ASSESSING THE UTILIZATION OF INFORMATION AND COMMUNICATION TECHNOLOGY (ICT) TOOLS FOR TEACHING SECONDARY SCHOOLS ISLAMIC STUDIES IN ILORIN, NIGERIA

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ABSTRACT

The study aims to examine the utilization of ICT tools for teaching secondary school Islamic studies in Ilorin, Nigeria. Descriptive research design was adopted and simple random technique was adopted to select 120 Islamic Studies teachers in Ilorin. Researcher self-designed questionnaire was used to elicit information from the respondents. Two research questions were raised and answered using percentage. The findings of the study revealed that ICT have influence on teaching and learning. Also, result of the findings shows computer system, telephone, Mp3 player are available for teaching and learning Islamic Studies while firm projector, T.V set, film stripe are not available. The findings also revealed that majority of Islamic Studies teachers are not using ICT tools to teach. It is concluded that ICT have great influence on teaching and learning. Also, using ICT can improve teaching and learning processes. The researchers adopted the experimental research method using two groups; pre-test, post-test/control design. The data for the study were collected using a questionnaire titled "Computer-Assisted Instruction usage and Students Attitude towards Mathematics" (CAISAM). The result shows that calculated T value (0.96) is less than the table value (2.021), meaning that, the use of computer-assisted program in teaching of Mathematics enlivens the attitude of the students towards the subject.

Keywords: Technology, Teaching, Learning, Islamic Studies, Teacher, ICT

INTRODUCTION

The Federal Government of Nigeria, in the National Policy on Education (Federal Republic of Nigeria, 2004), recognizes the role of ICT in education. Information and Communication Technology (ICT) refers to the totality of methods and tools that are used in gathering, storing, processing and communicating information (Olutola & Olatoye, 2015).

The improvements in the field of information and communication technologies have offered a new approach to education, by switching the conventional process of obtaining and transferring knowledge to e-learning technologies. In a similar development, in 2010, Federal Ministry of Education identifies the role of ICT policy on education amongst others as: "The policy provides the needed guidance on what is expected in the entire process of ICT integration in education to all stakeholders in education. Its' implementation, therefore, should lead to a speedy transformation of the teaching, learning and administration of education. This in turn will foster the production of graduates in the education system that can survive in the contemporary society, sustain national development and compete globally (p.3). The realisation of this policy statement lies basically in the capability of the key implementers of the nation's educational policy i.e teachers to integrate ICT-Driven instructional aids effectively through Computer Assisted mode of Instruction (CAI) in their day to day classroom activities for effective pedagogy.

In the contemporary educational landscape, the integration of technology has evolved from a peripheral innovation to a central component of pedagogical strategies, reshaping the way teaching and learning are conceptualized and executed. The rapid advancement of digital technologies has catalyzed a paradigm shift, where traditional teaching methods are increasingly supplemented or replaced by technology-enhanced practices (Aina & Adedeji, 2020; Fernandez & Scull, 2018; Okafor & Ugwuanyi, 2021). This transition is underpinned by the growing recognition that technology can significantly enhance educational outcomes by fostering student engagement, promoting interactive learning, and facilitating access to a wealth of information and resources (Brown, 2020; Owusu-Ansah et al., 2019; Oyeleye & Ayodele, 2021). As such, the effective integration of technology into educational settings is not merely an option but a necessity for preparing students to thrive in a digitally-driven world.

However, the successful integration of technology in education is contingent upon various factors, including the availability of resources, the digital competence of educators, and the institutional support for technology adoption (Adeyemi & Olaolu, 2019; Johnson et al., 2021; Nkadi & Iheanachor, 2022). In many contexts, particularly in developing regions, the implementation of technology in schools is hindered by infrastructural challenges, limited access to digital devices, and inadequate training for teachers (Ibrahim & Hassan, 2022; Okon & Usoro, 2023; Yusuf et al., 2018).

Bakhshi (2013) expressed that ICT is capable of facilitating substantial improvement in the way lecturers lecture and students learn and can also assist the undergraduates with the needed digital literacy capabilities necessary for efficient communication in the 21st century. According to Agbonlahor (2005) the introduction of ICT into the educational system has re-defined teaching and learning processes thereby giving rise to contemporary medium of learning termed "e-learning".

Abdul Razak, et al., (2014) stated that teachers of Islamic Studies need to modify traditional teaching methods to suit the modern method of teaching using ICT such as media presentations, Ms powerpoint, Ms word, Ms excel and LCD projector. Also, Sudin and Mohd. Noh (2003) noted that information and communication technology

(ICT) facilitates both the teaching and learning of Islamic Studies to be more enjoyable, real and fun via the use of e-mail discussion group (e-group), video presentations and teleconferencing (video conferencing).

