn content of their curriculum. These plays are cards, singing and dancing, mdako, real objects, bao, role play, tracing (numbers, letters, vowels, etc.), hiding and counting chairs; Kunguru and Korongo (crow and crane), swinging, storytelling, writing/drawing on surfaces, draught, dama game (hopscotch), most of which are made using locally available materials.

The findings of the third question indicate several opportunities and barriers. The study reveals that positive LtP practices are associated with the availability of support from school leaders, supportive LtP environment, connection to larger education system, and teacher professional development. The findings also reveal that parents and/ or guardians are engaged in supporting school activities through meetings and providing play facilities for their children. The study has also revealed barriers to successful implementation of LtP. The barriers found include overage children in schools, limited space for playful activities, large class sizes, poor safety, inadequate play materials, time constraints, resistance from parents, workload, cultural practices, and the need for more teacher training opportunities.

The study recommends the following:

Seminars and workshops should be organized to create awareness of the

importance of learning through play methods among all teachers. There is a need to remove the misconception that play ise for pre-school and lower primary school grades but not the upper primary school children.

- The use of play in schools is not coordinated, since each school works in isolation. There is a need to coordinate play activities centrally and ensure play-based methods are shared widely among the teachers in different schools.
- The study has shown that parents are willing to participate and contribute to play-based learning and games. Schools are, therefore, urged to devise means to actively engage parents in play activities. This could be done by setting aside some days in which parents would join play activities at the schools as a way of encouraging children to use play to learn. Parents should be assured through school campaigns that their children are well safe during free play and no harm would befall the children, especially girls.
- Schools need to set play corners where games and plays are kept and taken out during free play. Efforts should be put in place to ensure that schools have adequate games and plays for the children. Schools should consider learning from other schools with better play practices
- Teachers should be given some incentives for implementing play in their teaching since the approach is time consuming. The incentive scheme would as well avert the problem of work-load teachers complain about.
- Organize in-service professional development packages for pre-primary and primary school teachers on how to better incorporate play in their teaching. Teachers reported during interviews the need for more grounded sessions to sharpen their play based pedagogical approaches. Schools with disabled children need to be impacted with the needed knowledge on how to involve children with disabilities in play based activities. To be able to effectively engage play as crucial part of children learning experiences, schools should strive to enroll the right number of children per classroom to avoid overcrowding.

List of Figures

Figure 1. Play meanings by category of participants	20
Figure 2. Play meanings by category of teachers	21
Figure 3. Benefits of play by category of participants	24
Figure 4. Characteristics of play by settings	26
Figure 5. Types of skills emphasized in ECD	27
Figure 6. Types of skills emphasized in primary school	27

List of Plates

Plate 1. ECD boys play together during free	31
Plate 2. ECD girls play together during free play	32
Plate 3. Some plastic bottles, guavas, and colored corn-cobs	33
teachers use for teaching	

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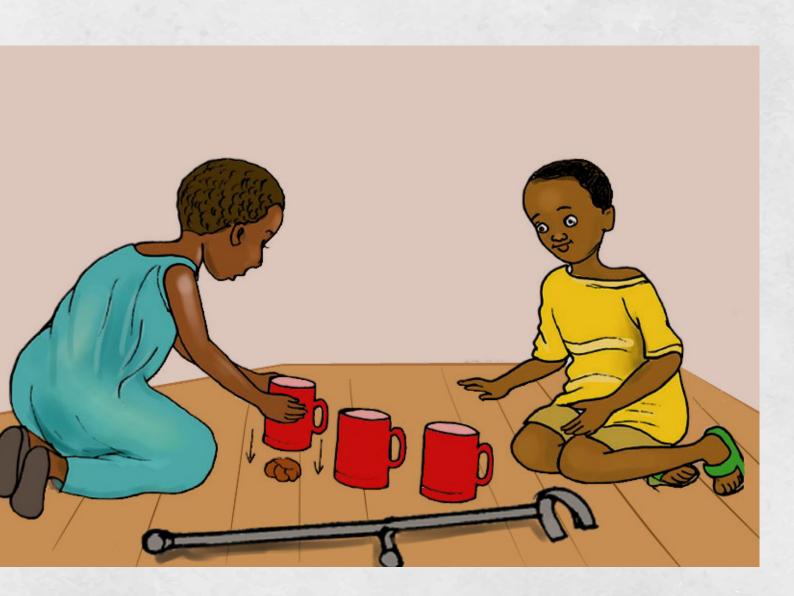
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Thank you all.

Chapter 1: Introduction



Background to the Study

This study explored 'Positive Deviance' (PD) in selected schools to find evidence that supports Learning through Play (LtP) in Tanzania ECD centres (henceforth, pre- schools) and primary schools for the aim of supporting the holistic development and well-being of children. PlayMatters has adopted the name Learning through Play (LtP) to refer to this approach to learning among children in their early stages of life.

In achieving its overall goals PlayMatters is led by the International Rescue Committee (IRC) and includes Plan International, War Child Holland, Innovations for Poverty Action, and the Behavioural Insights Team with funding from the LEGO Foundation.

Evidence and broad educational experiences maintain that play functions to enable children achieve their full educational potential and build resilience in the course of time (UNICEF 2018).

According to PlayMatters (2021), play – specifically LtP, is a specific methodology for enhancing children's holistic skills – cognitive, social, creative, emotional and physical, through the integration of child-centred and play-based interactions intoECD centres and primary schools.

This approach advocates for children to be actively engaged, relating new experiences to what they already know (i.e., play being meaningful), enjoying a task for its own sake and the thrill of surprise, insight, or success after overcoming challenging experiences, iteration – trying out possibilities, revising hypotheses and discovering new questions; and finally, social interactivity – so that children are able to communicate thoughts, share ideas, understand others and enjoy being with them and build stronger relationships.

Context of Child Education in Tanzania

The child education system in Tanzania is two-fold combining pre- and primary education. Primary school education is a seven-year cycle and is offered to children from age 7 while its counterpart - pre-school education, is offered to children who are below primary school age. All public pre and primary schools are located in the same area contrary to private schools that might not necessarily have the pre-school component. It is common to find pre-schools that also serve as day-care centres for even younger children. These schools might not be part of the larger primary school education system as are public primary schools.

The Tanzanian curriculum for pre-primary and primary education emphasizes the use of 'play' and its integration into the teaching and learning process (MoEST, 2016). Efforts have therefore been made to review teacher guides for pre-primary, grades one and two to incorporate play and guide the teachers on how to facilitate play-based learning.

Traditionally teachers in pre-primary and lower primary school undertake a two-year teacher

education training program leading to the award of a Certificate in Primary Education (Grade A Certificate). In recent years a certificate in Early Childhood Education has been introduced in some Teacher Training Colleges (TTCs). The aim of this program is to prepare children for primary education. Some universities such as the University of Dodoma offer a Bachelor of Education in Early Childhood Education.

Although in some parts of the country teachers of pre- and lower primary schools have undergone professional development programs that have been conducted by some NGOs (non-governmental Organizations), many teachers are left without professional development training. The trainings have proven to be effective in enhancing teachers' capacity to incorporate play in teaching (e.g. Hakielimu, 2021) although only a minimum number of teachers have had access to the programs.



¹ In the Tanzanian education system, pre- and primary schools are not separated from each other. In fact the pre-schools are part of the primary schools. This might be different from other countries where ECD centres and primary schools are separate entities that are not directly connected. .

The Problem

While there is obvious evidence that supports the use of Learning through Play (LtP) in pre- and primary schools to improve holistic outcomes for children more effectively than either traditional instruction or free play, there is little evidence from low-resource contexts like Tanzania of how to assist

educators to overcome the challenges they face to incorporate and implement LtP practices (Kiriuki and Angoye, 2018). This project seeks to explore the extent to which LtP is expressed in pre- and primary schools and exploit strengths – 'Positive Deviants', to support child learning.

Goals and Objectives

This formative study aims to explore what "successful" LtP integration in pre- and primary schools currently look like in the context of PlayMatters (with a focus on schools that have strong local engagement and are not dependent on donor funding) and suggest recommendations for improvement.

Main Objectives

This study is premised within the following three main questions that support the general goals and objectives of the study.

- i. What does Learning through Play (LtP) mean to children, educators, and parents in case study schools?
- ii. What does LtP look like in the case study school?
- iii. What barriers and opportunities challenge or facilitate the engagement of children, educators, school leaders, and parents with LtP at school?

Research Methodology

This section presents the main procedures used to collect data. The section covers the description of research design and approach, area of study, methods used in collecting data, data analysis, ethical considerations and the organisation of the report.

Research Design and Approach

This study used an ethnographic case study methodology to answer the main research questions, drawing on the 'Positive Deviance' (PD) framework for sampling and analysis. Ethnography is the type of study that involves the researcher immersing themselves in a particular community or organisation to observe their behaviour and interactions up close before making valid conclusions (Taylor, 2002). Ethnography as a field of research developed out of the social science called anthropology propounded by Suchman (1987), Wynn (1979) and Zuboff (1988).

