IMPACT OF PLAY AS A TEACHING METHOD FOR COGNITIVE DEVELOPMENT OF PRIMARY PU-PILS IN GOMBE METROPOLIS GOMBE STATE, NIGERIA

¹ABDULLAHI SABO; ²ABDULLAHI AHMAD ABDALLAH AND ³BUHARI SAIDU ^{1,2&3} School of Early Childhood Care and Primary Education Federal College of Education (Technical) Gombe State, Nigeria

E-mail: Saboabdullahi921@gmail.com

ABSTRACT

This study Assessed the impact of play as a teaching method for cognitive development of primary one pupils in Gombe metropolis Gombe state. Among the objectives of the study is to find out whether play method of teaching determines children participation in classroom academic activities, to determine the extent to which different types of play method affect children's participation and learning process in nursery Schools. To find out the level of performance of the children using play method. Descriptive survey design was used, while Research questions were raised to guide the study. Questionnaire was used to collect data from one hundred (100) respondents. Frequencies were used to interpret the data obtained. The results of the analysis showed that Play develops pupils' sense of reasoning and teamwork abilities, it increases pupils' comprehension of content and development of practical skills, play provides Information, evaluation and creative reasoning among primary one pupils, it allows Pupils to actively involved in problem solving. The study recommended that preschool teachers should be going for seminars, workshops and refresher courses on their roles in provision of play equipment, as well as on supervision of children during play activities. This will equip them with more knowledge on how they can improvise most of the play equipment which could be used to promote children participation in outdoor activities among others.

Keywords: Cognitive Development, Play method and Primary school

Introduction

Nowadays pupils are not given the time to play because of various reasons which include parental commitment to work. Many parents leave their children with house maids who do not allow the children to play well. Again, due to high population growth especially in urban areas, many primary schools do not have play grounds and pupils are left to play in their classrooms. Play equipment in some schools are not available at all, they are also expensive to be purchased or improvised. In addition, some schools have facilities which are old and are poorly maintained thus making them a health hazards to the children. Facilities such as swings, Marry-go-round, See-saw and so on are not properly fixed thus exposing pupils to danger of falling during play. The work load in primary schools seemed heavy as a result of that the pupils do not play as expected. Instead they spend their playtime in classrooms not playground or with little play just in their classrooms.

Mwaura (2012) asserts that play method allows children to explore their environment on their own terms and to take in any meaningful experiences at their own rates and on their own levels. Children play can be seen as practice for tasks that will be useful to them as adult. It is during the early years that children construct their own knowledge and interpret their own experiences through manipulation and observation. Early primary education should therefore aim at producing children who are physically, socially, emotionally and orally ready for the formal school education through provision of numerous physical play facilities and experiences. Time has come to advocate strongly in support of play method for all children. Play is to the child as work is to adult. It is a crucial activity during

childhood years. Play is pleasurable, spontaneous; activity that has an end in itself and has no extrinsic goal. Play has a role in children's development of social and emotional development. Children pass through different stages as they develop and that this is reflected in their play. Every child has a subconscious force shaping his or her personality. Children are only interested in things that provide pleasure to them in order to satisfy their needs. Playing games with rules enables them to acquire knowledge of right and wrong (Christine, 2016).

The play method provides room for children to use their creativity and develop their imagination. Play method allows children to learn through experience, enhances confidence and self-esteem and also develops interest towards learning language, children are given the opportunity to manipulate, explore and experience with a variety of new materials which enhances learning. Through play, children learn independence, knowledge and application of new vocabulary (Maria 2012).

Play method of teaching is universally the best way to stimulate the nerve cells in a child's brain. It improves alertness, improves memory and the benefit surely visible in the child's interactive skills. It is highlighted that young children learn best through play, games, stories, art, puppetry and social interaction. The teacher employs various methods in the process of teaching and learning. The play method helps children to adapt themselves to new social environments. Play should not be a forced activity as naturally children love to play. It gives the opportunity to children to reveal their negative emotions and to channel their opinions (Christine, 2012). Several research on play indicated that the playful nature of children makes play the most natural technique of teaching which would if properly used by teachers, ensures smooth transition from home environment to school environment.