Teaching and learning processes can be defined as a transformation process of knowledge from teacher to student. It is referred to as the combination of various elements of instructions, the process where an educator identifies, establish the learning objectives, develops teaching resources, implement teaching and learning strategy. Learning is a cardinal factor that a teacher must consider while teaching students. Teaching and learning are an interaction processes which occur between three important components i. e, teacher, student and lesson in the classroom. The three components are inter-related through method. The teachers are critical stakeholders in achieving success in educational attainment (Tanshi, 2012). Therefore, teacher should initiate a paradigm shift in their teaching and not relying solely on "chalk-and-talk". This is because the method is boring and it decrease students' motivation to learn. Teacher must increase the quality of their teaching and learning in line with the current challenges of education with facilities which could promote effective teaching and learning.

The general purpose of this study was to examine the influence of ICT in teaching of Islamic studies students in Ilorin, Nigeria. Specifically, the study was set to achieve the following objectives:
1. Determine the influence of ICT in teaching of Islamic studies.
2. Find out the availability of ICT tools that can be used to facilitate teaching of Islamic studies in secondary schools in Ilorin, Nigeria.
3. Examine the level of utilization of ICT tools to facilitate effective teaching.

The following research questions were raised to guide this study:
a. What is the influence of ICT on teaching of Islamic Studies?
b. What are the available ICT tools for teaching Islamic studies in Secondary schools in Ilorin, Nigeria?
c. To what extent does the utilization of ICT tools facilitate effective teaching of Islamic studies?

The influence of Information and Communication Technology in teaching and learning process can never be underestimated. It greatly enhances qualitative teaching and learning. Opati (2013) worked on the use of ICT in teaching and learning at Makere University, Uganda. He revealed that the use of ICT tools made the system of education delivery to change and enhanced teaching and learning in higher institutions of learning. Furthermore, the integration of ICT tools empowers teachers with new skills that facilitate teaching and learning in a sustainable manner using various educational software or videos.

Ezekoka and Okoli (2012), on the use of computer in teaching and learning in secondary schools in Imo state. The purpose of the study was to examine if the modern philosophy of education can be achieved through computer-aided instruction (CAI). It also set out to investigate the effect of the use of computer on the academic

performance of secondary school students. An experimental research design was used and the instruments for data collection were multiple-choice questions designed by the researcher, and an oral interview held after the experiment with some students. The result of the t-computed was 25.33, which is greater than t-critical of 2.064. The result shows that students taught with computer performed better than those taught without computer. The above study conducted is very much related to this research because it is based on finding out the effect of the use of Computer-aided instruction on academic performance of secondary school students.

Carried out related research on the effect of computer-assisted packages on the performance of senior secondary students in Mathematics in Awka, Anambra State, Nigeria. (Anyamene, et al., 2012) The purpose of the study amongst others was to determine the retention achievement scores of students taught using computer-assisted instruction and those taught using conventional method. A quasi-experimental (pre-test-post-test) group research design was adopted for the study. The research instrument was made up of Algebra Achievement Test (AAT). The results indicated that students taught using computer assisted instruction package performed significantly better than their counterparts taught using the conventional method of instruction in the retention test. Furthermore, the study revealed that there is no significant difference between the mean achievement scores of male and female students taught Mathematics (Algebra) with CAI package.

Conducted a study on the effect of a Computer Mediated Systems Teaching Approach on Mathematics Achievement of Engineering Students in Nigerian Polytechnics in Kaduna Polytechnic, Kaduna State. The purpose of the study was to determine the Mathematics Achievement Level (MALs) of students taught Mathematics using the Computer Mediated System Teaching Approach (CMSTA) and those not taught with the same approach and secondly, to determine whether the MALs of the male and female students taught mathematics using the CMSTA differ. A quasi-experimental research design was adopted to carry out the study. The instrument for data collection was the Mathematics Achievement Test I and II (MATs I and II). Pre-test and post-test of Non-Equivalent Groups Design (NEGD) was used in line with the guidelines and based on steps outlined by Gall (1996). The result showed that students taught mathematics using the CMSTA significantly outperformed those not taught with the same approach. Secondly, the result revealed that the male students taught mathematics using the CMSTA significantly outperformed their female counterparts. (Yusuf, et al., 2013)

Nwoke and Uzoma (2011) also conducted research on impact of Computer-Assisted Instruction on student attitude to Mathematics" in PortHarcourt, Rivers State, Nigeria. The purpose of the study was to determine whether students taught Mathematics with computer-assisted instruction will have improved attitude towards Mathematics. The researchers adopted the experimental research method using two groups; pre-test, post-test/control design. The data for the study were collected using a questionnaire titled "Computer-Assisted Instruction usage and Students Attitude towards Mathematics" (CAISAM). The result shows that calculated T value (0.96) is less than

the table value (2.021), meaning that, the use of computer-assisted program in teaching of Mathematics enlivens the attitude of the students towards the subject.

