



## The Influence of Teaching Strategies on Preschool Learning in Kiambu West Sub-County

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**Abstract:** Preschool learning has faced numerous challenges which have raised concerns among preschool education stakeholders. Preschool learners have registered and continued to register dismal grades in basic numeracy, language and creativity skills. Thus, the study examined the influence of teachers' instructional practices on preschool learning in Kiambu West Sub-county, Kiambu County, Kenya. The objective of the study was to examine the influence of teaching strategies on preschool learning in Kiambu West Sub-county This study was guided by instructional and Piaget's Cognitive learning theories. The study adopted mixed methods approach, concurrent triangulation design. Target population comprised of 80 head teachers, 187 preschool teachers and 240 parents' representatives all totaling to 507. Using the Central Limit Theorem, a sample of 10 preschools and 86 respondents were selected. Stratified sampling was applied to create 5 strata based on number of zones. From each zone, 2 head teachers and 11 preschool teachers were selected using purposive sampling. 4 parents' representatives were selected using simple random sampling. Questionnaires were used to collect data from preschool teachers, interview schedules were used to collect data from head teachers, whereas focus group discussion was used to collect data from parents' representatives and observation checklists were used for collection of data from preschool learners. Piloting was conducted to establish validity, reliability, credibility and dependability. Validity was determined through expert judgement whereas reliability was determined using test retest technique. Reliability coefficient of  $r = 0.7$ , was realised using Pearson's product moment correlation method, Credibility was ascertained by data triangulation through multiple analysts whereas dependability was established through detailed reportage of the data collection process. Qualitative data was analyzed thematically along the objectives and presented in narrative form whereas quantitative data was analyzed descriptively and inferentially using statistical package for social science (SPSS 23) and presented using statistical tables. The study established that preschool teachers apply different strategies for learning. Teachers' instructional practices to handle preschool learners with diverse needs impact on learning processes in preschools. Teachers' instructional practices to meet quality assurance and standards impact on learning

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*processes in preschools. The study concludes that there is significant relationship between teachers' instructional practices and preschool learning. Thus, the study recommends that teachers should adopt teaching strategies which inspire learners to participate effectively in preschool learning.*

**Key words:** *Influence of Teaching Strategies, Preschool Learning, Kiambu West Sub-County*

## I. INTRODUCTION

Globally, teachers adopt a variety of instructional practices and provide tools, organize workshops and guidance for individuals or children to adapt to new lifestyles. The practice includes both children's academic and social skills as they enter school and teachers' instructional practices to serve all children (Amarel, 2008 and Ball, 2000b). Despite these assertions, little is known about how instructional practices teachers adopt enhance learning in preschool settings which have become a virtual mantra of development. In recent years, mainly as a result of the interest in the articulation of learning theories, researches are increasingly able to differentiate pedagogical strategies by reference to developmental levels of children (Barrowman, 2001).

Combs, Blume, Newman and Wales (2000) describe aspirations for early years practice as practice wherein learning is seen in a holistic non-compartmentalized way, where play, first-hand experiences and talk are the principal means of learning. At the same time, children's capacity to explore and imagine for themselves is nourished by open-ended invitations to engage with the world, and where observation of individual children is the key to developing both curriculum and learning.

A recent report by Buchmann (2004) is highly critical of the sometimes overly formalized pedagogical practices that are generally observed in infant classes in Ireland. The overall impression gained by the Organization for Economic Co-operation and Development (OECD) Thematic Review Team (2004) was one of whole class teaching, with children sitting quietly at tables. The approach appeared to be directive and formal compared to practices observed and theoretically underpinned in other countries. The team observed what they described as a predominately didactic approach towards early learning in infant classes. They suggested that the model of the teacher as the source of learning from whom young children receive knowledge is still strongly felt within the system. They noted that notions such as the well-being and involvement of children, or the construction of knowledge through play, participation and choice, all needed to be developed. Similar findings were reported in Ghana by Ukpokodu (2002) in which they suggested that teachers have images of parents and the role they should play during their child's transition to school. They use these images as norms against which they judge new parents. In Kenya and Kiambu West Sub-county in particular, Preschool Learning has experienced numerous challenges. Research studies by Edwards et al (2000) and Ukpokodu (2002) have had difficulty identifying specific mode of instructional practices related to teacher effectiveness. There is little evidence that academic background and instructional practices of a teacher can predict effective learning and learner success.