In this study ethnography was carried out alongside Positive Deviance (PD). (PD refers to a

behavioural and social change approach which is premised on the observation that in any context, certain individuals confronting similar challenges, constraints, and resource deprivations to their peers, will nonetheless employ uncommon but successful behaviours or strategies which enable them to find better solutions.

Through the study of these individuals—subjects referred to as "Positive Deviants", approach suggests that innovative solutions to such concerns may be identified and refined from their outlying behaviour."

Study Area

This study was carried out in pre- and primary schools in selected regions of Dar es Salaam, Morogoro, Dodoma, and Mara. There were four pre-primary schools and three primary schools in total. The number is different because in Dar es Salaam, only one school was picked for study. This one pre-school is among the few public schools that are English Medium. It was assumed that the school had a blend of characteristics of both public and private schools and, therefore, offer representative characteristics of LtP in public and private schools.

In other regions the study involved both pre- and primary schools. In all the regions – Dar es Salaam, Morogoro, Dodoma, and Mara, researchers worked with local government and authorities to determine the schools that exhibited commendable LtP practices before making decisions about schools to engage in the study. Researchers organized a

two-day pre-visit in each region to decide which schools to incorporate in the study.

The schools were selected using the following criteria – schools not donor dependent, receiving funding from outside the community for successful LtP integration, may or may not have participated in a play-based program in the past, and may have engaged local actors and strategies in the implementation of LtP. Based on these facts, private schools and schools with rich support were excluded outright. In addition, most private schools reported not to have a strong LtP base.

It suffices to say that the schools that participated in the study were selected after thorough consultations to inform study goals, objectives, and key research questions.

Research Informants

The study design was built on gathering insights from four groups of people – school leaders, teachers, children, and parents- from the four schools visited.

Four school leaders were selected (one from each school); these had sufficient details needed to inform the management of LtP in the schools and they were the custodians of the school curricula in respective schools.

Sixteen teachers (four from each school) were

selected to take part in the study. Teachers' views were significant because they worked with children all the time they were at work. The teachers were expected to be close to some parents and guardians, thus teachers could share their perceptions of parents and guardians' view about play at school.

The study also talked to selected children and parents in focus groups to reflect on their perspectives of play in respective schools.

Data Collection Methods

The main methods of data collection used in this study were ethnographic in nature; the ones that have been traditionally used by anthropologists (Whitehead, 2005). The major feature of ethnographic studies is the fieldwork because it allows the researcher to observe and examine all aspects of a cultural system, especially those that could not be addressed through laboratory or survey research alone.

Research teams spent two weeks embedded in study schools, making use of in-depth semi-structured interviews, classroom observations, free play observations, and video stimulated children group and parent group reflections.

In addition all researchers were granted consent to use camera, video recording, and audio recording.

Interviews

The researchers conducted in-depth face to face interviews with individual school leaders and teachers in schools. The researchers used the proposed interview guide to interview all school leaders and teachers. Thus, in one school there were 15 interviews conducted, that is 3 interviews for each of the 5 participants. The interviews reflected LtP experiences using photo elicitations and video-simulated reflective dialogues. The researchers prepared photos and videos for reflections during the sessions.

Observations

The researchers spent time to observe curricular activities – recess times, lunch times, classrooms, sports, and special activities, in respective schools. The researchers conducted teacher classroom observations and child observations (classroom

and playground). The observation protocols were semi-structured and allowed for the researchers to record descriptive data and statistical data.

Descriptive Data Observations

Researchers observed and transcribed teaching and learning activities descriptively. The aim was to observe and provide rich descriptions of what LtP looked like in actual classrooms or free play. The researchers used the classroom observation tool part I to fill in the details of the activities. These tools provided qualitative findings of the study.

Observation Checklist

Researchers observed and ranked aspects of teaching and learning using an observation checklist. The aim of this tool was to observe and rank the distributions of the holistic skills observed during teaching and or free play. The researchers used the classroom observation tool part II to rank the details of holistic skills that children gained when learning through play. The holistic skills

observed in classroom were actively engaging, joyful, iterative, meaningful, and socially interactive. Each skill was ranked using a four-point Likert scale ranging from 1 'Not Present', 2 'Emerging', 3 'Good', and 4 'Exemplary'. The ranking N/A (Not Applicable) applied when the holistic skills were not observed.

Focus Group Discussions

These were special sessions where researchers held group reflections with children and parents. The sessions were held in separate intervals of time. School leaders helped with the logistics to invite parents and select children for focus group reflections about play in schools. Participation in group reflections was voluntary and observed all ethical protocols related to granting consent. However, the number of parents in each session was supposed to be not less than 6 and more than 7. The school leaders granted the informed consent for the children's reflections on behalf of their parents

Data Management and Analysis

Data for this study was analysed inductively since the study was an exploratory, qualitative research study that drew on an ethnographic methodology. The inductive approach to data analysis implies that the analysis did not begin with hypothesis but what was found in the data so that the findings were grounded in what was learned from responses and practices of the activities of the participants.

Data collected from interviews were analysed using Dedoose, an online qualitative data analysis platform. The research team employed a semi-structured approach to coding the data, developing codes around the research questions and also allowing new codes (or themes) to emerge organically from the data. For each theme, responses were tallied to identify variation of views among groups of participants. The total number of responses for each participant group under each theme were recorded on excel sheet and a graph chart was generated to display the variation of the responses as presented in the findings section. Data from observations were ranked statistically to support findings of the study. Pallant (2010) points out that data presented using ordinal scales require a descriptive test that introduces order into the data from 'weakest' to 'strongest'. Cohen, et al., (2011) arque that the choice of statistical tests depends on the type of data, which can either be nominal, ordinal, interval, or ratio. Thus, the observed data were stored in two MS-Excel files – classroom and free play.

A total of eight classrooms and eight free play observations were conducted and recorded

frequencies of their rating scores. Statistics on assessing characteristics of learning through play were obtained by adding all scores of responses from the scale items and computing the mean score. The computation of the mean score was found appropriate instead of the traditional median score because the median score has limitations when there are few categories (the present study has four categories ranging from 1 to 4) and it became challenging when the actual number of items in each category need to be reported. Thus the mean was found to be a relevant measure of assessing characteristics of learning through play in this context.

The mean score from each item of characteristic of LtP were summed up to compute the average mean score for each characteristic of LtP from both classroom and free play recorded observations. The results were combined to examine the impact of each characteristic of play at both settings. Findings are presented using bar charts.

Researchers were also interested to examine what the children appeared to be learning during classroom or free play. In particular, researchers wanted to establish types of skills emphasized by settings and by levels. Types of skills examined include numeracy, literacy, emotional, cognitive, creativity, social and physical skills. Data from all 7 schools, two schools from the four researched regions were collected and frequency recorded. Frequencies were recorded from 0 (not observed), 0.5 (slightly observed) to 1 (observed). Finally, total frequencies by settings and by levels were

computed and examined to establish the type of skills emphasized. Findings are presented using bar charts.

Furthermore, researchers wanted to establish the impact of games to the learning skills by settings and levels. In particular, all the identified fourteen (14) games in the case schools were listed against learning skills for both settings and levels.

Data from all case study schools were collected and frequency recorded.

Frequencies were recorded from 0 (not observed), 0.5 (slightly observed) to 1 (observed). Finally, total frequencies by settings and by levels were computed and examined to establish the impact of each game by skills, settings and levels. Findings are presented using bar charts.

In presenting findings names of regions are given two-letter codes DA, MO, DO, and MA respectively for ethical reasons.

Ethical Considerations

Ethical considerations pertain to issues that researchers do in doing a study to protect the respondents from any form of harm because of their participation. The researchers observed all the safeguarding protocols widely used in academic institutions without infringing the research safeguarding protocols accepted by the IRC Institutional Review Board (Protocol EDU 1.00.021). The researchers obtained research ethics approval

from both the IRC and the University of Dar es Salaam. During data collection, consent and assent were granted before initiating any research activity in the field. School leaders granted consent to work with children on behalf of their parents because it was not possible to get all the parents to sign forms for all the children in classrooms during the visits.

The Organization of the Report

This report is divided into chapters. Each chapter presents the findings of one research question. Thus, chapter two presents the findings for question 1, chapter three presents findings for question 2,

and chapter four presents the findings for question 3. Finally, chapter five presents the summary, conclusion, and the recommendations of the study.





Chapter 2: Understanding Learning through Play



Introduction

The first purpose of the study was to explore how children, educators and parents in case study schools understand learning through play. In analysing the findings, we were guided by the question: 'What does Learning through Play mean to children, educators and parents in case study schools?' Data for this question were obtained from in-depth interviews and focus group reflections. In determining the meaning of learning through play,

we sought to establish how these stakeholders understand play and what they regard to be the benefits of it (specifically in children's learning). Responses from participants reveal that play is perceived as a pleasurable and physical activity on one hand, and beneficial in different aspects on the other as presented in the following subsections.

Play as a Pleasurable and Physical Activity

Findings reveal that play is mainly perceived as a pleasurable activity as well as that which involves physical actions. The majority of participants' responses indicate that play is a joyful activity which provides pleasure through entertainment. It is also understood to be an activity that involves physical actions including movement of the body, activities like singing and clapping hands, jumping, running,

playing ball and other active, competitive games and sports. Of the two aspects identified in the meaning of play, more responses indicate play is a pleasurable activity. The pleasure is expressed by the way the children demonstrated joyful feelings as stated by one primary child when reflecting on a video of children playing:

They were feeling joyful, they were feeling good, they were feeling happy, they were feeling at peace (FGD_TZ_MORO_GR3 (PH&VD))

Similar views were given by the educators as one of them responds by giving a definition of play:

Play is any kind of activity that a student or a person engages so as to make him happy or to refresh the body and mind. (KII_TZ_MARA_HT)

From the view of the educator, a child engages in a play activity for relaxation, a view similarly shared by one of the parents:

Playing is a relaxing moment where children meet and engage freely with friends.(FGD_TZ_DSM_PAR)

In addition to being a pleasurable activity, findings reveal that play is understood to be a physical activity. Participants' responses indicate understanding of play as physical games which are competitive and leading to body activeness as one parent stated:

I think play means keeping our bodies active. (FGD_TZ_MORO_PAR)

Likewise, this was revealed as one educator shared her experience:

...So, I loved playing. Even when I was in primary school, I used to play netball, rope jumping, so, I continued with playing games until when in secondary school and still when I became a teacher, I loved being a sports teacher especially in netball. (KII_TZ_MORO_T(3)

Findings reveal no significant variation on the meaning attributed to play among different stakeholders.

While findings reveal that most responses show participants understanding of play as a joyful/pleasurable activity, the largest number of these responses is from children. From the photo and

video reflections, the children expressed the joy they feel as they participate in such playful activities. The implication we can draw from these findings is that pleasure and joy as one of the characteristics of play needs emphasis in the provision of participatory, LtP activities.



Play as Beneficial for Children's Development and Wellbeing

Findings further reveal stakeholders' understanding of play as beneficial for children's learning and development. The understanding was determined from responses of the participants as they responded to questions on what play is and what they consider to be its benefits. The findings reveal that the educators, parents and children believe that play is beneficial in five aspects, namely: cognitive development, physical development, social and emotional development, motivation and love for school, and discovery/identifying of talent.

section.

Cognitive Development

Play/participatory activities were largely commended for creating a good opportunity for children to learn, understand and remember what is being taught mainly because of the joy associated with playful activities. It was revealed that play facilitates understanding of the content taught, but with special emphasis on remembering information as evidence that the content has been understood as described:

The identified benefits of play are presented in this

It creates memories for them as they remember we learned something from a certain song. If you sing today, you will not forget. For example, I remember the songs I sang in my childhood. (KII_TZ_MARA_T GR2)

Compared to non-participatory activities, it was revealed that the game/participatory activity makes it easy for children to remember what is taught:

They cannot forget because they remember that a certain game was played with their teacher, it becomes easy for them to remember compared to when a teacher speaks only without these participatory methods. (KII_TZ_MORO_T(1))

It was further revealed that different games and playful activities are beneficial in activating the mind and therefore enhance thinking and the related attributes as explained:

LtP improves well-being of the children – inculcates active learning, curiosity, problem solving, learning together. (KII_TZ_DSM_T(ECD2))

Generally, playful participatory activities were found to be beneficial in enhancing brain function. Further analysis of perceived benefits by school level and stakeholder can be found on page 23.

Physical Development

As presented earlier, findings reveal that play is understood to be a physical activity. In relation to this, findings indicate play is beneficial to the students' physical development. Here, physical development was not mentioned directly as referring to growth in fine(small) and large muscles of the body, but rather, as children engage in physical activities, play was said to be useful in generally strengthening the body hence making it healthy and active.

Stimulates mental fitness and physical fitness/wellness; you cannot find a child learning through play very weak. (KII_TZ_MORO_T(4))

Hence, playful activities are expected to be physical and therefore activating the children both physically and mentally.

Social Development

Findings further reveal that children develop some good relationships through the use of play in teaching and learning. Collaboration, communication and relationship building are skills that were highlighted, as these teachers said:

...learning in collaboration, practising life skills, and interpersonal communication. (KII_TZ_DSM_T(ECD4))

In addition to relationship and friendship building among children, play was found to be beneficial in building good relations between teachers and children. Typically, the teachers are too authoritative and create fear in students. Engaging in playful activities has been found to help in removing the fear, as said by this teacher:

In most cases children fear teachers, so play builds closeness and friendship between children and teacher (KII_TZ_MARA_T GR2 [2]).

Due to the nature of the activities which require engagement of both teachers and students in collaborative manner, social distance is reduced among them as said by a parent and a teacher:

Games bring children and teachers closer unlike in the past, teachers were far away. I have seen children being fearless. They become close to teachers. (FGD_TZ_DOM_PAR-[GR1])

Generally, the social benefits of playful activities for children extend from gaining the social skills and to enhancing their emotional well-being as presented in the following sub-section.

In addition to social development, play activities specifically used in classroom settings were found to provide emotional well-being to students. It was found that through play, students feel safe to express their problems to their teachers as one teacher said, "can freely express their problems and concerns." (KII_TZ_MARA_T GR2 (1))

The emotional safety further helps students to easily build relationships among themselves and with the teacher, which consequently enhance trust as stated by another teacher:

Children become free; creating close relationships and bonds between children and their teachers. The bonds in turn lead to love and trust. (KII_TZ_MARA_T GR2))

Through collaborating in playful activities, students help each other to solve a problem encountered as this teacher puts it:

Even building empathy in helping one another especially when one child is not understanding. (KII_TZ_MORO_T(1))

Findings reveal that students gain emotional skills through engaging in playful activities. These skills are useful as they interact with other people in school, home and later in their lives.

Generally, findings reveal that the use of playful

activities benefits the children by enhancing their development and well-being in different aspects as presented above.

These beliefs vary among stakeholders involved as shown in Figure 3.

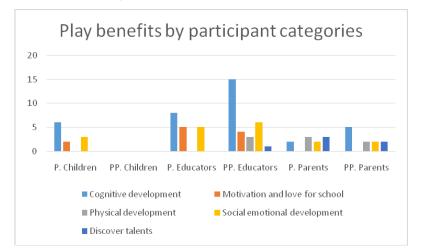


Figure 3.
Benefits Of Play By Category Of Participants

As illustrated in Figure 3, there are some variations in what the stakeholders understand to be the benefits of play. Among the children, responses from primary children reveal belief in cognitive, motivation to learn and social and emotional aspects as beneficial. However, there was no related response from pre-primary children, likely because their very young age might have limited their understanding.

Furthermore, cognitive development was mentioned in most of the responses and the highest number of them was from the pre-primary educators. On the other hand, discovery of talents had the least number of responses and these were from parents and educators.

These findings indicate the need for more training and sensitization to educators and parents respectively. For the case of educators, although they integrate LtP in their classes, they are not knowledgeable of how it impacts the child in all aspects for holistic development. Increased knowledge will help them to enhance their facilitation of teaching and learning. For parents, understanding of the benefits will encourage them to provide opportunities for LtP even at home.

Chapter 3: Overview of Learning through Play



Children playing rope skipping game during an organised Play Session, Palabek Refugee Settlement, Uganda, October, 2021

Introduction

This chapter introduces the analysis of Learning through Play (LtP) in case study schools. The chapter attempts to analyze the types of play in terms of activities, materials used, association with the curriculum, and inclusivity and accessibility of the activities in case study schools.

second research question, "What does LtP look like in the case study schools?" Data were collected using interviews with teachers, school leaders, parents and children through face to face in depth interviews, observations and focus group reflections.

The findings in this chapter are based on the

LtP Activities and Approaches Used in Schools

The study reveals that there are about fourteen (14) LtP activities in pre- and primary schools observed (Appendix 1). The teachers reported that the choice of one LtP activity was influenced by such factors: the nature of the subject/topic under consideration, time of the day, settings (in classroom or outside classrooms), skills to be imparted, and the children themselves. The following subsections presents characteristics of LtP activities; skills emphasised and main play activities by levels and settings.

Characteristics of Ltp Activities Used in Schools

Quantitative analysis was used to establish the degree to which the characteristics of LtP were observed. Figure 3.1 shows the mean score on a scale ranging from 1-4 on the extent to which the characteristics of LtP are present by settings and levels.

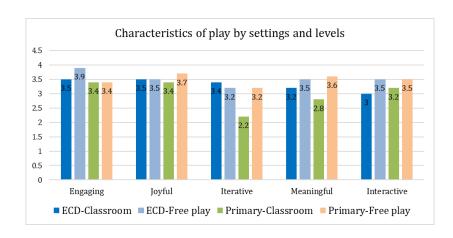


Figure 3.1 Characteristics of LtP During Classroom and Free Play

Findings from Figure 3.1 reveal that all characteristics of play were highly observed outside the classroom (i.e. during free play) than in the classroom at both ECD and primary levels. Similarly, during analysis, free play scored higher in all characteristics of play than classroom play.

This situation can be explained by the following factors:

Firstly, children seem to be more free to play outside the classroom than in the classroom.

Secondly, there are less restrictions of play outside than in the classroom.

Thirdly, children require less supervision during free play than classroom play. Lastly, Classroom play are directly linked with learning whereas free plays

are not necessarily linked with learning, particularly when there is no supervision from teachers.

Regarding the five characteristics of LtP, most of the plays found in case study schools were actively engaging because they promote hands-on, and minds-on involvement in the sense that the majority of children were actively participating during play and were observed to be physically moving. Actively engaging was found to be dominating in both classroom and free play observations.

Generally, actively engaging was remarkably the strongest characteristic during free plays in ECD, whereas joyful was observed to be the second strongest characteristic during free play at primary level.

Moreover, iterative was found to be relatively weak in both settings and levels. In particular, iterative was found to be relatively weaker in the classroom than free play at primary level whereas it was comparatively higher in the classroom than free play in ECD.

These findings can imply that teachers have limited knowledge and skills on how to integrate iterative play into teaching and learning.

Similar findings were revealed during interviews as elaborated in the following statements:

- ...in mathematics, maybe I want to teach addition, you can introduce the game of jumping by counting the steps, for example they jump 3 steps and they leave the space again they jump again 3 steps and then you tell them where there is a space put a sign of adding, so they will add 3 steps + 3 steps = 6 steps so they will get intended concepts. (KII_TZ_MARA_T [GR4])
- Children enjoy play because... if they were not enjoying play, you would have seen their faces that they are not happy. Learning through play is joyful, it is entertaining. (KII_TZ_MORO_T [3])
- Normally they become creative by making sure that they get it right through trying different ways. (KII_TZ_MARA_T [GR4])
- That is why when we teach, we try to make a child reflect on the lesson itself and relate it to the home environment. That is why we have questions that are based on Tafakari-(Think), Husisha-(Relate), Tumia-(Apply). They have to apply their skills in real life. (KII_TZ_MORO_T [2])
- It is beneficial in building cooperation between students and students and also between students and teachers. (KII_TZ_DOM_T [3])

The statements from teachers highlight characteristics of LtP demonstrated in different games used in case study schools ranging from actively engaging, joyful, iterative, meaningful and socially interactive. Games which are actively engaged involve physical movement of students such as jumping whereas those which are joyful make students happy during teaching and learning process. Moreover, games which are iterative in

nature provide opportunities for students to keep on trying until they get it right and those which are meaningful enhance students' ability to relate what they learn and the real life environment.

In addition, some games were found socially interactive because they build cooperation among learners themselves and learners and their teachers.

Types of Skills Emphasized by Settings and Levels

The study further established types of skills emphasized by environment settings in ECD and primary schools. The findings reveal that play provides opportunity for holistic development of the students' skills in all the five key aspects identified by the LEGO foundation (Cognitive, Physical, Social, Emotional, and Creativity). Findings show that numeracy, literacy, cognitive and physical skills were highly emphasized in both levels.

However, most classrooms plays in ECD lack creativity in comparison to free play. Creativity is relatively stronger in free plays at primary level.

Interestingly, emotional skills is highly emphasized during classroom and free plays at ECD and quite the opposite at primary level. Generally, findings shows that all types of skills are highly emphasized during free play to both levels than in the classrooms. It was also observed that most classroom plays in primary had limited emotional, creativity and social skills. It can be concluded that creativity in the ECD classrooms seems to either be given less attention or constrained by other factors such as large class size, limited learning materials and limited teachers' intrinsic motivation.

Games Versus Learning Skills by Settings and Levels

The study intended also to establish the main play/ games activities in case study schools. The following games/play were mainly observed: cards, songs and dancing, mdako, bao, role-play, game of chairs, Kunguru and Korongo (Crow and Cranes), swinging, football, hurdling, story telling (narratives), free hand drawing, draught game,

dama game (hopscotch) and other miscellaneous games. Other games commonly used in schools both pre- and primary schools include the tug of war, riding on used tires, running the tires, and running with bicycle rings. A detailed descriptions of games is attached in appendix 1. Figure 3.3 presents games versus learning skills by settings and levels.

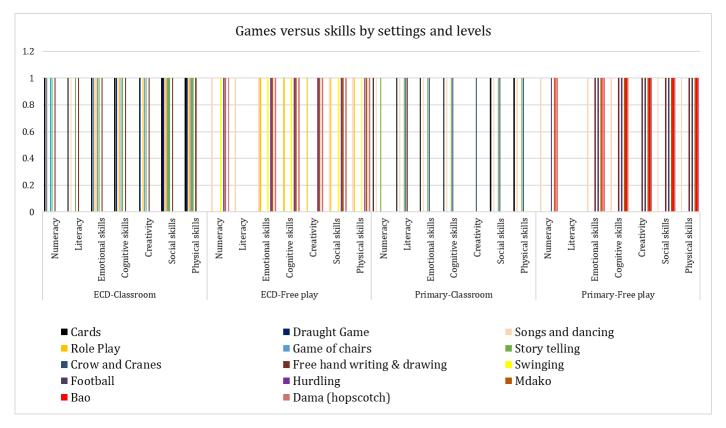


Figure 3.3: Games Versus Learning Skills by Settings and Levels

It was observed that most games are played more in ECDs than in primary levels. In particular, six (06) to seven (07) games namely cards, draught, song and dancing, role play, game of chairs, storytelling and free handwriting and drawing dominated in ECD classrooms and were observed to emphasized numeracy, emotional, cognitive, social and physical skills.

Moreover, majority of outdoor games such as football, mdako, bao and dama were observed to dominate during free plays at primary level and they emphasized numeracy, emotional, cognitive, creativity, social and physical skills whereas, swinging, hurdling, mdako and dama dominated free plays at ECD levels. The games were observed

to emphasize emotional, cognitive, social and physical skills.

Furthermore, findings revealed that learning skills through games are likely taking place more in ECD classrooms than outside whereas, the inverse is true for the primary levels, where learning skills through games are highly observed during free plays than in the classrooms. Surprisingly findings show that, literacy was not observed during free plays at both ECD and primary levels.

Similar findings were revealed during interviews as demonstrated in the following statements.

- Sometimes I take children outside to learn writing skills. I ask them to scribble/ write letters on the ground/ sand. I came to realize that children love more learning outside than in the classroom. (KII_TZ_MARA_T GR2)
- For example, by generating a story like, "while you are at home, your grandmother sent you to get a certain number of items...or grandmother went to cultivate a certain number of crops..." your main point as a teacher is addition. By starting with a narrative like this, students become more attentive to the lesson. (KII_TZ_MORO_T (4))
- For example, you find that there are two chairs and the children are three or five... so you ask them how many are playing? They will answer five, how many chairs are we having? They will answer two, and how many have missed the chairs? They will answer three. So they will definitely understand the concept of subtraction more easily. Normally this play is done for standard one to three. (KII_TZ_MARA_HT)
- All plays that cannot be brought in classrooms should be brought outside swings, jigsaws, slides, football... (KII_TZ_DSM_HT)

The three statements entails how games are a powerful source of learning for children either in the classroom or during free play because they equip students with different skills with or without their knowledge. For example, in the first statement primary school students gained literacy skills during free play where as in the second and third

narrations students gained numeracy skills through games conducted during the class. This calls for teachers (ECD and primary schools) to design various games for classrooms and free play which empower learners with different skills.

Gender and Play

In exploring the understanding of play, researchers were interested in investigating how this understanding is shaped by gender of the children. The findings reveal that play cannot be separated from the community assumptions or belief systems about the roles of both girls and boys in the society they come from. The findings reveal that the gender of a child plays a major role in deciding who to play with and the playful activities that children play at school.

In all case study schools visited, boys and girls were observed playing in separate groups. This tendency of natural selection – girls together and boys together, appeared to be so obvious during free play outside classrooms.

Similarly, observations of children in free play revealed that girls and boys have different preferences when it comes to what to play. The observations across the study schools revealed that boys preferred play activities like football, running with tires, running with rings, lifting each other, and lifting heavy objects.



Plate 1: ECD Boys Play Together During Free Play

Plate 2: ECD Girls Play Together During Free Play

The observation of free play also revealed that girls were more inclined to play activities such as mdako, ready, skipping ropes in groups, cooking, and role playing housekeeping among others. Teachers said during interviews that outside classrooms girls and boys exhibited different tendencies toward what they played.

In classrooms teachers reported not to discriminate children gender-wise as per the school curricula but were surprised that the gender divide was observed during free play outside classrooms. The focus group reflections with the parents revealed that parents were sceptical about girls playing with boys, especially some older boys.

Parents said that they were not against girls and boys playing together but given the reported issues of abuse of young girls by some older boys they though that strict supervision of the children was necessary during free play as one parent said.

You know the hide and seek game is good when the actions are done in the open under the supervision of teachers. Some 'bad' older boys could use the game to engage in abusive acts. (ECD PAR, DA)

Use of Real Objects (Local Materials)

The study reveals that real objects from the immediate environment are used in LtP. The objects can be brought by teachers or children directly from their environments. Dry pieces of sticks, sand, clay, plants, flowers, stones, pebbles, used plastic bottles, bottle caps (tops), packing materials, boxes, insects like grasshoppers and butterflies,

paper balls, and used tires are some common objects observed across the study schools.

Teachers said they brought some objects from homes and sometimes made objects of play by themselves as one teacher reported.

- Children no longer use manila skipping ropes but make them out of bottle tops..... In art subject, children create many interesting things like shoes made from boxes, balls, and different materials depending on the context of use. (PR Teacher, MA)
- If I want to teach children how to do laundry, I ask children to bring from home some common items like dishes, pans, soap, dirty clothes, and sneakers while I prepare basic items that I need for teaching. Parents always support such activities. (PR Teacher, MA)

Parents also said during group reflections in different schools that they contributed play items in their respective schools. In addition to these items all 16 teachers and 4 school leaders said they made their own objects from locally available materials.



Plate 3: An Assortment Of Locally Available Objects For Teaching - Plastic Bottles, Fruits (Guavas), And Corncobs

Real objects were used to teach at pre-primary and lower primary classes (standard one and two).

LtP and its Association with the Curriculum, Lesson Plan, and the General Pedagogy of the School

Teachers claimed that learning activities in schools were determined by the official curriculum developed by the Tanzania Institute of Education (TIE). Teachers revealed that they developed

schemes of work from the syllabus and chart out lesson plans for all the modules to be taught. Some teachers interviewed said the following.

- The Curriculum supports the use of plays when teaching. (ECD Teacher, DA)
- The syllabus specifies and there are teaching manuals which were brought here related to teaching through play methods and the teachers have them. (School Leader, MO)

However, some primary school teachers reported that plays were meant for pre-school classes but not primary schools. Extracts from pre-primary school teachers in two of the regions (DA and DO) in the study areas imply that every subject could be taught using games.

In every competence, I try to use at least one game, although not every day, but at least one activity. I must use a game. (KII_TZ_DO_ECD)

I use plays in every subject that I teach in the classroom and outside the classroom. However, not all plays can be incorporated into all subjects because of the nature of the subjects. (KII_TZ_DA_T [ECD4])

However, the extent to which plays are used is determined by teachers' awareness of LtP and how plays connect to classroom situations.

Support from School Leaders

Findings indicate that all four leaders of schools in the case study schools promoted the integration of LtP in their schools. School leaders said they invited guest speakers, allowed teachers to attend professional development seminars, and organized in-house seminars, reminded teachers about using LtP, provided education on the importance of games, and observed teachers in the classrooms. One of the school leaders had the following to say.

As a leader, I do assess personally, I pass through classes and check if they are integrating play in teaching, and sometimes I call the teacher and talk to him/her. (School leader, MA)

Teachers interviewed reported that school leaders and management of the schools supported the implementation of LtP curriculum as one teacher said.

The school management is very supportive. We are lucky because our school is owned by Dar es salaam University College of Education (DUCE), and the College management buys manila papers, ropes, marker pens, toys, games, dolls, and so forth. (PRE Teacher, DAR)

Teacher Professional Development

This finding from school leaders and teachers indicate that there are various professional development opportunities which vary from attending in-service training, mentorship in schools to attending staff weekly seminars. It was further revealed that the opportunities were on LtP and pedagogical content knowledge. With regards to pre-service training on LtP, only pre-primary school teachers in one school (DAR) reported to have some training. Moreover, it was revealed that most of the teacher professional development programmes/opportunities implemented were donor funded and NGO-run.

Another professional development structure described by Primary school teachers was the formation of a community of practice who met once a week with grade one and two teachers to share experiences and knowledge on teaching 3Rs (reading, writing and arithmetic). It was further mentioned that at least once a month, these teachers were encouraged to meet other teachers at the ward level in a School based - continuous professional development (SB-CPD) community of learners to share experiences, skills and practice as a group.

However, it was noted that the program was active during the implementation of an LtP project under Children in Crossfire (CiC). Other teachers reported to receive training from the Right to Play organization as one teacher said:

The Right to Play organisation helped me to see that the pedagogies I previously considered hard were very ordinary. Therefore, if various seminars are given to the teachers they will be able to practise. (School Leader, MO)

On specific professional development opportunities, teachers were asked if they needed any training on participatory methods (learning through play). The teachers said they wanted training on integrating

LtP into their teaching practice, sound identification (literacy), classroom management, creation of LtP materials and participatory teaching methods in general.

Inclusivity and Accessibility of LtP Activities in Case Study Schools

The study sought to find out the extent of inclusivity and accessibility of play activities in case study schools. The relatable question was, 'How inclusive and accessible are the schools' LtP activities in terms of gender, disability, ethnic background, and displacement status? In answering the questions raised, the researchers found the issues of ethnicity and displacement as being not applicable in the context of Tanzania.

Teachers reported no cases of lack of inclusion of children based on disability in all case study

schools. Classroom observations and interviews with teachers revealed that 14 teachers out of 16 involved in the study had no students with observable disabilities in their classrooms. However, the two schools where teachers reported to have teachers with disabilities said they had not received special training to handle disabilities.

Further, other teachers said that if they had children with a disability they would refer such children to special schools. One teacher who happened to have a child with one shorter limb said the following.

For example, this year we have a child who has a shorter leg compared to the other leg. First of all, s/he is placed at the front, and given priorities in classroom activities and s/he is my friend in short. May be Juma, read what is written there, s/he feels great. (PR Teacher, MO)



²Since there were no positive deviance case schools in refugee camps in Tanzania, the study area excluded camp schools.



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Chapter 4: Opportunities and Barriers to the Use of LtP



Children playing together during an organised Play Session, Kyaka II Refugee Settlement, Uganda, October, 2021

Introduction

The third aim of the study was to find out barriers and opportunities that challenge or facilitate the engagement of children, educators, school leaders, and parents with LtP at school. The findings of this objective were informed by the question, 'What barriers and opportunities challenge or facilitate the engagement of children, educators, school

leaders, and parents with LtP at school?' In response to the question, the findings are presented into two main subcategories, which are opportunities and barriers.

Additionally, participants were also asked on the strategies they are using to overcome the barriers of implementing LtP.

Opportunities

This section presents opportunities which facilitate the engagement of children, educators, school leaders, and parents in LtP. The issues raised include, supportive LtP environment, teachers selfmotivation, parents and community involvement. All these are presented hereunder.

Supportive LtP Environment

The findings indicate that the case study schools had adequate outdoor spaces for implementing LtP curriculum. All the visited study schools had large compounds with trees providing shades for children to run about and play freely. The runways

were covered with sand to avoid injuries in case children fell down. Some schools also had enclosed areas where games like swings and hurdles were kept.

Teacher Motivation in Implementing LtP

Findings indicate that teachers experienced a sense of fulfilment when using LtP and when children enjoyed play-based learning. Some teachers reported that they were motivated because school

leaders recognized their work and praised them. Others said they were motivated when the children knew to read and count by the end of the year. Some teachers had the following to say.

- I am quite motivated when I find that by the end of the year only 10 or 20 pupils out of 258 pupils do not know how to read. I become proud to have planted something, as most of them know how to read. (PR Teacher, MO)
- When I teach through a play method the children become happy and enjoy and even tomorrow when you ask them they answer you properly because they remember you played and this is what motivates me to continue teaching. (PR Teacher, MO)
- I enjoy a lot using participatory methods because they help me to achieve intended objectives easily. (PR Teacher, MA)

Findings show that in implementing LtP teachers are motivated by both extrinsic and intrinsic factors. The reported intrinsic motivation include adoration for playful activities, love for children (students)

and feeling effective in their teaching role. While the extrinsic motivation mentioned include receiving praise from supervisor or peers and students' performance.

Parents' Engagement in LtP

The study revealed that parents donated play materials and games, attended meetings, coached children, and participated in preparing teaching materials. Some parents who are professionals also bring their expertise in supporting play in schools as one teacher said.

Recently, two parents who are games coaches, football referees to be specific, have volunteered to coach Grade 1 - IV in evenings. (PR Teacher, MA)

Yes, the parents have a contribution because we ask children to bring play materials – boxes, bottles, ropes, toys, and children cannot do that without their parents. So parents support us in this way. (PR Teacher, MO)

Parents revealed in focus group reflections that they donated play materials to respective schools and others said they served as school committee members as one parent said.

Yes, I think I should have a role – in this school; I am a member of the school committee and a chair of the parents, in that accord I am obliged to have a role in promoting LtP. The problem is that our school lacks a variety of games, we have limited games. (EDC Parent, DAR)

These findings reveal that parents support LtP in respective schools. This appears to have positive impacts because parents' engagement with their children's play influences children's development

and learning. Therefore, more efforts should be made by schools' management to engage parents in LtP activities.

Connection to Larger Education System

Because the government is the one that brings in those materials/tools, and we have seen our President of the United Republic of Tanzania (URT) is trying harder to improve the quality of both primary and secondary schools. We ask the government to bring more materials especially for children with disabilities. (School Leader, MO).

The government supports LtP implementation by providing play materials. Through the Tanzania Institute of Education prepare and review curriculum for pre- and primary schools, prepare children books, and teacher guides. Additionally, the Education and Training Policy (URT, 2014) recognizes pre-primary and primary education as part of basic education that is being implemented in the country.

Another area where play in schools is widely underscored is in the sports and academic tournament involving primary schools popularly known as UMITASHUMTA. The sports and academic tournament provides a space for children to showcase their talents and expertise in play and winners are awarded medals and trophies in contested areas of competition.

Barriers to LtP

Children, teachers, school leaders and parents were asked to explain barriers they thought could hinder effective implementation of LtP in schools. The findings of the study reveal that there were various barriers which inhibit the implementation of LtP. These barriers include: limited storage and classroom spaces, large class sizes, unfriendly/

unsafe environment, inadequate play materials, time constraints, resistance from parents, workload, social norms and lack of professional development on LtP.

The reported and observed barriers are presented below:

Limited Storage Places

Play materials are supposed to be stored for security or weather conditions. However, the study noted limited storage places for LtP materials. For instance, one primary school teacher narrated.

There is a challenge in the storage place; the classroom has only one bookcase (bookshelf) for Grade 1 and 2. In this bookcase we store all books and play materials. As a result some books are frayed 'torn' while others get lost. (PR Teachers, MA)

In connection with limited storage places for play materials, researchers also noted a serious problem on limited indoor space for LtP implementation.

Limited Indoor Space

In organised classroom settings, play experiences are enhanced when children are provided with ample time and space to engage freely with the environment. Findings reveal that primary schools studied had limited indoor space for activities. The challenge of limited space for indoor activities and storage facilities goes together with large class sizes as presented in the subsequent section.

Large Classes

Large class sizes were reported to limit children's freedom to play in primary schools. For instance, the visited primary school classrooms had more than the standard size of 45 children. Large classes cause difficulty for teachers to support children's learning through play. In a large class it is also challenging to give children active experiences

with materials or even have enough materials for all children. Eight participants (teachers and 2 head teachers) reported large class sizes to be a challenge in implementing LtP in primary schools. In one upcountry region it was reported that one class had 122 children on average as one gradetwo teacher observed.

We have large classes, limited time, and limited space to effectively engage LtP. With more than 80 pupils in my class with no hangers for materials or organizers for toys and dolls, implementing LtP becomes impossible. (PR Teacher, MA)

Lack of Playing Materials

Availability of play materials stimulate and promote learning in children. However, in all the case study schools the findings reveal that the schools lacked adequate play materials. The following quotes exemplify what the teachers reported about the availability of playing materials.

We have a shortage of materials for every child; every child needs to have at least something to play with during free play time. (PRE Teacher, DA)

One school leader concurred with the above saying the following.

When you teach children through play you find yourself missing certain materials. For example, a teacher may teach; say a machine or some electric wires for a bulb to light up; but the problem arises when the teacher has no requisite materials for doing experiments. (School Leader, MO).

The findings further reveal that many play tools were made available for the pre-primary schools but not primary schools.

Time to Prepare and Implement Play

Teachers also reported time as a constraint for implementing LtP in schools. It was reported that curricular standards for primary school set aside 30 minutes for play in each period. Due to the

constraint of time in planning and preparing play activities, some teachers prefer not to use play in their teaching as two teachers said.

- Generally, the time slotted for a lesson is not enough. With a topic that involves play, the 30 minutes' duration for the session is not enough. (PR Teacher, DOM)
- It consumes a lot of time to prepare for lessons through play because it involves thinking and finding material for teaching but when you are teaching without games it doesn't consume time. (PR Teacher, MA)

Narrations from teachers show that implementing LtP is time consuming. Teachers interviewed associated time constraints with time for preparing

materials, content, and delivery. This calls for more capacity building training to teachers on how to use a variety of play-based activities in their teaching.

³ UMITASHUMTA stands for Umoja wa Michezo na Taaluma kwa Shule za Msingi Tanzania 'Sports and Academic Tournament for Primary Schools in Tanzania'.

Resistance from Parents and Teachers

The findings show that although some parents support LtP others resist it. Teachers reported that some parents wanted children to learn to write right from the first day at school as one teacher said.

Some parents expect to see notes on their children's exercise books on the very first day they begin school but we take our time and teach them according to the curriculum. We cannot begin teaching writing straight on the first day! We are supposed to play some games, make children scribble on the grounds, on the air, do physical exercises before we can get children to write. (PR Teacher, MO)

Teachers also said that some children avoided playing at school for fear of getting dirty and being punished by parents back home as a consequence. Teachers also said some parents asked their children not to play at school as one child reported.

At home my mother restricted me not to play with mud so that I don't get my clothes dirty. I, therefore, do not play because my dress will be covered with sand. (PRE Child, DOM)

Barriers Related to Workload

Implementation of LtP requires not only commitment and enough time but also acceptable workload. On workload issues, there were mixed findings as few teachers reported workload to be a hindrance for them to implement LtP. Some teachers had this to say:

I am exhausted. My workload affects the way I use LtP in my classrooms. I have to teach more than one stream....this workload does not provide for me time to prepare well and assess my children's progress. (PR Teacher, MO).

Social Norms

Social norms were also reported to be a barrier that challenges the engagement of children in LtP at school and home. At home girls were reported to be preoccupied with house chores, hence had limited time for LtP. However, at schools both girls and boys were given equal chances to participate in LtP activities. Commenting on inclusion in LtP by gender one teacher said the following.

In school, both girls and boys have equal opportunities to play. But the challenge is at home due cultural issues, girls are given a lot of domestic activities as a result they do not have time to play. Boys enjoy fewer restrictions and have plenty of time to play. For instance, when they go to pasture they play a lot there. Besides, after finishing eating they do not wash dishes; they join colleagues in playing while girls are washing dishes and fetching water. (PR Teacher, MA)

Lack of LtP-Based Teacher Professional Development

Findings indicate that some teachers were not adequately prepared to implement play-based learning in their classrooms. Some teachers reported to have no formal training to help them find or locally prepare play materials; as such they could hardly implement LtP curricula as one teacher noted.

We were given the rubrics of participatory methods other than play during pre-service training but we are now asked to implement full-fledged play curricular in lower primary school grades. I would be fine if I were trained in teaching using plays. (PR Teacher, MA)

The statement above shows that during pre-service training the emphasis was on other child-centred methods like group discussion and questioning rather than play-based activities.

Therefore, these teachers need to be given inservice training on different LtP methodologies.



Conclusion and Way Forward

As data from children, parents, head teachers and teachers suggest, play is experienced as a joyful, stress free, positive mood or feeling. All saw play as a good measure of good health of a child. All appreciated LtP as personally engaging (promoting internal motivation or drive), and as making teaching and learning processes more effective.

However, the meaning and significance of LtP has become more critical than ever before in the sense that the learner (even at the pre-primary level) may no longer be seen as a passive mass public, 'stupid and naïve', but that on the contrary, he/she actively and creatively make use of what the school system provides to construct his/her own identity. Moreover, as socially interactive, LtP is appreciated for promoting empathetic, communicative and caring team-workers. Gender dichotomies are largely minimized during play at school.

Stakeholders, especially teachers, recognise how the benefits of LtP range from the physical (bodily wellbeing), to memory (maximisation of attention span, focus, flow), cultural-sociological (learning to get along with peers), imagination (cultivating creativity), personal-psychological (skills of improving emotional health), and academic (intellectual, cognitive) skills. Teachers indeed pointed out how LtP is foundational for later learning. They thus concurred, not only with numerous scholars on LtP, but also with Uganda's ECCE Policy Document (2018).

Play was largely understood as an activity inside, but mostly outside class. However, findings showed that teachers saw LtP as breaking with the old routine-like, strictly rule-bound, impersonal and mechanical modes of teaching and learning. So, LtP has been sufficiently appreciated in terms of practical hands-on activities, songs, rhymes, drawing, painting, recitation, demonstrations, music, dance and drama, reciting riddles, story-telling, imitation of animal sounds and movements as well as role playing. During free play (and at home) there is a tendency to segregate between types of games and duration for (or not for) girls/boys.

Stakeholders, headteachers and teachers and especially parents (who would simply pay school fees) are supportive of LtP in terms of availing locally-made play materials, however, their efforts are limited by lack of financial and material resources. This is compounded by large numbers of learners crammed into small classes and compounds. Poor quality of infrastructure and limited play materials, since school proprietors lack adequate finances to put up the requisite structures and play areas to comfortably allow for 'free play' (which teachers acknowledged as authentic play) is a recurring concern.

There is an urgent need for CPD for pre-primary teachers. Pre-primary education in Uganda, having been neglected (by government) for too long, has neither attracted many professionals nor made the few available affordable to be hired by economically struggling schools. Moreover, those who are in-service at the moment urgently need training for LtP so as to measure up to new curricular and pedagogical demands in Uganda's ECCE Policy Document (2018).