Yusuf, et al., (2013) conducted a study on assessment of the availability, utilization and Management of ICT facilities in teaching English Language in secondary schools in Kaduna State, Nigeria. The purpose of the study amongst others was to ascertain the level of use of ICT facilities in teaching English Language in Secondary Schools. A descriptive research design was used for the study. The instrument for data collection was a structured questionnaire for teachers tagged "Availability, Utilization and Management of Information Communication Technology in Teaching English Language in Secondary Schools" (AUMICTSS). Descriptive statistics, frequency count and simple percentages were used for data analysis. The result showed amongst others that schools with computers do not have the relevant educational software required by their students.

METHODS

This study adopted descriptive method of research. Two instruments titled Available ICT Tools (AICTT) and Influence of Technology Questionnaire (ITQ) was used as instruments for this study. Simple random sampling technique was used to select 120 senior secondary school teachers of Islamic studies in Ilorin, Nigeria. The instrument used for data collection was validated by three experts in Islamic studies and Test & Measurement and found it appropriate for this study. The reliability of the instrument was determined using the test re-test reliability technique within a two week interval. The scores of the two tests were correlated using the Pearson's Product Moment Correlation (PPMC). The value of the correlation coefficient obtained was 0.83. Three research questions were raised and answered using Percentage, Mean and Standard Deviation. Similarly, the instrument was personally administered by the researchers to all the randomly selected 120 senior secondary school teachers of Islamic studies in Ilorin, Nigeria. The researchers sought the permission from all the heads of the sampled schools in Ilorin, Nigeria.

RESULT AND DISCUSSION

Demographic Distribution of the Respondents
Table 1. *Gender Distribution of Respondents*

Sex	Frequency (f)	Percentage (%)
Male	73	60.8
Female	47	39.2
Total	**120**	**100%**

Source: Field survey, 2024.

Table1 showed that out of 120 respondents to whom the questionnaires were administered, 73 respondents representing 60.8% were male while 47 representing

39.2% were female. This indicates that majority of the respondents to whom this research instruments were administered to in our survey are males. This implies that majority of the respondents sampled in this study were Males.

Research Question 1: What is the influence of ICT on teaching of Islamic Studies?

Table 2. *Influence of ICT Tools for Teaching Islamic Studies*

S/N	Items	Agree	(%)	Disagree	(%)	Remark
1.	ICT can improve teaching and learning processes	83	69.1	37	30.8	**Agree**
2.	Computer can enhance teachers' critical thinking skills	99	82.5	21	17.5	**Agree**
3.	ICT can enhance students' participation and feedback to teachers during the lesson.	101	84.1	19	15.8	**Agree**
4.	ICT can enhance teacher and student Interaction.	94	78.3	26	21.6	**Agree**
5.	ICT can enhance easy teaching and learning	105	87.5	15	12.5	**Agree**

Source: Field Survey, (2024)

Table 2 shows that out of 120, 83 of the respondents representing 69.1% agreed to the fact that ICT can improve teaching and learning processes while 37 representing 30.8% disagreed. Also, 99 respondents representing 82.5% agreed to the fact that Computer can enhance teachers' critical thinking skills, while 21 representing 17.5% of the respondents disagree. Also, 101 respondents representing 84.1% agreed to the fact that ICT can enhance students` participation and feedback to teachers during the lesson, while 19 representing 15.8 of the respondents disagree. More so, 94 respondents representing 78.3% agreed to the fact that ICT can enhance teacher and student interaction while 26 of the respondents representing 21.6% of the respondents disagree. Furthermore, 105 of respondents representing 87.5% agreed to the fact that ICT can enhance easy teaching and learning. This indicate that majority of the respondents agreed that ICT utilization have influence on teaching and learning of Islamic studies.

Research Question 2: What are the available ICT tools for teaching Islamic studies in Secondary school in Ilorin, Nigeria?

Table 3. *Available ICT tools for teaching Islamic studies in Secondary school in Ilorin, