

IMPACT OF PEDAGOGICAL INNOVATION ON EARLY CHILDHOOD TEACHERS' CLASSROOM PRACTICES IN SELECTED BASIC SCHOOLS IN SURULERE OF LAGOS, NIGERIA

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Abstract

Dynamics in education are changes teachers bring into classroom practices. The study focused on exploring the impact of pedagogical innovation on early childhood teachers' classroom practices in selected Basic schools in Surulere Local Government Area, Lagos, Nigeria. The study adopted a descriptive survey research design. The population of the study comprised all basic school teachers in Surulere, Lagos state. Simple random sampling technique was used to randomly select a sample size of 240 public basic school teachers in Surulere LGA. Ten teachers each in 24 schools were randomly selected. Two research questions in a 14-item statement instrument titled 'Impact of Pedagogical Innovation and Teachers' Classroom Practices' (IPITCP) questionnaire was used to elicit information from respondents. Face and content validity of the instrument was carried out by Experts in Early Childhood and Measurement and Evaluation. The reliability coefficient of 0.80 of the instruments was derived through test-re-test. Data gathered were analyzed using descriptive statistics such as frequency count, percentages and mean. The study identified the challenges associated with the adoption of pedagogical innovation, and examined impact of pedagogical innovation on classroom practices. The findings of the study revealed that pedagogical innovation had a positive impact on classroom practices which attributed to the improvement in teachers' motivation towards teaching and learning, an increase in the level of pupils' engagement and motivation, and an overall improvement in pupils' learning outcome. The study also revealed that adoption of

pedagogical innovation posed several challenges to the teachers, including inadequate access to technology, limited gadgets and resources, and inadequate training among others. Recommendations were made among others that training organized for teachers should be innovative in order to enhance their competence in ICTs. Also, Government, NGOs, PTA should assist in procuring ICTs gadgets among others.

Keywords: Impact, Pedagogy, Innovation, Early Childhood Teachers, Classroom Practices

Introduction

Childhood education helps in the optimal development of the child. Foundations laid at this stage are key factors in their developmental milestones. Teachers' adapting to changes as they occur in education is paramount to effective learning outcome. 21st century education demands require that teachers attune to pedagogical innovation in classroom practices as they evolve and revolve. However, gaps still exist in teachers attuning to pedagogical innovation where they reinvent teaching practices to have better learning outcome due to certain impediments. In credence, Akyeampong, Pryor and Ampiah (2006) postulate that pupils' learning and academic performance is severed by gaps in teachers' pedagogical content knowledge and classroom practices.

Basic Education is the education for children between the ages of 0 and 15 years. As stipulated in the Federal Republic of Nigeria (FRN) (2013), Basic Education is for children in the age bracket of 0-15 years which comprises Early Child Care and Development Education (0-4 years) while ages 5-6 are for the pre-primary. Childhood education encompasses the laying of sound foundation to ensure pupils develop maximally and optimally. Childhood education is the education given to individuals lawfully categorized as children in any country which is commonly divided into early childhood and primary education (Nzeribe, 2004). Also, early childhood education is a cluster set purposely to affect progressive variations in children from birth to 8 years (Gordon & Browne, 2014). The need for childhood educators to align with changes in pedagogy is crucial for the educational demands of the

time. A-Okujagu (2022) states that early childhood educators represent a very elusive and complex sector in the development of children. The researcher reiterates that an early childhood educator is that individual with the uniqueness of bringing change-oriented philosophies and handling tasks in the midst of changing social environment with important awareness.

Quality teachers are pivotal for pupils' academic performance. To this end, The Federal Republic of Nigeria (2013) stipulates that in order to provide quality education at all levels, teacher education shall be responsible to bring into being goal-driven, diligent and competent classroom teachers at all educational levels. The institution shall also provide teachers with the intellectual and professional training needed for their work and be adaptable to the revolving situations. Instructional strategies teachers adopt are key to facilitating good learning outcome. However, most personal and professional trainings and workshops teachers undergo do not have continuous follow up on teachers' competency on utilization of innovative pedagogy based on technology. In credence, Koehler, Mishra, Herstey and

Peruski (2004) posit that most workshop training teachers attend are interested in teaching specific software without appropriate strategies and follow up on teachers' change of behavior and competence on use of the software introduced to them.

