Utilization of Interactive and Non-Interactive Media for Teaching and Learning Courses in Faculties of Education in Universities in Rivers State

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Abstract
The study examined the utilization of interactive and non-interactive in faculties of education in Universities in Rivers State. Descriptive survey design was adopted and the population comprised of 258 lecturers and 11,666 students giving a total population of 11,924. Sample was drawn from the study and analysis was done with 168 lecturers and 232 students who returned their instruments. Test re-test method was used for the reliability test which yielded a co-efficient of 0.82. Mean and standard deviation were used to analyse the research questions while z-test was used to test the hypotheses. Findings from the study revealed that interactive and non-interactive media are critically utilised to some extent for teaching and learning courses in faculties of education in universities in Rivers State. The hypotheses testing proved that there is no significant difference in the responses of the lecturers and students on the utilization of interactive and non-interactive media as a component of information and communication technology in teaching and learning courses in faculties of education in universities in Rivers State. Based on the findings, conclusion were drawn and recommendations made amongst others includes provision of interactive and non-interactive media in faculties of education in universities in Rivers State for effective teaching and learning should be encouraged; training and retraining of lecturers on how to effectively utilize interactive and non-interactive media during teaching should be a necessity for lecturers in the faculties of education and students should try and utilize the interactive and non-interactive media during learning as it will certainly help in improving their knowledge and understanding.

Key Words: Interactive, Non-Interactive, Media, Teaching and Learning, Courses, Faculties of Education

Introduction
E-learning technology has the potential to transform how and when learners learn. Learning will become more integrated with work and will use shorter, more modular, just in time delivery systems. E-learning delivers contents through electronic information and communication technologies (ICT). According to Ajayi (2008), the use of these interactive and non-interactive media involves various methods which include systematic feedback system. Computer-based operation network, video conferencing and audio conferencing, internet worldwide websites and computer assisted instruction. This delivery method increases the possibilities for how, where and when learners can engage in life-long learning - lecturers are especially excited about the potential at e-learning for just-in-time learning delivery. The products of business education to maintain technological leadership, they must be equipped with technological competencies to meet up with the tremendous surge and
demand of the ever changing technologies in the world of work. Osuala (2009) recognizes new technologies as a developing force. Above all, the infrastructures of information and communication technology in tertiary institutions are always not accessible. According to Philip; Oluwaghemna and Oluwaranti (2010) tertiary institution lack adequate infrastructure to effectively tap into the opportunities offered by the cyberspace. Moreover, where they are available they are plagued by one problem or the other. Despite the development in the capacities of information and communication technology and its impact, DY Path University (2012) (2006) as cited in Uchendu, (2012) stated that the level of application of information and communication technology in Nigerian universities is less than five percent. Information and communication technologies is still not fully reflected in the teaching and learning process in faculties of education in tertiary institutions in Rivers State. Because of lack of such facilities teachers do not seem to be using them in teaching and learning. Students are not also exposed to their use where they can apply their knowledge. Hence, the basic aim of this research is to provide a framework of the extent of utilization of information and communication technologies in faculties of education in Rivers State.

**Non-interactive Media in Teaching and Learning in Tertiary Institutions in Rivers State**

A fixed, self-contained and pre-conceived passive experience, fictional or not, typically featuring a narrative, often with a beginning, a middle and an end. The students are only observers and not able to interact and participate and therefore incapable of influencing or changing the experience directly. The construct of the experience contains all necessary elements correctly structured and ordered. It is therefore complete even without the students observing. A film does not just stop by itself if a student decides to walk out of the cinema at the middle. This implies that the author has full control over the structure of the experience and contributes all the pieces required to make the structure complete and functional. In a film or book the author has full control over setting, structure, narrative and characters, including protagonist and antagonist. The researchers can easily dictate structure, pace, progress, perception and perspective and interchange will. The various forms of non-interactive media have their own immersion and emotional delivery language: for novels it could be choice of structure, words, perspective, pace, perception etc. whilst audio-visual media like film and television use narrative structure camera framing, editing, lighting, sound, music, actor performance amongst others (Backer, 2011). Because the student only observes the experience, the emotions evoked are indirect and reactive towards experience. The students will feel for the characters and situations but it will not necessarily feel the same.