Importance of Play

Piaget (1951) viewed play as an active process which involved a lot of activities whether physical like tug of war or at times mental activity like: playing with words, imaginative play where children build houses using blocks therefore arrange blocks to form a picture of a house. Karl Groos (2016) view was that play allowed children to practice the skills needed in adulthood. He believed that through play children would practice skills needed in adulthood without guidance from an adult and suggested that if children did not have opportunity to play the result would be lack of intellectual progress. Smith (2017) states that play enhance language development as an integral part of learning. That outdoor play gives children opportunity to interact with various play equipment as well as other children forcing them to communicate and through communication children acquire knowledge from each other. Play promotes socialization among children. It also enables children to learn how to live with others harmoniously by thanking others for what they have received waiting for one's turn so as to accomplish an activity. Maria Montessori (2016) who said that each child possessed a capacity to develop and the development in them progressed in stages. Therefore, play is an integral part of learning because as children play the thought capacity is developed through training the senses (seeing, hearing, smelling, touching and tasting) she argued that play promoted physical development and body coordination. The small and large motor skills are refined and developed during play. Jensen (2016) stated that active brain makes permanent neurological connections critical to learning. Inactive brains do not make permanent neurological connections. Research on brains demonstrates that play is scaffold for development, a vehicle for increasing neural structures and a means by which all children practice skills they need in later life.

Play and its impact on learning

Play can not only fill up spare time, but can also lead to changes in knowledge, attitudes, behaviours, and skills. Fenthaler, Eseryel & Ge (2016) stated that there exists various research today that discussed the impact of play on learning. A classification scheme of learning outcomes that covered the aspects of cognitive, affective and motor skills. All of these learning outcomes can be further decon-

structed into more specific skills. Thus, one of the interests of this study is to explore the subcategory of the learning outcomes (i.e. problem-solving skills, behavior changes, motor skills, social skills, etc.) to provide a clear, direct, and comprehensive view on the impact of play on learning. By understanding the potential of games in learning, educators, researchers, and game developers can make careful plans to utilize games for learning.

Play and Child Development

Ginsburg (2016) stressed that play is so important for optimal child development that it has been recognized by the United Nations for Human Rights as a right for every child. Play is essential for development because it contributes to the cognitive, physical, social and emotional well-being. As such, primary school teachers should emphasize on play methods in the classroom because it enhances children's learning processes and interest towards learning languages. The play method provides maximum interaction and corresponds with others in and outside the classroom as well as helps children to master vocabulary through fun and enjoyment.

The play method provides room for children to use their creativity and develop their imagination. Play allows children to learn through experience, enhances confidence and self-esteem and also develops interest towards learning language. Scarfo & Littleford (2017) asserted that teachers should allow children to play with things like sand, water and blocks. By setting up a play environment, children are given the opportunity to manipulate, explore and experience with a variety of new material which enhances learning. Through play, children learn independence, knowledge and application of new vocabulary. Bodrova (2014) also stressed that play helps children master the symbolic nature of words. A study by Istomina (2017) showed that preschool children could remember more items in the dramatic play condition, functioning at the level that older children could demonstrate in the non-play condition that was similar to typical school task.

Existing reviews on using games for learning lack detailed analysis on the dimension of age. Boyle et al. (2016) and Connolly et al. (2018) reviewed game studies on various outcomes of learning, as well as the potential for promoting, engagement and supporting learning. Although Connolly et al. (2018) did focus on participants over the age of 14 years, the details for particular age groups were neither analyzed nor discussed. On the other hand, Powers et al. (2017) analyzed and investigated the impact of games on information processing skills for four general age categories, from young children to older adults. Nevertheless, the range of each age category was too large to represent a specific age group. Hwang and Tsai (2017) and Hwang and Wu (2018) analyzed the learning outcomes based on school levels (e.g. elementary, secondary, and multi-level). Since each school level consisted of participants within a wide age-range, the interest in both games and the level of challenge might be different for each age. Although the above studies provide some useful information, educators and researchers may not have sufficient guidance on setting an educational plan and using games within teaching/learning strategies for a particular age group of children.

Effects of play method on interest in learning

Philip (2016) indicates that public schools have high population of pupils such that the play equipment available is over stretched. As a result of this not all children in public primary school are getting opportunity to participate in play way method of teaching in which provide the pupils with opportunity to manipulate a variety of play equipment. Primary head teachers also claim that Early Primary Education is run in partnership with the community members who are of low socio-economic status, hence not able to equip the schools. The lack of qualified teachers, facilities like inadequate and unconducive class rooms, with full utilize play equipment and poor curriculum planning, inadequate infrastructure, learning process (monitoring and evaluation) have great influence on the suc-

cessful achievement and performance of primary pupils' educational objectives and hence students' academic achievement is affected.

In the kindergarten room, children can do role play as shopkeepers, consumers, teachers, doctor, dentists and so on, which help them to reach the outside world and explore them in interesting manners, as the learning environment enhances the pupils' interest in learning.

Montessori (2015) stressed that children are able to learn on their own, teachers should therefore provide play materials. Children are born with the potentials from parent and other adults. Their potentials should however be nurtured in order to make them achieve their goals, the only way a teacher can nurture children's potentials is by providing them with a variety of play facilities so that they can participate freely in play through manipulation of the facilities. The teachers need to provide children with prepared outdoor environment that is: environment which allows play to take place without any hindrances. The purpose of the prepared environment is to make the child independent to the adult. Thus, working alone while being responsible, it is a place where the child can do things for himself or herself without any instruction and at times without interferences (NACECE, 2017)

Statement of the Problem

Teaching and learning has become more critical and challenging in this modern era. This has created the problems associated with teaching methods and techniques. Finding a suitable teaching method for elementary school children has led many teachers to teaching ignorantly with wrong teaching method without achieving set objectives. In primary school, the method ensures that more than half of the teaching is successful. Unfortunately, many children have had to perform poorly in school because of the poverty of teaching methods employed by the teacher. Research has it that out of every ten children in primary school that fails in continues assessment and terminal examinations, 6,5% are directly or indirectly as a result of poor teaching method which must times are far away from play methods or strategies. This study tries to find solution to this poor rate of performance using the play teaching methods.

Objectives of the Study

- 1. To identify the impact of play methods in primary schools in Gombe metropolis.
- 2. To identify the effects of play method in primary schools in Gombe metropolis.
- 3. To ascertain the adopting play method of teaching in primary schools in Gombe Metropolis

Research Questions

- 1. What is the impact of play method in public primary schools in Gombe metropolis?
- 2. What are the effects of play methods in primary schools in Gombe metropolis?
- 3. What are the adopting play methods of teaching in primary schools in Gombe Metropolis?

Methodology

The study is a descriptive survey design hence it explored contemporary challenge of using play method for effective teaching and learning of primary school children. The research was carried out in selected primary schools in Gombe state. A specially designed questionnaire tagged Primary Play Method Questionnaire (PPMQ) was used for data collection. A total sample of one hundred (100) pupils was used through the systematic cluster sampling techniques. The mean and standard deviation of the questionnaire was used to answer research questions. A benchmark of 3.00 mean was considered good enough for a positive result and decision on acceptance taken based on it.

Data presentation and analysis

Research Question 1: What is the impact of play among primary pupils in some selected public primary schools in Gombe metropolis?

Table 1: Presenting the response of the respondents based on the impact of play among primary pupils in some selected public primary schools in Gombe metropolis.