Pedagogy is what the teacher does in the class with pupils during instruction. Pedagogy, etymologically is derived from the word 'pedagogue' which does not refer to a teacher but means a slave who cared for a student and escorted the student to and from school (Cuenca, 2010). In education parlance, pedagogy has been a word of teachers' instructional technique and relationship. In corroboration, Loughran (2008) defines pedagogy as knowledge of teaching and learning to teach, and how both influence each other. The researcher reiterates that pedagogy is a method and techniques of instruction. Pedagogy is a strategy of instruction. It is the action of pedagogue which shows an inter-relationship. As teachers assume the role of instructors and are in a relationship with pupils, they lead them to academic and personal growth. It shows a constant care for pupils with the expression of growth and are shaped for good in the environment (Cuenca, 2010). Despite this specific role of teachers in

classroom practices, gaps still exist in poor classroom pedagogy that incorporates ICTs. Fuad, Musa and Yusof (2020) state that innovation is needed in educational system to improve school success and output in the 21st century.

The strategy of instruction by teachers in modern education should align innovatively. Pooja, (2017) defines teaching strategies as ideologies and methods used for instruction. The researcher reiterates that the teacher should consider pupils' background, knowledge, environment and learning goals in choosing instructional strategy. Also, teaching strategies are ways the teacher delivers the subject matter to the learners based on instructional objectives (Dorgu, 2015). The researcher opines that there are factors that the teacher should consider in selecting teaching methods; among them are: subject matter, instructional objectives, the learner, time, instructional materials, and environment. On the needs of the learner, the researcher adds that, age, ability, physical, emotional and aesthetic reaction among others should be put in mind. Walder (2014) states that pedagogical innovation introduces something new in order to get the existing improved upon.

Pedagogical innovation is modification and transformation for a positive effect. In other words, it is an improvement on certain deficiencies. Pedagogical styles are transformed through use of ICTs to develop and access to quality educational system (World Bank, 2002).

Innovation in education cannot be overemphasized. Innovation depicts newness. Rohtak (2019) defines innovation as the introduction of new trends, methods, techniques or practices. It can be development and use of technologies, methods and practices in teaching. In cognizance, The Organization for Economic Cooperation and Development (OECD) (2016) stipulate that innovation is imperative in education because it could improve the quality of education and provide more 'bang for the buck' in areas of budget pressure and high educational demand. The researchers reiterated that innovation enhances equity because it gives access and quality learning outcomes. OECD (2016) see innovation as the execution of new and better ideas, practices and knowledge. Also, the researchers added that innovation in education can be in diverse areas; introduction of new products and services, such as new syllabus, textbooks and educational resource materials,

new way of delivering services such as use of ICT in e-learning service, new ways of organizing activities such as use of ICT to reach out to students and parents among others. Integrating technology in the classroom stimulates active learning in the pupils (Ozerol, 2009). Kurt (2010) postulates that appropriate technology can be used as a classroom instructional tool for stimulating critical thinking and problem-solving skills.

Kostoff, (2003) and Mitchell, (2003) posit that innovation depicts new and improved ideas, knowledge and practice. OECD (2016) and Serdjukov (2017) state that technology is the major driver of innovation. Bransford, Brown and Cocking (2020) assert that Information and Communications Technologies (ICTs) help develop competencies for current globalization. Pratt (2019) states that ICTs enable modern computing and communication. It includes information collection and digital gadgets communication. In corroboration, Rosenberg (2005) asserts that ICTs help in the storing, recovery, operation, broadcast or delivery of information digitally. For actualization of this, such ICTs gadgets which include computers, internet, modems,

