TEACHERS PERCEPTION ON THE USE OF MULTIMEDIA RESOURCES FOR EFFECTIVE TEACHING AND LEARNING IN EARLY CHILDHOOD EDUCATION IN ASABA DELTA STATE

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ABSTRACT
This study focused on the perception of teachers on the use of multimedia resources for effective teaching and learning in Early Childhood education. Specifically, the study aimed at finding out the extent to which teachers make use of multimedia resources in teaching and challenges facing teachers in the utilization of multimedia resources in teaching Early Childhood Education. Three research questions guided the study. The study adopted the descriptive survey research design. The population was made up of 192 Early Childhood teachers in Asaba Urban. Simple random techniques were used to select 96 nursery school teachers from the 24 public nursery schools in Asaba Urban. Structured questionnaire consisting of 20 items was raised to gather information from respondents. The questionnaire titled: 'Teachers Perception on the use of Multimedia Resources for Effective Teaching and Learning in Early Childhood Education'

Introduction:
Multimedia is simply multiple forms of media integrated together, that is, the collection of audio, sounds, text, graphics which develop in programmes. Multimedia resources are a collection of materials in non-traditional formats. They include Digital Versatile Discs, Compact Discs, music scores and newspapers. The word multimedia comes from the Latin word “multus” which means “numerous” and media which means “middle” and “centre”. Multimedia in general sense therefore means “multiple intermediaries” between
Data collected was analyzed using mean. Findings revealed that teachers were in agreement that the cost of multimedia resources is too high and that poor electricity supply affects the usage of multimedia resources. Findings shows that these multimedia resources are inadequate in public schools in Asaba Urban. It was recommended that adequate multimedia resource materials should be provided by government to ensure effective learning.

**Keywords:** Teachers, Perception, Multimedia, Teaching, learning, Early Childhood

Sources and information sinks or multiple means by which information is stored, transmitted, presented and perceived. Multimedia is communication that uses any combination of different media, it may or may not involve computers. Multimedia can include a range of formats from a simple PowerPoint slide show to a complex interactive simulation (Learning Circuits) and in most cases is believed to enhance user experience and result in easier and faster understanding of the information presented. The concept of presenting information in various formats is not a new phenomenon, however when reviewing this concept in terms of multimedia it generally implies presenting information in various digital formats (Wikipedia, 2014).

Multimedia resource plays a positive role in children's development and learning. Through the use of multimedia resource, teachers have access to more innovative and improved teaching methods that allow them to promote learning and create an active learning environment for learners. Multimedia resource can be richer, provide more development opportunities and provide more mental links for the learner to access the new knowledge with prior knowledge. Instruction using the presentation of multimedia information seems to be a potential learning advantage compared to traditional instruction in the classroom.

Brown (2014) describes the term *perception* as attitudes, behaviours, self-beliefs and/or views that a person has developed towards anything. Having
considered Brown's description as applied to this research work, teachers perceptions can be referred to the attitudes, behaviours, self-beliefs, views and the understanding that teachers hold towards the use of multimedia resource in education. Teachers' perceptions explain the beliefs that teachers have about the relevance of integrating multimedia resource into teaching and learning, and the perceived obstacles that are associated with using multimedia resource in Education (Hutchison & Reinking, 2011). Furthermore, teachers' perceptions in using multimedia resource can tell about the teachers' beliefs, including their self-efficacy on multimedia resource usage into teaching and learning. According to Park & Ertmer (2007), teachers' perception on the use of multimedia resource can be explained as the way in which teachers' regard, understand and interpret the use of technology in teaching and learning. Determining teachers' perception on the use of multimedia resources in early childhood schools in Asaba urban is important because it is the teacher that understands the nature of the instruction through his or her professional expertise and the significance attached to multimedia resources requires productive school environment with efficient resources for teaching and learning. Perception of teachers towards multimedia resources in teaching/learning and the ability to establish an interaction between technological innovation and human values, partly determines development and globalization. Many people's understanding of multimedia resource and mastering the basic skills and concept as part of the core education, alongside reading, writing and numbers. United Nations Educational,Scientific and Cultural Organization[UNESCO] aims to ensure that all countries, both developed and developing have access to the best educational facilities necessary to prepare young people to play full roles in modern society. It is important for teachers to accept and acknowledge multimedia resource because it has become, within a short time one of the basic building blocks of education and modern society (Suithwood, 2004). Some of the importance of multimedia resource in teaching and learning according to Chioran (2016), are listed; Deeper Understanding, Improved
Problem Solving, Increased Positive Emotion, Access to a Vast Variety of Information and World Exploration.