**Communication Effects of Non-interactive Media**

The emphasis here is on specific non-interactive media applications with specific content to assess learning outcomes linked to a formal curriculum. By contrast, the sub heading is to review research on the role of media, in particular, non-interactive media, and learning outside the classroom, outside the formal learning environment. It focuses on the way in which media contribute to learning when no teacher is present and the media presentation is not linked to a formal, institutional curriculum with explicitly measurable goals. Research on media and learning outside the classroom dates back to early studies of the introduction of mass media. Kathy & Warren (n.d) as each new medium such as film, radio, television, and computer was adopted into the home setting, a new generation of research investigations examined the role of the medium and it’s potential as a teacher. In addition to questions of how a new dominant mass medium would alter people’s use of time and attention, one of the central research questions was how and to what extent students would learn from the new media system. Over time, these questions broadened beyond media content to explore the
manner in which students interpreted media messages and the social context in which that interpretation takes place. This focuses on these unique perspectives in a review of communication and media research on learning. Classic studies of the introduction of both film and television illustrate the broad-based questions regarding non-interactive media and learning posed in relation to a new medium. In the case of film, the Payne Fund studies in the 1930s represented the first large-scale attempt to investigate the media’s role in influencing people’s beliefs and attitudes about society, other people, and themselves. Investigators (Cressey, 2016; Holaday & Stoddard, 2015; Peterson & Thurstone, 2010; Shuttleworth & May, 2008) examined three types of learning that have become dominant in studies of media and learning:

- Knowledge acquisition or the reception and retention of specific information
- Behavioural performance, defined as the imitation or repetition of actions performed by others in media portrayals; and
- Socialization or general knowledge, referring to attitudes about the world fostered by repeated exposure to mass media content.

Researchers have found evidence in support of the medium’s influence on learning on all three counts. In addition, learning from film could go well beyond the specific content and the intended messages. According to Cressey (2016), when a child or youth goes to the movies, he or she acquires from the experience much more than entertainment. General information concerning realms of life of which the individual does not have other knowledge, specific information and suggestions concerning fields of immediate personal interest, techniques of crime, methods of avoiding detection, and of escape from the law, as well as countless techniques for gaining special favours and for interesting the opposite sex in oneself are among the educational contributions of entertainment films. Compared to traditional classroom teaching, Cressey asserted, films offered an irresistible and oppositional—new source of knowledge, especially for young people. Early studies of the introduction of television adopted similar broad-based approaches and reached similar conclusions regarding the role of the new medium in shaping individuals’ responses to, which is, helping them learn about, the world around them. According to Shuttleworth and May (2008), the first rigorous exploration of television’s effects on children set the stage for an examination of television’s unintended effects on learning.

Cultural Analysis of Using Non-Interactive Media in Teaching and Learning

Cultural studies as a research approach fits under Carey’s ritual view of communication. It assumes that non-interactive media messages are part of a much broader social, political, economic, and cultural context. Non-interactive media messages are examined less in terms of content than in the relationship of the content and the social environment in which it is applied. That is to say that the messages are not viewed in isolation, but rather as part of an integrated set of messages that confront students learning. One’s definition of and experience with objects, events, other people, and even oneself, is determined through a network of interpersonal relationships. Based on the perspective of Wilson and Pahl (1988) and Bernardes (1986) as cited in Krendl (2009), researchers must account for this social emboldens of media users. Specifically, this means that any examination of media use must account for psychological motivations for learning as well as the nature of the social relationships that give rise to such motivations. This negotiation determines both the symbols we use to communicate and the meanings of those symbols (Cressey, 2016).

Culture: On a micro level, then, participants arrive at shared meaning for successful communication. However, cultural analysts are concerned at least as much about macro-level
phenomena. Individual action is influential when it becomes routine. Patterns of social action take on a normative, even constraining, force in interpersonal relationships. They become a set of social expectations that define life within specific settings (such as a home or workplace). Thus, social routines (such as football highlight) become the very fabric of cultural life of 67 percent of students. Culture is defined as “the particular pattern of relations established through the social use of things and techniques.”

**Power:** Because of its roots in the critical Marxism of theorists such as Holaday and Stoddard (2015) noted, cultural studies assigns a central role to the concept of power. Because the mass media of that time were controlled largely by social and financial elites, critical theorists examined media messages in reference to the economic and political forces that exercised power over individuals. Initially, this meant uncovering the size, organization, and influence of media monopolies in tangible historical/economic data. Consequently, an intense focus on the political economy of mass media became a hallmark of this approach. Media elites were seen as manufacturing a false consciousness about events, places, and people through their presentation of limited points of view. In news coverage, this meant exclusively Western perspectives on news events, largely dominated by issues of democracy, capital, and conquest.

