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E-mail:
e-learning@elearnnigeria.org

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Managing Editor
Dr. Alade Abimbade

Editor
Dr. Tunde Salawu

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Vision: To promote the development of Information and Communication Technologies (ICTs) and in particular e-Learning in education and training.

Mission: To collaborate with or support Educational Institutions at all levels, public and private training outfits in the development and management of appropriate process for e-Learning, Information and Communication Technologies (ICTs), Seminars, Workshops, Leadership Round-table, Discussions, Researches, Publications, Asynchronous /Synchronous environments and e-classroom demonstrations.

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University of Ibadan,
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JOURNAL OF E-LEARNING (JOEL)**Volume 7, Number 2, April 2008****Editorial Comment**

The Editorial Board of this Journal is happy to publish this edition of JOEL, This edition of the Journal is our another attempt of an online and off-line publication. Most of the papers published in this Journal were presented at the e-learning Conference held at the Federal College of Education (T) Omoku, Rivers State. Keeping to the promise of the publisher, e-learning Network of Nigeria (eLNN) Organization who is committed to promoting ICTs in education and training has published this volume. This volume has contributed to the discourse on ICTs in teaching and learning, the Internet, globalization and e-learning in education and training.

Our contributors and readers of this journal will be able to access the abstract on our website but would need a password through acrobat file (pdf) to access the whole article of interest. (on subscription).

The next volume of this journal will soon be published, as we are not able to include in this edition all available articles we had received. We wish to appeal to our contributors whose articles did not appear in this volume that we shall do all necessary to include their articles in the next volume.

Let me use this opportunity to thank all our contributors for their interest in Joel and we look forward to your future contributions. Also, I want to thank our Editorial Board, Consulting Editors and Reviewers for the invaluable services to this Journal. We have not been able to put forward appropriate reward system for their services but, we believe, God will reward them and we shall in future be able to compensate for all these services.

Finally, I like to thank all that have contributed to making this edition to see the light of day; the young man who typed and formatted the manuscripts particularly. Master Abiodun Adeyemo. Thank you all and God bless.

Managing Editor
Dr. A. Abimbade

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STUDENTS' PERFORMANCE IN COMPUTER STUDIES: GENDER IMPLICATIONS

J. G. Adewale & S. A. Amoo

International Centre for Educational Evaluation

Institute of Education, University of Ibadan

Abstract

This study investigated the students' performance in computer skills in the world of ICT. The research was carried out 20 schools in Southwest, Nigeria. A sample of 1100 JSS three students randomly selected from the 20 schools participated in the study. Computer studies achievement test was used to collect data. The overall results (zonal average) ($M = 24.48$, i.e. 61.2%). Fourteen schools scored below the zonal average and many of the schools were from Ondo and Ekiti States. One school (representing 33.3%) from Lagos State and two schools (representing 50%) from Ogun State scored below the zonal average. The remaining schools (66.7% and 50% respectively from Lagos and Ogun scored above the zonal average. Interestingly, three schools out of 8 (37.5%) in Ekiti scored more than the zonal average. About 75% of the students in Ondo State scored below the zonal average. Boys are superior to girls (although the difference is marginal). In order to increase students' performance in computer studies students be exposed to career talk and importance of computer use in school in this era of ICT; government should strengthen the use of ICT along with the teaching of computer at this level and the relevant re-training of teachers on the use be instituted.

Introduction

There is no doubt that Computer education is one of the most important things in everyday life and that Information and Communication Technology (ICT) has strong impact on many aspects of the society. This probably informs FRN (2004) to introduce Computer Studies as one of the vocational subjects at Junior Secondary Schools (JSS). A child entering Junior school has to do Computer as one the vocational subjects irrespective of background, gender, location even capability. Also, at JSS, ICT is an aspect of Computer Education (a pre-vocational elective) which lay emphasis on practice (FRN, 2004). However, the possibility using the ICT tools when teaching and learning in the classrooms raises questions about their proper integration into the school system. This paper tries to answer some these questions generally but with special considerations to Junior Secondary Education and gender implication.