## II. LITERATURE REVIEW

### The Concept of Learning in Preschools

Learning may be defined as the practice or the art, the science or the craft of acquiring skills (Siraj-Blatchford, 2004). In recent years, mainly as a result of the interest in the articulation of learning theories, we are increasingly able to differentiate pedagogical strategies by reference to developmental levels of children (Bowman, Donovan and Burns, 2001).

A number of recent reports (Coolahan, 2004; Organization for Economic Co-operation and Development (OECD, 2004) are highly critical of the sometimes overly formalized pedagogical practices that are generally

observed in infant classes in Ireland. The overall impression gained by the OECD Thematic Review team (2004) was one of whole class teaching, with children sitting quietly at tables. The approach appeared to be directive and formal compared to practices observed and theoretically underpinned in many countries. The team observed what they described as a predominately didactic approach towards early learning in infant classes. They suggested that the model of the teacher as the source of learning from whom young children receive knowledge is still strongly felt within the system. They noted that notions such as the well-being and involvement of children, or the construction of knowledge through play, participation and choice, all needed to be developed.

### **The Concept of teachers' Instructional Practices**

Success of learning in preschool education depends largely on teachers' instructional practices and one approach to addressing these concerns is to examine the extent to which teachers themselves feel prepared to meet these demands. In the United States, the 1998 survey conducted amongst 112 preschool teachers indicated how well prepared the teachers felt for some of the most compelling classroom demands (Cave & Mulloy, 2010). The study established that such forms of instructional practices included; ability to maintain order and discipline in the classroom; implement new methods of teaching such as cooperative learning; implement preschool curriculum and performance standards; use learner performance assessment techniques; address the needs of students with disabilities and integrate educational technology into the grade or subject taught.

Teachers are most likely to report being very well prepared for maintaining order and discipline in the classroom (Campoy & Hoewisch, 2008). In other words, classroom management has been identified as a major influence on teacher performance, a key source of teachers' job-related stress, and, in general, an essential prerequisite for preschool children's teaching. In a study conducted in South Africa, Cabrera & Cabrera (2002) indicated that having an overwhelming majority of teachers who feel very well prepared to meet this core classroom requirement is an important indicator. Cabrera & Cabrera (2002) asserted that fewer teachers felt very well prepared to meet other typical classroom requirements for which teachers receive both initial and on-the-job training.

Teachers in experimental preschool classrooms, for example, used math-relevant activities in their daily routines that significantly increased students' standardized math test scores compared to students in regular classrooms (Arnold, Fisher, Doctoroff & Dobb, 2002). In Kenya and Kiambu West Sub-county, there is also the acknowledgement that the emphasis being placed on high-stakes testing, with its rewards and punishments, can be informative but also come with unintended negative consequences with implications for teacher professional development programs (Okoth & Wilson, 2006), and a thorough examination of formal professional development and other professional learning opportunities that may increase teachers' knowledge and change classroom practices to better meet requirements regarding preschool teaching and children's performance.

### **Teaching Strategies and Learning in Preschools**

According to Ashton & Webb (2006), the brain has two distinct parts; each one is responsible for specific tasks and that the left side of the brain controls speech, logical, and thinking skills; the right side is the athletic, creative, and visual portion. Although both sides of the brain function properly, one side is dominant; causing each person to be stronger in either a logical way or a creative way and this contributes to the reason why each child learns differently (Ashton & Webb, 2006). Everyone has a specific type of learning style that works best for them. Teachers, faced with the challenges of accommodating different types of learner learning styles and academic levels, are forced to implement various teaching strategies in order to captivate each

learner's attention.