**Viewing Pleasures:** This celebration of the viewer raises an important tension within cultural studies. Seiter, Borchers, and Warth (2009) referred to this as “the politics of pleasure.” Viewers’ pleasure in television programming is an issue used to motivate many studies of pop culture and to justify the examination of popular television programmes. Innumerable college courses and academic studies are only the beginning of the examples one could provide on this score (example, Peterson & Thurstone, 2010; Shuttleworth & May, 2008). However, Seiter et al. (2009) charge that some rather heady political claims have been made about the television experience.

**Social Positioning:** Studies of everyday social life revealed that media are important resources for social actors seeking to achieve very specific goals. The nature of these goals is dependent upon one’s position in the local social setting. In the home, for example, children’s goals are not always the same as, or even compatible with, parents’ goals for television viewing. Thus, one’s position in relation to social others influences the goals and nature of media use. Cultural studies scholars foreground this purposeful activity as an entry point in our understanding of both local and global culture. In essence, this approach claims that individuals use media messages to stake out territory in their cultural environment. Media messages present images and symbols that become associated with specific social groups and subgroups (example; teens, and elderly). Media users, given enough experience, attain the ability to read and interpret the intended association of those symbols with those cultural identities (for example, a white hat as a symbol of the “good” cowboy). The display of such cultural competence is a means by which individuals identify themselves as part of certain social groups and distinguish themselves from others. In this way, social agents come to claim and occupy a social position that is the product of their cultural, social, educational, and familial background. This background instils in us our set of cultural competencies and regulates how we perceive, interpret, and act upon the social world. It creates mental structures upon which one bases individual action.

High cost of interconnectivity, the cost of internet access, relevant software and hardware is so high that only few individuals, government institutions and parastatals can afford it as compared to other countries. Added to this, is the astronomical cost the licensing fee for
internet services providers (ISP). In 1995, the fee was 143,000.00; in 1999 it was increased to 338,000.00. Presently, renewal fee is ₦1,000,000 or more. This cost can be obstacle to potential investors. The act of integrating information and communication technology into teaching and learning is a complex process and one that may encounter a number of difficulties which include:

Poor information and communication technology policy and implementation strategy, lack of information and communication technology infrastructures, frequent electricity interruption, high cost of information and communication technology facilities or component, limited school budget, inadequate educational software and poor management on the parts of school administration and government.

Lack of infrastructures: Poor or lack of infrastructural problem remains major obstacles in many developing countries like Nigeria as it is neither there nor is it utilized (Jamwal, 2012). A survey in the USA by the National Centre for Education Statistics (NCES) using the Fast Response Survey System (FRSS) revealed that 99 percent of full time regular public institutions teachers had access to computers or the internet somewhere in their school.

Poor information and communication technology policy or implementation strategy: Nigeria information technology industry strategy (NITIS, 2006) stated that Nigeria does not have a comprehensive information and communication technology policy. The legislative provisions are scattered throughout the government department. There is a view that the absent of such a comprehensive policy is not the result of lack of political will, but is the result of the speed with which developments occur in the sector and the complexity of the issues involved (NITIS, 2006). Nevertheless, this situation has the potential to create conflict and detract government from pursuing a universal approach to information and communication technology.

Frequent electricity interruption: Power is a major player in information and communication technology. Without constant power the objective of this technology will be defeated, because not all students have access the constant power. Observation shows in Rivers State University generators are programmed to be on by 11am daily so the students is subjected to that time. Before any academic exercise electronically can take place which is major challenge to students in course of their study.

High cost of information and communication technology facilities or components: Uchendu (2012) revealed that the level of application of information and communication technology in Nigerian universities is less than five percent. Uchendu further argued that most of these universities have little or no infrastructure for cyber-centre, computer equipped classroom or high speed internet which is attributed to lack of fund. Information and communication technology tools meet with challenges ranging from financial constraints, inadequate electricity, and the problem of getting technical experts to handle the maintenance of information and communication technology resources. Teachers’ knowledge on the use of information and communication technology resources to enhance teaching and to make a total reshape of education is rather underdeveloped. Akomolote (2008) opined that teachers seem to be very conservative as far as adopting modern pedagogies in teaching and learning is a concern. Akomolote further stated that the use of information and communication technology has brought pedagogical innovations to classroom teaching.