S/N	Impacts	SA	A	D	SD	Total	Mean	Remark
1	Play develops pupils sense of reasoning and teamwork abilities		10	20	30	100	3.25	Agreed
2	It increases pupils compre- hension of content and de- velopment of practical skills	40	40	10	10	100	3.87	Agreed
3	Play provides Information evaluation and creative rea- soning among primary one pupils	40	50	10	00	100	3.99	Agreed
4	It allows Pupils to actively involved in problem solving. (Pupils learn by doing)	60	10	20	10	100	3.87	Agreed
5	Pupils Understand the complexity and the ambiguity of classroom activity via play method		40	10	20	100	3.50	Agreed

Source: Field Survey 2022

The table above presents the perceptions of the respondents with regard to the impact of play among

S/N	Challenges	SA	A	D	SD	Total	Mean	Remark
1	Lack of qualified teachers who are- acquainted with play way method of teaching		30	10	10	100	4.00	Agreed
2	Low self-esteem among the pupils to participate In the play learning activities	50	40	10	00	100	4.25	Agreed
3	Lack play environment within the school premises	40	30	20	10	100	3.75	Agreed
4	lack proper play facilities in the various school	10	70	10	10	100	3.5	Agreed
5	Cultural related issues (e.g. Boys and Girls Should play separately)	50	10	10	30	100	3.50	Agreed

Source: Field Survey 2022 primary pupils in some selected public primary schools in Gombe me-

tropolis. Based on the result in the table above, it revealed that; all Items agreed with a mean score of 3.25, 3.87, 3.99, 3.87 and 3.50 respectively that Play develops pupils sense of reasoning and teamwork abilities, It increases pupils comprehension of content and development of practical skills, Play provides Information evaluation and creative reasoning among primary one pupils, It allows Pupils to actively involved in problem solving. (Pupils learn by doing), Pupils Understand the complexity and the ambiguity of classroom activity via play method.

Research Question 2: What are the effects of play on pupils in primary one in some selected primary schools in Gombe metropolis?

Table 2: Presenting the Views of the respondent base on the impact of play among primary one pupils in some selected public primary schools in Gombe metropolis

S/N	Effects	SA	A	D	SD	Total	Mean	Remark
1	Development of psychomotor Skills	70	10	10	10	100	4.25	Agreed
2	Improvement in social skills	30	50	10	10	100	3.75	Agreed
3	lesser or no need for special education	20	40	20	20	100	3.25	Agreed
4	Play stimulate all the sense which foster proper under- standing and comprehension of learning content	70	10	10	10	100	4.25	Agreed
5	It is inclusive learning strate- gies as variety of Teaching pedagogy are employed		30	10	10	100	4.00	Agreed

Source: Field Survey 2022

The table above presents the Views of the respondents based on the effect of play among primary pupils in some selected public primary schools in Gombe metropolis, it revealed that; Item 12,3,4 and 5 all agreed with a mean score of 4.25, 3.75, 3.25, 4.25 and 4.00 respectively that Development of psychomotor skills, improvement in social skills, lesser or no need for special education, Play stimulate all the sense which foster proper understanding and comprehension of learning content and It is inclusive learning strategies as variety of Teaching pedagogy are not properly employed, are the major effects of play among primary pupils in some selected public primary schools.

Research Question 3: What are the adopting play methods of teaching in primary schools in Gombe metropolis?

Table 3: Presenting the Views of the respondent base on the impact of play among primary one pupils in some selected public primary schools in Gombe metropolis.

The table above also reveals the opinion of the respondents with regards to the challenges in adopting play method of teaching in some selected primary schools in Gombe Metropolis; Item 12,3,4 and 5 all agreed with a mean score of 4.00, 4.25, 3.75, 3.50 and 3.50 respectively that Lack of qualified teachers who acquainted with play way method of teaching, Low self-esteem among the pupils to participate in the play learning activities, Lack of play environment within the school premises, lack

of proper play facilities in the various school and Cultural related issues (e.g. Boys and Girls Should play separately) are the major challenges.

Findings of the study

Based on the result obtained the following findings were made that:

- 1. Play develops pupils' sense of reasoning and teamwork abilities, it increases pupils' comprehension of content and development of practical skills, Play provides Information evaluation and creative reasoning among primary one pupils, it allows Pupils to actively involved in problem solving. (Pupils learn by doing), Pupils Understand the complexity and the ambiguity of classroom activity via play method which response objective one seeks to addressed
- **2.** Development of psychomotor Skills, Improvement in social skills, lesser or no need for special education. Play stimulate all the sense which foster proper understanding and comprehension of learning content and It is inclusive learning strategies as variety of Teaching pedagogy are employed are the major impact of play among primary one pupils in some selected public primary schools.
- 3. Lack of qualified teachers who acquainted with play way method of teaching, Low self-esteem among the pupils to participate in the play learning activities, Lack play environment within the school premises, lack proper play facilities in the various school and Cultural related issues (e.g. Boys and Girls Should play separately are the major challenges which objective three seek to addressed.

Discussion of the Findings

Research objectives one intends to identify the impact of play among primary one pupils in some selected public primary schools in Gombe metropolis. In which the findings revealed that; Play develops pupils sense of reasoning and teamwork abilities, it increases pupils' comprehension of content and development of practical skills. Play provides Information evaluation and creative reasoning among primary one pupils, it allows pupils to be actively involved in problem solving. (pupils learn by doing), Pupils Understand the complexity and the ambiguity of classroom activity via play method and this goes in line research made by Smith (2017) states that play enhance language development as an integral part of learning. That outdoor play gives children opportunity to interact with various play equipment as well as other children forcing them to communicate and through communication children acquire knowledge from each other. Play promotes socialization among children. It also enables children to learn how to live with others harmoniously by thanking others for what they have received waiting for one's turn so as to accomplish an activity.

Research objective two is to examine the effects of play on pupils in primary in some selected primary schools in Gombe metropolis. of which development of psychomotor skills, Improvement in social skills, lesser or no need for special education, play stimulate all the sense which foster proper understanding and comprehension of learning content which was in line the study made by Jarvis, Odell & Troiano (2012) believed that role-play as a teaching strategy offers several advantages for both teachers and pupils. First, pupils' interest in the subject matter is raised. Secondly, student participation in learning is increased (Fogg, 2011). The third advantage is that teachers' empathy and understanding of the different perspectives increases (Poorman, 2012).

Research objective three was to ascertain the challenges in adopting play way method of teaching in some selected primary schools in Gombe Metropolis which reveals that Lack of qualified teachers who acquainted with play way method of teaching, Low self-esteem among the pupils to participate In the play learning activities, Lack play environment within the school premises, lack proper play facilities in the various school and Cultural related issues (e.g. Boys and Girls Should play separately, this in line with the Research made by Mwaura (2013) on the impact of play on academic perfor-

mance of pupils in primary school in Katsina state recommended that play fullness of pupils influences the development of cardinal concepts and also learning in the other areas. Therefore, teachers must appreciate playfulness of pupils and encourage them by providing play facilities and materials. In schools where parents are of low socio-economic status and cannot afford to equip their children with all the play facilities the government should come for their help.

Recommendations

This study recommends that; primary school teachers should be going for seminars, workshops and refresher courses on how to improvise local play equipment as well as on supervision of children during play activities. As most of the teachers would like to have such an important idea. The study recommends that school inspectors should ensure that primary schools have safe play environment and equipment. This is necessary because in most schools visited teachers were not present at the play field to check on what children played with.