Recommendations

Government Intervention on Coordinating and Enforcing the use of LtP Pedagogies

Currently the findings revealed that the use of play in schools is not coordinated since each school works in isolation. There is a need to coordinate play activities centrally and ensure play is shared widely among the teachers in different schools. To be able to do so, the government should also ensure the working environment is conducive for LtP to take place, especially in reducing overcrowding in classes. To be able to effectively engage in play as a crucial part of children's learning experiences, schools should strive to enrol the right number of children per classroom to avoid overcrowding. It is also recommended that teachers should be given some incentives for implementing play in their teaching since the approach is time consuming. The incentive scheme would as well avert the problem of work-load teachers complain about. Government should also continue putting in place awareness campaigns on gender discriminatory culture and Social norms that become barriers to engagement of children in LtP at school and home especially girls. At homes girls were reported to be preoccupied with house chores, hence had limited time for LtP.

Celebrate School-Based Initiatives and Learning from Neighbouring Schools on Best Practice

Efforts should be put in place to ensure that schools have adequate games and play materials for the children. Schools need to set play corners where games and play materials are kept and taken out during free play. Schools also should consider learning from other schools with better play practices. Schools that are doing the ir best should be recognized and celebrated as champions in LtP.

Enhance LtP through School Community Partnerships

Schools are urged to devise means to actively engage parents in play activities. This could be done by setting aside some days in which parents would join play activities at the schools as a way of encouraging children to use play to learn. Parents should be assured through school campaigns that their children are well safe during free play and no harm would befall the children, especially girls. Additionally, parents should be made aware on the value of LtP in children's development and be involved in LtP activities in school like preparing play materials, contributing resources and materials to facilitate play experiences.

Help Teachers and Students Change Perception on the Use of LtP as a Teaching Approach

There is a need to remove the misconception that LtP is for pre-school and lower primary school grades but not the upper primary school children. While teachers did show generally fairly understanding on the importance and use of LtP as a pedagogical approach than their pupil, it is important for this misconception to be corrected so that school community in general start viewing pay as not just for fun and physical exercise but as important learning activity that can stimulate learning.

Provide Training for Heads and Teachers on Use of LtP Approaches

The research aimed to find promising LtP practices in Tanzanian schools. We identified a range of challenges faced these schools in using LtP. We also found leadership and teacher training is needed. Teachers for instances reported during interviews the need for more grounded sessions to sharpen their play-based pedagogical approaches. Finding that Some teachers did not have any formal training to help them find or locally prepare play materials makes training fundamental. Seminars and workshops and Trainings should be organized to create awareness of the importance of play among all teachers.

Training will enable teacher to further understand and own the change process responsibly.

Establish Ongoing Professional Development Initiatives for Teachers and other Educational Officers

Schools need to establish a community of practice whereby once in a week teachers meet to share experiences and knowledge on teaching using play as a method to achieve literacy and numeracy goals. Furthermore, at least once a month, these teachers should be encouraged to meet other teachers at ward level in a School Based – Continuous Professional Development (SB-CPD) community of practice to share experiences, skills and practice as a group. The on-going monthly professional development meetings can be a tool to bring teachers together to share. Capacity and advocacy efforts should be increased to inform curriculum developers and other educational stakeholders on the importance of LtP.

We believe that Tanzania faces similar problems to many countries around the world and that our findings and recommendations will be of interest to many in the global teaching community.



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Appendix

Classroom Games

Cards

Cards were the most common play activity to be used in schools in all case study schools. Teachers used coloured foolscaps, coloured manila papers, paper cutters, pairs of scissors, glue, masking tapes, pencils, and marker pens of different colours. Teachers had words, letters, numbers, pictures, etc. on the cards for children to play in learning something – counting, reading, or writing. Teachers reported that cards were simple to make and easy to use in teaching.



Children pose holding number words written on cards. Children were asked to pick up cards with number words mentioned in a song.

Teachers reported that most card plays were not used in isolation but in connection with other plays like dancing, jumping, and singing as one teacher said.

If I want to teach Kiswahili syllables – ba, be, bi, bo, and bu; I will have written the syllables on cards and guide the children to read the syllables aloud in the classroom - without the cards. When the children are able to read and identify the syllables and corresponding cards, I take them outside the classroom and tell them that we are going to identify syllables using a song. I take a box and shuffle all the cards together. I begin singing a song and select one child after another to come and pick one card. Each child picks a card and reads it aloud in the tune of the song. After each child reads a syllable, I ask the whole class to repeat reading aloud before I call another child to pick another card. This is one way I use the cards. (PR Teacher, MO)

Free Hand Drawing

The game involves children making drawings on surfaces using free hands. According to teachers, children use sticks to draw things on sand, chalks to draw things on slates, or pencils to draw pictures on foolscap papers. Teachers said they were discouraging children to draw on walls, doors, and other similar places.

One teacher said children were taken outside classrooms and made to draw pictures on the sand. This



method is more functional to pre-primary school children when compared to children in primary schools. Normally teachers ask children to draw letters, numbers, and different things in their environment. Children are given slates (boards) and white chalks when the work is done in classrooms with close teacher supervision.

A pre-primary school child using a piece of chalk and a slate to draw pictures of the things learned.

Teachers interviewed and observations of free play reveal that free hand drawing was one of the ways used to teach children content through playful activities. However, some teachers said that this method demanded a teacher with some sense of art to be able to appreciate what the children drew.

Songs and Dancing

Observations in classrooms revealed that songs were used in nearly all learning activities in pre-school and lower primary classes visited. The use of songs was accompanied with dancing or performing a certain learning outcome. The use of songs and dancing was another very common strategy of teaching reported in all case study schools. Usually singing goes simultaneously with dancing.



Preschool children appear to learn better through singing and dancing. The child (holding the ball) recites a song as she jumps and counts numbers as instructed by the teacher.

Interviews with teachers in all four case study schools also revealed that songs and dancing were used simultaneously. Some teachers use songs to teach arithmetic and reading. One teacher had the following to say.

Inside the classroom, I do prefer using songs as a teaching method; this is due to the fact that the classroom is small for a large number of children to participate. My class has about 80 children. So with songs, all children do participate. (PR Teacher, MA)

The use of songs as a participatory pedagogy was found common and suitable inside classrooms. One teacher observed that songs were more preferred in large classes. However, this was not the issue in other three schools where songs were common regardless of class sizes. Although both pre-primary schools and primary schools use songs, classroom observations revealed that songs were more pronounced in teaching pre-primary children.

Role Play

Role play is a game that involves children assuming roles or imitating real actions. The use of role play was reported in pre-primary and lower primary schools where children acted out roles. Role plays made use of very immediate objects like bunches of flowers, bottles, balls, pairs of scissors, spoons, knives, and boxes to mention a few.



Role play was observed in two pre-primary schools where children assumed roles. In one school, children were baking cakes during free play – one said was a cook and was baking a birthday cake for a daughter. Later, the children made an enactment of a birthday party – with cake cutting and singing a birthday song. In another school, teachers used role play during the introduction and reinforcement phases of their lessons.

Preschool children acting how to make and reply to requests

Teachers revealed that role was not commonly used when compared to other approaches of play. Two schools had used role play – free play inside a

classroom and free play outside a classroom. One teacher had the following to say about the use of role play.

Role play depends on the subject and level of the children. In Civics, the teacher may use role play in teaching leadership skills. Children can take roles of Members of Parliament and demonstrate activities of the Speaker of the House. (School leader, MA)

Teachers explained that role play is appropriate for students at different levels of education. However, the choice of role-play is highly determined by the nature of the subject matter or the concept to be taught. Its effectiveness highly depends on the size of the class. It is difficult to engage many students using this game.

Kunguru and Korongo (Crow and Cranes)

In this game the teacher asks the children to stand opposite each other in two groups. The names of the groups are *Kunguru* and *Korongo* and are given special functions according to the subject and or lesson to be taught.

The teacher draws a line in front of the class and selects one child to stand in the line dividing left and right of the front of the class. If the teacher plans to teach tenses in English, the teachers may name *Kunguru* present tense and **Korongo** past tense. Now the child standing on the line displays cards with sentences in present and past tenses and tells the class that in the left are past tense (*Korongo*) and right (*Kunguru*) present tense. When the child holding cards displays a present tense sentence, one member of the *Kunguru* is supposed to walk to the right side of the line, otherwise if the child fails to walk to the right direction, other group members will come and pull the child to the right side. This game is not only socially interactive but also actively engaging. According to one teacher in one school, this game is suitable for primary school children.

Game of Chairs

This game involves the teacher placing chairs, say eight, in a round pattern at the centre of the classroom with their backs facing each other. The teacher selects a few children (say 10) and starts a song and children sing after the teacher as they walk round the chairs. The song will be selected based on some content to be taught, hence Learn through Play. Each child scrambles to sit on the closest chair when the song ends. Those who miss the chairs or sit two in one chair are considered 'dead' – hence they remain standing around the class. And the game continues and chairs are reduced as the number of children who 'die' increases. The winner is announced and applauded by all children. This game is not commonly used and in this study the game was observed in only one school. In using this game one teacher said the following.