Anumnu (2008) viewed the factors inhibiting the provision and utilisation of information and communication technology facilities in the classroom includes among others the teacher
factor. The absence of trained teachers among others militates against the use of ICT in classroom. Most teachers in the school system play the avoidance techniques. They keep a distance from any computer related activities and training, such distance may be as a result of ignorance, negative perception or inferiority complex. Most teachers are resistant to change and it does prevent full implementation of information and communication technology in the classroom. Thus, all practicing teachers must embrace the challenges of information and communication technology and use it as tools and skills to impact quality lessons to their students, get abreast with the current information in their subject areas. Above all, Akomolate (2008) opined that teachers have a network world to deal with, which demands working in a more collaborative way, regionally, nationally and globally.

Statement of the Problem
Interactive media normally refers to products and services on digital computer-based systems which respond to the user's actions by presenting content such as text, moving image, animation, video, audio, and video games. Most Faculties of Education curriculum have not fully embraced the use of interactive and non-interactive media in teaching and learning courses in faculties of Education in Universities in Rivers State. This is as a result of the prevailing challenges such as issues in dispute on proposed distinction between interactive and non-interactive instruction. The origin of this issue was a provision of the minimum requirements for degree granting institutions that one-half of the course credits for either degree or post graduate degree be earned through direct classroom instruction. Direct classroom instruction means live instruction on the academic level which allows immediate interaction between student and instructor, including lecturers, laboratory, instruction, seminars, colloquia, independent study, interactive instructional television and interactive computer-aided instruction, but not including instruction through correspondence, non-interactive learning, credit for prior learning, cooperative education activities, practical, internships, externships, apprenticeships, portfolio review, departmental examinations, challenge examinations or courses offered by non-academic institutions. It is based on the above issues raised by the researchers that this study was motivated.

Purpose of the Study
The aim of the study was to determine the utilization of interactive and non-interactive media for teaching and learning courses in Faculties of Education in universities in Rivers State. The study was to determine the:

1. Extent of utilization of interactive media as a component of information and communication technology in teaching and learning courses in Faculties of Education in universities in Rivers State.
2. Extent of utilization of non-interactive media as a component of information and communication technology in teaching and learning courses in Faculties of Education in universities in Rivers State.

Research Questions
The following research questions were posed for the study:

1. What extent is interactive media utilized as a component of information and communication technology in teaching and learning courses in Faculties of Education in universities in Rivers State?
2. What extent is non-interactive media utilized as a component of information and communication technology in teaching and learning courses in Faculties of Education in universities in Rivers State?
Hypotheses

Two null hypotheses were tested at 0.05 level of significant.

1. There is no significant difference in the mean rating of students and lecturers on the extent of utilization of interactive media as a component of information and communication technology in teaching and learning courses in Faculties of Education in universities in Rivers State.

2. There is no significant difference in the mean rating of students and teachers on the extent of utilization of non-interactive media in teaching and learning Courses in Faculties of Education in universities in Rivers State.

Methods

The area of the study was in Faculties of Education in Universities in Rivers State, Nigeria and the design was a descriptive survey, because the variables being studied were not subjected to manipulation but were observed in their natural setting and questionnaire was used to elicit responses from the respondents. The population of the study consists of 11,924 lecturers and students in three Universities and one College of Education in Rivers State which include Rivers State University, Port Harcourt, Ignatius Ajuru University of Education, Port Harcourt, University of Port Harcourt and Federal College of Education (Technical) Omoku. Details of the population are shown in table 1. The sample size for the study was 490 respondents. The figure comprised the entire 258 lecturers and 232 students selected from 11,666 students using Taro-Yemen formula. Self-structured questionnaire titled ‘Utilization of Interactive and Non-Interactive Media for Teaching and Learning Courses in Faculties of Education Questionnaire (UINMTLCFEQ)’ was used to collect data from both lecturers and students. The instrument was developed in two sections, A and B. Section A of the instrument was for the background information of the respondents while section B was used to elicit information for the research questions posed in the study. The respondents were made to choose the best options that suits their view about the question items raised. Four point scale of Highly Highly Utilized (HU= 4 points), Utilized (U = 3 points), Moderately Utilized (MU = 2 points) and Not Utilized (NU = 1 point) was used to gather information for the research questions. The instrument was subjected to content and face validity. Reliability of the instrument was done through test-re-test method using nine (9) lecturers outside the population under study, who were not part of the study population. The second test was given at interval of two weeks after the first test and a Correction Co-efficient (r) and reliability index of 0.82 was obtained and the instrument was deemed reliable by the researchers for the study. All the instrument administered were not retrieved and the researchers used only the retrieved instrument for analysis as 168 instead of 258 lecturers returned their instrument and 232 students also returned theirs. Mean and standard deviation was used to analyse the research questions posed. Decision for accepting the analysis was based on the mean score of 2.50 and above which was utilized while item with mean score below 2.50 was not utilized. z-test statistical tool was used to test the null hypotheses posed for the study and decision were made based on the results obtained.
Table 1: Population Distribution

