

PEDAGOGICAL KNOWLEDGE AND SKILL COMPETENCES OF PRE-SCHOOL TEACHERS IN IBADAN METROPOLIS, OYO STATE, NIGERIA

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Abstract: *Early childhood educators are faced with many important tasks in their day to day activities which include caring, stimulating, and instructing for young learners. The implementation of these tasks require certain competences which the teachers must possess in order to be effective in discharging their duties and to provide for quality early childhood education. It has been observed that with respect to the pedagogical knowledge and skill competences, teachers of young learners still have a long way to go in learning how to handle young children especially in the way they relate curriculum content to children's needs and experiences, integrate content across learning areas, and use of child-friendly approaches, methods, and techniques in teaching.. The study adopted a descriptive survey design. The sample involved in the study comprised 58 pre-school teachers randomly sampled from pre-primary section of public primary schools in the five local government areas within Ibadan city. Two research questions were set to guide the study, and one self-designed and validated rating scale on pre-school teachers' pedagogical knowledge and skill ($r=0.48$) was used to gather the data. The data were analyzed by using frequency count, percentage, mean, and standard deviation. The results showed that the level of pedagogical knowledge and skill competences displayed by the pre-school teachers was low. Recommendations were made by suggesting strategies that could develop the pedagogical knowledge and skill competences of pre-school teachers for quality early childhood education.*

Keywords: early childhood education, stimulation, competences, pedagogical knowledge, pedagogical skill, effective teaching and learning

Introduction

The crucial role of teachers in learners' lives is invaluable. The reason is that teachers share a significant responsibility in preparing young children to lead successful and productive lives. In fact the greatest resource in any school is the teachers because they have the greatest impact on children's learning that will make them become successful learners, confident and creative individuals, and active and informed citizens (Australian Institute for Teaching and School Leadership [AITSL], 2011). In this regard, the need to develop and improve teacher quality becomes imperative especially for teachers of pre-school children who are directly involved in the building of a solid foundation upon which other levels of education are built.

There are many aspects in the early learning environment such as the culture of the school, teachers' interactions, knowledge, beliefs, expectations, and practices. While researchers have focused on some of these variables, few research studies have been carried out about pre-school teachers' pedagogical knowledge and skill in Nigeria.

What is Pedagogical Knowledge and Skill?

Pedagogy is often referred to as the practice of teaching, but in the early years, it includes the provision of learning environments for play, exploration, and instructive learning (Siraj-Blatchford, Sylva, Muttock, Gilden, & Bell, 2002). Pedagogical knowledge is knowledge for teaching. It involves knowledge of how to

teach content as a condition for teacher effectiveness (Hill, Rowan, & Ball, 2005). Pedagogical knowledge and skill deal with instructional techniques and strategies which enable learning to take place. In this study, it refers to the interactive process between pre-school teacher and learners and the learning environment provided by the teacher in order to enhance children's stimulation and learning.

The importance of displaying pedagogical knowledge and skills cannot be over-emphasised. It helps teachers to think about the best possible methods, strategies, materials, and resources to be utilized for the learning situation; helps teachers to know how to utilize various forms of play; different strategies for grouping learners; different types of media and materials. Pedagogical knowledge and skills turn teachers into facilitators, coaches, models, evaluators, managers, and advocates. It helps teachers employ appropriate evaluation schemes. Effective pedagogy helps teachers display skills at creating curricula designed to build on learners' present knowledge and understanding and move those learners to more sophisticated and in-depth abilities, knowledge, concepts, and performances. Thus, effective teaching requires pedagogical skills so that the teaching is carried out smoothly and results in the maximum output in terms of the expected teaching outcomes. However, the situation of education of many developing countries, especially Nigeria, is the problem of half-baked products of many schools caused by the poor foundation that is laid in pre-primary and primary schools.

This situation necessitated investigation of pre-school teachers' pedagogical knowledge and skills in Nigeria as one of the major factors in education of children. In a pre-school classroom, the teacher's role is to plan and execute experiences for learning. They determine what children are interested in and what they know. Children

are at the centre of instructional and classroom activities. Teachers set up a physical and social environment for the children to interact with. The interaction with materials, other children, and adults guides children to make sense of the world. When this interaction generates learning outcomes for children, it is deemed the most successful interaction (Bhowmik, Banerjee, & Banerjee, 2013). The implication of the above is that preschool teachers, who do not plan, organize, and present children's learning experiences effectively, may hinder the children's quality of learning.

Moreover, children use their sense of curiosity to learn by asking a lot of questions. Young children like to question, observe, and engage in activities. They experience the world with their senses and explore natural phenomena. This is the reason why Elkind (1989) advised against presenting more formal kinds of experiences at an early age so that young learners would not view learning as only imparting knowledge, thus undermining their curiosity.

