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TABLE OF CONTENTS

COMPARATIVE ANALYSIS OF STUDENTS' LEARNING STYLES AND MATHEMATICS PERFORMANCE AT THE TERTIARY LEVEL OF EDUCATION IN KATSINA STATE, NIGERIA. Adeniji, K. A. Federal University, Dutsin-Ma, Dept of Science Education. kadeniji @ fudutsinm.edu.ng,xyoriented@gmail.com 08037660561 1

THE EFFECTS OF A WELL PLANNED CORRECTIONAL EDUCATION PROGRAMME ON THE REHABILITATION OF PRISON INMATES IN NIGERIA. Abba, Mannir, Dept of Adult Education and Extension Services. Usmanu Danfodiyo University, Sokoto, Nigeria.manniraba@ yahoo.com & Sanda, Mohammed Umar (Ph.D) Dept of Educational Foundations, Federal University, Dutsin-Ma, Katsina State, Nigeria. musanda 123@ yahoo.com 08035892454 ..13

EPISTEMOLOGICAL BELIEFS AS A CATALYST IN OPEN AND DISTANCE LEARNING EDUCATION.

Okoza, Jolly (Ph.D. Educational Psychology) School of Education, National Open University of Nigeria, Victorial Island, Lagos. okozajolly @ yahoo.com 08030647727.....24

KNOWLEDGE AND ATTITUDE OF PRIMARY SCHOOL TEACHERS TOWARDS PUPILS WITH ATTENTION DEFICIT HYPERACTIVITY DISORDER (ADHD) IN PRIMARY SCHOOLS IN YENAGOA LOCAL GOVERNMENT AREA, BAYELSA STATE, NIGERIA. Maliki, Agnes Ebi, Dept. of Educational Foundations, Faculty of Education, Niger Delta University, Wilberforce Island, Bayelsa State. agnesmaliki @ yahoo.com 40

SCIENCE EDUCATION AND NIGERIAN NATIONAL DEVELOPMENT EFFORT: THE MISSING LINK

Paulley, Fabainmine G.(Ph.D), Dept of Educational Foundations, Niger Delta University, Wilberforce Island .paulley fg @ mail .ndu.edu.ng. 08037768953 & Professor Buseri, John C. Dept of Teacher Education, Niger Delta University, Wilberforce Island. johnbuseri@yahoo.com 54

SPORTS AS AN AGENT FOR PEACEFUL CO-EXISTENCE. Abdulsalam, Abdullah, Dept of Physical and Health Education, School of Science Education, Federal College of Education (Technical) Gasau. just2abdul@gmail.com 07030315880..... 7

THE MANAGEMENT OF DISCIPLINARY PROBLEMS OF SECONDARY SCHOOL STUDENTS IN BENIN CITY. Igbafe, K. R. Dept of Educational Management, University of Benin, Benin City, Nigeria igbafe-k-r@ yahoo.com 08064507391..... 78

SCHOOL-BASED ASSESSMENT AS A DETERMINANT OF STUDENTS' ACHIEVEMENT IN WAEC AND NECO EXAMINATIONS: GEOGRAPHY IN FOCUS. Jimoh, Mohammed Idris, Dept of Social Science & Education, Faculty of Education, University of Ilorin. jimoh.mi @ unilorin.edu.ng & Olutola, Adekunle Thomas (Ph.D), Dept of Educational Foundations, Faculty of Science and Education, Federal University, Dutsin-Ma, Katsina State, Nigeria. aolutola @ fudutsima.edu.ng 08165117771 & Balogun, Abdurasaq Olatunji, Dept of Social Sciences Education, Faculty of Education, University of Ilorin. balogun.ao@unilorin.edu.ng..... 93

SUSTAINING EDUCATIONAL DEVELOPMENT IN THE ERA OF TEACHER SHORTAGE: THE WAY FORWARD. Osagiobare, Osamiro Emmanuel, Dept of Educational Foundations, Faculty of Education, University of Benin, Benin City. emmanuel.osagiobare @ uniben.edu 07039080142. Imogie, Rachel Irete, Nigerian Institute For Oil Palm Research (NIFOR), Benin City. 08133899413 & Igbineweka, Martins Noyosase, Dept of Arts and Humanities, School of General Studies, Delta State Polytechnic, Ogwashi-Uku. iginewekamartins @ gmail.com 0816433764. 102

ACCESS TO UNIVERSITY EDUCATION IN NIGERIA: THE NIGERIAN EXPERIENCE. Okotoni, Comfort A., tayokotoni @ yahoo.com & Adebakin, Azeez B., Dept of Educational Management, Obafemi Awolowo University, Ile-Ife, Nigeria. adebakinazeez@yahoo. 08053365175. 113

STAFF PARTICIPATORY MANAGEMENT IN SECONDARY SCHOOLS AS A PANACEA TO ENHANCED PRODUCTIVITY IN SOUTH WESTERN NIGERIA. Professor Akin Ogunlade, Dept of Educational Management, Faculty of Education Obafemi Awolowo University, Ile-Ife, Nigeria. ogunlade lucas @ gmail.com 08066761178 & Dr. Yusuf. Musibau Adeoye, Dept of Educational Management, Faculty of Education, Obafemi Awolowo University, Ile-Ife, Nigeria. siyanmade@ gmail.com 08062915901.....127

ASSESSMENT OF UNDERGRADUATE STUDENTS' LEVEL OF AWARENESS AND UTILISATION OF E-RESOURCES FOR EDUCATIONAL DEVELOPMENT IN SELECTED UNIVERSITIES IN OGUN STATE, NIGERIA.

Akorede, Olufunbi Jimoh (Ph.D), akoredejimmy55@ gmail.com 08056117431, Bamiro, Oladipupo Adekunle (Ph.D), Dept of Educational Foundations and Instructional Technology (Educational Technology Unit), College of Applied Education and Vocational Technology, Tai Solarin University of Education, Ijebu-Ode, Ogun State, Nigeria. bamirooa@ tosued.edu.ng & Alaba, Olumuyiwa Bamidele (Ph.D), Dept of Computer Science, College of Science and Information Technology, Tai Solarin University of Education, Ijebu-Ode, Ogun State, Nigeria. 138

THE EFFECTS OF ENROLMENT AGE ON THE ACADEMIC PERFORMANCE OF PRE-PRIMARY SCHOOL PUPILS IN OREDO, EGOR AND OVIA-NORTH EAST LOCAL GOVERNMENT AREAS OF EDO STATE, NIGERIA.

Emoefe, Amina Mevoweovo, Dept of Educational Management, Faculty of Education, University of Benin. solaminemoefe@yahoo.com 08036115786. & Okafor, Chukujindu Joyce, Dept of Education, Faculty of Arts and Education, Benson Idahosa University, Benin City. chukujinduokafor@yahoo.com.....150

THE GAINS OF THE GIRL-CHILD IN THE UNIVERSAL BASIC EDUCATION (UBE) PROGRAMME.

Osawaru, Arasomwan Endurance, Dept of Educational Foundations, Faculty of Education, University of Benin. endurance.osawaru@uniben.edu 08066874582, Ogiemwonyi, Pamela Festher, Dept of Educational Foundations, Faculty of Education, University of Benin. esther.ogiemwonyi@uniben.edu & Omorogbe, Ekhomwanye Ruth, State Universal Basic Education Board, Benin City ruthomorogbe@gmail.com.....161

TEACHER CHARACTERISTICS AS CORRELATES OF SENIOR SECONDARYS SCHOOL STUDENTS' ACHIEVEMENT IN SS II TERMINAL EXAMINATIONS IN BENIN CITY, EDO STATE.

Uyigwe, Amen Valentine, benin.amenworld2@yahoo.com 08056742588 & Dr. Omorogiuwa, Kingsley Osamede, Dept of Educational Evaluation and Counseling Psychplogy, Faculty of Education, University of Benin. kingsonmorogiuwa@yahoo.com 08055650677.....171

LECTURERS' ASSESSMENT OF THE EFFECTIVENESS OF COMPUTER BASED TEST IN THE TRAINING OF PRE-SERVICE TEACHERS IN NIGERIA. Bello, M. B. (Ph.D), Yusuf, A. (Ph.D), Amali, I.O.O. & Daramola, D.S., Dept of Social Sciences Education, Faculty of Education, University of Ilorin. muhinat4islam@yahoo.com, yuabra25@gmail.com 180