<table>
<thead>
<tr>
<th>S/N</th>
<th>Institutions</th>
<th>No. of Students</th>
<th>No. of Lecturers</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Rivers State University, Port Harcourt</td>
<td>1,824</td>
<td>67</td>
</tr>
<tr>
<td>2.</td>
<td>Ignatius Ajuru University of Education, Port Harcourt</td>
<td>2,800</td>
<td>38</td>
</tr>
<tr>
<td>3.</td>
<td>University of Port Harcourt</td>
<td>5,321</td>
<td>132</td>
</tr>
<tr>
<td>4.</td>
<td>Federal College of Education (Technical), Omoku</td>
<td>1,721</td>
<td>21</td>
</tr>
<tr>
<td></td>
<td><strong>Total</strong></td>
<td><strong>11,666</strong></td>
<td><strong>258</strong></td>
</tr>
</tbody>
</table>

Source: Field Survey, 2018

Results
The results and analysis was presented as thus:

Research Question 1: What extent is interactive media utilized as a component of information and communication technology in teaching and learning courses in Faculties of Education in universities in Rivers State?

Table 2: Mean Rating of the Respondents on the Extent Interactive Media Utilized as a Component of Information and Communication Technology in Teaching and Learning Courses in Faculties of Education

<table>
<thead>
<tr>
<th>S/N</th>
<th>Item</th>
<th>Lecturers (N=168) Mean</th>
<th>SD</th>
<th>Remarks</th>
<th>Students (N=232) Mean</th>
<th>SD</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Interactive media increases my communication skills</td>
<td>3.68</td>
<td>0.67</td>
<td>HU</td>
<td>3.50</td>
<td>0.86</td>
<td>HU</td>
</tr>
<tr>
<td>2.</td>
<td>Interactive media changes learner’s attitude towards learning</td>
<td>3.87</td>
<td>0.37</td>
<td>HU</td>
<td>3.36</td>
<td>0.94</td>
<td>U</td>
</tr>
<tr>
<td>3.</td>
<td>It promotes dialogic communication</td>
<td>3.74</td>
<td>0.49</td>
<td>HU</td>
<td>3.28</td>
<td>1.00</td>
<td>U</td>
</tr>
<tr>
<td>4.</td>
<td>It is most suitable for cooperate learning</td>
<td>3.54</td>
<td>0.88</td>
<td>HU</td>
<td>3.16</td>
<td>1.06</td>
<td>U</td>
</tr>
<tr>
<td>5.</td>
<td>It helps build my social, emotional and language development</td>
<td>3.51</td>
<td>0.95</td>
<td>HU</td>
<td>3.18</td>
<td>1.05</td>
<td>U</td>
</tr>
<tr>
<td></td>
<td><strong>Total mean/SD</strong></td>
<td><strong>18.84</strong></td>
<td><strong>3.36</strong></td>
<td></td>
<td><strong>16.48</strong></td>
<td><strong>4.91</strong></td>
<td></td>
</tr>
</tbody>
</table>

Source: Field Survey, 2018

The analysis in table 2 shows that the lecturers and students rated the items in the table highly utilized and utilized on the extent of utilization of interactive media. Thus, it indicates that interactive media increases an individual’s communication skills, changes learner’s attitude towards learning, promotes dialogic communication, most suitable for cooperate learning and it helps build my social, emotional and language development. The grand mean of 3.66 for
lecturers and 3.29 for students is a clear indication that interactive media are critically utilised to some extent for teaching and learning courses in faculties of education in universities in Rivers State.

**Research Question 2:** What extent is non-interactive media utilized as a component of information and communication technology in teaching and learning courses in Faculties of Education in universities in Rivers State?

**Table 3: Mean Rating of the Respondents on the Extent Non-interactive Media is Utilized as a Component of Information and Communication Technology in Teaching and Learning Courses in Faculties of Education**

<table>
<thead>
<tr>
<th>S/N</th>
<th>Item</th>
<th>Lecturers (N=168) Mean</th>
<th>SD</th>
<th>Remarks</th>
<th>Students (N=232) Mean</th>
<th>SD</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Television is good instructional material.</td>
<td>3.68</td>
<td>0.68</td>
<td>HU</td>
<td>3.25</td>
<td>1.01</td>
<td>U</td>
</tr>
<tr>
<td>2.</td>
<td>Pictures and books are needed in training.</td>
<td>3.69</td>
<td>0.96</td>
<td>HU</td>
<td>3.29</td>
<td>0.99</td>
<td>U</td>
</tr>
<tr>
<td>3.</td>
<td>Materials are only for downloading.</td>
<td>3.80</td>
<td>0.44</td>
<td>HU</td>
<td>3.30</td>
<td>0.97</td>
<td>U</td>
</tr>
<tr>
<td>4.</td>
<td>Materials are only for viewing.</td>
<td>3.74</td>
<td>0.51</td>
<td>HU</td>
<td>3.46</td>
<td>0.71</td>
<td>U</td>
</tr>
<tr>
<td>5.</td>
<td>No feedback is required.</td>
<td>3.64</td>
<td>0.91</td>
<td>HU</td>
<td>3.35</td>
<td>0.89</td>
<td>U</td>
</tr>
<tr>
<td></td>
<td><strong>Total mean/SD</strong></td>
<td><strong>18.65</strong></td>
<td><strong>3.5</strong></td>
<td><strong>HU</strong></td>
<td><strong>16.65</strong></td>
<td><strong>4.57</strong></td>
<td><strong>U</strong></td>
</tr>
<tr>
<td></td>
<td><strong>Grand mean/SD</strong></td>
<td><strong>3.73</strong></td>
<td><strong>0.7</strong></td>
<td></td>
<td><strong>3.33</strong></td>
<td><strong>0.91</strong></td>
<td></td>
</tr>
</tbody>
</table>

**Source:** Field Survey, 2018

The analysis in table 3 shows that the lecturers and students rated the items in the table highly utilized and utilized on extent of utilization of non-interactive media in teaching and learning courses in universities in Rivers State. Thus, it indicates that television is good instructional material, pictures and books are needed in training, materials are only for downloading, materials are only for viewing and feedback is required. The grand mean of 3.73 for lecturers and 3.33 for students is a clear indication that the issues raised here are good in teaching and learning courses in Faculties of Education in universities in Rivers State.

**Test of Hypotheses**

The hypotheses were tested according to each research question as thus:

**Hypothesis 1:** There is no significant difference in the mean rating of students and lecturers on the extent of utilization of interactive media as a component of information and communication technology in teaching and learning courses in Faculties of Education in universities in Rivers State.

**Table 4: z-test Result of the Difference in Mean Rating of Lecturers and Students on Interactive Media**

<table>
<thead>
<tr>
<th>Group</th>
<th>N</th>
<th>Mean</th>
<th>SD</th>
<th>L/Significance</th>
<th>z-cal</th>
<th>t-tab</th>
<th>Remark</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lecturers</td>
<td>168</td>
<td>3.66</td>
<td>0.67</td>
<td>.05</td>
<td>-7.10</td>
<td>1.96</td>
<td>Accepted</td>
</tr>
<tr>
<td>Students</td>
<td>232</td>
<td>3.29</td>
<td>0.98</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Source:** Field Survey, 2018
The analysis in table 4 showed that at 0.05 percent level of significant, the calculated z value of -7.10 is less than the table value of 1.96. Hence, the null hypothesis is accepted, meaning that there is no significant difference in the mean responses of lecturers and students regarding the utilization of interactive media as a component of information and communication technology in teaching and learning courses in faculties of education in universities in Rivers State.

**Hypothesis 2:** There is no significant difference in the mean rating of students and teachers on the extent of utilization of non-interactive media in teaching and learning courses in Faculties of Education in universities in Rivers State.

**Table 5: z-test Result of the Difference in Mean Rating of Lecturers and Students on Non-Interactive Media**

<table>
<thead>
<tr>
<th>Group</th>
<th>N</th>
<th>Mean</th>
<th>SD</th>
<th>L/Significance</th>
<th>z-cal</th>
<th>t-tab</th>
<th>Remark</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lecturers</td>
<td>168</td>
<td>3.73</td>
<td>0.7</td>
<td>.05</td>
<td>-4.96</td>
<td>1.96</td>
<td>Accepted</td>
</tr>
<tr>
<td>Students</td>
<td>232</td>
<td>3.33</td>
<td>0.91</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Source:** Field Survey, 2018

The analysis in table 5 showed that at 0.05 percent level of significance, the calculated z value of -4.96 is less than the table value of 1.96. Hence, the null hypothesis is accepted, meaning that there is no significant difference in the mean responses of lecturers and students regarding the utilization of non-interactive media as a component of information and communication technology in teaching and learning courses in Faculties of education in universities in Rivers State.

**Discussion**

Findings from the study were done according to each research question as raised in the study. Results from research question one revealed that interactive media increases communication skills of both lecturers and students as it changes learner’s attitude towards learning, promotes dialogic communication, most suitable for cooperate learning and it helps to build social, emotional and language development. This clearly indicates that interactive media are critically utilised to some extent for teaching and learning courses in faculties of education in universities in Rivers State. This finding is in agreement with the views of Idoko and Ademu (2010) who depicts that utilization of interactive media increases communication skill of an individual while non-utilization of interactive media is an obstacle to technology adoption and integration in learning as Idoko and Ademu indicated that there is urgent need for more computers and information and communication technology facilities in universities if a country is to successfully integrate it in higher institutions. The researchers viewed that it is important that interactive media be used in teaching and learning courses in faculties of education as this will actually help in upgrading the standard of education in both State and country.

The findings from research question 2 indicated that television is good instructional material, pictures and books are needed in training and teaching educational courses in faculties of education as materials are only for downloading, viewing and no feedback is required. This is a clear indication that lecturers and students rated the items highly utilized and utilized on non-interactive media for teaching and learning courses in faculties of education in
universities in Rivers State. The finding indicated that the respondents accepted the statement that lack of infrastructure, poor information and communication technology facility usage or policy, poor electricity supply, limited budget and poor management poses challenge. This finding is in agreement with the view of Everest and Laura (2011) who depicts that some inhibitors to the use of e-learning facilities which include power outage, obsolete e-learning facilities, lack of skilled manpower and poor infrastructure is due to lack of non-utilization of interactive and non-interactive media for teaching and learning. In agreement with the views of Everest and Laura, Uchendu (2012) opined that the level of application of information and communication technology in Nigerian universities is less than five percent. Uchendu further argued that most of these universities have little or no infrastructure for cyber-centre, computer equipped classroom or high speed internet which is attributed to lack of fund. The researchers viewed that the act of integrating information and communication technology into teaching and learning is a complex process and one that may encounter a number of difficulties which include Poor information and communication technology policy and implementation strategy, lack of information and communication technology infrastructures, frequent electricity interruption, high cost of information and communication technology facilities or component, limited school budget, inadequate educational software and poor management on the parts of school administration and government as the hypotheses testing were all accepted.

Conclusion
The researchers concludes that interactive media ought to be utilized in teaching and learning courses in faculties of education and if this is done, teaching and learning will be more appropriate as the students learn more on what they see and visualize. The need for interactive and non-interactive media in faculties of education in universities in Rivers State is very essential as the results and analyses of the study proved that most universities in Rivers State do not use interactive and non-interactive media in teaching courses in faculties of education in Rivers State.

Recommendations
Based on the findings and conclusion from the study, the following recommendations were made by the researchers:

1. Provision of interactive and non-interactive media in faculties of education in universities in Rivers State for effective teaching and learning should be encouraged.
2. Training and retraining of lecturers on how to effectively utilize interactive and non-interactive media during teaching should be a necessity for lecturers in the faculties of education.
3. Students should try and utilize the interactive and non-interactive media during learning as it will certainly help in improving their knowledge and understanding.

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