**Deeper Understanding:** According to research, a benefit of multimedia learning is that it takes advantage of the brain’s ability to make connections between verbal and visual representations of content, leading to a deeper understanding, which in turn supports the transfer of learning to other situations. All of these are important in today’s 21st century classrooms, as teachers are prepare students for the future where higher-level thinking, problem-solving and collaborative skills will be required.

**Improved Problem Solving:** A large percentage of the human brain dedicates itself to visual processing. Thus, using images, video and animations alongside a text stimulates the brain. Students’ attention and retention increase. Under these circumstances, in a multimedia learning environment, students can identify and solve problems more easily compared to the scenario where teaching is made possible only by textbooks and it helps to increase their emotions

**Increased Positive Emotions:** According to psychologist Barbara Fredrickson (2013) experiencing positive emotions makes people see more possibilities in their lives. Using multimedia during instruction impacts learner’s mood during the learning process. With a positive attitude they learn better and tend to be more proactive and have access to a vast variety of information.

**Access to a Vast Variety of Information:** with computers, tablets, smartphones and the internet, learners are today better equipped than ever to search and find the information they need. Sharing the information and participating in class discussions were done in a more confident way when access to information is very easy today and it helps them explore.

**World exploration:** With the help of multimedia children can explore and learn about places they would never been to. In a Geography class, students can explore different cities of the world, the tallest mountains and the most dangerous jungles. In a Science class, space and planets exploration are now possible. In a Biology class, the dissection of rare animals and different habitats exploration are like a walk in a park for students benefiting from
a multimedia learning environment. As a result of the fundamental importance of multimedia in the field of teaching and learning teachers ought to develop interest in multimedia usage and its application in teaching and learning in early childhood education. Teaching and learning are best thought of not as separate and independent activities but rather as two sides of the same coin, coordinated and correlated (Ehujuo, Ugwu & Obichli 2017).

According to the research conducted by Ndiku (2003) in Ehiguo, Ugwu and Obichili (2017) on the problems encountered by school personnel in the implementation of computer use in secondary schools in Uasin Gishu District, teachers were too reluctant to respond to global changes because of the challenges they face. Some of this challenges includes; lack of multimedia resource, poor electricity supply, high cost of multimedia resources and teachers lack of skill to use multimedia resources.

Early childhood education or pre-primary education is defined by the National Policy on Education (FRN, 2012) as education given in educational settings for children aged 3 through 5 years in preparing their entry into primary school. It includes “ota akara” popularly named in some parts of the country, the crèche, the nursery and the kindergarten.

Crèche: This is the type of early childhood education for babies between the ages of zero and two years inclusive

Nursery Education: This is the type of early childhood education or pre-primary education for children between the ages of two and five years inclusive

Kindergatten Education: This is the type of early childhood or pre-primary education for children between 5 and 6 years of age it is a preparatory ground for entering into the primary schools.

According to the Federal Republic of Nigeria (2014), the purpose of pre-primary education shall be to: effect a smooth transition from the home to the school; prepare the child for the primary level of education; provide adequate care and supervision for children while their parents are at work (on the farms, in the markets, offices); inculcate social norms; inculcate in
the child the spirit of enquiry and creativity through the exploration of nature, the environment, art, music and playing with toys; develop a sense of cooperation and team spirit; learn good habits especially good health habits; and teach the rudiments of numbers, letters, colours, shapes, forms, through play.

Statement of Problem
Teachers are the most important machineries in the education sector. As the important stakeholder in the education sector, they should be the first to utilize multimedia resources in order to promote teaching and learning in childhood education. The use of multimedia resources for effective teaching and learning in Early Childhood Care Education is the current trend in the world today. However, there is a negative perception towards the use of multimedia resources for effective teaching and learning in Early Childhood Care and Education in Delta State. This is as a result of lack of skill on the side of the teachers, poor electricity supply, non availability of multimedia resources in our schools, high cost of multimedia resources, lack of manpower, lack of fund to buy multimedia resources materials and equipments. Thus, this study sought to ascertain the perception of teachers on the utilization of multimedia resources in teaching and learning in Early Childhood Education.

Purpose of the Study
The main purpose of this study was to determine the perception of teachers on the use of multimedia resources in early childhood education in Asaba urban. Specifically, the study sought to find out:

1. The extent of teachers’ perception in the use of multimedia resources in teaching early childhood pupils.
2. The challenges facing teachers in the utilization of multimedia resources in teaching early childhood pupils.

Research Questions
The following research questions guided the study:
1. What is the extent of teachers perception in the use of multimedia resources in teaching Early Childhood pupils?

2. What are the challenges facing teachers in the utilization of multimedia resources in teaching early childhood class in Asaba urban?