AN ASSESSMENT OF SELF DIRECTED LEARNING EFFECTIVENESS AMONG OPEN AND DISTANCE LEARNERS IN NIGERIA. U.S.A. Osuji (Ph.D) School of Education, National Open University of Nigeria, Victoria Island, Lagos. osujiojiugwo 2006 @ yahoo.com 193

FACTORS DETERMINING NON-USE OF FAMILY PLANNING METHODS AMONG LITERATE MARRIED ADULTS IN IBADAN, NIGERIA. Ajiboye, Samuel Kolawole (Ph.D), skajiboye @ yahoo.com & Adegboyega, Lateef Omotosho, Dept of Counsellor Education, University of Ilorin, Ilorin, Nigeria. adegboyegalateef@gmail.com 208

ASSESSMENT OF PROSPECTIVE UTME CANDIDATES' READINESS FOR THE COMPUTER BASED TEST (CBT). Nneka Cynthia Ohaeri, Educational Research Centre (ERC), Nigerian Educational Research and Development Council (NERDC) Sheda, Abuja. nekuindy @yahoo.com 08032362968. 218

THE RELATIONSHIP BETWEEN TEACHER'S PERSONALITY AND STUDENTS' ACADEMIC PERFORMANCE IN SELECTED SCHOOLS IN LAGOS METROPOLIS. Osunde, Yvonne Ododo, Dept of Educational Evaluation and Counseling Psychology, University of Benin, Benin City. 230

OPEN AND DISTANCE EDUCATION FOR ENHANCED ACCESS TO EDUCATION AND NATIONAL DEVELOPMENT. Tilije, R. N. (Ph.D), School of Education, National Open University of Nigeria, Victoria Island, Lagos. rtilijie@noun.edu.ng 0802772030. 241

THE CHALLENGES OF SCIENCE AND TECHNOLOGY CURRICULUM REFORMS IN NIGERIAN SECONDARY SCHOOLS. Akorede, Olufunbi Jimoh (Ph.D), Akorede jimi55@gmail.com 08056117431 & Bamiro. Oladipupo Adekunle (Ph.D), Dept of Educational Foundations and Instructional Technology, Tai Solarm University of Education, Ijagun, Ogun, State, Nigeria. 252

**GENDER AND STUDENTS' ACHIEVEMENT IN BIOLOGY
PRACTICALS IN SENIOR SECONDARY SCHOOLS IN IKORODU
LOCAL GOVERNMENT AREA OF LAGOS STATE**

James Timothy (Ph.D) School of Education, National Open University of Nigeria
Victoria Island, Lagos, timadejames64@yahoo.com (08035895812)..... 263

**THE PROBLEMS OF DISTANCE EDUCATION PROGRAMME IN
NIGERIAN TERTIARY INSTITUTIONS: THE CASE OF THE
NATIONAL TEACHERS' INSTITUTE, LAGOS**

Ogundiran Samuel Ogunwale (Ph.D), School of Education
National Open University of Nigeria, Lagos. drsogundiran@yahoo.com,
+2348032327228 272

**INFLUENCE OF SOCIO-DEMOGRAPHIC INDICES ON THE
NUTRITION STATUS OF BANK WORKERS IN BENIN METROPOLIS,
EDO STATE, NIGERIA**

AKINGBADE, Timothy Adetunji (Ph.D,) University of Benin, Faculty of
Education, Health, Safety and Environmental Education Department
timothy.akingbade@uniben.edu. 290

LECTURERS' ASSESSMENT OF EFFECTIVENESS OF COMPUTER BASED TEST IN THE TRAINING OF PRE-SERVICE TEACHERS IN NIGERIA

BELLO, M.B. (Ph.D.), YUSUF, A. (Ph.D.), AMALI, I.O.O.
AND DARAMOLA, D. S.

