

**TEACHERS' COMPETENCE AND USE OF PLAY PEDAGOGY IN  
NURSERY SCHOOLS: A CASE OF KAMPALA  
CENTRAL DIVISION, UGANDA**

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## DECLARATION

I, Saleema Panjwani, declare that this research dissertation titled “Teachers’ competence and use of Play Pedagogy in Nursery schools: a case of Kampala Central Division” is my original work which has never been submitted to any institution for any award. I am now submitting it to the Faculty of Education Graduate School of Kyambogo University with the approval of my supervisors.

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## **APPROVAL**

This Research Dissertation titled “Teachers’ competence and use of Play Pedagogy in Nursery schools: a case of Kampala Central Division” by Saleema Panjwani has been developed with our guidance and it is now submitted for examination with our consent as supervisors.

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## **DEDICATION**

I dedicate this Research Dissertation to God Almighty my creator, my strong pillar, my source of inspiration, wisdom, knowledge and understanding. He has been the source of my strength and my family's strength throughout this program and on His wings only have I soared.

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## **LIST OF ABBREVIATION AND ACRONYMS**

ECDE: Early Childhood Development Education

ECE: Early Childhood Education

ECD: Early Childhood Development

ITT: Institute of Teacher Training

KoL: Knowledge of Learners

KoSM: Knowledge of Subject Matters

LFW: Learning Framework

MoES: Ministry of Education and Sports

NCDC: National Curriculum Development Centre

NS: Nursery School

PCK: Pedagogical Content Knowledge

PD: Professional Development

PhD: Doctor of Philosophy

PK: Pedagogical Knowledge

PP: Play Pedagogy

## ABSTRACT

When we have competent teachers, different pedagogies are used including play pedagogy to work with children. When teachers use Play Pedagogy in the teaching and learning process, children develop socially, emotionally, physically, and cognitively. Play Pedagogy also helps children develop language/oral numerical competences. However, as more evidence emerges it has become clearer that even the most difficult subjects can be made very easy if taught playfully using learner centered pedagogy. Many teachers still prefer to use teacher centered approaches of teaching. The aim of this study was to establish the relationship between teacher competence and use of play pedagogy in nursery schools. Specifically the study intended to establish the role of teachers' knowledge of learners in influencing their use of play pedagogy in nursery schools, to examine teachers' knowledge of their subject matter on use of play pedagogy in teaching in nursery school and to assess teachers' pedagogical knowledge needed on use of play pedagogy in nursery schools. The study was carried out among 60 purposively selected teachers in 12 purposively selected play based schools located in Kampala central division. A descriptive research design was used; data was collected using questionnaires, observations and interview guides. Content analysis and descriptive statistics were used to analyse data collected. Strategies identified by this study were to be used to help support develop teacher competences in using play pedagogy in the classroom to promote better learning outcomes. From the study, the researcher found; some of the teachers are competent in using the play pedagogy while others still use the teacher centered approach. Teachers conduct play without pre-conceived pedagogical purpose, others still involve children in the learning process with absence of play. Further investigation clearly revealed that those who were doing it well had been receiving continuous professional development support unlike the rest. This showed that giving all teachers training in play pedagogy will enhance their competencies as they teach. The study reveals that there is statistically significant relationship between teachers' competence and use of play pedagogy with  $r = 0.784$ . The study concluded that teachers' competence contributes greatly to the use of play pedagogy in nursery schools. The findings from the study were used to make the following recommendations; Teachers should be given continuous support as they teach and involve themselves in workshops that will enhance their competencies in using play pedagogy to improve teaching and learning process for children to acquired better ECD education.

## **CHAPTER ONE**

### **INTRODUCTION**

#### **1.0 Introduction**

This chapter covers the background of the study, statement of the problem, purpose of the study, objectives of the study, significance of the study, limitation and delimitation of the study, theoretical and conceptual frame work.

#### **1.1 Background of the Study**

##### **1.1.1 Historical Perspective**

Historically, education has been a very necessary event in life. Throughout the years, education has greatly evolved. In ancient times education was primarily gender based and informal with fathers teaching their sons hunting and survival skills whereas mothers taught their daughters how to take care of their children and do household work (May, 2002). This form of education was transmitted through various forms which included songs, plays, storytelling and poetry and hand-on induction.

Greek civilisation then brought forth counting using abacus and also introduced the alphabets from which writing was later developed (Elijah, 2019). Greek civilisation diverted education from a play base to theoretical approach. This therefore points at the fact that education has been a fundamental path of society over the years regardless of it being formal or informal.

Today education is also viewed as a basic necessity. Given technological transformation going on all over the world, learning has greatly become diversified and several methods and instructional materials have been invented to foster better and easier

learning (Foray, D. and J. Raffo, 2012). People with a good education background have the windows of the world of education open to them. Other than simply reading and writing, education has a lot of meaning attached to it. One uses it for their own benefit such as acquiring a good job or earning a living as opposed to the fact that one might end up depending on others for a living. This highlights the need to develop social and cognitive abilities of individuals from a tender age to achieve a holistically nurtured and educated being in future (Court, 2007). This can be well achieved by giving children the chance to learn through play pedagogy.

Kamogawa (2010), reported that for Malaysia to become an advanced nation by 2020, it is valuable to have this focus on attaining Universal Primary Education (UPE) in early childhood, as has been the case from the late-1990s to the early 2000s. To improve the quality of preschool teachers, the qualifications for their appointment will be raised to a diploma or a bachelor degree in early childhood where they are taught play pedagogy. This rise in qualification will have a profound impact on the Early Childhood sector, for example, it means that the Government will implement measures to establish teaching as a profession of choice (Economic Planning Unit, 2010). Like many Western governments, the Hong Kong government advocates “learning through play” as the central pedagogy for Hong Kong nursery education. Curriculum Development Council (2006) reiterated the key message that “play is an indispensable and important tool for facilitating children’s learning.”

International bodies such as the United Nations and the European Union have begun to consider and develop policies concerned with children’s right to play, with the educational and societal benefits of play provision, and with the implications of this for leisure facilities and educational programs (David, 2012). In Uganda, play is promoted through providing opportunities for play indoors and outdoors, creating child-friendly spaces in the home,

classroom, compound and neighbourhood, where a parent or an adult can supervise children at all times and ensuring play areas are open, comfortable and clean (Mafabi, 2017). If this is emphasized in the ECDE it will help improve teacher's competences in regards to play pedagogy.

In Uganda, the competence of nursery school teachers was not taken seriously until after the Kajubi report 1989 and the Government White Paper on education 1992. Since that time, a lot of efforts have been put in place to train competent nursery school (NS) teachers with today's PhD course in ECD at Kyambogo University as a climax. Despite this historical development, teacher-centred methods and inappropriate content still linger on in nursery schools in Uganda.

### **1.1.2 Conceptual Perspective**

Conceptually, teacher competences refer to the ability of the teacher to make the school a desirable place to be, 'A home outside home' (Jackson, 2009). Competence is understood as excellent capability and includes knowledge, skills, attitudes and experiences which have to be target category of profession of an educator (Milan, 2008). Pedagogical knowledge (PK) and subject matter knowledge (SK) is an essential and critical element in determining a teacher's success in handling the teaching and learning process (Hill, 2004).

According to a study by Gasteiger (2015), teachers' ability to teach through play pedagogy enhances learning even though the understanding of play itself varies. All these linked with the play pedagogy, a novel approach in early childhood education, and Play world, an educational practice that is inspired by this approach. Baumer (2013), explains that the play pedagogy has been developed by scholar Gunilla Lindqvist. It states that play pedagogy advocates adult and child joint play, in which adults provide a variety of resources to enrich and support children's play.



According to Soysal (2018), Pedagogical knowledge and subject matter knowledge (SK) is a type of knowledge that is unique to teachers, and is based on the manner in which teachers relate their pedagogical knowledge to their subject matter knowledge. Aggarwal (2009, p.57), says that the soul of effective teaching and learning is a good command of subject matter knowledge. Having a quality teacher in every classroom, is a goal all Ministries of Education aspire to attain. But there is need to be more explicit about what teachers know and do, about what teachers need to know, and how well they need to perform in order to become more effective.

Teacher competence is knowing how to teach, what to teach and to whom to teach. In nursery school, if play pedagogy is to be used effectively, it must be done by effective teachers. Muton (2002), reports that a strong and effective teaching profession requires well trained teachers, Teachers need not only a depth of knowledge about the developmental stages of students they are teaching, but also how to reach those students effectively using age appropriate pedagogy. Taguma (2010), put it that, there is strong evidence that enriched stimulating environments and high-quality pedagogy are fostered by better qualified staff and better quality pedagogy. All those factors considered, lead to better learning outcomes.

Rosbach (2011), reports that play pedagogy enables teachers to connect with children and provide guidance, without imposing authority, fear and hierarchy. It is a useful tool in teachers' in-service professional development and in teacher preparation. As discussed by Wyver (2008), within the early childhood field, play pedagogy has long been acknowledged as an important context for children's learning and development. Play pedagogy is a significant aspect of children's lives, reflecting their social and cultural contexts.

### **1.1.3 Theoretical Perspective**

This study was guided by the Constructivist theory of Vygotsky underpinned under the constructivist theory is the concept of scaffolding which means the practice of helping pupils to develop the desired competence. (Askill- Williams et al., 2012; Molenaar et al., 2011). If scaffolding is done properly following constructivist theory a teacher will decide in advance the competence he or she wants children to develop and will therefore choose play materials, activities and methods that will help children develop the pre-selected competence, this is what play pedagogy is all about (Murphy and Messer, 2000; Pino-Pasternak et al., 2010). This is far more effective than random play that many ECD teachers tend to conduct. In this study, the aim was to promote use of play pedagogy by encouraging teachers' use of their competences to provide enough assistance so that children can learn and acquire competence through practical learning.

### **1.1.4 Contextual Perspective**

Contextually, all nursery schools in Kampala, and the rest of Uganda are in the hands of the private sector, and out of the financial reach of most Ugandans. There are very few children benefiting from institutionalized ECD centres (MoES, 2018). The rest sit at home with their parents, yet the services given to the parents to be able to address the ECD needs of those children are minimal. The net enrolment ratio at nursery education in Uganda was at 23%. According to the National Development Plan (NDP) (2010/11 - 2014/15), in 2008, Early Childhood Development (ECD) enrolment stood at only 89,296 yet there were about 3.5 million children aged 3-5 years.

Nursery schools in Kampala are characterised by teachers who are adopted from higher primary school classes which indicates that their competence towards teaching nursery classes is highly questionable. There is minimal use of play as a form of instruction by the teachers. In addition to that, the major methods of instruction are highly teacher centered.

This could primarily be as a result of insufficient teachers' competence on the use of play pedagogy and the lack of appropriate materials to enhance learning. A step taken by Mafabi (2017), intended to find out what learning materials the schools used to implement the 2007 Early Childhood development Education (ECDE) policy.

According to Miller (2009), it is indicated that in some schools the teachers are in the class with pupils aged between three and five on average, exercising with them by jumping. There are however not many play materials. In some schools teachers say that they seldom use play pedagogy, due to many reasons. These include inadequate funds and play materials because either parents cannot raise enough funds or the proprietors want to maximise profits or both. Some nursery teachers are under pressure to drill children academically in preparation for P1 entrance written academic interview, so nursery school teachers see "play" as wastage of time.

For this study, the focus will be to find out, whether the idea of not using play pedagogy in nursery schools in Kampala is intentional by teachers, or predesigned during teacher training or adopted on the job because of different circumstances as mentioned in the previous paragraph.

## **1.2 Statement of the Problem**

When we have competent teachers', different pedagogies are used including play pedagogy to work with children (Heckman, 2014). When teachers use Play Pedagogy in teaching learning process, children develop socially, emotionally, physically, and cognitively. Play Pedagogy also helps children develop language/oral numerical competences. Play pedagogy advocates adult and child joint play, in which adults provide a variety of social, emotional, cognitive and communicative resources to enrich and support children's play.

Children bring to this joint play their expertise in pretend play and symbolic imagination, which help adults revitalize their playfulness and improvisational competence (Rainio, 2015).

In contrast to this trend, in Kampala Central Division nursery schools, teachers are using the theoretical approach, teacher centered which involves teacher talking and children listening, using chalk and board, charts and activity sheets and rote learning (Mosey, 2019). It is observed that, Children's play time is limited, yet, for them to learn, children need to go play way and have hands on experiences (Obbo, 2017). There is also lack of relevant play materials for teachers to use during both class and play activities. According to a report by Mafabi (2017) the methods teachers are using are not appropriate for the nursery schools level. He found out that the teachers pointed at a chart, asked pupils to name the items and read. Teachers would write words on the black board which she would later ask them to re-write. Many teachers in Kampala Central Division nursery school are using same teacher-centered methods like Mafabi observed that put emphasis on academic drilling of children.

Teachers ignore the competencies put down in learning framework and make their own. If the situation remains the same than we shall not be achieving the competencies given in the learning framework. Children will not be receiving adequate practical ECD education.

Therefore, there was great need to investigate nursery teachers' competence on use of play pedagogy in nursery schools in Kampala Central Division. This involved assessing teachers' pedagogical knowledge, examining teachers' knowledge of their subject matter and to establish how teachers' knowledge of play pedagogy in nursery schools can instil learners' interest in learning and facilitate easier learning. This would guide teachers on how to make learning enjoyable to learners through play.

### **1.3 Purpose of the Study**

The purpose of the study was to establish how teachers' competences can be used to enhance play pedagogy in nursery schools in Kampala Central Division.

### **1.4 Objectives of the Study**

1. To establish the relationship between teacher competence and use of play pedagogy in nursery schools.
2. To establish how teachers use knowledge of learners influences their use of play pedagogy in nursery schools.
3. To examine how teachers' knowledge of their subject matter influences use of play pedagogy in teaching in nursery school.
4. To assess teachers' pedagogical knowledge needed on use of play pedagogy in nursery schools.

### **1.5 Research Questions**

- How do the teachers use knowledge of learners to influence their use of play pedagogy in nursery schools?
- In which ways does teachers' knowledge of their subject matters influence use of play pedagogy in teaching in nursery schools?
- How does the teachers' pedagogical knowledge help him/her to use play pedagogy in nursery schools?

### **1.6 Research Hypotheses**

- There is a no significant relationship between teachers' competence and use of play pedagogy in teaching in nursery school.

## **1.7 Scope of Study**

The scope of the study stipulates the geographical specifications of the study, the time within which the study would be valid and the context in which the study was conducted.

### **1.7.1 Geographical Scope**

The study was carried out in Kampala Central Division. Kampala Central Division is one of the five divisions that make up Kampala Capital City Authority and was selected randomly

### **1.7.2 Time scope**

Since 2007 many innovations have taken place in the field of ECD, the need to understand “play” better is more urgent than ever before. The year 2019 marks the end of this study and prepares the ground for understanding the impending revised ECD policy.

### **1.7.3 Content Scope**

The Content scope for this study was to establish the relationship between teachers’ competence and use of play pedagogy, to determine the relationship between teachers’ pedagogical knowledge and use of play pedagogy. Other aspects of the study included the knowledge of learners, teachers use to promote use of play pedagogy, the content of knowledge teachers need to promote use of play pedagogy.

## **1.8 Significance of the Study**

The teachers’ competence towards play pedagogy in nursery schools will be enhanced as they would have been equipped with a variety of methods that they previously were not aware of. This will in turn make the teachers feel motivated to do their work as is expected of them for they will now know what to do.

Teachers’ will be enabled to know the level at which they have been applying play pedagogy in class and then go ahead to improve/correct the things they have not been doing

right as well as start using the play way method that is advocated for in the teaching and learning process if they have not been doing so.

There will be establishment of different ways in which to enhance teachers' competence to use play during the teaching and learning process.

The teachers and other Directorate of Education Standards (DES), National Curriculum Development Centre (NCDC), Primary Teachers College (PTC), who may read this work will improve on their competence towards play pedagogy in nursery schools.

This information will enhance teachers' pedagogical skills in nursery schools of Kampala, Central Division and others elsewhere. This book will be readily available in the university library for reference in view of improving teachers' knowledge about play pedagogy. The research work will provide clear information to the stakeholders and opinion individuals so as to effect a positive change in the societal attitude about the play pedagogy.

## **1.9 Limitation and Delimitation**

### **Limitation**

The researcher was faced with limited financial recourses for transportation to the various research areas and printing cost. To minimize this, the researcher used home resources for typing to reduce cost.

The researcher was faced with some respondents refusing deliberately to disclose some research information for confidentiality reasons. The researcher had to assure the respondents that the information provided will only be used for nothing other than academic purposes.

The researcher was faced with limited time for carrying out and completion of the research. A few but adequate representatives were interviewed from a bigger sample size to reduce the time that would be required to carry out the research.

### **Delimitation**

The research was delimited to some randomly selected nursery schools in Kampala, Central Division. In addition there were other educational issues, problems and requirements that affected provision of nursery school in the Kampala central Division. This implies that the result obtained has only been generalized to play based nursery schools.

## **1.10 Theoretical and Conceptual Framework**

### **1.10.1 Theoretical Framework**

This study was guided by scaffolding instruction as a teaching strategy originating from Lev Vygotsky's social constructivist theory. Vygotsky's theory states that knowledge is co-constructed and that individuals learn from one another. It is called a social constructivist theory because in Vygotsky's opinion the learner must be engaged in the learning process. Learning happens with the assistance of other people, thus contributing the social aspect of the theory. A fundamental aspect of Vygotsky's theory is the Zone of Proximal Development. This is a "range of tasks that are too difficult for a child to master alone, but can be mastered with the assistance or guidance of adults or more-skilled peers (Vygotsky, 1962)." The assistances can be given by a teacher through what Vygotsky called scaffolding.

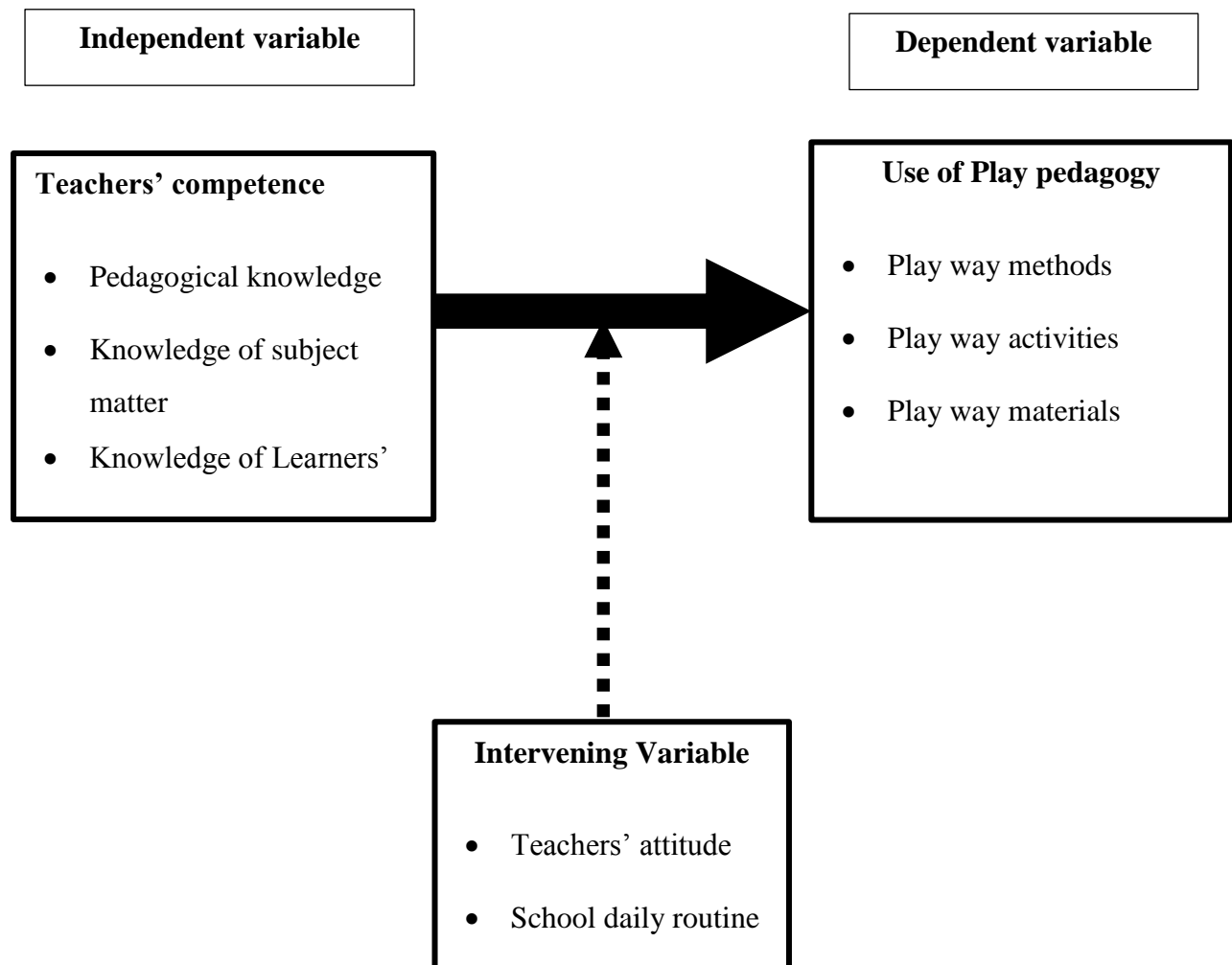
Scaffolding is giving the learner the right amount of support at the right time. If the learner can perform a task with some assistance, then he or she is closer to mastering it. The scaffolding teaching strategy provides individualized support based on the learner's ZPD (Chen, 2002).



The concept of the Zone of Proximal Development (ZPD) is the distance between what children can do by themselves and the next learning that they can be helped to achieve with competent assistance (Raymond, 2000). In scaffolding instruction a More Knowledgeable Other who is the teacher in this case provides scaffolds or supports to facilitate the learner's development. The scaffolds facilitate a student's ability to build on prior knowledge and internalize new information.

Scaffolding is a key feature of effective teaching, where the adult continually adjusts the level of his or her help in response to the learner's level of performance. In the classroom, scaffolding can include modelling a skill or play, providing hints or cues, and adapting material or activity (Copple, 2009).

### 1.10.2 Conceptual Framework



**Figure 1.1 Factors influencing teachers' competence on use of play pedagogy in teaching learning process.**

**(Source:** Student Initiative (2019))

The conceptual framework is based on the relationship between the independent variables which are the teachers' competence and the dependent variables which is the use of play pedagogy.

### **Independent variable**

Pedagogical knowledge is a generic form of knowledge that is involved in all issues of student learning, classroom management, lesson plan development and implementation, and student evaluation. It includes knowledge about techniques or methods to be used in the classroom; the nature of the target audience; and strategies for evaluating student understanding through play pedagogy. As such, pedagogical knowledge requires an understanding of cognitive, social and developmental theories of learning and how they apply to students in the classroom. This is important in determining what appropriate play way methods, activities and materials to use in order to achieve the set learning objective.

Knowledge of subject matter refers to teachers' knowledge about the actual subject matter that is to be learned or taught which includes concepts, theories and frame works. It is very vital in passing on not only the correct information to learners but also using appropriate methods with the aim of achieving a better understanding of classroom concepts. Knowledge of subject matter guides and directs on the play activities that are necessary at each stage of instruction and to cope up with the increasing demand of the children today.

Having a strong and effective knowledge of learners requires well trained teachers with not only depth of knowledge about the developmental stages of students they are teaching but also how to reach those students effectively using age appropriate pedagogy.

### **Dependent variable student insisted**

Play pedagogy comprise of play methods, play activities and play materials.

### **Intervening Variable**

Teachers' attitude involves social and cognitive forces that ignite a particular behaviour of an individual in everyday life. Teachers' positive attitude is instrumental in

fostering the achievement of play pedagogy. The teachers' attitude, consciously or unconsciously affects how well he or she plans, prepares and administers the lesson. This also has a direct influence on students' interest in learning. A positive attitude towards acquiring knowledge and attending refresher courses on how to adequately implement play in learning experiences greatly enables teachers to pass on the positive energy to their students to learn, whereas a negative attitude discourages instructors to generate positive learning outcome.

The school daily routine of most of the nursery schools in Kampala is from 8-12:30pm with a 30minutesbreak between 10:30am to 11:00am. However this schedule is characterised by a high level of academic drilling and less time is given to play. This indicates at the need to observe the school daily routines as it's a major factor in achieving the implementation and use of play pedagogy.

### 1.11 Operational Definition of Terms

**Early Childhood Education** — Early childhood Education (ECE; also nursery education) is education of children from birth up to the age of eight.

**Knowledge of Subject Matter** — The term knowledge of subject matter refers to the body of knowledge and information that teachers teach and that students are expected to learn in a given subject, such as an English, language arts, mathematics, science, or social studies over a given period of time.

**Nursery Schools** — A nursery school is also known as preschool, playschool, kindergarten, or learning space offering early childhood education. These schools cater for the young children, particularly those between the ages of three and five.

**Pedagogy** — The term pedagogy refers to how a teacher teaches with the help of methods, skill and instruction materials. Pedagogy is the study of how knowledge and skill are exchanged in an educational context and activity by one person designed to enhance learning.

**Pedagogical Knowledge** — Pedagogical knowledge is the integration of subject expertise and skilled teaching of that particular subject.

**Play** — Play is where children get time to explore freely on their own in a way that promotes their emotional, cognitive and social development.

**Play Materials** — anything natural or artificial/improvised, props or loose parts, which a child or a teacher can use for teaching learning, inside or outside class.

**Play Pedagogy** — Play pedagogy is where teacher provides variety of material to children to achieve pre- conceived and set competences.

**Play way Activities** — Play way activities are activities which help children to explore all the five senses with help of adult support.

**Play way Methods** — Play way methods are methods that help children learn through play, where play is utilised to the maximum in learning.

**Teacher Competence** — Teacher competence includes knowledge, skills, attitudes and experiences which are expected of every professional teacher.

## **CHAPTER TWO**

### **LITERATURE REVIEW**

#### **2.0 Introduction**

This chapter deals with the various key theoretical constructs which form the conceptual framework of this study. It begins with the definition of play or play pedagogy; various learning theories which support play followed by a review of the benefits and value of play or play pedagogy in nursery school settings as documented by various scholars and researchers. Teachers' competence on use of play pedagogy in the setting of Nursery schools of Kampala, Central Division was explored.

#### **2.1 Teachers Competence and use of Play Pedagogy.**

Teacher competence is an intellectual potency that exists in a teacher's mind and which is realized in doing his/her job according to professional standards. Teacher competence refers to the ability of a teacher to use professional standards efficiently to help, guide and counsel his/her students so that they can get good achievement (Tope, 2012).

As Litjens and Taguma (2010) put it there is strong evidence that enriched stimulating environments and high-quality pedagogy are fostered by better qualified teacher; and better quality pedagogy all those factors considered together, they lead to better learning outcomes.

Once a teacher is competent in the use of play pedagogy, there is no reason as to why they wouldn't use it. According to Darling (2006) the 21st century classrooms demand from the teachers to prepare virtually all students for higher order thinking and performance skills. Teachers with high competence are those with the most significant factors that manipulate the students' learning as well as serving the school to meet its objectives and missions (Theall, 2012).

According to Bishop, (2016) to be fully effective in teaching and capable of adjusting to the changing needs of learners in a world of rapid social, cultural, economic and technological change, teachers themselves need to reflect on their own learning requirements in the context of their particular school environment. Reuda (2002) believes that qualified teacher should be able to upgrade student's capability effectively, enhance their knowledge and skills, and improve their behavior and attitude and then make contributions to the organizational goal. Qualified teachers recognize the teaching approach that appreciates the fact that children have unique interests that need to be considered for any meaningful achievement (Gichuba, Opasta and Nguchu, 2009).

A competence is described as a complex combination of knowledge, skills, understanding, values, and attitude. Possessing a competence means that one not only possesses the component resources, but is also able to mobilize such resources properly and to orchestrate them, at an appropriate time, in a complex situation (Gokalp, 2016).

In the context of teaching, competence encompasses tacit and explicit knowledge, cognitive and practical skills as well as disposition. Since the pre-primary customers of educational organizations are the learners, teacher competence enables the teacher to remain committed to learners and their learning goals (Adeyemi, 2016). The teacher can use a variety of instructional methods in their classroom to meet students' learning needs, create a relaxing environment and cater for the needs of the learners regarding language, motivation and interests.

The teacher is the person who facilitates learning, his duty is to take advantage of a variety of teaching methods and techniques to organize learning experiences and assess whether the desired behaviour has been achieved by the learners or not through use of play way learning (Kai-ming, 2003).



Competence is a set of organized activities, which act on content in a given category of situations in order to solve a problem. Explained by Hakim (2015) competence is hereby described as an ability to carry out a specific task or activity to predetermined standards of attainment.

Teacher competence would mean all observable teacher behaviours that bring about desired pupil outcomes through play (Brouwer, 2010).

Thus, in the competencies for teaching system, competency is used to describe professional ability, including both the ability to perform specific functions and the ability to demonstrate acquired knowledge and conceptualization. According to Claude (2010), in Uganda, the key competences required by a teacher to be effective are knowledge, skills, values, attitudes and professional ethics in using play as method in teaching learning process.

The competencies that are needed by teachers include pedagogic, personal, professional and social competence. In an environment where resources are very limited and where many factors contribute to the inadequate performance of pupils, teacher competence comes to the front (Archer, 2011). However according to Evertson (2013) a better method of teaching is dependant largely on the user (the teacher) and it requires competencies, which may be viewed from pedagogical knowledge, knowledge of learner, knowledge of subject matters, skills and behaviour in using play in teaching.

According to Mendro (2010), if students have a high-performing teacher one year, they will enjoy the advantage of that good teaching in future years. Conversely, if students have a low-performing teacher, they simply will not outgrow the negative effects of lost learning opportunities for years to come.

Dealing with young children is quite tricky as they have a low attention span and a teacher needs to be so innovative. This is supported by Johansson (2003) who admits that

work with young children requires teachers to have a range of competencies, vital aspects are teacher's pedagogical knowledge, knowledge of subject matter, and knowledge of learners in use of play as teaching tool.

According to Arshad (2007), the competent teacher is he who has in depth knowledge of subject matter, good verbal and non-verbal Communication skills, completes work within time, initiative, takes appropriate decisions, gets adjustment in every situation, believes in research, has a cooperative attitude towards pupils, colleagues, parents and administration.

According to Barge (2012) teachers are the core of any education system, so trained, skilled teachers are necessary for every student .The teachers with good instructional planning plan the lessons by merging their own ideas, thoughts, beliefs, students' thinking and understanding of concepts. However there is research on teacher use of play in teaching learning process, but unfortunately, there has been little research teacher competence but not on teachers' competence and use of play pedagogy in Uganda.

## **2.2 Teachers' Knowledge of Learners and Use of Play Pedagogy**

The importance of teacher responsiveness to children's differences, knowledge of children's learning processes and capabilities, and the multiple developmental goals that a quality preschool program must address simultaneously all point to the centrality of teacher education and preparation.

According to Smit (2014) among the most challenging and important competencies are the ability to provide differentiated instruction in the classroom, for students of individual abilities.

Knowing the names of the children helps a teacher to connect with children in class and outside with more confidence. As said by Kees (2008) knowing and using a students' name during and outside of class recognizes that a student exists and is important.

The teachers who plan lessons by considering students' needs, cultural values, and global demands to make their lesson actionable and understandable get success in delivering content material (Kinuthia, 2009).

While play is considered to be an important element in an early year's environment many teachers are unsure of how to plan for such a curriculum (Moyle et al, 2002). Wood and Attfield (2005) suggest that an approach based on both curriculum-generated play to support the development of specific skills and knowledge and a play-generated curriculum based on teachers responding to the interests of the children is the best approach to curricular planning.

When Preschool teachers prematurely expose children to formal reading and writing, children present lower academic success in later years (Elkind, 2007). Understanding how school children learn best will ultimately help preschool teachers to assist children to reach their full potential.

Developmental milestones (DM) are a series of practical proficiency and expertise or age specific tasks that most children can perform at a certain age range. For example, teachers within nursery schools use milestones in order to test how the child is developing. Although each milestone has an age level; which means that every milestone takes place during different ages. The actual age when a normally developing child reaches that milestone can diverge because every child possesses unique characteristics (UMHS, 2012).

Armstrong (2012) reports that increasingly it is seen in early childhood education programs veering toward formal academic learning. This is a distressing trend, inasmuch as

it makes young children do things (formal reading and math, computer instruction) that they are not developmentally ready for, and that take precious time away from letting children be children. There are no critical periods in early childhood during which a child must have exposure to formal reading and math, or computers, or they will never develop these capacities later in life.

However, there are only these few precious years of life when the child's brain is buzzing away at twice the metabolic level of an adult, and when the young child is open to a wide range of perceptions, senses, feelings, and other experiences.

In research conducted in Swiss nursery Schools, it was found out that the most difficult situation faced by the teachers was to use differentiated instruction technique effectively to balance their expectations with their personal established standards and with students' individual differences. Ng'asike (2004) Every student has his own learning style, and he learns better in various circumstances with various styles and from various people.

Thus, the teachers need to identify the students' learning styles and apply different teaching techniques according to their needs. The more teachers can involve all modalities and learning styles, the more chances they have of engaging learners in using their whole brains. Classroom environment leads towards a peaceful and critical learning that enhances students' capabilities and motivate them to learn and explore the facts. (Freiberg, 2009).

According to Kahtz & Kling (1999), developing instructional methods and materials that are appropriate for a wide range of cognitive learning styles should be a priority of all educators. Due to the fact that students respond better to instructional methods that match their learning style, integrating different learning styles in the classroom environment can enhance the benefits for everyone (Kahtz & Kling, 1999). Matching the teachers teaching methods to the students learning preferences will allow the students to acquire a better understanding of the subject matter in question (Cegielski, 2012).

A sociocultural view of children as capable and competent suggests that children's beliefs might also impact on the pedagogy they experience. Furthermore, research on the extent and depth of children's prior knowledge (Marcon, 2002) suggests that teachers might need subject knowledge to extend children's learning.

According to Agyeman (2005), Young child's time with academic activities and other preparations for nursery school, then you take away something that can never again be reclaimed: the magical years of play. Every early childhood education programs should have free play as its central focus.

Anything less than this is developmentally inappropriate, threatens to deprive the child of a solid multi-sensory experiential foundation for all future learning, and causes deterioration in brain connections that are related to art, music, nature, intuition, social interaction, physical expression, and a range of other culturally-valued domains. It is important that these years are well utilized by teachers through integrating play in the classroom.

### **2.3 Teachers' Knowledge of their Subject Matter and Use of Play Pedagogy**

A curriculum is 'the sum total of the experiences, activities, and events, whether direct or indirect, which occur within an environment designed to foster children's learning and development (Ministry of Education, 1996). Such a broad definition of curriculum potentially lacks guidelines for teachers with regard to content, because it focuses on the learning environment and children's experiences rather than teachers' and children's knowledge.

This lack of guidance, coupled with an integrated, holistic approach, leaves teachers unclear about what kind of conceptual knowledge is appropriate for young children, how to teach it, and what knowledge teachers need themselves to support children's learning.

According to Aggarwal (2009), the soul of effective teaching and learning is a good command of subject matter.

For example, according to Ghazi (2013), Knowledge of subject matter enquires about the value of knowing everything about a subject. If a teacher does not have first-hand knowledge about the subject matter, how will students learn and how will his or her teaching method be the best instructional strategy.

According to Raths (2001) Families also shape children's learning through the cultural and social interactions engaged in during normal daily life. Parents' beliefs are formed from a mix of personal and cultural experiences, including their own experiences of education. Several studies report that parents can be a source of pressure for teachers to deliver a structured, subject-focused curriculum (Marcon, 2002).

Bascia (2014) defines subject matter as teaching all students according to today's standards, teachers need to understand subject matter deeply and flexibly so they can help students create useful cognitive maps, relate one idea to another, and address misconceptions. Jadama (2014) argues that the in- depth knowledge of subject matter which teachers are going to teach makes them able to use various methodologies suited to deliver it.

Teachers need to see how ideas connect across fields and to everyday life. This kind of understanding provides a foundation for subject matter knowledge that enables teachers to make ideas accessible to others.

Harris et al, (2007) elaborate more about knowledge of subject matter by defining it as a prerequisite for effective classroom instruction. A teacher's understanding of subject facts, concepts, principles, methodology, and important generalizations determine his/her

pedagogical thinking and decision making. Teachers can make their content more elaborate by asking the students inquiry based questions, explanations and activities of their own.

Pakistan's professional standards (2009) describe subject matter knowledge as: teachers perception of the main concepts, means of exploration, designs of discipline, particularly as they linked to the national content/curriculum criterion, and formulation of enriching suitable learning experiences making the subject matter approachable and relevant to all learners.

According to Arlington Public Schools (2012), researchers found out from various researches that teachers' subject matter knowledge has great effect which methods are used to deliver lesson and consequently on achievement of students. It makes teachers confident and more loved by students. The less expert teacher cannot satisfy the needs of students learning which makes them ineffective in their profession.

When preschool teachers prematurely expose children to formal reading and writing, children present lower academic success in later years (Elkind, 2007). Understanding how children learn best, one needs to step away from the idea of children mastering skills that are not age appropriate (Walsh 2010). Pressuring children to meet the standards and pressures of a demanding society, prevents them from developing optimally (Heidemann, 2010).

Realising that children learn best through play and that play is what leads to learning forms the starting point from where children can learn and develop appropriately. (Brock, 2003).

#### **2.4 Teachers' Pedagogical Knowledge and Use of Play Pedagogy**

The concept of pedagogical knowledge also tends to be used with the meaning of minimum professional standard, often specified by law, which should raise a person in

fulfilling a particular role of the teaching profession (Gliga, 2002). Teachers' beliefs impact on the curriculum and pedagogy offered to children and mediate between teachers' knowledge and performance (Pajares, 1992). According to Bandura (2005) beliefs are personal, complex, likely to be self-fulfilling and not always internally consistent, most significantly, beliefs are unlikely to change unless they are challenged.

It is assumed that preschool teachers need a number of professional competencies and skills to offer high quality learning opportunities for young children. Thus, professional competencies of Preschool teachers also affect pedagogy. Current theoretical frameworks describing the professional competencies of preschool teachers consider different dimensions to be important, but they generally include: professional knowledge, pedagogical beliefs and orientations, emotional attitudes as well as motivational aspects (Anders, 2010). Pedagogical beliefs and orientations of preschool teachers are discussed as one dimension of quality as well as facets of preschool teachers' competence.

It is widely acknowledged that experiences in early childhood strongly affect human development. Research evidence from longitudinal and neuroscience studies has shown that children's earliest learning experiences are most significant in determining their future progress in education and subsequent success in life (Chi, 2009).

The quality of ECE has a significant and long term influence on their educational performance and life chances (Sylva, 2004). For young children's optimal development, there is need for consistent and responsive caregivers with appropriate pedagogical knowledge within stimulating environments where play materials and other opportunities for interaction are abundant.

Planning is the very first step of teaching and takes place before going to class room. It is important that teachers possess pedagogical knowledge because the quality of teaching



mostly depends upon the quality of planning. For effective planning, teacher should have sound knowledge of national aims, schools goals and curriculum objectives. However Niksolehin (2009), explains that Instructional planning involves preparing for teaching learning activities, developing of general and specific objectives, making clear the instructional strategies and assessment techniques to check whether the objectives have been achieved or not.

If pupils are definite about their learning objective they can easily focus their attention on learning activities. Their efforts get clear direction, if teachers know about their objectives in that case they can use time, course, facilities, resources effectively. Both teachers and students get benefits from instructional planning.

Knight (2012) defines instructional planning as the teacher comprehending the concept of instructional planning, formulating long-term and short –term plans consisting of concepts of content material, curriculum goals, need of society and pupils. The teacher applies an array of suitable strategies in pursuance of endorsing analytical rational, issue resolving and practical skills of all students.

The process of planning is critical and cyclical in its nature. The whole teaching and learning experience is based upon its quality. Teachers plan the play way activities, choose among strategies, implement them in actual classroom setting, assess students' performance and then re-plan to cover the shortcomings or for further improvement.

According to Gardner (2010, pp.41-42) the process of instructional planning involves usually three steps: first, it includes planning of general and specific objectives, selecting of appropriate teaching (play way) material to achieve these objectives, and organize the learning (play way) activities.

The second step includes the teaching of planned instructions in an actual classroom setting. The third step includes assessment of students to know that to what extent the planned objectives have been achieved. All the three steps are linked with each other in sequence. Instructional planning helps teacher in the following ways, teaching at any level requires that students be exposed to some form of simulation.

Ikerionwu, (2000), refers to instructional materials as objects or devices that help the teacher to make learning meaningful to the learners. Instructional materials, which are educational inputs, are of vital importance to the teaching of any subject in the school curriculum.

Wales (2012), opined that the use of instructional materials would make discovered facts glued firmly to the memory of students. A teacher who makes use of appropriate instructional materials to supplement his teaching will help enhance student's innovative and creative thinking as well as help them become enthusiastic (Ekwueme, 2001).

Manipulatives are concrete objects used as tools that allow students to experiment and explore different concepts (Burns 2011). Boggan, (2010) states that manipulatives have been used for many years and from several different civilizations to solve problems that children have encountered every day.

When children employ manipulatives in long-term use during early elementary level, they have greater achievement than students who have not used manipulative (Hamm, 2011). Materials that resemble everyday day items should assist students in making connections between abstract concepts and real world.

## 2.5 Conclusion

The literature reviewed in this chapter shows the role of teachers' competence in children's holistic development as well as relevance of the use of play pedagogy as a teaching method. Various studies on teaching behavior have also been reviewed though documented evidence on what exactly influences pre-primary school teachers' competence on use of play pedagogy as a teaching strategy is inadequate. It is from such a background that the following study sought to find out whether teachers' competence on use of play pedagogy as a teaching strategy is influenced by the teachers' pedagogical knowledge, teachers' knowledge of subject matter, teacher' knowledge of learners, teachers' training level, teachers' experience and availability of play materials. Based on the fact that the learning framework for early childhood development which focuses on the use of child centered teaching strategies. is relatively new in country's education system, there is need to establish teachers' competence and use of play pedagogy.

## **CHAPTER THREE**

### **RESEARCH METHODOLOGY**

#### **3.0 Introduction**

This chapter describes the frame work within which the research was conducted. This chapter presents the research design, study population, sample size and sampling techniques, data collection instruments, validity and reliability of research instruments, procedures, data analysis and ethical considerations.

#### **3.1 Research Design**

The research adopted a descriptive cross-sectional survey design in gathering of information on teachers' competence and use of play pedagogy in nursery schools. The researcher opted for this research design because of its advantages in obtaining data. It is also the simplest and most affordable.

According to Creswell (2013) the design was chosen because it helped the researcher to remove assumptions and replace them with actual data on the specific variables studied during the time period accounted for in the cross-sectional study, and does not require a lot of time, data was captured in the specific given point of time. The findings and outcomes were analyzed to create in-depth research. A correlation research design was also used to establish the relationship between teachers' competence and use of play pedagogy. A correlation research study design was used to collect data that helped to describe in quantitative terms the degree to which variables are related.

#### **3.2 Research methods**

The study utilized both mixed methods in research, 'mixing' of the qualitative and quantitative components within the study (Maudsley, 2011). According to Lathlean (2010),

the quantitative research methods such as tables and graphs which were used in this study utilize objective measurement and statistical analysis of numeric data to understand and explain phenomena.

Qualitative methods on the other hand helped the researcher to understand the problem from the research participants' perspective (Glogowska, 2011). Interviews and Questionnaires were used as qualitative methods. The qualitative approach was used in the presentation of non-numeric data in form of explanations mostly gathered from the interviews.

Triangulation of two approaches was achieved through interviews with key informants to generate both quality and quantity information about the subject under study

### **3.3 Location of the Study**

The study was carried out in twelve (12) nursery schools within 20 parish of Kampala Central Division, such as Civic Centre, Kagugube, Old Kampala, Bukesa, Nakasero, Nakasero III, NakaseroIV, Industrial Area, Nakivubo, Mengo, KisenyiI, Kisenyi II, Kisenyi III, Kamwokya I, Kamwokya II and Kololo.

### **3.4 Study/Target Population**

Orodho (2008) describes study/target population as the population to which a researcher wants to generalize the results of a study. The population of the study included; kindergarten teachers, Head teachers and children in their learning environment in Kampala Central Division. The study specifically involved 327 respondents of whom; 12 (3.7%) were head teachers, 60 (18.3%) were teachers and the children were 255 (78%).

### 3.5 Sample Size and Sampling Techniques

Sakaran (2010) advised that too large a sample size may become a problem and recommended that a minimum number of samples for research should be 30 and maximum 500.

#### 3.5.1 Sample Size

The sample size was determined using the Krejcie and Morgan table of sample size.

The sample size of the study was 327 respondents. This includes 60 teachers, 12 head teachers and 255 pupil and class observation from where the research was carried out. The sample size determination was derived from the sample size calculation which expressed as below equation (Krejcie & Morgan, 1970).

The Krejcie and Morgan's sample size calculation was based on  $p = 0.05$  where the probability of committing type I error is less than 5 % or  $p < 0.05$ .

$$s = \frac{X^2 NP (1-P)}{d^2 (N-1) + X^2 P (1-P)}$$

Where,

$s$  = required sample size.

$X^2$  = the table value of chi-square for 1 degree of freedom at the desired confidence level ( $0.05 = 3.841$ ).

$N$  = the population size.

$P$  = the population proportion (assumed to be 0.50 since this would provide the maximum sample size).

$d$  = the degree of accuracy expressed as proportion (0.05).

**Table 3.1: Showing Population, Sample size and Sampling procedure**

Category of respondents	Population	Sample size	Sampling procedure
<b>Sampling for qualitative data</b>			
Head Teachers	66	12	Purposive sampling
Teachers	647	60	Purposive sampling
<b>Sampling for quantitative data</b>			
Class and pupil observation	782	255	Random sampling (Krejcie and Morgan Table of sample size)
Total	1,495	327	

**Source: KCCA, (2018); Krejcie and Morgan table (1970)**

### **Justification for Sample Population**

The study was carried out in 12 nursery schools which use play as the main methodology to teach children.