Conclusion

The results of this study indicates that adopting play method of teaching in some selected primary schools in Gombe Metropolis which reveals that there are unqualified teachers who in play method of teaching, Low self-esteem among the pupils to participate in the play learning activities, Lack of play environment within the school premises, unavailability of play facilities in the various schools. The finding also indicates the need for play method of learning for better interaction of pupils with each other during the activities; as such they master the vocabulary better. The instructional materials also create opportunities for children to use their creativity especially in role play, playing games, and making traditional crafts. Therefore, preschool teachers should consider the play as an alternative method to teach preschool children. The instructional materials provide opportunity for children to learn through touch, feel and experience especially when they play games, thus the children in the Experimental Group are able to remember the vocabulary related to the games better than those in the Control Group. The instructional materials offer full benefits to preschool children in the process of learning. There is need for nongovernmental organization involvement; government should provide a policy of building anything in the primary school field.

References

- Anne, C. (2014). Fundamentals of Early Childhood Education, Cambridge, Massachusetts: Winthrop publishers.
- Association for Children Education International. (645³). Childhood and society. New York: Norton.
- Bellyne (2017). The content of children's mind co-education in the high school America USA: Texas University Press.
- Bodrova, C. (2014). Young children's thinking. New York: Columbia University Teachers College Press.
- Boyle et'al (2016). Developmentally appropriate practice in early childhood programmes. Securing children from birth through to age 8. Washington D.C: National Association for Educational of young.
- Christine (2017). Research methods. Quantitative and qualitative approaches. Nairobi: ACTS Press (African Centre for Technology Studies)
- Connally et'al (2018). Success in statistics, Hong Kong: Wing King Tong Ltd.
- Conolly, U. (2014) Plays exploration and learning. London" Routledge publishers.

- Eseryel, Fenthaler and Ge (2016). Research Methodology. Methods and techniques. New Delhi. New Age international (P) limited publishers.
- Ginsburg, A (2016). Article 12: Right to Leisure, Recreation and Cultural Activities. Monrovia, Liberia. Istomina (2017). Educational research. New York, London: Longman.
- Jacobson and Mathaeus et'al (2014). Total learning: Curriculum for the young child. Columbia Merrill.
- Jarvis et'al (2012). A constructivist Approach to Block Play in Early Childhood.
- Jensen (2016). Guide lines for ECD of Kenya. Nairobi: NACECE.
- Karl, G (2016). Plays exploration and learning. London" Routledge publishers.
- Karl, G (2016). Plays exploration and learning. London" Routledge publishers.
- Kenya Institute of Education (2003). A guide for Early childhood development in Kenya. KIE Nairobi: NACECE.
- Kraiger et'al (2019). Effect of play on children's performance in preschool activities. Suba east, Migori District. Unpublished Diploma of Education in Early Childhood Education Research project, Dona hill College.
- Lilian, N. (2017). Children's Environmental learning and the use design and management of play grounds. Margaret M. (1860, 1931). Education through the imagination. London: Heinemann Education Publishers.
- Maria, M. (2015) The content of children's mind co-education in the high school America USA
- Miliscent (2017). Effect of play on children's performance in preschool activities. Suba east, Migori District. Unpublished Diploma of Education in Early Childhood Education Research project, Dona hill College.
- Morrison M. (2017). Behavioural Research, A conceptual Approach: New York: Holt, Rinehart.
- Mwaura O. (2017). Research Methodology. Methods and techniques. New Delhi. New Age international (P) limited publishers.
- Mwaura, K. (2017). Research on play learning materials on the development of cardinal numbers and other learning areas in children. Kiambu District- Unpublished masters of education in Early Childhood Research project, Kenyatta University.
- NACECE (2016). Cognitive development in children. New York: McGraw Hill.
- National Centre for Early Childhood Education (1993). Preschool Teachers Guide togs material for play and learning: Nairobi, KIE.
- National Centre for Early Childhood Education (2004). Preschool teachers' Guide Toys materials for play and Learning: Nairobi, KIE.