interactive boards, projectors, among others must be available and in regular use. In this vein, Ogwazu and Onya (2023) posit that innovative solutions will make teachers to be abreast with technology trends. The researchers reiterate that innovative teaching models are proactive approaches that incorporate technologies during instruction. In credence, Sahlberg (2011) are of the view that in the current global world, only knowledge and innovation can be the force to the future. Serdjukov (2017) opines that innovation is not only utilization of latest technology but having an accepted process to deliver learning through the adoption of technology. National Association for the Education of the Young Children (NAEYC) (2013) rightly posits that technology enhances cognitive and social learning during child's learning. Hermans, Tondeur, Van-Braak, and Valcke (2008) identify three main stages to value ICTs use to be pedagogical by teachers. They include: integration, enhancement and complementary. Integration is making ICTs part of their teaching; enhancement involves facilitating learning by laying emphasis on how ICTs can be used to teach the topic. For instance, power points enhance presentation. Complimentary aids pupils' learning like their use of mouse,

key boards and computer screen to see what the computer displays, projector to allow many see what the teacher is teaching at the same time among others.

The essence of innovation is for improvements in educational practices. In this vein, Ogwazu and Onya (2023) state that innovative technology equips teachers for any unforeseen contingencies; both in instructional strategies and materials. Their capacity building both individual and collective professional development goes a long way in enhancing their practices. In the light of the above, Serdyukov (2017) opines that innovation in education can be inform of new methodological approach, pedagogical philosophy, instructional tools, teaching techniques, learning process or instructional structured believed to cause a great improvement in teaching and learning outcome. Innovation in educational practices is highly rooted in technology use. OECD (2016) and Serdjukov (2017) state that technology is the major driver of innovation. In this vein, Ogwazu and Onya (2023) posit that innovative solutions will make teachers to be abreast with technology trends. The researchers reiterated that innovative teaching models are proactive approaches

that incorporate technologies during instruction. In credence, Sahlberg (2011) posits that in the current global world, only knowledge and innovation can be the force to the future. Kostoff, (2003) and Mitchell, (2003) are of the view that innovation depicts new and improved ideas, knowledge and practice. In innovative models, multimedia plays an important role and pupils create a learning environment they have passion for (Barrado, 2016). Walder (2014) is of the view that innovation means technological progress which assumes many other forms. The researcher reiterates that innovation involves moderation, renewal, an adjustment and improvement on what is existing.

ICTs gadgets' utilization in our daily lives is not quantifiable; in areas of use of phones, sending electronic mails (e-mails), day to day transactions in banks and financial houses, use of e-library, and use of electronic gadgets and mechanical gadgets such as radio, television, driving cars among others. Serdjukov (2017) opines that innovation is not only utilization of latest technology but having an accepted process to deliver learning through the adoption of technology. The researcher adds that innovation in education can be inform of new methodological approach, pedagogical

philosophy, instructional tools, teaching techniques, learning process or instructional structured believed to cause a great improvement in teaching and learning outcome. Ng (2009) is of the view that for anything to be taken as innovation, it must produce improved results.

There are certain challenges teachers face utilizing pedagogical innovation in class. In credence, Fordy and Raffo (2014) state that lack of data is a major challenge of innovation. The researchers reiterate that innovation in education majorly focused on research and development which is not significant to address issues in innovation in education. The curriculum designed for training teachers at various level of education has not wholly applied E-learning oriented programmes (Jimoh-Kadiri & Bupo, 2011). Ogwazu and Akeredolu (2022) outline such factors to include shortage of personnel, infrastructure and emigration of skills. Also, huge costs incurred on acquiring, installing, operating, maintaining and replacing ICTs are challenges incurred. Other factors include lack of requisite skills; teachers are not as skilled and thorough in the understanding, operation, and applications of the packages

as they are supposed to be. Serdyukov (2017) posits that challenges of innovation in education includes incorporation and implementation into teaching and learning. Ogwazu and Aguh (2021) outline other hindering factors such as poor interconnectivity, schools located in remote areas where there are poor networks, irregular power supply, children from poor parents who find it difficult to provide the devices, or that such parents are not exposed to use of technological gadgets will find it very difficult to access E- learning. The researchers add that teachers of such pupils who dwell in same locality with such challenges face same challenge of lack of ICTs access and utilization.

It is against this background that the study identifies impact of pedagogical innovation on early childhood teachers' classroom practices.