This study sampled a total of 12 Head teachers and 60 teachers for baby class, middle class, top class from nursery schools in Kampala central division.

The 12 Head teachers were interviewed because they are the policy supervisors of play pedagogy, they ensure that play way methods are implemented, and they buy the play way materials and distribute them. Head teachers gave information about how teachers use play way methods.

The teachers were interviewed because they are the implementers of play pedagogy. All these categories of respondents are accountable for the extent to which play pedagogy is being used in creating a better learning environment for children in nursery.

### **3.5.2 Sampling Techniques**

The researcher used both random sampling and purposive sampling techniques.

The researcher used random and purposive sampling techniques. Random sampling is a sampling technique by which each individual is chosen randomly and entirely by chance.

The aim of random sampling is to give each individual in the population the same probability

of being chosen for the study (Dattalo, 2010). Random sampling ensured representativeness of each respondent. Random Sampling technique was used to select twelve out of the 66 nursery schools which use play as the main methodology to teach children in Central Division of Kampala.

The sample nursery schools constituted 20% of the total population. According to Gay & Diehl (1992), a minimum of 10% of the target population is enough for descriptive surveys while a sample of 20% may be required for smaller populations.

A purposive sample is a non-probability sample that is selected based on characteristics of a population and the objective of the study. Purposive sampling is also known as judgmental, selective, or subjective sampling (Crossman, 2016). Purposive sampling techniques were employed in selecting respondents of 12 head teachers since each school has only one head Teacher and they were the ones who informed the researcher about the performance over the years about play in the curriculum implemented in the school.

### **3.6 Research Instruments**

The researcher used questionnaire, interview guides and observational check list to obtain information during the research. A research instrument helps in capturing all the necessary information from all categories of respondents.

#### **3.6.1 Structured Questionnaire**

A questionnaire is a document designed with the purpose of seeking specific information from the respondents (Sanson, 2011). The researcher used the measurement of score out of 10 for closed and open-ended questions. Both open and close-ended questions were used to obtain respondents' views and perspectives about the research problem. The questionnaires were used because the information was collected from the respondents in a short period of time and because all respondents can read and write (Bougie, 2010).



### **3.6.2 Interview**

An interview, also called a face-to-face survey, is a method that is utilised to collect oral responses by directly asking individual respondents questions about the study problem. The method is used when a specific target population is involved. The purpose of conducting a personal interview survey was to explore the responses of each individual to gather more and deeper information. Personal interview surveys are used to probe the answers of the respondents (Bordens & Abbott, 2011). The method was chosen because people were more likely to readily answer live questions about a subject than open-ended questions due to the fact that the respondents find it more convenient to give their long answers orally than in writing.

The interview guide has structured questions that helped in the data collection. These are noted to be the best tools for getting first-hand information, views, perceptions, feelings and attitudes of respondents. An informal interview was used to get maximum information from the teachers who participated in the research. The head teachers were also interviewed.

Before conducting interview, appointments were taken from heads of the schools, where the research has took place. The interviews were first recorded using a recorder and then later they were transcribed and then the information was analysed according to the themes. This helped in collecting more accurate data in the research.

### **3.6.3 Observation Check List**

The researcher used a lesson Observation checklist to observe lessons for teachers and pupils from each nursery school. This helped the researcher to experience the teachers using play pedagogy during the teaching and learning process.

Document analysis check list was used to check the quality of planning in using play pedagogy in teaching learning process.

### 3.7 Measurement

The variables of the study were measured on a score out of 10. The choice of this measurement is that each point on the scale carries a numerical score which was used to measure the opinions of respondents and it was the most frequently used summated scale in the study of teachers' competence and use of play pedagogy. From each of the aspect of competences listed below the maximum and minimum scores (Marks) a teacher could get was 10 and 0 respectively.

#### Teachers' Competence

- Using age appropriate language----- /10
- creativity -----/10
- Aga appropriate material -----/10
- Catering all learners needs-----/10
- Class management skill-----/10
- Child centered methods-----/10

#### Use of play pedagogy

- Teaching in traditional methods with chart and chalk and board ---/10
- Teaching with play way method----/10
- Teaching with play way activity---/10
- Teaching with material-----/10

### 3.8 Validity and Reliability

#### 3.8.1 Validity

Validity is the degree to which an instrument measures what it is supposed to measure and does so correctly (Creswell, 2014). According to Zohrabi (2013), validity can be measured by the Content Validity Index (CVI) based on the results obtained for both interviews and questionnaires.

$$\text{Content validity index (CVI)} = \frac{\text{Number of items rated relevant}}{\text{Total Number of Items in the questionnaire}}$$

According to Creswell (2014), the content validity greater than 0.7 means that the research instrument is valid. From the study, the research instrument had 62 items, only 51 were rated relevant to the study, this resulted into a CVI of 0.82. Validity of the instrument was therefore ensured since the validity value computed was 0.82. This means that the instrument was valid because according to Crosswell (2014), CVI which is 0.7 and above means that the instrument is valid for research use.

#### 3.8.2 Reliability

A reliable instrument is one that gives consistent results. A test-retest procedure was used to test for reliability of the questionnaire. The researcher carried out the same study twice, with the same respondents, using the same instruments, at two different times. The questionnaires were administered to the teachers in the selected schools. Two weeks later, the same instruments were re-administered to the same teachers in the same schools to ascertain whether the responses from the items were consistent. Results from the two tests were analysed and comparisons were made.

Cronbach Alpha Coefficient was used to establish the extent to which the content of the questionnaire was consistent in eliciting the same responses when administered at

different times to the same group. Cronbach Alpha is a method of measuring internal consistency (repeatability) based on the average inter-item correlation. Reliability for quantitative data was determined by calculating Cronbach Alpha using SPSS 20.0 (Statistical Package for Social Scientists). The instruments was found valid and above 0.70 (70) after a pilot study. A reliability of 0.70 indicates 70% consistency in the scores that was produced by the instrument (Tavakol & Dennick, 2011), if the alpha coefficient value obtained was 0.7, therefore it is concluded that the research instruments are reliable.

### **3.9 Data Collection Procedure**

The researcher after designing and pre-testing data collection tools obtained an introductory letter from the authorities of Kyambogo University. The researcher then approached the schools for permission to collect data after explaining the purpose of the study. Upon being allowed in school the researcher contacted the teachers to build rapport with them and make appointments.

#### **3.9.1 Primary Data Collection**

The data sources were primary and secondary. Primary data which is first hand data was collected from the respondents using a questionnaire and interviews. Ajayi (2017) indicates that primary data is collected specifically for the research at hand with the purpose of adding to existing knowledge

#### **3.9.2 Secondary Data Collection**

Douglas (2015) defines secondary data as the data that is available, already reported by some other scholars. Secondary data was obtained from various existing documents that included library textbooks, articles, journals, published annual reports, magazines, gazettes and internet search among other relevant literature, all these documents was reviewed in a bid to collect the secondary relevant data as per the study.

### **3.10 Data Processing and Analysis**

The study involved both qualitative and quantitative data. The combined analysis was helpful in that qualitative approach generated details and valid data which contributed to the in-depth understanding of the research problem. The data analysis process involves applying the reasoning method for comprehending and interpreting the data collected by the researcher. The choice of analytical techniques depends on the characteristics of research design and nature of the collected data. The collected data from the respondents were valuable and important because it contained all the relevant information needed to fulfil the objectives of research.

For quantitative research, the researcher performed descriptive statistics and frequency distribution analysis to report the attribute variables and numeric variables associated with demographic data. Descriptive statistics used in this study included mean, frequencies, standard deviations and graphical representations. The selection of tools was done on the basis of objectives of the research work and the nature of respondents. Quantitative data was also analyzed using SPSS software version 20. Data analysis involved both SPSS and Microsoft excel. The researcher got data from SPSS and then transferred it to excel to make the data more meaningful and easier for interpretation. This helped to identify information relevant to the research questions and objectives. In analyzing data qualitatively, the researcher aimed at cross checking the level of use of play pedagogy. It was also of particular interest to compare the trends, patterns and relationship between teachers' competence and use of play pedagogy in nursery school.

Qualitative data was analyzed using content analysis, which is a method concerned with the explanation of the status of some phenomenon at a particular time or its development over a period of time (Wayne, 2010). It is a method that permits researchers to study an observed phenomenon unobtrusively- that is, without being directly involved with people or

situations (Msila &Setlhako, 2013). Raw qualitative data from the field was transcribed, edited and categories developed from it. The categories were coded and cross cutting themes were developed to arrive at patterns that provided meaningful information as guided by (Bogdan & Biklen 2007).

**Obj 1:** To establish the relationship between teacher competence and use of play Pedagogy in Nursery schools. The data analysis was done by using Pearson Product Moment Correlation (PPMC) at 0.1 level of significance.

**Obj 2:** To establish how teachers' use knowledge of learners helps to implement their use of play pedagogy in nursery schools. The data analysis was done through content analysis and data was analysed thematically.

**Obj 3:** To examine teachers' knowledge of their subject matter on use of play pedagogy in teaching in nursery school. The data analysis was done through content analysis and data was analysed thematically.

**Obj 4:** To assess teachers' pedagogical knowledge competence needed to use of play pedagogy in nursery schools. The data analysis was done through content analysis and data was analysed thematically.

### **3.11 Ethical Consideration**

The researcher adhered to the ethics of conducting a research study as guided by Martin Stevens (20 13) in his document called 'Ethical issues in qualitative research'.

All the information gathered from the study respondents was regarded as highly confidential. Appointments were made with the selected respondents to allow them select their own convenient time of participating in the study. Respondents' informed consent was sought well in advance before the study and confidentiality was assured.

This was done through such measures like informing respondents prior that the information they gave shall be strictly used for academic purposes solely and data obtained on private matters was treated as private. The researcher did this by obtaining administrative approval from the head teachers of the schools in the study. The head teachers helped to seek and obtain consent from all study participants including teachers and learners.

Respondents were informed not to indicate their name anywhere and that they had the right to leave the questions unanswered if they didn't wish to offer any response.

## **CHAPTER FOUR**

### **PRESENTATION, DATA ANALYSIS AND INTERPRETATION**

#### **4.0 Introduction**

This chapter is stretches starting with the introduction, followed by demographic data of respondents and descriptive statistics interlinked with qualitative results, it presents, analyses and interprets findings from the study based on the specific objectives and research questions of the study. Teachers' competence and use of play pedagogy in nursery schools: a case of Kampala central division, Uganda presented,

The research intended to establish the relationship between teacher competence and use of play Pedagogy in Nursery schools, to establish how teachers use knowledge of learners to influence their use of play pedagogy in nursery schools, to examine how teachers' knowledge of their subject matter influences use of play pedagogy in teaching in nursery school, to assess teachers' pedagogical knowledge needed to use play pedagogy in nursery schools.

This was the basis of the questions and hypothesis of the research under study which were; How do the teachers use knowledge of learners to influence their use of Play Pedagogy in Nursery schools?, In which ways does teachers' knowledge of their subject matter influence use of play pedagogy in teaching in nursery school?, How does the teachers' pedagogical knowledge help him/her to use play pedagogy in Nursery schools?, There is no statistically significant relationship between teachers' competence and use of play pedagogy respectively at 0.01 level of significance.



## 4.1 Response Rate

In the study, the researcher used the interview guides for Nursery teachers, and head teachers of nursery schools, Questionnaires, lesson and classroom observation check lists were used to collect data. From the instrument, it can be observed that out of 60 questionnaires issued, a total of 60 were returned fully completed, constituting (100%).

**Table 4.1 Response Rate**

Research Instrument	Planned	Received	Percentage (%)
Questionnaires	60	60	100%
lesson & classroom	60	60	100%
Total	60	60	100

**Source: Primary data 2019**

Table 4.1 Response rate obtained from both the questionnaire and interview, and class and lesson observation. From the data capture, a response rate of (100%) was obtained.

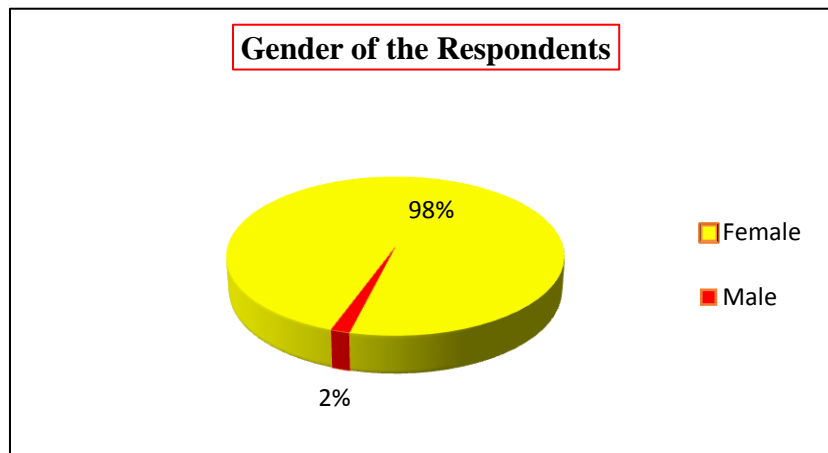
According to Keeter (2012) response rate above 70% is good enough to represent a survey.

## 4.2 Demographic Information

Bio - data findings discussed in this section are based on the responses obtained from the field findings on demographic characteristics of respondents, such as gender, age of respondents, work experience and their education level as reflected in Figure 4.1 to 4.4

### 4.2.1 Gender

The gender of the respondents who participated in the study is presented in the study is presented in figure 4.1

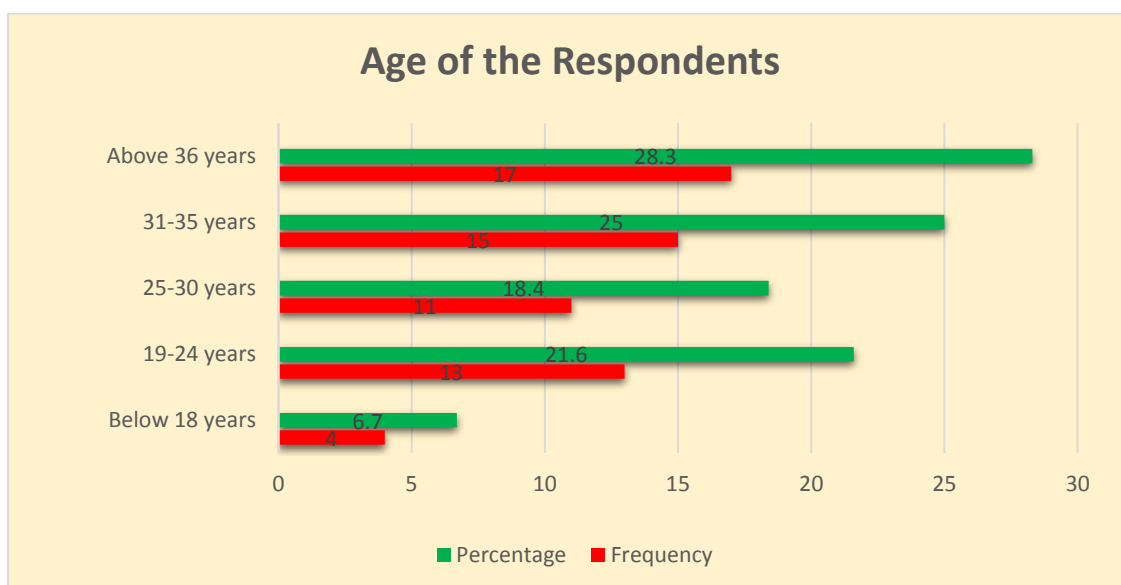
**Figure 4.1 Gender of the respondents**

**Source: Primary Data 2019**

Study findings in figure 4.1 reveal that 98.7 % (59) of the total respondents were female while 3.3% (01) were male. This implies that both male and female respondents participated in the study. However, results indicate that majority of the respondents in the study were female. This shows that teachers in nursery schools are mainly female.

#### 4.2.2 Age of the respondents

The age of the respondents who participated in the study is presented in figure 4.2

**Figure 4.2 Age of respondents**

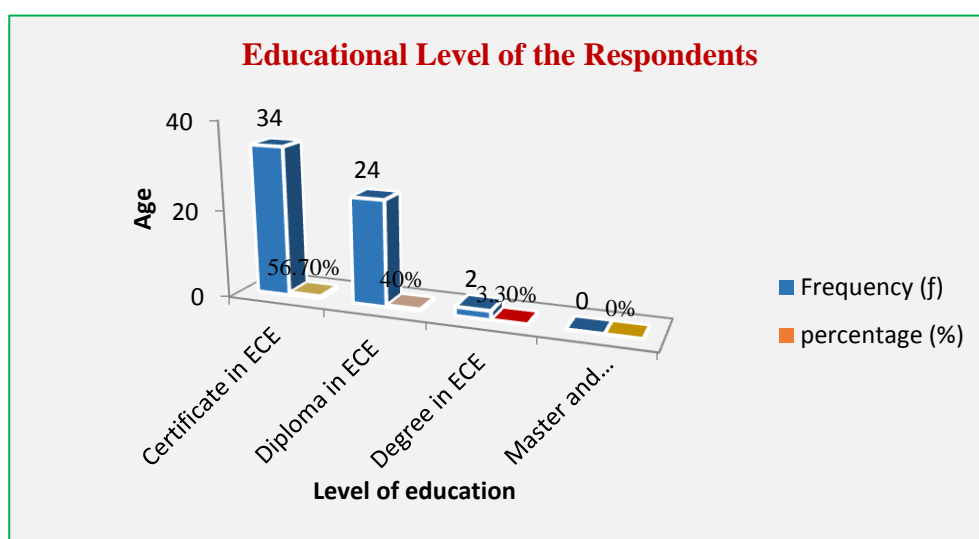
**Source: Primary Data 2019**

The findings in the study indicate that majority of the respondents 17(28.3%) were in the age category of above 36 years. This shows that majority of the respondents were mature and were able to answer the questions asked, four (6.7%) respondents were below the age of 18years. The results showed that majority of the teachers in the nursery teaching profession are mature, a phenomenon which probably influenced use of play pedagogy.

#### 4.2.3 Education level of the respondent

The education level of the respondents who participated in the study is presented figure 4.3

**Figure 4.3 Education level of the respondents**



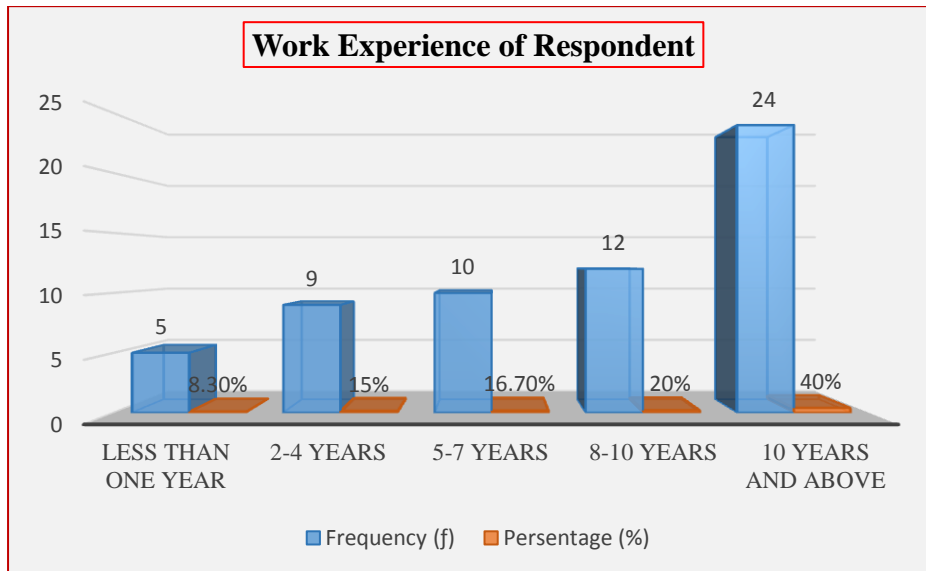
**Source: Primary Data 2019**

The Study findings in figure 4.3 reveal that 56.7% (34) of the total respondents had certificates in early childhood education, 40% (24) had diplomas and 3.3% (2) had bachelor's degrees in ECE. Study findings show that most of the respondents are certificate holders in ECE implying that they need to upgrade and get more knowledge and skill specially in play pedagogy and for further perusing of degrees and masters in ECE.

#### 4.2.4 Working experience with nursery education

Study findings in figure 4.4 shows the working experience of the respondents who participated in the study.

**Figure 4.4 work experience of respondent**



**Source: Primary Data 2019**

The study findings in figure 4.4 reveal that 40% (24) of the total respondents had an experience with nursery education of more than 10 years, while 8.3% (5) had an experience of less than one year. This implies that most of the respondents had enough experience on use of play pedagogy in nursery school.

### 4.3 Findings of the Study

#### 4.3.1 Availability of Play materials

In order for teachers to implement play pedagogy in class room, teacher needs to be play materials to facilitate learning using the play pedagogy. Figure 4.5 to 4.7

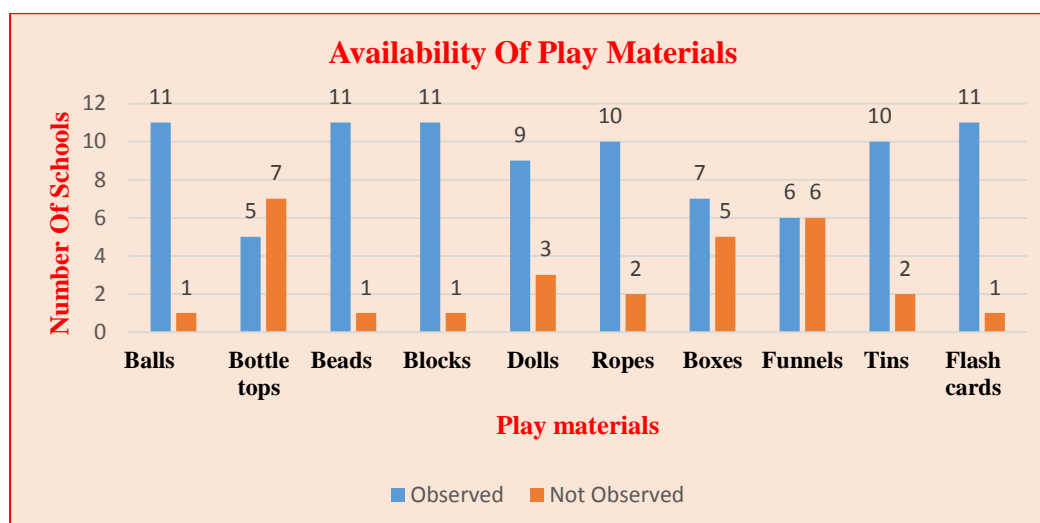
**Table 4.2 Availability of play materials in Nursery Schools**

Play Objects	Observed		Not Observed	
	Frequency	percentage	Frequency	percentage
Balls	10	83.3%	2	16.7%
Bottle tops	11	91.7%	1	8.3%
Beads	5	41.7%	7	58.3%
Blocks	11	91.7%	1	8.3%
Dolls	11	91.7%	1	8.3%
Ropes	9	75%	3	25%
Boxes	10	83.3%	2	16.7%
Funnels	7	58.3%	5	41.7%
Tins	6	50%	6	50%
Flash cards	11	91.7%	1	8.3%

**Source: Primary Data 2019**

The table 4.2.and graph 4.5 show that most schools 10 (83.3.7%) have material, but 2(16.7%) schools did not have. The results also show that teachers in schools make use of local materials like ropes, banana fibers, bottle top, sticks, and paper balls. These material were use partially and give children to play without using them in the teaching process. This was mainly because the teachers revealed that they had limited knowledge about material and do to large number of student.

The results from the table 4.2.are further showcased in the figure 4.5 below:

**Figure 4.5 Shows availability of play material in nursery schools.**

**Source: Primary Data 2019**

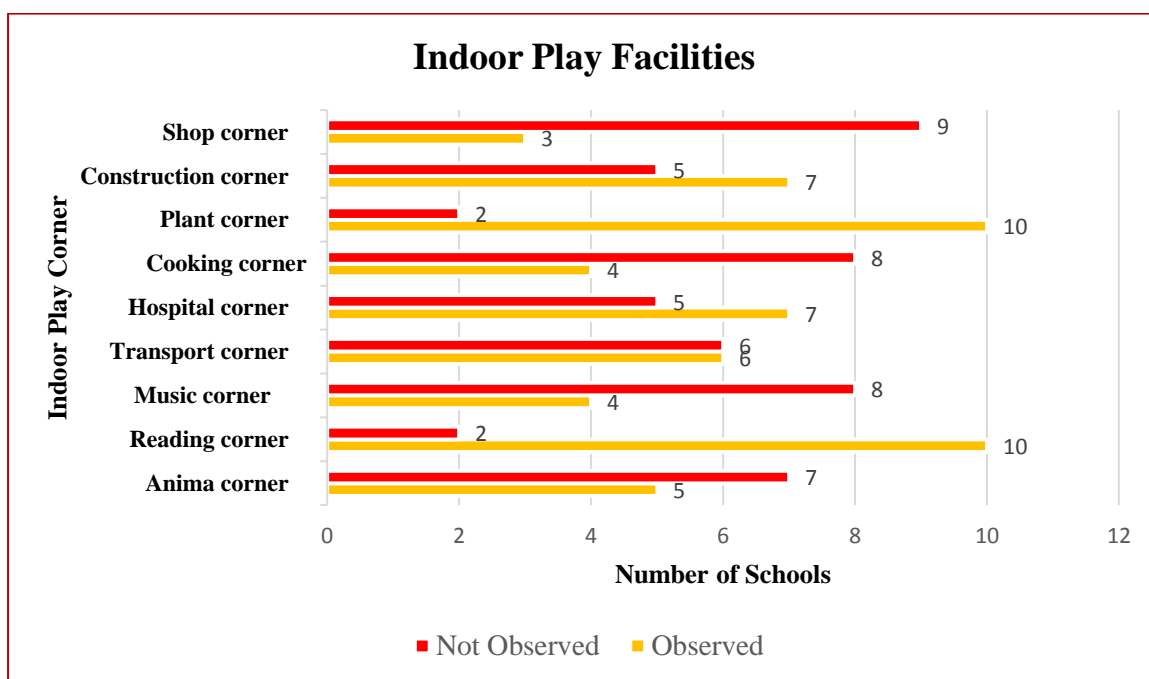
**Table 4.3 Available Indoor Play Facilities in Nursery Schools**

Indoor Play Corners	Observed		Not Observed	
	Frequency	percentage	Frequency	percentage
Anima corner	5	41.7%	7	58.3%
Reading corner	10	83.3%	2	16.7%
Music corner	4	33.3%	8	66.7%
Transport corner	6	50%	6	50%
Hospital corner	7	58.3%	5	41.7%
Cooking corner	4	33.3%	8	66.7%
Plant corner	10	83.3%	2	16.7%
Construction corner	7	58.3%	5	41.7%
Shop corner	3	25%	9	75%

**Source: Primary Data 2019**

Results from the table 4.3 above reveal that among the schools that were observed during the study, 10 (83.3%) had reading corner in the classrooms created by teachers and 2 (16.7%) schools did not have reading corner. Even it was observed that teachers are aver of the importance of this corner in child development. But do too many results, such as pressure from all stakeholder, this teacher are not able to use up to the mark.

The results from the table 4.3 are further showcased in the figure 4.6 below:

**Figure 4.6 Shows available indoor play facilities in nursery schools.**

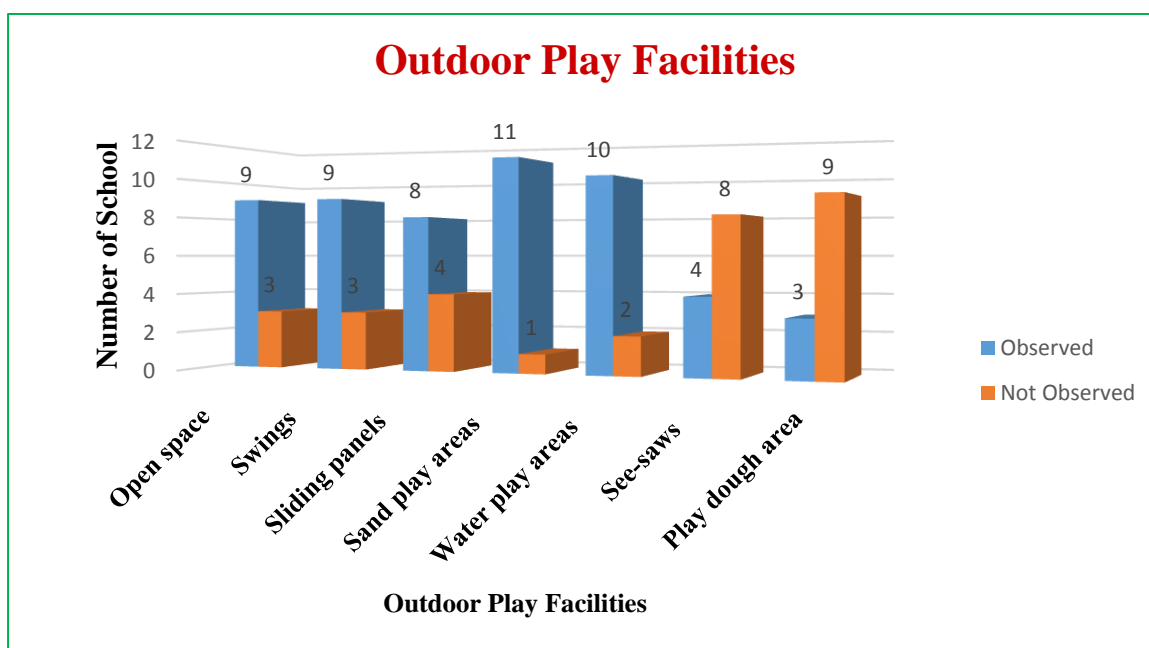
**Source: Primary Data 2019**

**Table 4.4 Available Outdoor Play Facilities in Nursery Schools**

Outdoor Play Facilities	Observed		Not Observed	
	Frequency	percentage	Frequency	percentage
Open space	9	75%	3	25%
Swings	9	75%	3	25%
Sliding panels	8	66.7%	4	33.3%
Sand play areas	11	91.7%	1	8.3%
Water play areas	10	83.3%	2	16.7%
See-saws	4	33.3%	8	66.7%
Play dough area	3	25%	9	75%

**Source: Primary Data 2019**

Results in the table show that Supervised Outdoor play facilities was observed only in 9 (75%) school out of 12 schools and but it was use during free time, but not in teaching the children due to the pressure by both the administration and parents to complete the syllabus. This were made for the purpose of using in learning process and to develop there fine motor, gross motor and physically. But do to pressure of academics children are not allow to use them. The results from the table 4.4 are further showcased in the figure 4.7below:

**Figure 4.7 Shows available outdoor play facilities in nursery schools.**

**Source: Primary Data 2019**

#### 4.4 Objectives of the Study

In this chapter, detailed findings from the field of study on the use of play pedagogy are presented. The findings are presented using Pearson correlation and descriptive statistics based on the specific objectives of the study. Qualitative data is also presented to triangulate with quantitative data referred to above.