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Abstract

The purpose of the study was to find out the lecturers' assessment of the effectiveness of Computer Based Test in the training of pre-service teachers in Nigeria. This is a descriptive research of a survey type using questionnaire. The sample for this study included randomly selected lecturers 201 out of 314 lecturers from two purposively sampled universities. A researcher-designed questionnaire for lecturers was used to collect the data. Mean was employed to answer the research questions using 2.5 as the basis to determine the strength or otherwise of the statement while the hypotheses were tested using chi-square at 0.05 level of significance. Among the findings, it was found that the use of computer-based test was considered effective and adequate for assessing pre-service teachers in cognitive and psychomotor domains. Lecturers from University of Ilorin and University of Lagos differed significantly in their assessment of effectiveness of CBT in the training of pre-service teacher in Nigeria. However, lecturers did not defer in their assessment of the effectiveness of CBT in the training of pre-service teachers in Nigeria based on gender and status. It was recommended that pre-service teachers should be taught using ICT to improve their computer skills. Other alternative to multiple-choice response CBT questions should be used for assessment. This would help in the development of cognitive, affective and psychomotor domains.

Keywords: Computer-based test, pre-service teachers and
Introduction

Teacher Education is very paramount to national development since the quality of teachers determine the quality of human resources in all other sectors of the labour market. It is pivot to all levels of Education and the hub upon which a

nation's economy is based. As rightly asserted by the National Policy on Education (FRN, 2004), no Education system may rise above the quality of its teachers. Based on this assertion, the policy provided among other things that teacher Education should produce highly motivated, conscientious and efficient classroom teachers for all levels of the Nigerian Educational System; and provide teachers with the intellectual and professional background adequate for their assignment and make them adaptable to changing situations (FRN, 2004). The policy seeks to make the nation's educational system functional and relevant to the needs of learners and society through quality assurance in teacher production. Given the laudable objectives of teacher education as spelt out in the national policy on education (FRN, 2004), it would be expected that the products of teacher education should be employable anywhere in Nigeria and also demonstrate reasonable degree of competence as they carry out their teachings. Unfortunately, the contrary remains the case (Ngada, 2005).

A nation without quality teachers is doomed and the cumulative effects of incompetent, non-functional or unemployable teachers would be non-development than development and at times national retrogression instead of progress and advancement (Ngada, 2005). Fafunwa (2004) also stressed the dependency of manpower training and development on teachers. He argued that teacher education should be basically related to every phase of development in Nigeria, for wherever one wishes, be it economic, political or social spheres of activities, one is faced with the ever -reoccurring problem of trained manpower needs. This presupposes that no adequate training can take place without competent teachers.

In the same vein, Madueke (2000) noted that since national development depends majorly on education, and the teachers are saddled with the responsibility of translating educational policies, it presupposes that teacher education should be the priority of any nation wishing to develop in all fields of human endeavour especially in the 21st century.

Simmons (2010) also noted that the task of teacher education programme in the 21st century goes beyond the production of teachers needed for effective teaching and basic understanding of educational theory and classroom management. Teachers must also collaborate with other educators to learn how to implement new technology in the classroom, and how to prepare students to enter a global economy through adequate assessment. Therefore, the teacher is faced with the task of effective classroom management, making content relevant to students' daily lives, developing critical thinking in her/his students, working with new and evolving technologies to create meaningful and effective lessons, giving students understanding and importance, having students work in teams to ensure that all students receive an equal education and finally staying current on new issues and development in the field of teaching as well as content areas.

The dimensions of teacher education and preparation of teachers include the nature and extent of guidance given to them. Their success in teaching depends on their knowledge, attitude toward teaching, academic self-concept and explicit understanding of the profession. Teacher preparation, therefore, provides teachers with knowledge, skills and aptitude to be familiar with the art and science of teaching that in turn gives pre-service teachers confidence to carry out their task after graduation (Amedeaker, 2005).

Teacher education programmes have been forced to grapple with the question of how to measure teacher competencies reliably and validly so that they can document the contributions of their programmes to teacher quality. Darling-Hammond, Wise, and Klein (1999) argue that more authentic assessments of teaching that simulate the complexities of teaching practice can improve the validity of assessments and provide a valuable educational experience for teachers in the process of preparing for the assessment. Darling-Hammond and Snyder (2000) identified two characteristics of authentic assessments of teaching: (1) the assessments sample the actual knowledge, skills, and dispositions desired of teachers in real teaching and learning contexts; (2) the assessments integrate multiple facets of knowledge and skill used in teaching practice.

Teacher education programmes have long used a customized set of paper/pencil test method of assessment to support pre-service teacher learning. This educationists believed to have been able to lift up to the standard, which have usually tested basic skills, content, knowledge, and, increasing, pedagogical knowledge. However, recent societal challenges of increase in the rate of unemployment have put teacher education programme outcomes under the microscope for scrutiny. In order to take care of this, there is the quest for more valid and reliable assessment method which will lead teacher education programmes to look toward the use of performance-based assessments model that measure teachers' competencies with more authentic instruments as the basis for the production of functional and employable teachers in the society (Amedeaker, 2005).

The question raised by educationists today is, how does teacher education institutions in Nigeria assess its pre-service teacher for this task ahead. A number of persons have expressed concern that the present educational opportunities offered to pre-service teachers seems to be lacking in functionality. For instance, Madumere-Obike (2006) lamented that the present status of educational system in Nigeria only enables our teaming products to acquire knowledge and facts with inappropriate method of self assessment (content). Assessment could be in different forms depending on the type teachers or trainers or lecturers wish to employ. But at times some social as well as school factors may determine to a large extent the method of assessment a teacher can employ. Increase in the number of students at all levels of the educational system,

especially in Higher Education and the corresponding increase in time spent by lecturers on students' assessment have encouraged interest into how technology can assist in these areas thereby ensuring that the assessment methods adopted reflect both the aims and objectives of the courses taught. This has made technical development taking place increasingly important, especially in the aspect of quality assurance procedures which require departments to justify the assessment procedures adopted (Ngada, 2005).

During the past few years, technology has significantly reshaped the methods of assessment. In many academic domains, educational measurement has been moving towards the use of computer-based testing (CBT). These are tests or assessments that are administered by computer in either stand-alone or dedicated network, or by other technology devices linked to the internet or world wide web with most of them using multiple choice questions (MCQs) (Sorana-Daniela & Lorentz, 2007). Computer based tests have been in use since 1960s to test knowledge and problem solving skills (Peter, Bill, & David, 2004). Computer based assessment systems have enabled educators and trainers to author, schedule, deliver, and report on surveys, quizzes, tests and exams. Currently in University of Ilorin and University of Lagos the traditional method (a combination of essay examination and practical examination) is most used as evaluation of students' knowledge. In the past few years, the number of students increased drastically and the conventional examination method became time consuming in terms of the examination time for evaluation and assessment. A solution of examination difficulty in large classes of students and production of quality teachers is the automated testing system which has been introduced by the University of Ilorin in 2008 and about 2007 respectively.

Researchers over the years have conducted a series of studies on the assessment of the use of information communication technology (ICT), Computer based test (CBT) and paper/ pencil test as methods of student's assessment. For instance studies by Alabi, Issa and Oyekunle (2012) found that the use of CBT in the conduct of examinations in the University of Ilorin was successful due to some factors such good ICT policy and partnership adopted by the university administration. Jimoh, Shittu and Kawu (2012) studied on Students' Perception of Computer Based Test (CBT) for Examining Undergraduate Chemistry Courses. The study by Bankole (2003) revealed that secondary schools teachers from different departments differ in their assessment of the use of CBT for the conduct of post-UME. The work of Olagunju (2003) revealed that environment, location, and societal needs and aspiration have significant influence on the level of teachers' awareness of the use of Information Technology Communication (ITC) for effective assessment in science education. In the same vein Chambers (2003) findings revealed that the use of Computer base test (CBT) has positive effects on students' achievement in different subject areas. Also the finding of Levin and

Research Hypotheses

1. There is no significant difference in the lecturers' assessment of the use of Computer Based Test and the quality of teacher production based on institution?
2. There is no significant difference in the lecturers' assessment of the effectiveness of Computer-Based Test in the training of pre-service teachers based on departments?
3. There is no significant difference in the lecturers' assessment of effectiveness of Computer-Based Test in the training of pre-service teachers based on gender?
4. There is no significant difference in the lecturers' assessment of effectiveness of Computer-Based Test in the training of pre-service teachers based on status?

Methodology

This is a descriptive research of a survey type. The population for this study comprised all Lecturers of the University of Ilorin and the University of Lagos. The target population for the study was all the Lecturers in the Faculties of Education in the two Universities. The sampled universities have of six Departments, Adult Education, Educational Management or administration, Arts and Social Sciences, Counselor Education, Human Kinetics, Science Education. The two faculties have a staff strength of 314 out of which 201 was randomly selected for the study. An adapted 13 item questionnaire from Obianuju (2011) with psychometrics properties of content validity as well as 0.73 reliability index was used to collect the data required for this study. Each respondent made a tick (✓) against the appropriate option in each questionnaire items.