In a study conducted in India, Mohanty (2003) asserted that some teachers believe that the best way to teach is by taking on the role of the dictator in the classroom. As dictators, they treat their learners as sponges, and merely feed the learners information and expect it to soak in and be comprehended. Mohanty (2003) further asserted that these kinds of teachers believe that once the information is presented, it is the learners' own responsibility to comprehend the material. Learning, in the eyes of these teachers, means reading, memorizing, and being able to repeat any information.

In a study conducted in the United States, Robert et al (2006) indicated that if the learners understand the value and importance of the subject, they will be willing to devote their time and energy into learning the subject matter. Robert et al (2011) further indicated that if learners are allowed to work together and collaborate in their ideas, learning will be enhanced. In other words, it is vital that learners are able to formulate their own ideas and opinions, and being able to work with peers certainly facilitates that. Learners need to practice active learning. Prepared teachers should not adopt teaching strategies which encourage learners to learn just by sitting in classes listening to teachers, memorizing pre-packaged assignments, and spitting out answers.

To learn the material, teachers must talk about what they are learning, write about it, relate it to past experiences and apply it to their daily lives. In most countries in Sub-Saharan Africa, within the past couple years, class sizes have been increasing in both pre-primary schools due to Universal Free Education (Haycock, 2003). The larger the class size, the less individual attention each learner receives.

In addition, these abilities were further enhanced when learners believed their teachers emphasized practical application of information and promoted the use of learning materials in situations beyond the classroom. These assertions indicate it is highly effective when small group work is used, especially in large classes since it allows learners to feel connected to the class, it promotes active learning, and it allows learners to interact with one another. A common problem learners face is not being able to relate learning material to the real world. Learners feel as if the knowledge they learn in school is useless and that it is a waste of time to learn the information if it won't benefit them later on

In a study carried out in Kisumu East District, Mwangi and Njuguna (2011) indicated that these methods stimulate learners' mental activity and make it more feasible and effective for learners to learn. Moreover, each learner's learning process is different; some people learn better by listening, some by observing and others by doing. When all techniques are combined, learners have a better chance of understanding the material. In Kiambu West Sub-county, the scenario is the similar with most learners in dire need to be challenged, engaged, and eager to learn. However, the reviewed empirical studies have not recognized that not every child learns the same way. Some learners learn material quicker and easier than others due to the way their brains are wired. If only one type of teaching strategy is applied, not every learner's learning needs will be accounted for.

The reviewed empirical studies have not indicated the net effect of combining various teaching strategies so that Preschool children have the opportunity to learn in multiple ways since the more opportunities that are available for a learner to learn, the more valuable the education becomes. Therefore, the most successful teaching technique is one that involves a variety of different teaching strategies in order to accommodate every learner's unique learning style; a concept which most of the reviewed studies have not exhausted and this study sought to address.

### **III. CONCEPTUAL FRAMEWORK**

The figure below explains how dependent variable (preschool learning dynamics indicated by acquisition of basic numeracy skills, acquisition of language skills, acquisition of creativity skills, is influenced

by the independent variable (teachers’ instructional practices, exemplified in group work, learner-and teacher-centered approach and teacher demonstrations.