The first objective was to establish the relationship between teacher competence and use of play pedagogy in Nursery schools. A hypothesis related to this objective stated that- There is no statistically significant relationship between teachers' competence and use of play pedagogy.

The second objective was to establish how teachers use knowledge of learners to influence their use of play pedagogy in nursery schools which was related to first question of the study- How do the teachers use knowledge of learners to influence their use of Play Pedagogy in Nursery schools?

The third objective was to examine teachers' knowledge of their subject matter influences the use of play pedagogy in teaching in nursery school, which was related to second question of the study- In which ways does teachers' knowledge of their subject matter influence use of play pedagogy in teaching in nursery school?

The fourth objective was to assess teachers' pedagogical knowledge needed to use play pedagogy in nursery schools. Which was related to fourth question of the study- How does the teachers' pedagogical knowledge help him/her to use play pedagogy in Nursery schools?



#### 4.4.1 To establish the relationship between teacher competence and use of play pedagogy in nursery schools

Findings in this section were in responses to the research hypothesis of the first objective which stated that; there is no significant relationship between teachers' competence and use of play pedagogy. Findings regarding this hypothesis are presented in the table 4.5 and figure 4.8

**Table 4.5 Correlation between teachers' competence and use of play pedagogy**

Correlations		Teachercompetence	useofplaypedagogy
Teachercompetence	Pearson Correlation	1	.784**
	Sig. (2-tailed)		.000
	N	60	60
useofplaypedagogy	Pearson Correlation	.784**	1
	Sig. (2-tailed)	.000	
	N	60	60

\*\* . Correlation is significant at the 0.01 level (2-tailed).

Table 4.2 shows that  $r = .784$ ,  $p = 0.000$ . This means that it is a strong correlation between teachers' competence and use of play pedagogy. The correlation is positive; it means that teachers' competence increases the use of play pedagogy increase. The more teachers' are competence the more use of play pedagogy. Since the power value is lower than level of significance, it means that there is a significant relationship between teachers' competence and use of play pedagogy. It did not happen by chance.

Thus the effect of teachers' competence and use of play pedagogy is

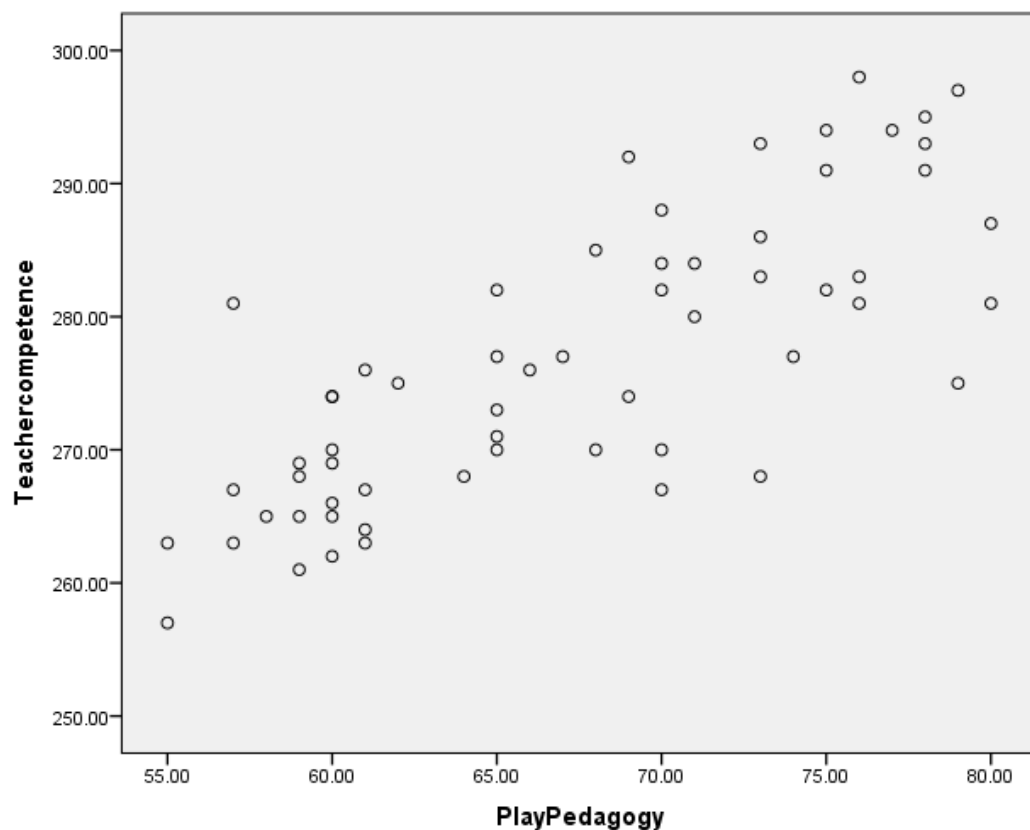
$$(0.784)^2$$

$$0.784 \times 0.784 \times 100 = 61.4$$

It means that teachers' competence contributes (61.4%) to use of play pedagogy while the other (38.6%) is by other factors.

Teachers' competence play important role in using play pedagogy in nursery school, by correlation we can see that 66.9% is contributed by teachers' competence in using play pedagogy in nursery schools. From the observation, therefore we reject the hypothesis, which was state that there is no statistically significant relationship between teachers' competence and use of play pedagogy.

**Figure 4.8 Relationship between Teachers' Competence and Use of play pedagogy in nursery schools.**



In order to show the correlation a scatterplot was drawn. It shows a strong linear relationship between teachers' competence and use of play pedagogy. As teachers' competence increases, the use of play pedagogy also increases.

#### 4.4.2 To establish how Teachers' use knowledge of learners to influence their use of play pedagogy in nursery schools.

Findings in this section are in response to the second research question, how does the teachers' knowledge of learners influence their use of Play Pedagogy in Nursery schools?

Table 4.6 below shows findings on the teachers' knowledge of learners in nursery schools.

**Table 4.6 Teachers' knowledge of learners**

Teachers' knowledge of learners	Observed (f)	%	Not Observed (f)	%
Knowing children by their names	60	100	0	0
Knowing age of the children	60	100	0	0
Know characteristic of learners	55	91.7	5	8.3
Knowing the background of the children	50	83.3	10	16.7
Knowing Developmental milestone	47	78.3	13	21.7
Display of learners work in the class	45	75	15	25
Knowing children attention span	42	70	18	30
Age appropriate activities.	40	66.7	20	33.3
Identifies individual needs and differences	38	63.3	22	36.7
Prepare according learning styles	31	51.7	29	48.3

**Source: primary Data 2019**

Table 4.3 reveals that teachers know children by the name (100%) is the most where teachers know each child. While Prepare according learning styles (51.7%), is the least were teacher are lacking abilities to cater all learners in using play in teaching learning process. This implies that majority of nursery teachers are familiar with knowledge of learners. One of middle classes teacher had this to say;

*"First few days were very difficult for me in the class because I did not know pupils by their name. Knowing pupils by their names helped me to build rapport with pupils and to create positive learning environment where I included play."*

Finding reveals that knowing age of the children is very important. Almost all teachers know their pupils by their age, which eventually helps them in the

preparation of play way activities, play materials and selecting appropriate play way methods. At a certain moment one teacher said:

*“I know the age of my students; this helps me in selecting age appropriate material and activities. For example, I am taking baby class, as we all know they like touching and playing outside with sand and water etc. If I want to teach them about fish; I add some toy fish in water and show them and ask them to touch.”*

Findings also show that knowing characteristics of learners is very important. Many teachers have knowledge about the characteristics of learners and this eventually helps them in fruitful planning, because all children are unique and at the same time they are of same nature. One of the respondents admitted that;

*“When we are preparing for class, we consider the characteristics of our students, these young children have a lot of things in mind, for example they are very curious about things around them, we never stop them from exploring, but we give them materials and activities always in order for them to ask questions such as how, when, why and many more.”*

Findings further reveal that most of the teachers consider and know the background of the children, this helps teachers to prepare for play way lessons and build upon what students know, because children always learn from concrete to abstract, from known to unknown. But few teachers are not considering it important to know children's background. When asked for reasons of their not taking it important to know about background of the children, one of the respondents claimed that:

*“In my class I have so many children and am the only single teacher, so I never consider everyone's background. I generally prepare activities and material for all children regardless of their background.”*

Findings show that many teachers display learners' work in the class, while some teachers are not. It's just black board and walls full of Manila paper decorated by the teacher for using in teaching. One of the top class teachers said;

*"In my class I always display students work like; colouring sheets, number sheets, alphabets tracing, art work and many more. It helps them receive acknowledgement and approval. It helps build their confidence and gives them a stronger motivation. I think this makes them feel valued."*

Findings reveal that many teachers consider children's attention span while preparing for play way lessons. These eventually help them to add more rhymes, songs and warm-up activities which helps teacher to have effective teaching. One of the teacher said:

*"At this crucial age these children do not sit at one place and I always consider when I am planning, so I always take them for play or walk in the compound according to the lesson or use number songs , phonic etc."*

Findings also show that many teachers are developing age appropriate play way activities in teaching learning process, activities are simple guidelines. Some children may not be ready for activities that their same-age peers are, while others will be ready for activities that are suggested for slightly older children. While few teachers just neglect these ideas and just use chalk and board as well as just reading and writing. One of the respondents said;

*"Children age 3 to 6 years in our school enjoy playing with sand and water, colouring, tracing, matching, and many more."*

Findings on preparing according to learning styles is contradictory from the above table, because many teachers are not preparing according to children's interest and ability. It has positive impact on learners' holistic development, if thought in the way they want to

learn. When the researcher inquired why some teachers are against preparing according to learning styles, one of the top class teachers said;

*“It is very difficult from me to cater for all learners’ learning styles, as a single teacher in class of twenty-five children, it is difficult to prepare according to the needs of each learner.”*

One of the baby class teachers said:

*“I all ways give them more time to explore with the limited resources we have, I usually sing songs and rhymes while indoor and outdoor activities, because some children learn by listening, some learn by touching.”*

This is a challenge that needs solution by bringing teachers together in preparing material and other play way activities and play materials. Head teachers should support them by providing materials and training.

Also, according to findings from the above table, teachers should consider each and every thing about learners while preparing play way learning, play develops child holistically and should allow them to explore more.

#### **4.4.3 To examine how Teachers’ knowledge of their subject matter influences use of play pedagogy in teaching in nursery school.**

Findings in this section are in response to the second research question in which ways does teachers’ knowledge of their subject matter influence use of play pedagogy in teaching in nursery school. Table 4.7 below shows findings on the teachers’ knowledge of their subject matter.

**Table 4.7 Teachers' Knowledge of subject matter**

Teachers' Knowledge subject matter	Observed (f)	%	Not Observed (f)	%
Knowledge of learning framework	57	95	3	5
Mastery over subject	55	91.7	5	8.3
Knowledge of themes and topics taught in nursery	52	83.7	8	13.3
Knowledge of core competence learners learn through play	50	83.3	10	16.7
Know the importance of indoor and outdoor play	47	58.3	15	41.7
Know to prepare different types of materials according to subject.	46	78.3	14	23.7
Knowledge about play way methods used related to different subject	43	71.7	17	28.3
Knowledge about play activities	40	66.7	20	33.3
Knowledge about play material	35	58.3	25	41.7
Creative in teaching subjects	33	55	27	45

**Source: primary data 2019**

Table 4.7 reveals that (95%) teachers have knowledge about the Learning Framework of early childhood. This implies that majority of nursery teachers are familiar with learning framework. Findings are in support of many teachers having knowledge of learning framework, but as the researcher was collecting data, some teachers were not able to interpret the learning framework. One of the teachers said that

*"We have two copies of the learning framework and it is difficult to read as all teachers need it at the same time. We know that it has activities for children but we are not sure of how to use it well for play pedagogy"*

The researcher came across words by another teacher:

*"For me it's difficult to interpret the learning framework, to make play materials and to select play activities according to topic I want to teach."*

Findings also show that nursery teachers have mastery over subject matter they are teaching in nursery schools. This helps them in teaching all competences

effectively. These findings are similar to those of Arshad (2007) who found out that the competent teacher is he who has in depth knowledge of subject matter. Teachers are well equipped with jolly phonics and other basic numeracy knowledge and others. One of the baby class teachers said:

*“We teachers use song and colouring sheets of jolly phonics to make children learn about the sounds, but we have failed to use play for these competences”*

Another teacher of middle class said:

*“We use flash cards, blocks and bottle covers to teach children numeracy concepts. We all ways use concept of concrete to abstract in form of play.”*

Finding shows that teachers have knowledge of themes and topics that they should teach in baby class, middle class and top classes. Even many teachers know about the core competency they are teaching to children at nursery school. At a certain moment one teacher said:

*“We teach children about the body and how to take care of body parts and uses of it, by activities for example: when we are teaching about touch, we use different materials of different textures, like soft, hard, hot and cold and many more.”*

Another teacher said:

*“As teachers we even include values that children learn at this young age, which stay for lifelong, such as sharing, caring about the environment, helping others etc. by using play pedagogy.”*

Findings reveal that teachers know the importance of indoor and outdoor play to children in nursery school. Outdoor play is as important as indoor play. Space, fresh



air, freedom and time are essential for children's emotional, social and personal well-being. Outdoor play is vital because: It enables children to become independent learners, it allows them to explore their environment, develop muscle strength and coordination, and gain self-confidence. One middle class teacher said:

*“We teach children about taking care of themselves and about the sense organs and their uses in the class. We allow children to explore in the open place outside the class and also they play with climbing, swinging other materials outdoor.”*

Findings show that many teachers have knowledge of instructional materials and know how to prepare different type of materials according to topic and themes they teach in the nursery school. The researcher observed that classrooms had beautiful manila, sketches with numbers, alphabets, body parts and many more, but teachers also face challenges with lack of raw materials that they need for preparing hands on teaching aids. During one of the conversions with a top class teacher, she said:

*“We only get manila sheets to prepare instructional material and if we demand for other material, management says that they are not in the budget.”*

Another respondent said:

*“It is just a waste of time to prepare instructional material as it is time consuming, when we have to also do other work.”*

Findings also show that teachers lack creativity in teaching subjects matter through using play way methods, play way activities and play materials. While teachers lack creativity in teaching, only few of the teachers are lacking abilities to teach using play in teaching learning process. When asked, one of the head teachers said:

*“My teachers still have a challenge in designing practical learning activities, but they design very good written activities. Some teachers lack the competences of effectively selecting appropriate activities yet it is being emphasized in the learning framework.”*

Teachers are using more of chalk and board or we can say using traditional methods. When the researcher inquired about it, teachers said that:

*“We are bound by the management and parents, they want schools with toppers in even nursery school, they just want children to read and write”*

More so, from the findings in the table above, teachers’ know how to teach subject matter by using play pedagogy, but they are bound by the stakeholders of the schools. Where they want children to read and write and advertise the school. On other hand parents also want they children to have rote learning not practical way of learning.

#### **4.4.4 To assess teachers’ pedagogical knowledge needed to use play pedagogy in nursery schools.**

Findings in this section are in response to the third research question, how does the teachers’ pedagogical knowledge help him/her to use play pedagogy in Nursery schools? Table 4.8 below shows findings on the teachers’ pedagogical knowledge to help him/her to use play pedagogy in nursery schools.

**Table 4.8 Teachers’ pedagogical knowledge that helps him/her to use play pedagogy in nursery schools.**

Teachers’ Pedagogical knowledge	Observed (f)	%	Not Observed (f)	%
Develops instructional material	55	91.7	5	8.3
Develop schemes of work	50	83.3	10	16.7
Teacher equally participates with the pupil, monitors them, use age appropriate language and take care of their safety in play way learning	48	80	12	20
Using different play methods in teaching	45	75	15	25
Uses continuous assessment through play	44	73.3	16	26.7
Demonstrates variety of teaching skills	42	70	15	25
Using play for reinforcement of already taught concepts	41	68.3	19	31.7
Do teachers reflect after each class	37	61.7	23	38.3
Develop lesson plans	31	58.3	29	41.7
Uses Learner centred Methods in teaching	25	41.7	35	58.3

**Source: Primary Data 2019**

Table 4.5 reveals that developing instructional material is the most (91.7%) pedagogical knowledge that teachers were using. While use of learner centred method during teaching (41.7%), is the least teacher use in teaching. This implies that majority of nursery teachers have skill to develop instructional material and use it in play way teaching and learning.

One baby class teacher said;

*“Yes, I prepare instructional material with limited resources, these materials help me to teach pupils by giving them hands on experience.”*

Findings reveal that, teachers have put in many efforts to support each other on material development, but there are other factors that are acting as barriers towards the achieving of their goals such as head teachers’ failure to provide material except the Manila paper and A4 size papers.

Words by one of the Head teachers were;

*“We lack resources and it is difficult to cater for teachers’ needs of developing instructional material.”*

Findings above show that majority of the nursery teachers had schemes of work with the correct format. However, respondents complained that schemes of work are too wide, that they write a lot which is time consuming. Regardless of all this, majority of the teachers possessed ten weeks schemes of work. A teacher said that;

*“For me I cannot teach without a scheme of work, it is difficult to break content into themes and into topic without it, I may end up teaching irrelevant content to my learners.”*

Findings on lesson planning, results are contradictory to the findings on lesson planning. Teachers complain that, lesson plans are too wide, that one lesson plan can cover three full scarps which is a very heavy load for them. As a result of this, most teachers are irregular in making lesson plans. When the researcher inquired for reasons of their irregularities in lesson planning some respondents answered that;

*“As you know there are so many children in one class with one teacher, where by you have to do everything including working upon a positive classroom environment, on top of this, learning areas are many so writing a lesson plan for every learning area is not possible.”*

Findings also show that most nursery teachers support and assess learners continuously through play. Some teachers even need help on how to determine the competencies pupils learn while playing and to fill in the report cards of the term. One of the respondents said that;

*“I always observe my students when they are participating in indoor activities or outdoor activities, when they are manipulating materials, which helps me in continuous recording of their development and the competencies they learn”*

Study findings further show that many teachers equally participate with the pupils in teaching and even scaffold them when ever needed. The researcher also observed that teachers always monitor the learners and take care of their safety while playing with indoor or outdoor materials, use age appropriate language and motivates them to play in groups or pairs. These activities further help children to develop holistically. Words by a middle class teacher:

*“At this tender age they need love, care and motivation to have effective learning, this eventually helps learners to participate in all class activities happily.”*

Findings further show that most teachers use different play methods and activities in teaching, such as singing songs, role play, dramas, fieldtrips which eventually give children practical learning. But still few teachers are not using play activities in teaching learning process. One respondent said;

*“Play actively involves almost all learners in learning process and play way or practical learning promotes imagination and innovation among learners and they happily participate in learning”*

On the other hand, further findings reveal shocking results showing that only few teachers use student centred methods in teaching in nursery schools. In this modern era, most of the teachers are still using traditional methods, when the researcher inquired for reasons of their not teaching using student centred methods, some respondents answered that:

*“We are forced to use traditional methods, for lack of resources, pressure from management and even from parents, when they send children to school, they only want children to learn how to read and write nothing else.”*

Another teacher said:

*“If we don’t make them write in books and send homework to these little children for one day, the next day parents come and complain. But as teachers we know that children’s fine motors are still developing so we should allow them to play and manipulate with material, but we are helpless with because of the system.”*

According to the findings in the table above, it is important that teachers have good command over pedagogical knowledge related to use of play pedagogy in nursery school, however there are few challenges face by teacher in giving play way and hands on learning.

## **CHAPTER FIVE**

### **DISCUSSIONS, CONCLUSIONS AND RECOMMENDATIONS**

#### **5.0 Introduction**

This chapter presents the study discussions, conclusions and recommendations drawn from the study findings. The purpose of this study was to assess the impact of teachers' competence on use of play pedagogy in nursery schools in Kampala Central division.

#### **5.1 Discussions**

##### **5.1.1 To establish the relationship between teacher competence and use of play Pedagogy in Nursery schools.**

With regards to the first objective, findings reveal that, there is a statistically significant relationship between teachers' competence and use of play pedagogy in nursery schools with a strong correlation. This view is in line with (Anning & Edwards, 2005) who indicate that Children benefit from teaching embedded in experiences that are meaningful to them such as play, teachers' participation in children's play and learning forms windows of opportunity to engage children in knowledge construction. Mendro (2010) also confirms these findings when he says that if students have a high-performing teacher, they will enjoy the advantage of that good teaching in all they life.

The contribution of teachers' competence towards use of play pedagogy is 66.9%, the rest 33.1% is contributed by other factors such as involvement of parents, school administration and availability of play materials. Teachers' competence comprises of teachers' knowledge of subject matter, knowledge of learners and pedagogical knowledge. It is important for teacher to possess this competence for effective use of play pedagogy in nursery school. This is in agreement with Tope (2012) who says that teacher competence is

the ability of a teacher to use professional standards efficiently to help, guide and counsel his/her students so that they can get good achievement.

The contribution of teachers' competence on the use of play pedagogy is important because play develops child holistically. In line with the study findings, Wyver (2008) discusses that within the early childhood field, play pedagogy has long been acknowledged as an important context for children's learning and development. The findings are further supported by Ng'asike (2004) who purports that teachers in pre-primary schools should focus on investing in play as an appropriate and natural opportunity to reinforce and introduce new concepts to children.

### **5.1.2 Teachers' knowledge of learners influences their use of play pedagogy in nursery schools.**

With regard to research the second objective, findings reveal that teachers have good knowledge about learners, such as 100% teachers know children by their names, age, and 91.7% know characteristic children, and 83.3% teachers consider background of the children when preparing play based learning, while 47% teachers know the importance of developmental milestones. The rest just ignore their responsibilities in the classroom. This finding is in disagreement Copple & Bredekamp's (2009) that discovered that young children are always playful and their level of activity is very high, so it is upon teachers to turn the high level of activity into effective learning.

Teachers in nursery schools display children's work which makes them feel important and valued. This view agrees with that of Marlynn (2010) who agreed that displaying student work sends several important messages. A teacher should value what students do, this is reflected by the results that show that teachers were displaying their students' work. Students will look at their own work more frequently than they will look at commercial materials. It is therefore the role of teachers to help children reflect their work and also get motivated.



When it comes to teachers identifying individual needs and differences when preparing for play way learning, there is no emphasis in this area. It was discovered that children in nursery schools have different learning styles which were not catered for. Findings show that preparing according to learning style is very important and it is not only held academically, but overall development. This finding agrees with that of Ng'asike (2004) who found out every student has his own learning style, and he/she learns better in various circumstances with various styles and from various people.

Cegielski (2012) highlights that matching the teachers teaching methods to the students learning preferences will allow the students to acquire a better understanding of the subject matter in question. Another study by Kinuthia (2009) reveals that the teachers who plan lessons by considering students' needs, cultural values, and global demands to make their lesson actionable and understandable get success in delivering content material.

### **5.1.3 Teachers' knowledge of their subject matter influences use of play pedagogy in teaching in nursery school.**

With regard to the third research objective, Findings reveal that 95% of teachers know about the learning framework of ECD. In consensus, Brooke (2013) highlighted that when learning materials like teachers' guides and textbooks are available, teachers can effectively do their best to deliver knowledge to the learners.

However when it comes to implementing, teachers say that it is difficult to for them to interpret. These findings were contrary to that of Bandura, (2005) who stated that in relation to confidence in Content Knowledge, early childhood teachers should be able to read and understand the content material of what they are supposed to teach. Therefore teachers end up teaching what seems to be simple to them, leaving out some key competences' that children ought to acquire early in life.

But when it comes to mastery of subject matter it is observed that teachers know the topics and themes by using play supposed to be taught in nursery school. In other words these findings are in agreement with Harris (2007) who elaborates that knowledge of subject matter is a prerequisite for effective classroom instruction. A teacher's understanding of subject facts, concepts, principles, methodology, and important generalizations determine his/her pedagogical thinking and decision making.

However study findings showed that teachers still forget about the importance of ECD learning and they still use the same academic drilling. Finding also shows that (46%) teacher know the importance of play way methods, play way activities and play materials, but still the irrelevant methods are lingering. This view is also in line with Erwin (2004) who indicates that children benefit from teaching embedded in experiences that are meaningful to them such as play, teachers' participation in children's play and learning forms windows of opportunity to engage children in knowledge construction.

The study showed that teachers lack creativity in blending of play and subject matter. This finding is in disagreement with that of Bascia (2014) who found out that subject matter is when teachers teach all students according to today's standards, teachers need to understand subject matter deeply and be flexible. Further, Cullen (2003) highlights that purposeful teaching and learning occurs when teachers' subject knowledge contributes to appropriate pedagogical strategies used during authentic learning experiences as children try to make sense of their experiences with the people, places and things in the world around them. Findings implied that if teachers are to effectively teach the young children, they should create more play way learning activities that suit the learners' activity levels and should conduct learner centered lessons.

The findings show that teachers are not creative in teaching their subject and lack enough knowledge about play materials. Teachers should be self-learners by researching about different ideas on Google and other relative online materials. Lin, Gorrell and Silvern (2011) argued that an effective teacher should have in-depth knowledge of the concepts to develop in children in order to extend children's learning in a wide range of contexts. This will help the teachers to have in depth knowledge about different concepts and material development.

#### **5.1.4 To assess teachers' pedagogical knowledge needed on use of play pedagogy in nursery schools.**

With regards to the fourth research objective, findings reveal that 91.7% teachers know how to develop instructional materials which is key to successful teaching. Instructional materials advocate for childrens involvement in the teaching and learning process. This is in agreement with Flottman, McKernan and Tayler (2008) who say that early childhood teachers should provide the best support for childrens learning and development.

The study showed that even 83.3% teachers are well equipped with developing schemes of work, In line with study findings, New (2008) highlights that schemes of work show the availability of both pedagogical content knowledge and content knowledge which are key competences to be possessed by any teachers who is competent at his or her work. Since most teachers have the basics of developing a scheme of the work, this implies that they are in better position to plan for play way activities. Naz (2016) pointed out that the process of planning is critical and cyclical in its nature. The whole teaching and learning experience is based upon its quality. Teachers plan the play way activities, choose among strategies, implement them in actual classroom setting, assess students' performance and then re-plan to cover the shortcomings or for further improvement.

While study shows that 73.3% of teachers believe in continuous assessment through play, some teachers needed help on how to determine the competences children learn while playing. This is in agreement with Snow & Van Hemel (2008) who agree that doing assessment well is difficult, and designing assessment systems that serve the purpose of ensuring optimal outcomes for young children requires the investment of time, money, and considerable expertise.

The researcher observed that 41.7% of teachers use learner centered methods to teach children, this was a low percentage compared to the overall number of teachers. This agrees with Vavrus, Thomas & Bartlett's (2011) findings in several Sub Saharan African countries that showed that some schools do not consider teachers' useful concerns on child-centred method and favourable conditions of teaching.

## **5.2 Conclusion**

### **5.2.1 Relationship between teacher competence and use of play Pedagogy in Nursery schools.**

With regards to the hypothesis of the first objective, the result shows that there is a statistically significant relationship between teachers' competence and use of play pedagogy in nursery schools.

### **5.2.2 Teachers' knowledge of learners influences their use of play pedagogy in nursery schools.**

With regards to research question one, study finding show that teachers have basic information on learners, but when it comes to learning style, developmental milestones and preparing age appropriate methods and materials in teaching learning process. Teachers face challenges of lack of scholastic resources and there is even lack of support from management of the school, other stockholders in the school and pressure from parents.

### **5.2.3 Teachers' knowledge of their subject matter influences use of play pedagogy in teaching in nursery school.**

With regard to research question two, results show that teachers have knowledge about learning framework and its importance in teaching learning process, teachers find challenges in identifying and designing age related activities for learners and in using practical activities or hands on experience for children in class. This is because teachers lack full support of management and parents in regards to material development.

### **5.2.4 Teachers' pedagogical knowledge needed on use of play pedagogy in nursery schools.**

With regards to the third research question, results showed that most of the teachers have knowledge of planning for activity based teaching and learning, Teachers find the learning framework hard to use therefore schools should try to organise refresher courses for the teachers on the use of play pedagogy using the LFW. It was also found that there is minimal use of play pedagogy in nursery school; still unwanted content lingers in nursery school. Teachers lack motivation from management and other stakeholders.

## **5.4 Recommendations**

The following are some of the recommendations that the researcher came up with in regard to the gaps identified during the discussion.

Based on the findings of the study, the researcher was of the view that hindrances to teachers' competency to use play pedagogy could be addressed by ensuring all the concerned stakeholders do the following:

### **5.4.1 Ministry of Education and Sports**

MoES should ensure that teacher colleges stepped up and maintain the standards of quality training of ECD teachers to emphasize key competences such as interpreting using

play, designing developmentally appropriate activities and developing appropriate plans to teach nursery children.

MoES should monitor schools to see that they use LFW

Organize for relevant in-service programs for all teachers and head teachers in Pre-primary schools where they can be equipped with the key competences of interpreting and designing developmentally appropriate activities for children, planning comprehensively, following plans in using play pedagogy. This will build the Pre-primary teachers' capacity to implement and use play based or activities based teaching.

Government should allocate loans to teachers so as to enable them to obtain adequate knowledge of the various ECE courses they are pursuing or they want to.

MoES should partner with NGOs and other stockholders to provide scholastic material to nursery schools.

Parents should be empowered through Parent Education programs at school and national levels so that they can utilize and understand the importance of play based learning and its effect on children holistic development

#### **5.4.2 National Curriculum Development Centre**

Curriculum planners should develop the curriculum to an extent that teachers are enabled to better shape student's cognitive, physical, social and affective domains of students on different subjects while using play pedagogy.

NCDC should provide instructional material to school at minimal price, which will benefit the school and teachers to be more resource full, eventually it will help in using play pedagogy in teaching learning process.

I recommend particularly to both NCDC to provide continuous subject knowledge training to their teachers (each teacher should receive such training once in a year or once in every two years).

#### **5.4.3 Directorate of Educational Standards**

Efforts should be made by the Directorate of Educational Standards division in its supervisory, monitoring and inspection jurisdiction, to ensure that all teachers effectively implement learning frame work and activity based learning.