A descriptive statistical analysis was employed to analyze the data that were collected for the study. Mean was employed to answer the research questions using 2.5 as the basis to determine the strength or otherwise of the statement. The hypotheses were tested using chi-square at 0.05 level of significance.

RESULTS

The findings of the study are presented below;

Research Question One: What is the Lecturers' assessment of the effectiveness of Computer-Based Test in the training of pre-service teachers in Nigeria?

Table 1: Lecturers responses on effectiveness of CBT in training of pre-service teachers

S/No	Statement	Mean	Rank
1	Use computer to teach in the lecture room	2.78	7 th
2	Assess pre-service teachers on the five senses of learning using Computer based test provide.	2.82	6 th
3	Assess pre-service teachers on cognitive domain using Computer based test.	2.95	5 th
4	Assess pre-service teachers on affective domain using Computer based test.	2.18	13 th
5	Assess pre-service teachers on psychomotor domain using Computer based test.	2.60	10 th
6	Use computer based test to enhance the academic achievement of pre-service teachers.	2.96	4 th
7	Use computer based test to assess the communication skills of pre-service teachers.	2.36	11 th
8	Use computer based test to assess the pedagogical skills of pre-service teachers.	3.46	1 st
9	Use computer based test to ensure more valid assessment of pre-service teachers' competence and specialization in subject areas.	2.46	9 th
10	Use computer based test to ensure a more reliable assessment of pre-service teachers' competence and specialization in subject areas.	2.76	8 th
In your institution there are challenges of:			
11	Unavailability of appropriate software designed for use in computer based test to cater for different domains in the preparation of functional pre-service teachers is a constrain to teacher production	3.23	2 nd
12	There are challenges facing the teachers in the use of Computer Based Test (CBT)	3.13	3 rd
13	The use of Computer Based Test (CBT) does not allow for the training of qualitative pre-service teachers.	2.25	12 th

In table 1, it was revealed that computer based test is considered effective for assessing pre-service teachers in cognitive and psychomotor domain with mean score of 2.95 and 2.60 which is higher than the acceptable mean score of 2.50. While it was not effective or suitable for the assessment of affective domain, with means score less than 2.50.

On the pedagogical skills needed for employability, computer base test was consider not effective or desirable ($2.46 > 2.50$). On the validity and reliability of CBT to assess competences and specialty in subjects area, the study show CBT has low valid because the mean score $2.16 < 2.50$ while CBT was consider reliable with mean score $2.76 > 2.50$. There are challenges hindering the effectiveness of CBT with mean score $3.13 > 2.50$.

Hypothesis One: There is no significant difference in the lecturers' assessment of the effectiveness of Computer Based Test in the training pre-service teachers based on institutions.

Table 2: Lecturers responses on effectiveness of CBT in the pre-service teacher training on the bases of different department.

Institution	N	df	X ²	Significance	Decision
Unilorin	114	1	4.000	0.046	Rejected
Unilag	95				
Total	209				

P=0.05

Table 2: shows $X^2 = 4.00$ with P -value = $0.04 < 0.05$ alpha level, hypothesis one is rejected. By implication, lecturers from University of Ilorin and University of Lagos differ significantly in their assessment of the effectiveness of CBT in the training of teachers in Nigeria.

Hypothesis two: There is no significant difference in the lecturers' assessment of the effectiveness of Computer-Based Test in the training of pre-service teachers based on departments?

Table 3: Lecturers responses on effectiveness of CBT in training per-service teachers on the bases of different department.

Department	N	df	X ²	Significance	Decision
ASSE	45	3	9.680	0.021	Rejected
Counsellor Edu.	38				
Science Edu.	51				
HKHE	75	3	9.680	0.021	Rejected
Total	209				

P=0.05

Table 3: shows $X^2 = 9.68$ with P -value = $0.02 < 0.05$ alpha level. Thus, the null hypothesis is rejected. It was concluded that lecturers from different departments of the faculty of education from the two universities assess the effectiveness of CBT in training pre-service teacher differently.

Hypothesis three: There is no significant difference in the lecturers' assessment of effectiveness of Computer-Based Test in the training of pre-service teachers based on gender?

Table 4: Lecturers responses on effectiveness of CBT in training of pre-service teachers bases on gender.

Gender	Frequency	Df	X^2	Significance	Decision
Male	121				
Female	88				
Total	209				
P=0.05					
		1	0.160	0.689	Accepted

Table 4 revealed that $X^2 = 0.16$ with P -value = $0.68 < 0.05$ alpha level. Thus, hypothesis three is not rejected. By implication male and female lecturers do not differ in their assessment of the effectiveness of CBT in training pre-service teachers in Nigeria.

Hypothesis four: There is no significant difference in the lecturers' assessment of effectiveness of Computer-Based Test in the training of pre-service teachers based on status?

Table 5: Lecturers responses on effectiveness of CBT in training pre-service teachers bases on status

Status	Frequency	df	X^2	Significance	Decision
Professor	25				
Senior Lecturer	45				
Lecturer I	33				
Lecturer II	46				
Assistance	59				
Lecturer	209				
Total	209				
P=0.05					
		4	5.000	0.287	Accepted

Table 5 revealed that $X^2 = 5.00$ with P -value = $0.28 < 0.05$ alpha level, the null hypothesis is not rejected. This indicates that lecturers in the faculty of

education do not differ in their assessment of the effectiveness of CBT in training pre-service teachers on the basis of their status.

Discussion of the findings

The aim of this study was to investigate lecturers' assessment of the effectiveness of computer-based test in training pre-service teachers. To this end, the scores obtained from the analysis of the questionnaire administered to the respondents in the faculty of education from the two universities revealed that, CBT was effective and appropriate as a mode of assessing pre-service teachers only if, computers were used to deliver lectures in the classroom. Its effectiveness would have been more appropriate if there were availability of software that can adequately transform the traditional paper/pencil test to computer based test and not the multiple choice questions only as it is presently. This is because multiple-choice tests rarely provide information about achievement on skills-based goals, which is needed to cause changes in pre-service teacher's values, attitudes, and interests. While finding in this study also revealed that computer based test was effective for the assessment of two domains of taxonomy that is, cognitive and psychomotor, leaving out affective domain.

The study also shows that CBT laid more emphasis on cognitive and psychomotor and not affective domain. CBT was assessed to be valid enough in its present day (Multiple Choice Questions) form to be able to develop in pre-service teachers, competence and specialization in subject areas. By implication, there are several challenges hindering the potential advantages offered by computer based testing. This is confirmed by the findings of Jegede and Okebukola (1992) whose study revealed that the use of technology cannot take the place of content mastery. For teacher training institutions in Nigeria to be able to produce employable teachers needed for development, pre-service teachers should be provided with knowledge, skills and aptitude to be familiar with the art and science of teaching that in turn gives them confidence to carry out their task in the real world.

Lecturers from the two institutions (University of Ilorin and University of Lagos) differ in their assessment of the effectiveness computer based test as being desirable for the training of pre-service teachers. This difference in assessment is in agreement with the finding of Olagaju (2003) whose study revealed that factors such as environment, location and societal needs and aspirations have significant influence on the level of teachers' awareness of the use of ICT for effective assessment in science education. The difference might be due to difference in environment of the respondents.

It was also revealed in the study that lecturers from different departments sampled differ significantly in their assessment of the effectiveness of computer

base test in training pre-service teachers. This is an indication that difference in their assessment is due to the difference in the department which they belong. This finding is corroborated with the findings of Bankole (2003) whose study revealed that senior secondary schools teachers (Science, Arts and commercial as well as social sciences teachers) differ significantly in their assessment of the use of computer based test for the conduct of Post-UME examination. By implication, lecturers whose departmental work requires more of practical may assess CBT as not being appropriate while for others it may be considered effective.

The gender of the lecturers as well as their status (junior and senior lecturers) does not constitute any significant difference in their assessment of the effectiveness of CBT in training pre-service teachers in Nigeria. This means that all the lecturers regardless of gender and status all assessed the effectiveness of CBT in training pre-service teachers the same way. This finding contradicts the finding of Levin and Gordon (1989) which revealed senior secondary school teachers differ significantly in their assessment of the use of CBT as a mode of assessment in mathematics on the basis of gender.

Conclusion and Recommendations

From the findings, it can be concluded that teachers assessment of the effectiveness of CBT in training pre-service teachers is positive, but CBT assessed more of cognitive and psychomotor domains than affective domain. Based on the findings, it is recommended that pre-service teachers should be taught ICT in the classroom, this would improve their computer awareness, literacy and fluency. Alternative software package (where easy questions will be given instead of multiple choice question) should be used for CBT assessment in pre-service teachers.

References

- Alabi, A.T., Issa, A.O. & Oyekunle, R.A. (2012). The Use of Computer Based Testing Method for the Conduct of Examinations at the University of Ilorin. *International Journal of Learning & Development*, 2, 3, 68-80
- Amodeker, M. K. (2005). Reforming Ghanaian teacher education towards preparing an effective pre-service teacher. *Journal of Education for teaching* Vol. 31, No. 2, 99-110.
- Bankole, B.B. (2003). Secondary schools teachers' assessment of use of computer base technology for the conduct of post-UME. *Educational and Psychology Measurement*, 46, 727, 733.

Chambers, L (2011) Composition and revision in computer-based written assessment, *Research Notes*. 43, 25–32

Darling-Hammond, L., & Snyder, J. (2000). Authentic assessment of teaching in context.

Teaching and Teacher Education, 16(5–6), 523–545.

Darling-Hammond, L., Wise, A. E., & Klein, S. P. (1999). *A license to teach: Raising*

standards for teaching. San Francisco: Jossey-Bass.

Fafunwa, A. B.(2004). *History of Education in Nigeria*. Nigeria: Pacific Publisher

Federal Republic of Nigeria, (2004), National Policy on Education. Fourth edition. Lagos; NERDC Press.

Jegade, O. & Okebukola, P. (1992). Adopting technology in third world classrooms: students' viewpoint about computers in science teaching and learning. *Journal of Educational Technology System*.

Jimoh, R.G., Shittu, A. K. & Kawu, Y.K. (2012). Students' Perception of Computer Based Test (CBT) for Examining Undergraduate Chemistry Courses. *Journal of Emerging Trends in Computing and Information Sciences*, 3,2, 125-135

Levin, T & Gordon, C. (1989). Effect of gender and computer experience on attitude towards computers. *Computing and Education*, 39, 299-312.

Loyd, B. & Gressard, C. (1984). The effect of sex, age and computer experience on computer attitudes. *AEDS Journal*, 40, 67-77.

Madumere-Obike (2006). Functional Teacher Education: A Sine Qua Non For Poverty. Retrieved from:

www.wesoeduonline.com/.../Functional%20Teacher%20Education%20A..

Ngada, J. A (2005). Challenges and future of teacher education in Nigeria.

Multidiscipline Journal of Research Development. National Universities Commission: VIHEP information Booklet 2005 – 2010.

Ololube, N.P. (2006).Appraising the relationship between ICT usage and integration and the standard of teacher education programs in a developing economy. *International Journal of Education and Development using Information and Communication Technology (IJEDICT)*, 2,3, 70-85.

- Olagunju, A. M. (2003). An investigation into teacher's awareness and extent of utilization of information communication technologies for effective science education in Nigeria. *Journal of Computer Literacy*, 4, 82-90
- Parshall, C., Spray, J., Kalohn, J. & Davey, T. (2002). *Practical considerations in computer-based testing*. New York: Springer.
- Peter C, Bill I and David S (2004). Using computers for Assessment in medicine. *British Med. J.*, 329(7466):606-609.
- Simmons, C. (2010). *Teacher skills for the 21st century eHow*. Retrieved from: http://www.ehow.com/list_6593189_teacher-skills-21st-century.html
- Sorana-Daniela, B. & Lorentz, J. (2007). Computer-based testing on physical chemistry topic: A case study. *International Journal of Education and Development using Information and Communication Technology*, 3, 1, 94-95.
- Thompson, S., Thurlow, M., & Moore, M. (2003). *Using computer-based tests with students with disabilities* (Policy Directions No. 15). Minneapolis, MN: University of Minnesota, National Center on Educational Outcomes. Retrieved from: <http://education.umn.edu/NCEO/OnlinePubs/Policy15.htm>