AN APPRAISAL OF COMPUTER LITERACY OF GEOGRAPHY TEACHERS IN SECONDARY SCHOOLS

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ABSTRACT
This study presents an assessment of the level of computer literacy of geography teachers in secondary schools in Edo state. The Survey research design was adopted for the study. A sample size of 200 geography teachers, drawn from across Egor, Oredo, Ikpoba-Okha and Ovia North East L.G.A. in Edo State. A questionnaire with twenty-one items was constructed and used as the instrument for data collection and analysis. The analysis of the data collected revealed that geography teachers are knowledgeable in the use of computer and computer packages. Also, the male geography teachers are knowledgeable in the use of computer and computer packages, while their female counterparts are less knowledgeable in using computer and computer packages in teaching geography during lessons. Furthermore, geography teachers that are younger in age are more knowledgeable than geography teachers that are older in age (above 40yrs) in the use of computer and computer packages. Based on the findings it was recommended that school heads should device a means of motivating and rewarding geography teachers who are knowledgeable in the use of computer and computer packages who also employs their knowledge in the classroom teaching. Also computer trainings should be rendered to geography teachers. Furthermore, school heads should organize orientation programmes for geography teachers stressing on the relevance of been computer literate and its classrooms applications in teaching geography.

KEYWORDS: *Computer Literacy, Computer, Computer Packages, Geography Teachers, Appraisal*

INTRODUCTION

Geography as a secondary school subject enables students to explore and understand the relationship between the earth and its people through the study of space, place and environment. These three concept forms the core of geography in secondary school education. The study of geography in senior secondary schools provides students who will study geography in the university with a solid conceptual foundation, while for those who will enter university to study other subjects (such as Arts, or social and environmental sciences) it would have provided exposure to higher order thinking. For all students it provides a

partial perspective towards socio-economic and environmental issues, a focus on citizenship and a national and global identity and opportunities for developing generic skills such as ability to analyze and synthesizes to solve problems, to communicate and to use information technology. It is for this cause that the relevance of computer literacy among geography teachers in senior secondary schools cannot be overemphasized.

History of Computer Education in Nigeria

In 1987, the Federal governments, at the 32nd ministerial council meeting of the National council of Education, setup a National committee on computer education, which was inaugurated on December 14, of that year. This crystallized into the establishment of a National policy on computer Education (1988), the general objectives of which, according to Jegede and Owolabi (2003), are focused on ensuring that: the general populace appreciated the impacts of information and computer technology on today's society; and Nigerians are equipped with the knowledge and skills to use and programme computers, develop software packages, understand the structure and operation of computers and their history and to appreciate the economic, social and psychological impact of the computer.

Similarly, underscoring the relevance of History and History of Education; Kosemani (2011) noted that history helps to promote understanding through the acquisition of relevant information. Well-ordered information increases students' understanding of historical events and happenings of their time. Adequate understanding promotes education. Education in this sense is not mere regurgitation of facts but 'what is left when one has forgotten all that one has ever learnt'.

Notwithstanding the existence of enabling policies, questions relating to the depths of integration of computer education and the existence of computer literacy disparities continue to crop up. Recent studies, unfortunately, show low levels of computer integration in the school systems. Cawthera (2005) had observed that although there are few countries in the world that do not have at least one computer in at least some schools, yet the vast majority of schools in the world are without any computers. With respect to differences in computer education integration, Jegede and Owolabi (2003) found that computer education in Nigeria was still limited to Federal Unity schools and was scarcely offered in any of the state secondary schools, which constitute more than 80% of Nigerian schools.

Computer as a Teaching Aid

Technology can be used to support and enhance learning. Everything from video content and digital movie making to laptop computing and handheld technologies has been used in classrooms. Similarly, new uses of technology such as pod casting are constantly emerging (Marshall, 2002). To Marshal, various technologies deliver different kinds of content and serve different purposes in the classroom. Word processing and e-mail promote communication skills; database and spreadsheet programmes promote organizational skills; and modeling software promotes the

understanding of science and mathematics concepts.

Technologies available in classrooms today ranges from simple tool based applications such as word processors to online repositories of scientific data. Others are primary documents, handheld computers, closed circuit television channels, and two-way distance learning classrooms (Prensky, 2005). According to Lei and Zhao (2008) each technology is likely to play a different role in students learning. Rather than trying to describe the impact of all technology as if they were the same, researchers need to think about what kind of technologies are being used in the classroom and for what purposes.