#### **5.4.4 ECD Teacher Training Institutions**

Training Institutions should equip the trainees with training in play as they want them to teach in school when they go out in field not teaching in the same traditional method.

TTI should teach trainees to make instructional material which allows them to give hands on experience.

#### **5.4.5 The Head teachers and school management**

To improve the use of play pedagogy in teaching process, the following recommendations were made to the head teachers and school managers:

School managers and head teachers should cultivate a conducive social environment that could promote and motivate teachers' behaviour to embrace the use of play pedagogy in teaching strategy.

School managements have a role to play in ensuring that teachers teach children as prescribed by the Uganda ECE guideline. Regular monitoring of teaching methods should be done to ensure that teaching and learning is as playful as possible.

School managements should have ways in place to orient inexperienced teachers with the child- centered teaching methods especially the use of play in teaching.

School managements should arrange teachers - parents meeting to let them know that the ECE teaching and learning ought to be as child centered as possible and that, the use of play as a teaching strategy is crucial as it enhances smooth academic progress for children.

Nursery schools management should allow teachers to teach children appropriately.  
Head Teachers should train teachers to use play pedagogy

School managements should consider their prime role in improvising teaching and learning materials from their immediate environments by making sure that the equipment/tools that teachers can use for improvising play materials are within teachers reach.

#### **5.4.6 Teachers**

Teachers should be active and creative in the use of play. This is based on the fact that the use of play pedagogy in teaching helps to simplify instruction, revision, summarizes concepts and captures children's attention. In this regard, teachers should be aware that play is the elementary activity any child does; hence the creative use of this intrinsic behaviour which is naturally embedded in children improves both teaching and learning activities.

Teachers should be able to use subject matter in play based and activities based learning to enable students to contribute effectively in teaching.

Teachers should endeavour to learn subject matter thoroughly so that they are able to use play pedagogy to enable their students to effectively engage in learning.

Knowledge of subject matter should be made a priority in teaching for baby, middle, top class in nursery schools.



### **5.5 Recommendations for further research**

The study findings were limited to Kampala Central Division, Uganda thus studies on the same topic could be conducted in other sub-counties in urban and rural areas to establish the use of play pedagogy in teaching. Since the study findings cannot be generalized to the entire country.

There is a need to conduct studies on improvising and accessibility of play resources. Such studies will help to establish the nature and trend of availability of play materials and facilities, and the manner and degree in which they are utilized.

A study needs to be undertaken to find out the reason behind the discrepancies in the availability of play materials and facilities between public and private schools.

Further studies can also focus on determining whether teachers' remuneration affects their teaching behaviour.

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## APPENDIX

### Questionnaire for Teacher

#### SECTION A

Dear respondent,

I am a student at Kyambogo University, undertaking studies leading to the award of a Master Degree in Education-Early Childhood Development. I am currently conducting a research study in partial fulfilment of the requirement for this award. Therefore, you are kindly requested to respond to this questionnaire by appropriate responses. The information you provide will be strictly used for academic purpose and treated with utmost confidentiality. Your cooperation is highly appreciated.

Please tick (✓) where most appropriate or fill in the information where necessary

**1. Gender:** Female ☐ Male ☐

**2. Age:**

a) Below 18 years ☐ b) 19-24 years ☐ c) 25-30 years ☐ d) 31-36 years ☐  
e) above 36 years ☐

**3. What is your designation?**

a) Classroom teacher ☐ b) Assistant class teacher ☐ c) trainee ☐

**4. Years of service**

a) Less than one year ☐ b) 2 – 4 years ☐ c) 5-7 years ☐ d) 8-10 years ☐  
e) 10 years and above ☐

**5. What is your level of education in ECE?**

a) Certificate in ECD ☐ b) Diploma in ECD ☐ c) Degree in ECD ☐  
d) Masters in ECD and above ☐

If any other please specify \_\_\_\_\_

**6. What is the age of the pupils in your class?**

3-4 years ☐ b) 4-5 years ☐ c) 5-6 year ☐

**7. How many pupils are in your class?**

No. of student \_\_\_\_\_

**Please indicate with (a tick -√) where is appropriate. All ways = A Rarely = R**

	<b>Teachers Use of play</b>	<b>Responses tick(√)</b>	
		<b>All ways</b>	<b>Rarely</b>
1.	How frequently do you use play in teaching process		
2.	How frequently do you use play for reinforcement of already taught concepts?		
3.	How frequently do you use indoor play corners to help children master the newly taught concepts?		
4.	How frequently do you use songs, music and drama to enhance learning and to facilitate teaching?		
5.	How frequently do you extend children's free outdoor play to help them learn different themes?		
6.	How frequently do you use materials available in teaching and learning activities?		
7.	Does the school provide play materials?		
8.	Does the school environment encourage use of play as a teaching strategy?		

**9. What are the challenges you face while using play way methods?**


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**10. What are the challenges you face while making instructional materials?**


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**Thank You for Your Co-operation**

## **APPENDIX B**

### **Interview Guide for Teachers**

#### **SECTION A**

**To establish the relationship between teacher competence and use of play pedagogy in nursery schools**

1. Do you prepare lesson plan regularly?
2. What do you know about play pedagogy?
3. Why play way teaching and learning is important for children?
4. What are some challenges you face while using play pedagogy in teaching?
5. How do school support you in using play pedagogy in class?
6. How often do you prepare instructional material?
7. What are the challenges you face while managing the class?

#### **SECTION B**

**To establish how teachers' knowledge of learners influence their use of play pedagogy in nursery schools.**

1. Why should teachers prepare according to learners level?
2. Which types of materials are required to develop learners physically, mentally, emotionally through play pedagogy?
3. What kind of play supports children`s learning and development?
4. Do you take safety of the children as they manipulate the different materials?
5. Do you know children learn differently and in different ways?
6. Why it is important to assess child growth and development?

## **SECTION C**

**To examine teachers' knowledge the subject on use of play pedagogy in teaching in nursery school**

1. Which curriculum do you follow in the school?
2. What do you know about play pedagogy?
3. How does play pedagogy help in learning?
4. Are play materials useful in teaching learning?
5. What are the different play methods you should use in classroom?
6. Do your class have play corners?

## **SECTION D**

**To asses teachers' pedagogical knowledge needed on use of play pedagogy in nursery schools?**

1. Which type of methods do you use while teaching?
2. How do play way methods help children to learn?
3. Which type of assessment do you use for assessing the pupils?
4. How do you encourage you pupils to participate in class?
5. How play help children to develop?
6. Do you prepare paly way materials by yourself or school provide?
7. What are the challenges do you face while using play way teaching?
8. How do you cater individual needs of the students?

## APPENDIX C

### Questionnaire for Head Teacher

Dear respondent,

I am a student at Kyambogo University, undertaking studies leading to the award of a Master Degree in Education-Early Childhood Development. I am currently conducting a research study in partial fulfilment of the requirement for this award. Therefore, you are kindly requested to respond to this questionnaire by appropriate responses. The information you provide will be strictly used for academic purpose and treated with utmost confidentiality. Your cooperation is highly appreciated.

#### SECTION A

Please tick (✓) where most appropriate or fill in the information where necessary.

#### Demographic Information

1. Gender: Female ☐ Male ☐
2. Age : 20-30 years ☐ 31-40years ☐ 41-50 years ☐ Above 50 years ☐
3. What is your designation?
  - a) Head Teacher (HT) ☐ D) Deputy Head Teacher (DHT) ☐
4. Years of service
  - a) 1 – 5 years ☐ (b) 6 – 10 years ☐ c) 11 - 20years ☐ d) 21 and above ☐
5. What is your Level of Education?
  - a) Certificate ☐ b) Diploma ☐ c) Degree ☐ d) Masters and above ☐
6. What is pupil teacher ratio in your school?

Class	No of teachers	No of student
Baby class		
Middle class		
Top class		

7. In which way do you help your teachers to perform better?

a) \_\_\_\_\_

b) \_\_\_\_\_

c) \_\_\_\_\_

8. Does your school conduct PD (professional Development) session for teachers to use play pedagogy in class?

### **SECTION B**

1. Is it important for Teachers to use play pedagogy?

2. How is it important?

3. Does failure to use play pedagogy have any impact on learning?

### **SECTION C**

1. Do the teachers use competence based approaches or subject based?

2. How often do teachers assess the learners?

3. Is there evidence of tracking learners performance?

### **SECTION D**

1. Do the nursery teachers use play pedagogy to teach the children?

2. Which other methods are teachers using?

3. How often do you provide them support as they teach?

4. How often do you check their preparation books?



## APPENDIX D

### OBSERVATION CHECKLIST (CLASS ROOM AND LESSON OBSERVATION PROTOCOL)

Use of Play Pedagogy	Responses	
	observed	Not observed
Prepares Instructional material/play materials		
Uses a variety of play way methods		
Prepare material and activities according to individual needs		
Uses a variety of instructional materials		
Interprets and teaches following the learning framework activities, material and methods		
Monitoring children while playing and taking care of their safety		
Allow the children choice, manipulate material according to the interest.		
Is teacher part of children play		
Scaffold the children when ever needed		
Availability of Play Materials, indoor/outdoor play material		

#### Availability of play materials

Do teachers have the following play objects?	observed	Not observed
Balls		
Bottle tops		
Seeds		
Blocks		
Scoops		
Ropes		
Boxes		
Funnels		
Tins		
Flash cards		

## Available Indoor Play Facilities.

Do classroom has following indoor play corners?	<b>observed</b>	<b>Not observed</b>
Anima corner		
Reading corner		
Music corner		
Transport corner		
Hospital corner		
Cooking corner		
Plant corner		
Construction corner		
Shop corner		

## Available Outdoor Play Facilities

Do school have following outdoor play facilities?	<b>observed</b>	<b>Not observed</b>
Open space		
Swings		
Sliding panels		
Sand play areas		
Water play areas		
See-saws		
Play dough area		

<b>Teachers' knowledge of learners</b>	<b>Responses</b>	
	<b>observed</b>	<b>Not observed</b>
Knowing Developmental milestone		
Knowing age of the children		
Identifies individual and differences needs		
Knowing children by their names		
Age appropriate activities.		
Prepare according learning styles		
Knowing the background of the children		
Knowing children attention span		
Display of children work of learners in the class		
Know characteristic of learners.		

<b>Teachers' Knowledge subject matter</b>	<b>Responses</b>	
	<b>observed</b>	<b>Not observed</b>
Knowledge of learning framework		
Knowledge about play way methods related to different subject		
Knowledge about play activities		
Knowledge about play material		
Basic knowledge of Subjects, themes and topics taught in Nursery schools.		
Knowing to prepare different type of materials		
Mastery over subject		
Creative in teaching subjects		
Knowledge of core competence		
Knowledge of hidden values and skill children learn.		

<b>Teachers' Pedagogical knowledge</b>	<b>Responses</b>	
	<b>observed</b>	<b>Not observed</b>
Develop schemes of work and lesson plans		
Uses Learner centred Methods during teaching		
Using play for reinforcement of already taught concepts		
Demonstrates variety of teaching skills		
Monitors to ensure that all pupils are actively participating in class.		
Do teacher reflect after each class.		
Teacher equally participates with the children in play way learning.		
Uses continuous assessment through play pedagogy		
Able to manage class and children with positive attitude while teaching.		
Uses age appropriate a language, motivates and Provide care to children while teaching.		

## Scores of teacher' competent and use of play pedagogy

Teachers' competence	Use of Play pedagogy	Teachers' competence	Use of Play pedagogy
265	59	268	64
270	65	277	65
265	60	285	68
273	65	276	61
264	61	284	71
265	58	294	75
282	70	293	78
280	71	297	79
268	59	287	80
282	65	271	65
267	61	263	61
261	59	266	60
270	60	281	80
283	73	291	78
283	76	286	73
274	60	269	59
275	62	277	67
262	60	274	69
257	55	267	70
268	73	275	79
263	55	263	57
267	57	269	60
298	76	276	66
292	69	281	76
288	70	291	75
294	77	281	57
282	75	284	70
270	70	293	73
270	68	277	74
274	60	295	78

<i>Table for Determining Sample Size of a Known Population</i>									
N	S	N	S	N	S	N	S	N	S
10	10	100	80	280	162	800	260	2800	338
15	14	110	86	290	165	850	265	3000	341
20	19	120	92	300	169	900	269	3500	346
25	24	130	97	320	175	950	274	4000	351
30	28	140	103	340	181	1000	278	4500	354
35	32	150	108	360	186	1100	285	5000	357
40	36	160	113	380	191	1200	291	6000	361
45	40	170	118	400	196	1300	297	7000	364
50	44	180	123	420	201	1400	302	8000	367
55	48	190	127	440	205	1500	306	9000	368
60	52	200	132	460	210	1600	310	10000	370
65	56	210	136	480	214	1700	313	15000	375
70	59	220	140	500	217	1800	317	20000	377
75	63	230	144	550	226	1900	320	30000	379
80	66	240	148	600	234	2000	322	40000	380
85	70	250	152	650	242	2200	327	50000	381
90	73	260	155	700	248	2400	331	75000	382
95	76	270	159	750	254	2600	335	100000	384
<i>Note: N is Population Size; S is Sample Size</i>					<i>Source: Krejcie &amp; Morgan, 1970</i>				

# KYAMBOGO UNIVERSITY

P. O. BOX 1, KYAMBOGO – KAMPALA, UGANDA

## Faculty of Education Department of Early Childhood Education

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### INTERNAL MEMO

**FROM:** Chair, Department Graduate Board, 30<sup>th</sup> September 2019

**TO:** Ms. Saleema Panjwani REF: 17/X/14520/GMEC/PE  
C/o Early Childhood Education  
Department

### **REF: APPROVAL OF RESEARCH PROPOSAL**

This is to inform you that the Faculty Graduate School Board at its meeting of 3<sup>rd</sup> April 2019 approved your research proposal for the Master of Education (Early Childhood Education). You can now proceed to the field for data collection.

Thank you.  
Yours sincerely,

  
Dr Ejuu Godfrey

**FOR: CHAIR, FACULTY GRADUATE BOARD**

CC Chair, Early Childhood Education Department Graduate Board

### **Supervisors**

1. Dr. Bwayo John  
Department of Curriculum
2. Dr. John S Maani  
Department of Curriculum



**DIRECTORATE OF EDUCATION AND  
SOCIAL SERVICES**

**REF:** DESS/KCCA/508

01<sup>st</sup> October, 2019

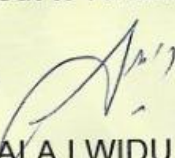
Mrs. Saleema Panjwani  
Early Childhood Education  
Kyambogo University  
Po Box 1, Kyambogo  
**KAMPALA.**

**RE: INFORMATION ABOUT EARLY CHILDHOOD EDUCATION**

The above captioned refers.

I acknowledge receipt of your request and wish to advise you to reach out to Kindergartens for the details.

Yours,

  
**MALAALA LWIDU PAUL**  
**SUPERVISOR EDUCATION SERVICES/CENTRAL**  
**Copy: Town Clerk**



P.O. Box 7010 Kampala - Uganda  
Plot 1-3 Apollo Kaggwa Road  
Tel: 0204 660 000  
WhatsApp: 0794274444, Toll free line: 0800990000  
Web: [www.kcca.go.ug](http://www.kcca.go.ug), Email: [info@kcca.go.ug](mailto:info@kcca.go.ug)  
f: [facebook.com/kccaug](https://facebook.com/kccaug), t: [@KCCAUG](https://twitter.com/KCCAUG)