Therefore, through spontaneous exploration of natural experience and events, with nurturing and guidance from teachers, children can develop. However, a review of a number of empirical studies focusing on play-based pedagogy found that teachers believe that play should be given high priority in a pre-school setting but find it difficult to implement in practice (British Educational Research Association [BERA], 2003). The meta-analysis revealed that educators of young children tend to lack the confidence, knowledge, and training that lead to interactive teaching and learning.

Walsh (2000) compared the quality of the learning experience offered to 4-5 year old children in formal (Northern Ireland) and play-based (Denmark) settings using an instrument known as the Quality Learning

Instrument (QLI). The research focused on nine key indicators of quality: motivation, concentration, confidence, independence, physical well-being, multiple skill acquisition, higher order thinking skills, social interaction, and respect. Walsh concluded that an over-emphasis on the teaching of the reading, writing, and arithmetic is inappropriate for young children in Northern Ireland as compared to the more play-based approach which was capable of providing a higher quality learning experiences for the children in Denmark. Wylie and Hodgen's (2007) findings revealed that the aspects of pedagogy that showed a lasting contribution were high quality staff interactions with children, an environment providing books and written material, and where children could select from a variety of learning activities.

Siraj-Blatchford and Sylva (2004) observed that the most effective preschool settings achieve a balance between the opportunities provided for children to benefit from teacher-initiated group work and the provision of freely chosen yet potentially instructive play activities in terms of intellectual, social, and attitudinal outcomes. They also argued that the best teachers use a mixture of pedagogical approaches such as scaffolding, extending, discussing, monitoring, and direct instruction – to fit both the concept or skill and the developmental zone of the children. Effective teachers who are able to engage children in meaningful experiences inside and outside classroom tend to know their subject matter; use pedagogical knowledge and skills appropriate for the content; use an appropriate language of instruction and have mastery of that language; create and sustain an effective learning environment; find out about and respond to the needs and interest of their learners and communities; reflect on their teaching and children's responses and make changes to the learning environment as necessary; have a strong sense of ethics; are committed to teaching;

and care about the children under their care (Craig, Kraft, & Plessis, 1998).

However in Nigeria, Omotuyole (2013) observed that the behaviour of many early childhood education teachers is reflective of developmentally inappropriate practice. Many Nigerian teachers especially in pre-schools and primary schools are fond of using non-interactive, theoretical, instead of practical methods to teach subject matter. They do not focus on child development and learning theories in ways that are relevant to learners' context. Many teachers in pre-schools do not teach as effectively as they could because they do not understand children, how they learn, and classroom dynamics. Supporting Omotuyole's observations, Osokoya (2001) suggested that the training of pre-school teachers should aim at developing the totality of the child, including accommodating a long period of practical teaching and observing children in their natural environments. He proposed that the desirable personality characteristics for individuals who wish to work in the pre-school are pleasure and interest in working with young children, flexible personality, and concern for the welfare of others regardless of religious or ethnic differences. Desirable qualities of pre-school teachers are important in the learning process of preschoolers and their development.

It is common in pre-schools' environment in Nigeria to find disorganized, noisy, quarrelsome, moody, and tearful children (Osokoya, 2001). The reason for this situation may be simply because of the inability of the pre-school teachers to understand children, how they learn, and how they interact among their peers. There is the need, therefore, to investigate the pedagogical knowledge and skills of pre-school teachers in Nigeria.

Statement of the Problem

It has been observed that Nigerian pupils are not adequately prepared to develop the skills and knowledge they need to live and work successfully in today's complex world. These children are deficient in solving problems that require more than simple recall of facts or performance of rudimentary skills. This issue has been traced to teachers' inability to provide opportunities for children to engage in activities that promote in-depth understanding, ethical thinking, creative problem solving, and the ability to use knowledge in real-life settings. Therefore, this study sought to identify level of pedagogical knowledge and skill competences of Nigeria's pre-school teachers. The following research questions were generated to guide the study:

What is the level of pedagogical knowledge displayed by pre-school teachers in Ibadan metropolis?

What is the level of the pre-school teachers' display of pedagogical skill competence?

Methodology

The study adopted a descriptive survey research design. The design employed the use of observation by using a four-point rating scale on pedagogical knowledge and skills of pre-school teachers during interaction with children.

Participants

The target population of the study was pre-school teachers in Ibadan, Oyo state, Nigeria public primary schools. The sample involved in the study comprised fifty-eight (58) pre-school teachers randomly selected from public primary schools in the five local government areas within Ibadan metropolis.

Of these participants, 54 were female and four were male. The participants had

different qualifications: 39 held a Nigerian Certificate of Education (NCE), 17 held a bachelor's degree in education, and two held a post-graduate diploma in education. More than half (34) of the teachers had 16 or more years of experience. The others' teaching experience is as follows: 1-5 years, three teachers; 6-10 years, 11 teachers; and 11-15 years, ten teachers.

Instrument and Procedure

The instrument used for this study was rating scale on pre-school teachers' pedagogical knowledge and skills (PSTPKS). The instrument was developed by the researchers to identify the level of display of pedagogical knowledge and skill of pre-school teachers. It is a 20-item instrument with three sections. Section one deals with general information about the demographics about the teachers. That information was reported above under 'Participants.' Section two is a four-point scale designed to identify level of display of knowledge of pre-school teachers ranging from 'no knowledge to high knowledge.' Section three is also a four-point scale ranging from 'no skill to high skill' in order to identify the level of display of skills of the pre-school teachers. Five research assistants observed and graded the participants while they displayed their pedagogical knowledge and skills. Their grades were correlated and the inter-rater values yielded 0.48 which connotes a fair display sense of pedagogical knowledge and skill competences.

The consent of the head teachers of the participating schools was sought and the observation of the pre-school teachers was carried out for two weeks with the assistance of five higher degree students in early childhood education at the University of Ibadan who served as research assistants in the study.

Results

The collected data were analysed by using frequency count, percentage, mean, and standard deviation. Table 1 answers research question 1; table 2 answers research question 2.

Table 1

Level of Pedagogical Knowledge of Pre-school Teachers' in Ibadan Metropolis

Item	No Knowledge	Low K	Average K	High Knowledge	Mean	SD
The teacher understands the procedures for:						
Using child-approaches, methods, and techniques of teaching	16 27.6%	27 46.6%	14 24.1%	1 1.7%	2.00	.77
Phasing teaching from known to unknown	13 22.4%	38 65.5%	5 8.6%	2 3.4%	1.93	.67
Inducing children's own learning	13 22.4%	32 55.2%	9 15.5%	4 6.9%	2.07	.81
Using a variety of teaching/learning aids during lesson delivery	14 24.1%	12 20.7%	18 31.0%	14 24.1%	2.55	1.11
Using the local environment as teaching resources	8 13.8%	23 39.7%	12 20.7%	15 25.9%	2.59	1.03
Assessing children's learning	15 25.9%	32 55.2%	8 13.8%	3 5.2%	1.99	.78

Combined mean - 2.19 on the 4 pt. scale

Table 1 shows that the pre-school teachers were observed to display low pedagogical knowledge on using child-friendly approaches, methods, and techniques of teaching ($\bar{x} = 2.00$); phasing teaching from known to unknown ($\bar{x} = 1.93$); inducing children's own learning by providing opportunities for them ($\bar{x} = 2.07$); and assessing children's learning regularly to know level of knowledge, values, and skills gained by the children ($\bar{x} = 1.99$); while they displayed average pedagogical knowledge on using variety of teaching/learning aids during lesson delivery ($\bar{x} = 2.55$); and using local environment as teaching resource ($\bar{x} = 2.59$). Meanwhile, based on the value of the combined average (2.19) for the six indicators, which is less than 2.50 that is

accepted in this study as the value for high display of pedagogical knowledge, it can be inferred that the level of pedagogical knowledge displayed by pre-school teachers in Ibadan metropolis was low.

Table 2
Level of Pedagogical Skill Competence Displayed by Pre-school Teachers in Ibadan Metropolis

Item	No Skill	Low S	Average S	High Skill	Mean	SD
The teacher:						
Adapts the school time-table to the needs of the learners	19 32.8%	22 37.9%	16 27.6%	1 1.7%	1.98	.83
Prepares comprehensive scheme of work and lesson plans	27 46.6%	24 41.4%	7 12.1%	- 0.0%	1.66	.69
Relates curriculum content to pupils' needs and experiences	11 19.0%	35 60.3%	12 20.7%	- 0.0%	2.02	.64
Integrates content across subjects/learning areas	14 24.1%	24 41.4%	13 22.4%	7 12.1%	2.22	.96
Demonstrates proper use of child friendly approaches, methods, and techniques in teaching	10 17.2%	27 46.6%	19 32.8%	2 3.4%	2.22	.77
Uses learning aids appropriately in the course of teaching	14 24.1%	13 22.4%	21 36.2%	10 17.2%	2.47	1.06
Makes use of the locally available materials in teaching	13 22.4%	16 27.6%	12 20.7%	17 29.3%	2.57	1.14
Regularly carries out assessment of his/her learners	15 25.9%	26 44.8%	15 25.9%	2 3.4%	2.07	.81
Provides timely and appropriate feedback in the process of learning	14 24.1%	29 50.0%	12 20.7%	3 5.2%	2.07	.81
Creates and maintains a conducive learning environment	21 36.2%	22 37.9%	15 25.9%	- 0.0%	1.90	.79
Fosters self-discipline, responsibility and creativity among his/her learners	17 29.3%	23 39.7%	17 29.3%	1 1.7%	2.03	.82
Gives clear instructions and checks understanding	16 27.6%	26 44.8%	15 25.9%	1 1.7%	2.02	.78
Ensures that learners are actively engaged in a wide variety of experiences and settings within and outside the classroom	20 34.5%	16 27.6%	19 32.8%	3 5.2%	2.09	.94
Prepares pupils to assume age-appropriate responsibility for learning through effective decision making, goal setting and time management	10 17.2%	23 39.7%	22 37.9%	3 5.2%	2.31	.82

Combined mean – 2.12 on the 4 pt. scale

Table 2 shows that the pre-school teachers displayed low pedagogical skill competence on adapting the school time-table to the needs of the learners ($\bar{x} = 1.98$); preparing comprehensive scheme of work and lesson plans ($\bar{x} = 1.66$); relating curriculum content to pupils' needs and experiences ($\bar{x} = 2.02$); integrating content

across subjects/learning areas ($\bar{x} = 2.22$); demonstrating proper use of child-friendly approaches, methods, and techniques in teaching ($\bar{x} = 2.22$); using learning aids appropriately in the course of teaching ($\bar{x} = 2.47$); making use of the locally available materials in teaching ($\bar{x} = 2.57$); regularly assessing learners ($\bar{x} = 2.07$); providing

timely and appropriate feedback in the process of learning ($\bar{x} = 2.07$); creating and maintaining a conducive learning environment ($\bar{x} = 1.90$); fostering self-discipline, responsibility, and creativity among learners ($\bar{x} = 2.03$); giving clear instructions and checking understanding ($\bar{x} = 2.02$); ensuring that learners are actively engaged in a wide of experiences and setting within and outside the classroom ($\bar{x} = 2.09$); and preparing pupils to assume age-appropriate responsibility for learning through effective decision making, goal setting, and time management ($\bar{x} = 2.31$). Based on the value of the combined average of 2.12 on the 14 indicators, it can be inferred that the level of pre-school teachers in Ibadan Metropolis display of pedagogical skill competence was low.

Discussion

The results of this study revealed that the level of pedagogical knowledge and skill competences displayed by the pre-school teachers in Ibadan, Oyo state Nigeria was low. The average values (2.19 and 2.12) respectively in Tables 1 and 2 above showed this discrepancy. This result was corroborated by Omotuyole (2013) who found that the observed behaviours and practices of the early childhood education teachers in creating a caring community of learners and in teaching to enhance development and learning was very low. Oduolowu (2001) also revealed that the classroom practices and exercises in Nigeria primary schools do not encourage creativity among the children. For example, it was shown in the result that teachers' display of pedagogical skills in fostering self-discipline, responsibility, and creativity among their learners was very low. The same result applies to ensuring that learners are actively engaged in a wide variety of experiences and settings within and outside the classroom. Where these aspects are lacking in pedagogy, it will definitely affect the quality of learners being produced. The results of this study

may be explained in that many of the pre-school teachers observed were not early childhood education specialists even though they were experienced teachers. It may also be a lack of necessary requisite knowledge and skills in handling pre-schoolers that accounted for the low knowledge and skills they displayed.

Conclusion and Recommendations

The researchers were able to conclude that pre-school teachers involved in the study displayed a low level of pedagogical knowledge and skill competences in handling the children. This means that teachers' knowledge and skills in planning, organizing, and presenting learning experiences for the children was low. The result of this is that young children may not sufficiently and adequately develop the knowledge, skills, and values they need for further education and life-long learning.

Based on the findings of this study, which revealed low knowledge and skills of pre-school teachers, the following recommendations are made:

- Child educators rather than experienced teachers should be recruited to teach in pre-schools.
- Early childhood educators should be trained and retrained to develop the professional knowledge and skills in handling preschoolers in all the pre-primary sections of the public primary schools in Nigeria.
- The curriculum of teacher education programmes in Nigeria needs to be revised to include rigorous preparation of pre-service, pre-school teachers.
- Inservice programmes for pre-school teachers should incorporate and emphasize pedagogical components such as methods for helping teachers acquire specific skills for teaching meaningful rather than just rote learning and for developing in children the creative ability and positive attitudes towards life-long learning.

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