Furthermore, a research by Chien *et al.* (2014) has shown that students in school are having high expectation on ICT integration in classroom as the new generation are born and grown with technologies and could be define as the digital –native phenomenon. The younger the students, the higher their expectation are on ICT integration in classroom. It also proved that the integration of ICT is mostly dependent on the personal factors which define as self-perceptions.

The integration of ICT in classroom is getting more important as it help student in enhancing their collaborative learning skills as well as developing transversals kills that stimulates social skills, problem solving, self-reliance, responsibility and the capacity for reflection and initiative. All these elements are core values that students need to achieve in an active teaching and learning environment (Ghavifekr *et al.*, 2014).

However, teachers' efficacy in urban schools changes as the years of experience of working and age of teachers. It shows that the teachers' efficacy are decreasing as the years of experience and age increases but somehow the decrease and the efficacy belief depend on the school management. School management here means the opportunities for collegial interaction, and the use of the instructional resources. Schools that could provide opportunities for teachers to reflect on teaching and learning with their colleagues and for administrators and teachers to collaborate and communicate, as well as support the use of instructional resources. From this research, the teachers efficacy belief is depend on the school management and culture. Therefore, if the school has always implant the culture to change and teachers are always sent for training for upgrading themselves, and then the integration of ICT in classroom will be easier to be enhanced in the classroom (Ghavifekr *et al.*, 2015).

Computer Literacy among Teachers

Computer literacy is the knowledge and ability to efficiently use computer. It can also refer to the comfort level someone can use the computer and its application in solving specific problem. It involves being able to operate the computer efficiently without an aid and manipulate the software associated with it. (Nwafor, 2015).

Nwafor (2015), outlined the following as factors that affects computer literacy among teachers in Nigeria:

➢ Lack of qualified ICT personnel's in the schools.

➢ Lack of fund and high cost of computer ICT facilities.
➢ Lack of basic amenities such as housing, ICT centres and electricity.
➢ Environmental factors.

Computer literacy has impact positively to the Nigerian education system despite the challenges encountered in course of computer integration in the teaching and learning process in schools (Braide, 2015). The following are some of the benefits and impact of computer literacy in education:

➢ It has increased teachers and student's interest and motivation.
➢ It has impacted in improvement and advancement of knowledge of the teacher and students through easy access to educational materials and research online.
➢ It has helped the teacher and student in self-development and training through online programmes, training, etc.
➢ It enables online resources like, e-mail, chat, discussion forum and video conferencing, to support collaborative learning and sharing of information.
➢ It makes the teaching process easy and lively as well enable independent learning.

The integration of computer into the teaching and learning process in Nigeria institutions (nursery, primary, post-primary and tertiary) and Edo State inclusive is of welcome development toward improvement and advancement of education in line with the global standard. But it would be meaningless if facilities were not provided, resource personnel were not available to operate and maintain them, ICT facilities were available are not used in the teaching and learning process (Braide, 2015).

Gender Differences and Computer Literacy

Knezec and Christensen (2018) noted that, while competencies in computer technologies, computer use, and computer-related attitudes were once considered separate but related aspects of the field, they have come to be seen as integrated. It is thus important that we not only review literature concerned with gender differences in these aspects of student computer literacy but also review information about gender differences in computer and information literacy (CIL) and related constructs, patterns of computer use, and perceptions of computer technology (including consideration of student attitudes to computer technologies and their perceptions of their capacities to use those technologies).

Punter *et al*. (2017) noted that many studies have attributed the lower use of computer technologies among female students and lower levels of female participation in computer-based industries to differences in attitudes. Most studies that have reported on teachers' ICT competencies have relied on self-report data. However, one of the few performance assessments of ICT skills among teachers identified three ICT skill factors: basic digital skills, advanced technical skills, and professional ICT skills (Kaarakainen *et al.,* 2018). Interestingly, these dimensions appear to be similar to those reported from studies of ICT self-efficacy. Results from this assessment indicated that male teachers outperformed female teachers in the

assessment of ICT skills that they used; these results mirror the patterns found among assessments of students.

The use of ICT has become more prevalent since the days of the Computers in Education study (IEA 2019a), and so to gauge changes, we investigate the use of computer technologies in the classroom by female and male teachers. Teachers' personal use of, and attitudes to, computer technologies in the lower secondary school years may also have an effect on their students, either directly, through their instructional practices or frequency of use of ICT in the classroom, or indirectly, through modeling of behaviour.

Essentially gender refers to sets of relationships attributes, roles, beliefs and attitudes that define what being a man or a woman is within the society. It is socially ascribed attributes as opposed to sex which is biological attribute (Oghiabephan and Asamaigo, 2010). As a result of gender roles assigned by different cultures many women have been brought up to see technology and its use as reserved for the male gender. According to Asuquo and Onasanya (2006), many factors in and outside the classroom result in girls being turned away from computer technology. These factors include the media depicting men as experts in technology, societal expectations different goals for boys and girls, the structure of learning tasks, the nature of feedback in performance situations and the organization of classroom seating.

METHODOLOGY

The research design for this study is the survey research design. According to Omorogiuwa (2006), the survey researcher is interested in the accurate assessment of the characteristics of the whole population through the study of a sample considered to be representative of the population. It is a method of collecting data from respondents by using a research instrument such as the questionnaire. The population of this study is 200 geography teachers spread across public secondary schools in Edo State. The sample size for the study was 200 geography teachers selected out of a population of 2000 geography teachers. This was selected using simple random sampling technique, by taking 10% of the total population. Four Local Government were randomly selected which are Egor, Oredo, Ikpoba Okha and Ovia North East. A questionnaire was used as the instrument for the study. The questionnaire was designed to provide answers to the research questions raised in chapter one. It was made up of twenty (21) items constructed along the four points Likert's scale. Items 1 to 10 of the instrument were constructed to provide answers to research questions one to three; items 11 to 21 were designed to provide answers to research questions four to six. A total number of two hundred questionnaires were administered. The instrument was administered by the researcher to geography teachers. The questionnaires were thereafter collected by the researcher. The data collected from the field were processed and analyzed. The simple percentage statistic was used to analyze the responses of the subjects. In doing this a decision rule was established, so that any item with a percentage greater than or equal to fifty

percent ($\geq$ 50%) is attributed a positive tone while below 50% were regarded as negative in relation to the tone of the item.

RESULTS

Data for this study were analyzed and presented based on the research questions that guided this study. The 200 questionnaires that were analysed were found to be composed of 90 male geography teachers, 110 female geography teachers, 91 geography teachers below 30 years, 57 geography teachers between (30-40) years and 52 geography teachers above 40 years.

Research Question 1

Are geography teachers knowledgeable in the use of computer?

From table 1, the number of geography teachers that can properly turn on and shut down a computer are 183 teachers making up the highest percentage of 91.5%. The table also reveals that the number of geography teachers decreases from 169 (84.5%) for those that can start and exit a computer to 122 (56.0%) teachers who possess ability to install a software programme and it peaks a little at 145 (72.5%) for teachers who understand the basic functions of a computer hardware components and then decreases again to 133 (66.5%) geography that possess skills of the use of "search" command.

For the purpose of analysis and interpretation of this work a decision rule was established, so that any item on the instrument with percentage $\geq$ 50% (greater than or equal to 50%) is attributed as positive tone while any item <50% (less than 50%) is attributed a negative tone.

Table 1: Percentage of geography teachers knowledgeable in use of computers

S/N	Items As a geography teacher 1	No. of teachers who agreed	% of teachers who agreed	No. of teachers who disagreed	% of teachers who disagreed
1	Can properly turn on and shut down a computer	183	91.5	17	85
2	Can start and exit a computer programme	169	84.5	31	15.5
3	Possess the ability to install a software programme	122	56.0	88	44.0
4	Understand the basic functions of a computer hardware components	145	72.5	55	27.5
5	Possess skills in the use of "search" command	133	66.5	67	33.5
6	Am capable of moving a file from a hard drive to a USB drive	127	63.5	73	36.5
7	Use CD ROM with relative ease to supplement learning/teaching	155	57.5	85	42.5
8	Can create a basic word document	125	62.5	75	37.5
9	Can create a basic excel spreadsheet	134	67.0	66	33.0
10	Can create a simple presentation using power point	107	53.5	93	46.5

Research Question 2
Does geography teachers' knowledge in use of computer vary with gender?

The results from table 2, reveals that the male geography teachers that can turn on and shut down a computer and those that can starts and exit a computer programme are both on the same knowledge level on their use of computer with 79 male geography

teachers and its corresponding percentage of 86.4%.

Similarly, the number of female geography teachers that can create a basic excel spreadsheet and also create a simple presentation using power point item are on the same knowledge level on their use of computer with 59 female teachers, and is corresponding percentage of 53.6%.

Table 2: Percentage of geography teacher's knowledge in use of computer by gender

S/N	Items As a geography teacher 1	No. of male teachers who agreed	% of male teachers who agreed	No. of female teachers who agreed	% of female teachers who agreed
1	Can properly turn on and shut down a computer	79	87.8	95	86.4
2	Can start and exit a computer programme	79	87.8	90	81.8
3	Possess the ability to install a software programme	53	58.9	60	54.5
4	Understand the basic functions of a computer hardware components	70	77.8	77	70.0
5	Possess skills in the use of "search" command	58	64.5	71	64.5
6	Am capable of moving a file from a hard drive to a USB drive	60	66.7	67	60.9
7	Use CD ROM with relative ease to supplement learning/teaching	56	62.2	60	54.5
8	Can create a basic word document	61	67.8	60	54.5
9	Can create a basic excel spreadsheet	53	58.9	59	53.6
10	Can create a simple presentation using power point	50	55.6	59	53.6

The percentage of male geography teachers that possess skills in the use of "search command" is equal to the percentage of female geography teachers. It means that male and female geography teachers are equip-knowledgeable in the use of search command.

Also, the female geography teachers that can use CD ROM with relative ease to supplement learning / teaching and

those that can create a basic word document attracted equal responses of 60 female geography teachers both with 54.5%, thus they are also on the same knowledge level on the use of items 7 and 8.

Geography teachers that can properly turn on and shut down a computer and geography teachers that can start and exit a computer programme, although that of the female

geography teachers are higher (95 and 90 geography teachers) compared with that of its male counterparts both comprising 79 geography teachers the percentage of the male geography teacher is however greater than that of the female geography teachers (i.e. 87.8% each as against 86.4% and 81.8%) because the aggregate for the female geography teachers is higher.

Research Question 3
Does geography teacher's knowledge in the use of computer vary with ages?

From table 3, 92.3% of geography teachers below 30 years, 89.5% of geography teachers between (30-40) years and 75% of geography teachers above 40 years can properly turn and shut down a computer.

Table 3: Percentage of the ages of geography teachers knowledgeable in the use of computer

S/N	Items As a geography teacher 1	No. of teachers below 30 yrs who agreed	% of teachers below 30 yrs who agreed	No. of teachers between 30-40yrs who agreed	% of teachers between 30-40 yrs who Agreed	No. of teachers above 40yrs who Agreed	% of teachers above 40yrs who agreed
1	Can properly turn on and shut down a computer	84	92.3	57	89.5	39	75.0
2	Can start and exit a computer programme	84	92.3	47	82.5	38	73.1
3	Possess the ability to install a software programme	64	70.3	33	57.6	22	42.3
4	Understand the basic functions of a computer hardware components	71	78.0	45	78.9	29	55.8
5	Possess skills in the use of "search" command	70	76.9	39	68.4	25	48.1
6	Am capable of moving a file from a hard drive to a USB drive	66	72.5	36	63.2	22	42.3
7	Use CD ROM with relative ease to supplement learning/teaching	62	68.1	31	54.4	13	25.0
8	Can create a basic word document	64	70.3	28	49.1	25	48.1
9	Can create a basic excel spreadsheet	61	67.0	30	52.6	26	50.0
10	Can create a simple presentation using power point	63	69.2	30	52.6	19	36.5

From the result, 70.3% of geography teachers below 30yrs and 57.6% of geography teachers between (30-40) years possess ability to install a software programme, while 42.3% of geography teachers above 40 years cannot install a software programme.

For use of search command, 76.9% geography below 30 years and 68.4% of geography teachers between (30-40) years possess computer skills to use search command but only 48.1% geography teachers above 40 years cannot perform this task of using a search command.

Geography teachers below 30 years and between (30-40) years with 72.5% and 63.2% respectively are capable of moving a file from a hard drive to a USB drive, while 42.3% of geography teachers above 40 years cannot move file from a hard drive to a USB drive. However, 68.1% and 4.4% of geography teachers below 30 years and geography teachers between (30-40) years can use CD ROM to supplement teaching, while 25% of geography teachers above 40 years cannot use CD RM to supplement teaching geography teachers below 30 years and above 40 years of age with percentages 49.1% and 48.1% cannot create a basic word document while 70.3% geography teachers below 30 years can conveniently create a word document.

For use of power point presentation, 69.2% and 52.6% of geography teacher below 30 years and between (30-40) years can create a simple presentation using power point, while 36.5% of geography teachers above 40 years cannot create a simple presentation using power point.

From the survey, 92.3% of geography teachers below 30 years can properly turn on and shut down a computer and also 92.3% of geography teachers below 30 years can as well start and exit a computer programme.

Similarly 48.1% of geography teachers above 40 years cannot also search command and also 48.1% of geography teachers above 48.1% cannot create a basic word document.

Research Question 4
Are geography teachers knowledgeable in the use of computer packages?

Referring to table 4, 63.5% and 54.0% geography teachers can use Ms Word to type student's examination questions and also it can use Ms Word to edit student's examination question. However, 55.5% of geography teachers can use Ms Word to create files were students information is documented, only 29% and 41.5% can use Ms word to share geography information among students via flash drives / CD ROM and use Ms word to create students worksheet.

The result also shows that 64.5%, which is the highest percentage of geography teachers that are knowledgeable in the use of computer can use Ms excel to draw for teaching, but only 38% of geography teachers can use Ms Excel to draws posters that are used as visual arts during classroom lessons while 56.5% and 55% of geography teacher can use Ms excel for arranging of students names alphabetically during computation of result and for computing students test and examination scores. 40% of geography teachers can use Ms excel to draw various forms of charts for teaching and only 38% can use Ms excel to explain various forms of charts during classroom lessons.

Table 4: Percentage of geography teachers that are knowledgeable in the use of computer packages

S/N	Items As a geography teacher 1 use	No. of teachers who agreed	% of teachers who agreed	No. of teachers who disagreed	% of teachers who disagreed
11	Ms word to type students examination questions	127	63.5	73	36.5
12	Ms word to edit students examination questions	108	54.0	92	46.5
13	Ms Word to create files where students information is documented	111	55.5	89	45.5
14	Ms word to exchange / share geography information and related materials among students during geography lessons via flash drives / CD/DVD ROMs	58	29.0	142	71.0
15	Ms Word to create students worksheet	83	41.5	177	58.0
16	Ms excel to draw maps for teaching / learning process	71	64.5	129	35.5
17	Ms excel to draw posters that are used as visual aids during classroom lessons	76	38.0	124	62.0
18	Ms excel arranging of students names alphabetically during computation of result	113	56.5	87	43.5
19	Ms excel for computation of student test and examination scores	110	55.0	90	45.0
20	Ms excel to draw various forms of charts for teaching / learning process	80	40.0	120	60.0
21	Ms excel to explain various forms of charts during classroom lessons	76	38.0	124	62.0

Research Question 5
Does geography teacher's knowledge in the use of computer packages vary with their gender?

Table 5 indicates 65.6% of male geography teachers can use Ms Word to type student's examination questions as against 54.5% female geography teacher that can perform the same task with Ms Word. 50.0% of male geography teachers are knowledgeable in the use of Ms Word to create files were students information is documented as against 49.1% that can perform the same task for the female counterparts.

By gender, 44.5% of female geography teachers can both use Ms word to exchange information among students during lessons via flash drives, CD.DVD and also to use Ms word to create students worksheet, as against 38.9% and 42.2% for male geography teachers can perform the same task and 42.2% male geography teachers can both use Ms Word to create student worksheet and also use Ms excel for posters that are used as visual aid during lessons.

Table 5: Percentage of geography teacher's knowledge in the use of computer packages by gender

S/N	Items As a geography teacher 1 use	No. of male teachers who agreed	% of male teachers who agreed	No. of female teachers who agreed	% of female teachers who agreed
11	Ms word to type students examination questions	59	65.6	60	54.5
12	Ms word to edit students examination questions	52	57.8	61	55.5
13	Ms Word to create files where students information is documented	45	50.0	54	49.1
14	Ms word to exchange / share geography information and related materials among students during geography lessons via flash drives / CD/DVD ROMs etc	35	38.9	49	44.5
15	Ms Word to create students worksheet	38	42.2	49	44.5
16	Ms excel to draw maps for teaching / learning process	37	41.1	41	37.3
17	Ms excel to draw posters that are used as visual aids during classroom lessons	38	42.2	45	40.9
18	Ms excel arranging of students names alphabetically during computation of result	60	66.7	61	55.5
19	Ms excel for computation of student test and examination scores	54	60.0	58	52.7
20	Ms excel to draw various forms of charts for teaching / learning process	35	38.9	45	40.9
21	Ms excel to explain various forms of charts during classroom lessons	36	40.0	36	32.7

The percentage of male and female geography teachers that can use Ms excel to draw maps and those that can use Ms excel for posters that are used as visual aids during lessons is approximately the same and it is equal to 41.0% Again, the percentage of female geography teacher that are knowledgeable in the use of Ms word to edit students examination question and in the use of Ms excel for computation of students test and examination scores are equal, both been 55.5%, as against their male counterpart with 57.8% and 66.7% . Also, the knowledge of male geography teachers in using Ms word to share geography information among students via flash drive, CD ROM is the same with their knowledge in the use of Ms Excel to draw various forms of charts for teaching with its percentage both at 38.9% as against the female geography teachers with 44.5% and 40.9%.

Research Question 6
Does geography teacher's knowledge in the use of computer packages vary with their ages?

Table 6 shows that, 72.5%, 75.4% and 34.6% of geography teachers below 30 years between (30-40) years and above 40 years respectively can use Ms

Word to type student's examination questions; 72.5% of geography teachers below 30 years can both use Ms Word

to type student's examination questions as well as use it to edit student's examination questions.

Table 6: Percentage of the ages of geography teachers knowledgeable in the use of computer packages

S/N	Items As a geography teacher 1 use	No. of teachers below 30 yrs who agreed	% of teachers below 30yrs who agreed	No. of teachers between 30-40yrs who agreed	% of teachers between 30-40yrs who agreed	No. of teachers above 40yrs who agreed	% of teachers above 40yrs who agreed
11	Ms word to type students examination questions	66	72.5	43	75.4	18	34.6
12	Ms word to edit students examination questions	66	72.5	38	66.7	13	25.0
13	Ms Word to create files where students information is documented	59	64.8	29	50.9	12	23.1
14	Ms word to exchange / share geography information and related materials among students during geography lessons via flash drives / CD/DVD ROMs etc	51	56.0	26	45.6	11	21.2
15	Ms Word to create students worksheet	48	52.7	24	42.1	8	15.4
16	Ms excel to draw maps for teaching / learning process	52	57.1	24	42.1	7	13.5
17	Ms excel to draw posters that are used as visual aids during classroom lessons	53	58.2	26	45.6	9	17.3
18	Ms excel arranging of students names alphabetically during computation of result	68	74.7	34	59.6	12	23.1
19	Ms excel for computation of student test and examination scores	65	71.4	29	50.9	15	28.8
20	Ms excel to draw various forms of charts for teaching / learning process	53	58.2	25	43.9	13	25.0
21	Ms excel to explain various forms of charts during classroom lessons	41	45.1	35	61.4	8	15.4

The result also shows that 64.8%, 50.9% and 23.1% of geography teachers below 30 years, between (30-40) years and above respectively can use Ms word to create file were students information is documented while 50.9% of

geography teachers between (30-40) years can both use Ms word to create files were students information is documented and can also use Ms excel for arranging students names alphabetically, during computation of

result. 23.1% of geography teachers above 40 years can both use Ms Word to create files were students information is documented and can also use Ms excel for computation of students test and examination scores.

From the survey, 52.7%, 42.1% and 15.4% of geography teachers below 30 years, between (30-40) years and above 40 years respectively can use Ms Word to create student worksheet and 42.1% of geography, teachers between (30-40) years can both use Ms Word to create students worksheet and can also use it to draw up maps for teaching/ learning process. Similarly, 15.4% of geography teachers above 40 years can both use Ms word to create students work sheet and can as well use Ms excel to explain various forms of charts during classroom lessons.

For use of Ms excel, 58.2%, 45.6% and 17.3% of geography teachers below 30 years, between (30-40) years and above 40 years respectively can use Ms excel to create posters that are used as visual aids during classroom lessons. 58.2% of geography teachers below 30 years can both use Ms excel to create posters that are used as visual aids and also draw various forms of charts for teaching. Similarly, 45.6% of geography teachers between (30-40) years can both use Ms excel to create posters that are used as visual aids and also can use Ms Word to share geography information and related materials among students during geography lessons.