Theoretical Framework

Albert Bandura's Social Learning Theory (1977)

The theory proposed that individuals can acquire new knowledge, skills, and attitudes by watching others and the consequences of their actions. The theory also stressed on

observing, modelling and imitation of attitudes and emotions. One's behavior is learned from the environment as the individual observes others. Those in high status model the behavior of those who observe them. Such individuals that are observed are the models. This is a reality in people's day-to-day activities as they are influenced by those around them such as teachers, parents, siblings, family members and peer groups. People of high status are often observed more. As teachers model their pupils through pedagogical innovation, they become their models they look up to. Also, more competent teachers model other teachers to attune to innovations, reinventing learning process so that their classroom practices are harnessed.

Statement of the problem

Innovative teaching in 21st century depicts bringing something new to the classroom. The driver of innovation is technology. Their utilization during instruction aligns with the demand of the age. However, most teachers have challenges utilizing ICTs during instruction. Lack of regular power supply, lack of manipulative competence and lack of continuity on follow-up on teachers' trainings are glaring challenges

teachers face. Also, lack of provision and access to ICTs gadgets are detrimental to their utilization by teachers during instruction. Most teachers rarely improve themselves to align with the tenets of educational demand of the time and as a result cannot be innovative in the kind of pedagogy use during teaching and learning. Also, teachers' lack of knowledge of innovative pedagogy has limited their utilization adequately during instruction; ranging from their inability to surf the net, to knowing manipulation techniques in the digital world and the age divide between them and their pupils still poses great challenge to teachers. Therefore, Serdyukov (2017) posits that challenges of innovation in education includes incorporation and implementation into teaching and learning.

Purpose of the study

The study identifies impact of pedagogical innovation on early childhood teachers' classroom practices. Specifically, the study

- I. Outlines impact of pedagogical innovation on teachers' classroom practices
- II. Identifies challenges of teachers in pedagogical innovation and classroom practices

Research questions

- I. What is the impact of pedagogical innovation on teachers’ classroom practices?
- II. What are the challenges of teachers in pedagogical innovation and classroom practices?

Methodology

The study adopted a descriptive survey research design. The study was delimited to all basic school teachers in Surulere Local Government Area of Lagos state. The population comprised all the 68 public basic schools and all the 368 teachers in Surulere LGA (Lagos State School Census Report (2018-19). Simple Random sampling Technique was used to randomly select teachers. All teachers in primary schools were given equal chance of being selected. However, the sample size of 240 teachers were randomly selected from 24 schools. Ten teachers were randomly selected from

each school. Two research questions guided the study. Data was elicited from the respondents through the use of a questionnaire in a-14 item statement. The instrument used was titled ‘Impact of Pedagogical Innovation and Teachers’ Classroom Practices’ (IPITCP). The instrument was validated by experts in the department of Early Childhood Education and Measurement and Evaluation. Test-retest coefficient reliability was adopted and the reliability coefficient was attained at 0.80. Data gathered were analyzed using descriptive statistics such as frequency count, percentages and mean.

Findings and Results

Research question 1: What is the impact of pedagogical Innovation on teachers’ classroom practices?

Table 1: Pedagogical Innovation and Teachers’ Classroom Practices

S/N	ITEM	Num ber	SA %	A %	D %	SD %	Mean	Remarks
1.	Innovative teaching models are proactive approaches that incorporate technologies during instruction.	240	73 30.4	100 41.7	21 8.8	46 19.1	2.8	Accept
2.	Innovation improves		55	100	31	54	2.6	Accept

	school effectiveness and productivity in the 21 st century.		22.9	41.7	12.9	22.5		
3.	Innovative solutions will make teachers to be abreast with technology trends.		100	51	40	49	2.8	Accept
			41.7	21.3	16.6	20.4		
4.	Pedagogical innovation shows a great improvement in teaching and learning outcome.		100	69	58	13	3.0	Accept
			41.7	28.8	24.1	5.4		
5.	Pedagogical innovation harnesses learners' competency in ICTs utilization during instruction.		86	81	43	30	2.9	Accept
			35.8	33.8	17.9	12.5		
6.	Innovation depicts new and improved ideas, knowledge and practice.		100	72	49	19	3.0	Accept
			41.7	30	20.4	7.9		
7.	Pedagogical innovation aims at producing improved results on what is existing.		109	90	19	22	3.1	Accept
			45.4	37.5	7.9	9.2		

classroom practices has high respondents' affirmation as follows: Item 1 has a mean score of 2.8 from the respondents, while item has2 has 2.6 mean score. Item 3 has a mean