Imagine I want to teach subtraction, I call eight children. I lead them to sing a song as they dance around the chairs. When the song ends, they occupy the chairs. Definitely some would miss the chairs. Then I ask them to say how many were called to the front? How many children occupied chairs? How many children were not seated? Thus, I teach the concept that the total number of children called, minus those who sat down, equals the children who remained standing without chairs. So, they will definitely understand the concept of subtraction more easily. Normally this play is done for children in grade one and three. (School Leader, MA)

This kind of game helps students to practice the concept taught. Students learn arithmetic indirectly. It can be used during the introduction of the subject matter or during reinforcement. However, it is not suitable for large classes.

Story Telling (Narratives)

This game involves telling of stories as others listen. The use of narrative comes from oral traditions commonly found in homes where elders tell stories to children. This play is participatory in the sense that children get times to respond in some way to what is being narrated. The use of narratives was observed in MO and DO where teachers gave brief narratives before or after they had taught a lesson. Story telling served to train listening skills and trained memory for the children to remember what was said in a brief period of time.

Commenting on the use of narrative one teacher had the following to say..

Sometimes we use narratives. If you are teaching mathematics, you can use any fiction to catch their (students) attention. But the main point is addition or subtraction. So, such kind of technique draws children's attention. For example, by generating a story like, "while you are at home, your grandmother sent you to get a certain number of items...or grandmother went to cultivate a certain number of crops..." your main point as a teacher is addition. By starting with a narrative like this, students become more attentive to the lesson. (PR Teacher, MO)

Storytelling method can be used for all children regardless of their age. The main consideration when using this method is for the teacher to associate the content of the story to the concept/topic to be taught.

Swinging

This play was among the common games in schools visited. Swings were made of metal beams, legs, and seats tied to the beams with chains. Pre-primary and primary school children enjoy swinging as they are pushed forward by others. Some children could propel themselves without support from other children.



Children in schools in DAR and DO were observed swinging at least three times a day – before classes commenced in the morning, during break, and after classes when waiting to be picked up. Children observed in the school in DAR counted to some numbers in order to change turns. Thus, if they decide that each will pass a turn after the count to twenty, then they start counting one when a child begins swinging and stops swinging at the count of twenty. This game could be used to teacher other content areas.

Seesaw Game

This game involves two children seated on each end of a balanced beam of wood or metal. The seesaws have handles for the children to grip as they sit facing each other. The children take turns pushing their feet against the ground to lift their sides into the air. This game was observed in Dar es Salaam.



Children riding a seesaw during free-play

Children were counting numbers as they went up and down. The numbers were democratic means of allowing children to take turns after certain numbers were counted. On average children would ride seesaw every time they are outside classrooms – at least three times a day children would ride seesaw just like swinging.



Out of Classroom Games

Football

Football uses a ball that can be bought locally, or some teachers make balls using papers and sisal ropes or manila ropes. Teachers also prepare goal posts or place two bottles as marks of the goal post on each side of the ground. During free play children are divided into two opposing teams.



Boys in a football ground in one of the study schools

Teachers guide the children to select a referee, goalkeepers, and players while others become spectators. In most cases players are mainly boys and matches lasts for 10 to 20 minutes while changing players as children would not have the stamina to play for a long time. The team that scores more goals becomes the winner, although little emphasis is placed on winning but playing.

Hurdling

This game involves children racing over a series of obstacles – hurdles. The hurdles are always set at fixed distances apart. Hurdles were observed in two school during free play. In one school the children raced over used tires and, in another school, children dangled over fixed metal poles. In the former school,



Boys were observed racing over hurdles – used tires, in a school playground

used tires were buried half the way in straight lines at fixed distances apart. During free play, children went about racing over the hurdles. It is good to note that more boys prefer this game than girls.

Mdako

Mdako is a rare game played by little girls in rural communities. Children dig a small hole on the ground or draw a circle in case there is a cement floor. Children use a small round object – it can be a small ball or a light stone and a number of small pebbles that they use for counting. All these items are locally available from the environs.

During play, all the stones are put inside the hole. One child holds the stone and throws it in the air. Then the child quickly sweeps out all the pebbles from the hole and picks up the stone before it falls sown. The child throws the stone up again and this time drags some pebbles (depending on the agreed number of pebbles to be drawn back turn after turn – in twos, threes, etc.) back to the hole. One child passes the turn when the stone falls out of the hand. The child who manages to drag all the pebbles in and out without



dropping the stone to the end wins - becomes the queen.

This game was observed during free play in one school only. As noted earlier, the game is not popular in urban settings. In the case study schools, the play was found in one school involving pre-school and lower primary school children.

Teachers said during interviews that *mdako* was more useful in practicing counting – addition and subtraction, among children. This suggests that some plays like *mdako* lead children to practise counting indirectly without their knowledge.

Bao

Bao is a type of traditional board game or mancala that is commonly found among the societies along the coast of East Africa. It has other names in English including a 'sowing game' or 'count-and-capture game' because of its nature.



Primary school children observed playing bao

The game uses a rectangular piece of wood with 24 paired round holes engraved in 4 rows. In schools where there are no boards, children dig holes in the ground to play mancala. Each player uses half of the board to play and distributes 3 round pebbles in each hole as seeds. During play one player takes 3 pebbles from one hole and move anticlockwise dropping one pebble in each hole. If the last pebble ends in an empty hole and there are pebbles in the opponent's hole, the player collects the other person's pebbles and keeps on dropping the pebbles all the way until the last. But if the last pebble drops into a hole and there is nothing in the opponent's hole next to it, the opponent takes the turn. The game ends when one player has collected all the pebbles from the opponent.

This game teaches children to think critically – practicing additions, subtraction, divisions, and multiplication because children must make some decisions before taking a move. The use of bao was reported in one school during free play. It is more common to find boys playing bao than girls, probably this comes from the coastal tradition where men play bao in the evenings as they drink gah(a)wa 'very strong locally made coffee'.

Draught Game

Draught is a kind of game involving two players or teams. Draught uses a board with 64 small squares and 24 round pieces that are placed on a piece of a board; 12 piece alternative on each side. A draught can be purchase locally but teachers said during interviews that they made draughts using card boards, boxes, bottle cups of two different colours, and marker pens of at least two contrasting colours.

Each player places 12 bottle cups alternating in three lines (See photo below). One player begins playing by pushing one bottle cup in a straight line and another player does the same. Each player will be collecting pieces of another each time they make certain moves. The player who collects all the pieces of another, wins the game.



Children playing draughts in a pre-primary school

Snake and ladder game is a slightly different version of draughts, according to teachers interviewed. In a snake and ladder game the teacher uses a sheet of paper or a board and draws snakes, small squares (as in draughts) and some ladder for children to climb when playing the game. The teacher gives children a dice and asks the children to roll the dice down and read the upper number on the dice. Teachers reported that the number read on the dice determines movement from lower point of a ladder to a higher point and when the child fails to read the number they are taken down one step.

A teacher in only one school reported using draughts and they had learning corners where they place the games for children to play during free

play. Teachers reported that both girls and boys in preschool classes liked the game. Grade 6 primary school children said during focus group reflections that they liked draughts but they were not allowed to go to preschool classes.



Children playing snake and ladder draughts

The interesting part of the snake and ladder game enhances students' ability in counting because it requires that skills to play the game.

Dama Game (Hopscotch)

The game involves the preparation of a Hopscotch court comprising a series of 9 squares in a linear format. The player tosses a pebble into the first square and hops through the squares skipping the square with the pebble in it. After the first round, the player tosses the pebble to the second square and moves as the first time. The player passes a turn when the pebble lands outside the square it is supposed to. This game has different names depending on the context; it is called *Dama* or *Kipande*.



Children playing Dama during free play

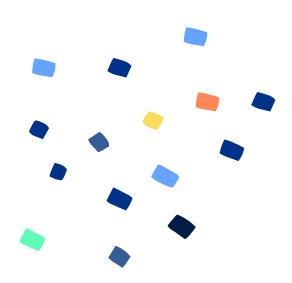
Teachers said they use this game outside classrooms because it needs a wide space for children to play. One of the teachers said the following during in depth interview.

This game is very interesting but children are not aware that the game involves learning something. For example, when they are playing dama they learn counting and division, and when they use pebbles they learn how to count by dividing the pebbles equally in each square. Thus, this game sets a foundation for numeracy. (PR Teacher, MA)

Miscellaneous Games

Other games commonly used in schools both pre- and primary schools include the tug of war, riding on used tires, running the tires, and running with bicycle rings. These are games more preferred by boys than girls. Teachers buy used car tires, bicycle rings and give children to roll them or ride on them. Teachers could not confirm active learning through these plays but it suffices to note that the functional use of these games depends on the teacher's creativity. The games can be used in different ways to improve children's learning outcomes.

This section has presented fourteen games used in case study schools. Some of the games are used more in classrooms while others are used outside classrooms. Games such as hurdling, dama, mdako, swings, football, and running with used car tires or bicycle rings are performed outside classrooms during free time while the rest may be organized inside the classrooms as already presented. Skills these plays emphasize include numeracy, writing, and reading.





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