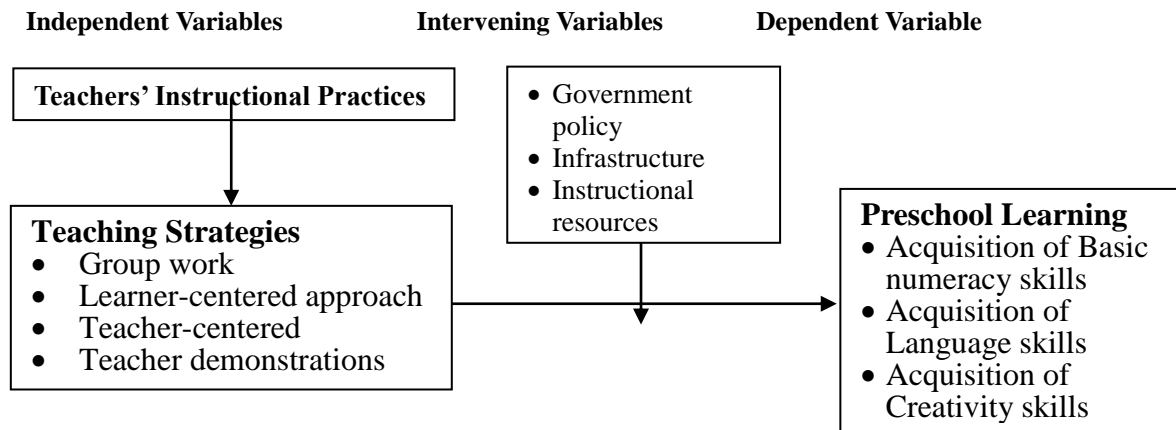


Figure 1: Conceptual framework showing how Teachers’ Instructional Practices affect the dependent variables

**Research Question**

The research question of the study was;

What is the influence of teaching strategies on preschool learning in Kiambu West Sub-county?

**Research Hypothesis**

H<sub>0</sub>: There is no statistically significant influence of teaching strategies on preschool children learning in Kiambu West Sub-county

**IV. METHODOLOGY**

The study applied mixed methods approach, where, both qualitative and quantitative approaches were applied. According to Creswell (2009), in qualitative approach, the researcher relies on the views of participants, asks broad, general questions and collects data consisting largely of statements from the participants (Creswell, 2009). In this case, the researcher described and analyzed these statements based on the objectives of the study. This kind of data was collected using an interview schedule guide, focus group discussion and an observation schedule. At the same time, the researcher adopted quantitative approach.

Concurrent triangulation design was applied in this study since it is single-phase design in which the researcher implements the quantitative and qualitative methods during the same timeframe and with equal weight (Creswell, 2009). This design generally involved the concurrent, but separate, collection and analysis of quantitative and qualitative data so that the researcher may best understand the research problem. The researcher merged the two data sets by bringing the separate results together in the interpretation during the analysis.

Using The Central Limit Theorem of sample size determination, a sample of 10 Preschools, that is, 12.5% of the targeted 80 Preschools, was selected. The Central Limit Theorem states that, for any sample size,  $N \geq 30$  ( $N$  is the sample size), sampling distribution of means is approximately a normal distribution irrespective of the parent population. It thus allows the researcher to select,  $N \geq 30$  from the target population (Kothari, 2005). Thus, from The Central Limit Theorem, the researcher sampled 86 respondents, that is, 16.96% of 507. The researcher applied stratified sampling to create 5 strata based on the number of zones in Kiambu West Sub-county.

Piloting of research instruments was conducted amongst 4 preschool teachers from 2 preschools in Kiambu West Sub-county since it has members of the relevant population, but not on those who formed part of the final sample. The purpose of piloting was to check on suitability and the clarity of the questions on the instruments designed, relevance of the information being sought and the language used and to test the reliability

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and validity of the instruments. The respondents who participated in the piloting of instruments were not included during the actual data collection.

### **Ethical Considerations**

Concerning confidentiality, the researcher undertook to keep private any information given by the respondents that touches on their persons or their private life. The researcher assured the respondents that no private information would be divulged to a third party. This was done by signing non-disclosure forms. To maintain anonymity of the respondents the researcher ensured and assured them that their individual identity would not be revealed whatsoever. This was done by labelling the respondents and not using their real names.