Results

Table 1 which identified impact of pedagogical innovation and Teachers'

score of 2.8. Also, item 4 has 3.0 mean score. Item 5 has a mean score of 2.9. Item 6 has a mean score of 3.0 and item 7 has a mean score of 3.1.

Research question 2: What are the challenges of teachers in pedagogical innovation and classroom practices?

Table 2: Challenges of Teachers in Pedagogical Innovation and Classroom Practices

S/N	ITEM	NUM BER	SA %	A %	SD %	D %	Mean	Remarks
8.	Incorporation and implementation of innovative pedagogy into teaching and learning is a great challenge to teachers	240	100 41.7	70 29.1	30 12.5	40 16.7	2.9	Accept
9.	Poor connectivity poses challenge to pedagogical innovation.		81 33.8	100 41.7	41 17.0	18 7.5	3.0	Accept
10.	Shortage of trained personnel is challenging to pedagogical innovation.		100 41.7	90 37.5	30 12.5	20 8.3	3.1	Accept
11.	Also, huge costs incurred on acquiring and installing ICTs gadgets are challenging		135 56.2	55 22.9	43 17.9	7 2.9	3.3	Accept

12.	Maintaining and replacing ICTs components are challenging		121 50.4	98 40.8	12 5	9 3.8	3.3	Accept
13.	Infrastructure and emigration of skills poses a great challenge to pedagogical innovation.		140 58.3	61 25.4	27 11.3	12 5	3.3	Accept
14.	The technicality of operation of ICTs poses a great challenge to teachers.		120 50	58 24.2	36 15	26 10.8	3.1	Accept

Results

Table 2 which outlined the challenges of teachers in pedagogical innovation and classroom practices has the following mean scores affirmation: Item 8 has 2.9 mean score. Item 9 has 3.0 mean score and item 10 has a mean score of 3.1. Item 11 has 3.3 mean score while item 12 has a mean score of 3.3. Item 13 has 3.3 mean score and item 14 has 3.1 mean score.

Discussions

Table 1, research question 1, items 1-7 which identified impact of pedagogical

innovation on early childhood teachers' classroom practices corroborates with the findings of Sahlberg (2011) who posits that in the current global world, only knowledge and innovation can be the force to the future. Also, OECD (2016) and Serdjukov (2017) state that technology is the major driver of innovation. Table 2, research question 2, items 8-14 which identified challenges of teachers in pedagogical innovation and classroom practices corroborates with the findings of Serdyukov (2017) who posits that challenges of innovation in education includes incorporation and implementation into teaching and learning. Also, Fordy and Raffo

(2014) state that lack of data is a major challenge of innovation.

Conclusion

Innovation depicts newness. Pedagogical innovation reinvents teaching practices, enhances learning outcome and spices-up learning. As teachers bring in new strategies through utilization of technology, interest of learners is revived, motivated and the outcome harnessed.

Recommendations

In the light of the findings of this study, the following recommendations are worthwhile:

1. Training organised for teachers should be innovative in order to enhance their competence in ICTs.
2. Teachers' classroom practices should be monitored to ensure they align with pedagogical innovation to meet up with the demand of the age.
3. Constant follow up should be done by trainers after workshops and seminars to ensure continuity on skills and teachers' competence.
4. Government, NGOs and PTA should come to the aid of schools to improvising ICTs gadgets like computers, projectors,

television, microphones and other digital devices used in teaching and learning process.

5. Network bandwidths should be improved upon on by network providers to enhance ICTs utilisation in classroom practices.

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Received on Sep 29, 2023

Accepted on Nov 10, 2023

Published on Jan 01, 2024