Methodology
Descriptive survey design was employed to gather information from teachers in public early childhood schools in Asaba urban. The population of the study consists of 192 teachers from 24 public Early Childhood schools. Fifty percent of the population which was 96 teachers were used. Purposive random sampling technique was used for sample selection. It was purposive because only teachers who were within the urban metropolis were chosen for the study.

The instrument used was a structured questionnaire titled: “Teachers Perception on the use of Multimedia Resources for Effective Teaching and Learning in Early Childhood Education (TPMRETLECE)” that contained 20 items, designed on a four point scale of; very great extent (VGE) – 4 points, great extent (GE) -3 points, low extent (LE) – 2 points and very low extent (VLE) – 1 point to answer the research questions. Experts from the Department of Educational Psychology (measurement and evaluation unit) and childhood education department vetted the instrument for face and content validity.

The instrument was personally administered by the researcher to the respondent to ensure 100% return rate. A total of 96 copies of questionnaire were distributed and all were retrieved at a 100% rate of return. Distribution of the copies of the questionnaire took a period of one week. The responses on the research instrument was analysed using mean and percentage, any percentage and mean below 50 and 2.5 were rejected and 2.5 and above 50% were accepted.

Results
Research Question One: What is the extent of teachers perception in the use of multimedia resources in teaching early childhood pupils

Table 1Frequency distribution and mean scores of teachers on usage of multimedia resources in Asaba Urban
<table>
<thead>
<tr>
<th>S/N</th>
<th>ITEMS</th>
<th>VGE</th>
<th>GE</th>
<th>LE</th>
<th>VLE</th>
<th>MEAN</th>
<th>DECISION</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Early childhood teachers see the use of multimedia as the best</td>
<td>42</td>
<td>25</td>
<td>15</td>
<td>14</td>
<td>2.98</td>
<td>Accepted</td>
</tr>
<tr>
<td>2</td>
<td>Early childhood teachers have their laptops</td>
<td>14</td>
<td>26</td>
<td>32</td>
<td>24</td>
<td>2.45</td>
<td>Rejected</td>
</tr>
<tr>
<td>3</td>
<td>All the Early Childhood teachers in Asaba Urban can use multimedia resources well</td>
<td>10</td>
<td>20</td>
<td>40</td>
<td>26</td>
<td>2.13</td>
<td>Rejected</td>
</tr>
<tr>
<td>4</td>
<td>All the teachers have knowledge of multimedia resources</td>
<td>15</td>
<td>25</td>
<td>26</td>
<td>30</td>
<td>2.25</td>
<td>Rejected</td>
</tr>
<tr>
<td>5</td>
<td>Early Childhood Teachers undergo training for multimedia resources</td>
<td>11</td>
<td>15</td>
<td>30</td>
<td>40</td>
<td>1.94</td>
<td>Rejected</td>
</tr>
<tr>
<td>6</td>
<td>Multimedia resources are not available in all the Early Childhood Schools in Asaba Urban</td>
<td>40</td>
<td>30</td>
<td>12</td>
<td>14</td>
<td>3.0</td>
<td>Accepted</td>
</tr>
<tr>
<td>7</td>
<td>Teachers cannot afford all the multimedia resources needed for teaching</td>
<td>32</td>
<td>28</td>
<td>20</td>
<td>16</td>
<td>2.8</td>
<td>Accepted</td>
</tr>
<tr>
<td>8</td>
<td>All the classes are equipped with Multimedia Resources in my school</td>
<td>10</td>
<td>17</td>
<td>28</td>
<td>41</td>
<td>1.94</td>
<td>Rejected</td>
</tr>
<tr>
<td>9</td>
<td>Multimedia Resources is used in my school in teaching early childhood classes</td>
<td>10</td>
<td>20</td>
<td>40</td>
<td>26</td>
<td>1.92</td>
<td>Rejected</td>
</tr>
<tr>
<td>10</td>
<td>All the Early Childhood Teachers perceive that a change from Analog – Digital will enhance effective teaching and learning in ECCE</td>
<td>50</td>
<td>28</td>
<td>8</td>
<td>10</td>
<td>3.12</td>
<td>Accepted</td>
</tr>
</tbody>
</table>

**Grand Mean**
(Source: field work 2020) 2.4
The data presented in the table 1 revealed that 10 items raised on extent of teachers perception on the use of multimedia resources in teaching early childhood pupils; the analysis shows that items 1, 6, 7 & 10 were rated above the acceptable mean score. The mean value are; 2.98, 3.0, 3.15 & 2.8 but items 2, 3, 4, 5, 8 & 9 were below the acceptable mean. The mean value ranges; 2.5, 2.13, 2.25, 1.94, 1.94 & 1.92. The total grand mean was 2.4 meaning that teachers have a negative perception towards the use of multimedia resources in teaching early childhood pupils.