Computer use is a necessary condition for the development of digital proficiency required for today's citizens, on a most basic level, must consist of the use of multimedia technologies to evaluate, store, produce, present and exchange information (Gil-Flores, 2007). The expansion and integration of facilities has made the accessibility of computers to today's students possible where the projects are featured. As ICT is present in every part of life, it is also more and more present in various ways of education. It is especially important for teachers, students, distance learning process, to source materials through ICT.

Junior Secondary Education plays a prominent role in future career of Nigeria and her youths. It is a transition stage where students are exposed to Pre-vocational subjects like Computer Studies. This pre-vocational subject is relevant to most subjects; its roles in future career are enormous, this can be achieved where students have opportunity to ICT resources. In the present time, it is found in all facets of life, no wonder, scholars agreed that in every aspect of human life like manufacturing, services, culture, entertainment, education, research, environmental education, even defence and global security (Akudolu, 2002; Ekoko, 2002; Abada & Nwanse, 2002, Adewale, Olasoji & Iroegbu, 2004, Adepoju & Amoo, 2005) the impact of ICT is felt. In understanding some or all school subjects in the present time when ICT facilities are becoming household use, one must not forget that attitudes to learning in computer age are equally important. The popularization of computers has translated to the presence of these resources in students' lives, the most relevant being at school. The presence and use of computers at school and in the classroom can be classified into two uses: as a source of information and as a system support for teaching. Via Internet, the computer use constitutes a means of looking for and obtaining information, and is a means of communicating and participating in forum on a diverse number of topics (Gil-Flores, 2007). The educational activities that involve the use of computer technology capture the interest of students, which facilitates their understanding of the content and provides a different way of expressing knowledge (Ediger, 1994).

It is important that students at JSS should be versatile in the use of ICT as a prevocational subject for them to be relevant in the world or work. The performance of students in Computer studies has not yielded a positive desire. Empirical research confirms a relationship between computer use at school and performance (Weaver, 2000, Amoo & Rahman, 2004). However, studies have not always been able to demonstrate a positive correlation between the use of computer at school and performance. Antonijevic (2007) found in his study of data obtained from TIMSS 2003 (Trends in International Mathematics and Science Study), which included 47 participant countries worldwide, that the use of computers in education contributes significantly to higher students' performance in science but not in mathematics. There

was even negative correlation found between these two variables (Ravitz, Mergendoller & Rush, 2002). Trends and prospects of ICT in teaching and learning of Mathematics at one time or the other had been recorded (Amoo & Rahman, 2004; Ezeamenyi & Alio, 2004; Amoo & Efunbajo, 2004). They all concluded that the functionality of ICT in the teaching and learning of Mathematics is one of the major concerns of scholars looking at the way of teachers are prepared for the current challenges of ICT in all the country.

Looking for information online involves the selection of adequate sources in order to extract, organize and integrate information: this type of task develops problem-solving skills in the subjects (Tabatabai & Shore, 2005). Even the participation in chatrooms contributes to the development of these kinds of skills in greater measure than face-to-face communication (Jonassen & Kwon, 2001). More recent works on Science Mathematics and ICT (Fennema, 2000; Halpen, Wai & Saw, 2000; Adewale, Adesoji & Iroegbu, 2004; Adepoju & Amoo, 2005; Adeleke & Amoo, 2007) have pointed out specific school influences- timetabling of the subjects, assessment procedure, teachers expectations, peer pressure, school resources including ICT and environment contribute to gender inequality in STM learning. The most comprehensive reviews of research in the area of gender differences have shown differences between Mathematics and achievement needs between male and female students (Halpen, Wai & Saw, 2000; Adewale, Adesoji & Iroegbu, 2004; Adeleke, 2007). Moreover, many researchers (Comu, 2002; Adebayo, 2008) are of the opinion that the impact of ICT will be mostly used on educational methods, others (Osunde, 2005; Olorundare, 2006) emphasize the issue of technological contents.

Since studies on students' performance in computer skills with respect to gender consideration, are inconclusive, this study examined students' performance in Computer studies and the implication of gender difference to achievement in ICT. The following research questions were raised to guide the study.

Research Questions

Research Question One: What is the students' performance in computer studies test across the sampled schools?

Research Question Two: What is the gender difference in the computer studies test?