From the result 58.2%, 43.9% and 25.0% of geography teachers below 30 years, between (30-40) years and above 40 years respectively can use Ms excel to draw various forms of charts for

teaching geography 25.0% of geography teachers above 40years can both use Ms excel to draw various forms of charts and also can use Ms word to edit students examination questions. However, 57.1%, 42.1% and 13.5% of geography teachers below 30years, between (30-40) years and 40 years respectively can use Ms excel to draw maps for teaching geography. Observing the columns for geography teachers between (30-40) years and geography teachers above 40 years on table 4.6, the least percentages are 42.1% and 13.5%, which means using Ms excel to draw maps was the most difficult task to perform for the geography teachers within these two age groups.

DISCUSSION OF FINDINGS

From the results, it is obvious that geography teachers are knowledgeable in the use of computer and computer packages. Although much work has not been done in this study area of assessing computer literacy of geography teachers, related research studies have been carried out to assess computer literacy among science teachers.

Geography teachers are knowledgeable in the use of computer in teaching geography, this would mean that student stand a better chance of learning geography, with the mean percentage of 67.6% (a positive tone). The results of this study agree with the finding of Gray and Scouter (2004) who reported that science teachers in the United States of America are knowledgeable in the use of computer and computer application packages. They also reported that teachers in business and management subjects

show greater knowledge in the use of computer and computer packages in comparison to the science teachers.

The mean percentage for the male and female geography teachers are 686.8% and 63.4% which are both consistent of the decision rule of percentage greater than or equal to fifty percent ($\geq$ 50%) is attributed a positive tone while below 50% are regarded as a negative tones as a result male and female geography teachers are both knowledgeable in the use of computer.

Again, the mean percent of geography teachers below 30 years between (30-40) years and above 40 years that are knowledge able in the use of computer are 75.7%, 64.9% and 49.9% and 49.6% respectively. This implies that computer literacy of geography teachers varies with their ages, with the geography teachers that are younger in age are knowledgeable in the use of computer, while the teachers that are older (above 40yrs) has no knowledge in the use of computer. This result disagrees with the findings of Ezekoka and Achuonye (2015) in a study to investigate peer tutoring strategy for computer literacy reported that there is no significant difference in the acquisition and use of computer and computer packages as a result of the age of tutors.

Geography teachers are knowledgeable in the use of computer packages, with a mean percentage of

RECOMMENDATIONS
Based on the findings of the study, the following recommendations were made in order to improve on teaching geography in secondary schools, so that the main objective of teaching and

53.3% (Positive tone). Male geography teachers are more knowledgeable in the use of computer packages (percentage of 34.3%), than their female counterparts (mean percentage of 48.1%). This agrees with the contributions made by Tella and Mutula (2008) in a study to assess if there is a significant gender difference in the application and use of computer by male and female teachers. Geography teaches below 30 years and between (30-40) years with mean percentage of 68.3% and 58.4% are both knowledgeable in the use of computer packages while teaches above 40 years with a mean percentage of 24.2% are not knowledgeable in the use of packages.

CONCLUSION
Based on the assessment of the literacy level of Geography teachers in Secondary schools, this conclusion maybe drawn:
  ➢ Geography teachers are knowledgeable in the use of computer and computer packages
  ➢ Male geography teachers were more knowledgeable in the use of computer and computer packages than their female counterparts.
  ➢ Geography teachers that are younger in age are more knowledgeable in the use of computer and computer packages than the older geography teachers (above 40yrs)

learning geography would not be undermined.
  ➢ The school heads (the principal, vice principal \and head of departments) should organize periodic orientation programmes for geography teachers (especially

the females and geography teachers above 40 years), stressing on the relevance of been computer literate and its classroom applications in teaching geography.

➢ Computer trainings should be rendered to geography teachers by employing the computer services rendered by consultancy services that can provide computer training services, the use of computer service bureau and through in-service training.

➢ For the recommendation in two above to be achievable, result oriented and sustainable, microcomputers should be provided, that will be able to serve the needs of geography teachers in teaching geography.

➢ School heads should device a means of motivating and rewarding geography teachers who are knowledgeable in the use of computer and computer packages and employs these skills in the classroom teaching of geography, as this will challenge other teachers who are not computer literate, to strive to be computer literate and also to use this knowledge in teaching geography in the classroom

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