### **Data Analysis**

Data was analyzed quantitatively and qualitatively and then merged into one overall interpretation in which the researcher related the quantitative results to the qualitative findings. Frequency counts of the responses were then obtained so as to generate descriptive information about the respondents and to illustrate the general trend of findings on the various variables that were under investigation. Qualitative was analyzed thematically along the research objectives and the basic quantitative data was analyzed descriptively using frequencies and percentages and inferentially analyzed using Pearson's Product Moment Correlation Test Analysis in Statistical Package for Social Science (SPSS V23)

## **V. FINDINGS AND DISCUSSION**

During the interviews, majority of the head teachers also indicated that most preschool teachers rarely apply group work strategy to enhance acquisition of oral skills such as listening to short stories and free self-expression, acquire basic numeracy skills such as ordering, sequencing and matching. In the same vein, the interviewees and discussants responded in favor of the view that most preschool teachers never use group work strategy to enhance acquisition of creativity skills such as observing colors and modeling simple items.

Qualitative data indicated that preschool teachers who adopt group work, learner-centered and teacher demonstrations methods of teaching have their preschool learners perform fairly well in basic numeracy, language and creativity skills. However, teachers who spend much time on teacher-centered approach more or less have their learners register similar grades in basic numeracy, language and creativity skills as other strategies. These findings corroborate the assertions of Shulman (2006) that teachers who adopt group work, learner-centered and teacher demonstrations Pearson's product Moment Correlation Test Analysis of the data indicated coefficients of  $r = -0.924$ ,  $-0.898$  and  $-0.832$  respectively with corresponding significant levels (p-values) of 0.025, 0.038 and 0.040 respectively which were less than the predetermined level of significance, 0.05, that is,  $p\text{-value} = 0.025, 0.038 \text{ and } 0.040 < 0.05$ . These findings were statistically significant and thus indicate that there is significant relationship between how often teachers apply a given a teaching strategy and preschool children's performance in basic numeracy, language and creativity skills, consequently rejecting the Null Hypothesis initially formulated for the study. Table 1 is a matrix showing relationship between frequency of applying teaching strategies and basic numeracy, language and creativity skills of the children.

Table 1: Matrix Showing Relationship between Frequencies of Applying Teaching Strategies

		Frequency of Teaching Strategies	Basic Numeracy	Language	Creativity
Frequency of Applying Teaching Strategies	Pearson Correlation	1	-.924*	-.898*	-.832*
	Sig. (2-tailed)		.025	.038	.040
	N	5	5	5	5
Basic Numeracy	Pearson Correlation	-.924*	1	.745	.965**
	Sig. (2-tailed)	.025		.148	.008
	N	5	5	5	5
Language	Pearson Correlation	-.898*	.745	1	.569
	Sig. (2-tailed)	.038	.148		.317
	N	5	5	5	5
Creativity	Pearson Correlation	-.832*	.965**	.569	1
	Sig. (2-tailed)	.040	.008	.317	
	N	5	5	5	5

\*. Correlations are significant at the 0.05 level (2-tailed).

## VI. CONCLUSION

The study has established that preschool teachers apply different methods for preschool learning. These include; group work, discussion, learner-centered and teacher demonstrations approaches with majority of the sampled respondents indicating that group work method is the most common teaching strategy adopted by teachers in preschools. Group work strategy is highly effective when small group work is used, especially in large classes since it allows learners to feel connected to the class, promotes active learning and allows learners to interact with one another. Teacher demonstration has also been used by teachers on several occasions. However, it has not been able to enhance acquisition of listening skills like listening to and retell tongue twisters, acquisition of numeracy skills such as comparing sizes of objects through filling and emptying and creativity skills by learners such as weaving objects to make patterns. These findings attest to the fact that when learners are able to put their knowledge to use in the real world, they are able to live their education and gain the tools to solve the problems of time. This method has forced learners to naturally become interested in learning and it has proved to be a very effective teaching strategy.

### Recommendations

On teaching strategies, the study has established that the strategies used by preschool teachers are not effective. The study thus recommends that teachers need to adopt new teaching strategies which inspire learners to participate effectively in preschool learning process. These include; adopting hands-on approach which is more learner-centered than teacher-centered. This should go a long way in adopting strategies which call improvisation of learning materials other than using the commercial and conventional learning resources. This will arouse learners' interest and make learning motivating.

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