**Research Question 2**: What are the challenges facing teachers on the utilization of multimedia resources in teaching Early Childhood in public schools in Asaba Urban?

**Table II**
Frequency distribution and mean scores of teachers’ responses on the challenges facing teachers in the utilization of multimedia resources in teaching Early Childhood in public schools in Asaba Urban.

<table>
<thead>
<tr>
<th>S/N</th>
<th>ITEMS</th>
<th>VGE</th>
<th>GE</th>
<th>LE</th>
<th>VLE</th>
<th>MEAN</th>
<th>DECISION</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Early Childhood Teachers lack the skills to use multimedia resources in teaching</td>
<td>30</td>
<td>28</td>
<td>18</td>
<td>20</td>
<td>2.69</td>
<td>Accepted</td>
</tr>
<tr>
<td>2</td>
<td>Poor perception of multimedia resources among Early Childhood Teachers</td>
<td>35</td>
<td>29</td>
<td>14</td>
<td>18</td>
<td>2.82</td>
<td>Accepted</td>
</tr>
<tr>
<td>3</td>
<td>The cost of multimedia resources is too high</td>
<td>45</td>
<td>30</td>
<td>8</td>
<td>13</td>
<td>3.09</td>
<td>Accepted</td>
</tr>
<tr>
<td>4</td>
<td>Lack of manpower</td>
<td>48</td>
<td>29</td>
<td>10</td>
<td>9</td>
<td>3.19</td>
<td>Accepted</td>
</tr>
<tr>
<td>5</td>
<td>Early Childhood teachers lack multimedia facilities</td>
<td>39</td>
<td>30</td>
<td>12</td>
<td>15</td>
<td>2.95</td>
<td>Accepted</td>
</tr>
<tr>
<td>6</td>
<td>Poor electricity supply</td>
<td>50</td>
<td>30</td>
<td>6</td>
<td>10</td>
<td>3.23</td>
<td>Accepted</td>
</tr>
<tr>
<td>7</td>
<td>Government do not offer training programme to Early Childhood teachers</td>
<td>44</td>
<td>26</td>
<td>13</td>
<td>17</td>
<td>3.62</td>
<td>Accepted</td>
</tr>
</tbody>
</table>
Result from table 2 revealed that ten items on the challenges facing teachers’ utilization of multimedia resources in teaching Early Childhood public schools in Asaba Urban had the mean values ranging from 1.82 to 3.62. Only item 10 that the respondents reacted in disagreement. Items 1-9, respondents agreed that there are challenges facing Early Childhood teachers in the use of multimedia resources in teaching.

**Discussion**

Result in table 1 shows the mean of respondents on the extent of teachers perception on the use of multimedia resources in teaching Early childhood pupils. Result showed that items 1,6,7 and 10 had mean ratings of 2.98,3.0,2.8, and 3.15 while items 2,3,4,5,8 and 9 had mean ratings of 2.45,2.13,2.25,1.94,1.94 and 1.92. Since the mean ratings of 6 out of 10 items are below 2.50 set as criterion level for acceptance; this means that Early childhood teachers in Asaba has a negative perception towards the use of multimedia resource in teaching. This finding is similar to that of Seiden(2000), who reported a low level of usage of ICT equipment and facilities in schools.

Secondly, the result on table 2 showed the mean scores of the respondents on the challenges facing teachers on the utilization of multimedia resource in teaching Early childhood class in Asaba urban. The result showed that items 1-9 that the respondents agreed with the challenges facing teachers in the use of multimedia resources in teaching which include among others;
poor electricity supply, lack of skill on the side of teachers, lack of storage facilities, lack of man power and the mean score ranges from 2.69-3.54. This means that teachers were in agreement. Only item 10 that the respondents reacted in disagreement with the mean value of 1.82. The mean scores of respondents in agreement with the challenges are more. This means that there are limitations to the teachers usage on multimedia resource. This therefore attest to the low performance of children in ICT lessons which is as a result of the inability of the teachers using multimedia resources in teaching and it attest to the finding of Anujionye (2012), that the common problem associated with the effective implementation of ICTs in Nigerian schools are unqualified ICT personnel, high cost of multimedia resources, poor management, inconsistent power supply and inadequate training of teachers.

Conclusion
The use of multimedia resources is of great value in teaching and learning so that both teachers and learners should have access to information. In order to enjoy the importance of multimedia resources, teachers need to be equipped with basic competencies in the use of multimedia resources. Based on the findings of this study, the following recommendations were made:

Recommendation
1. Government agencies should adequately finance and sponsor programmes for staff training/development on the usage of multimedia resources.
2. Teachers should be encouraged to divulge from old traditional/practices and resort to more creative resources materials.
3. Adequate resource materials should be provided by government and parents to ensure effective learning

References


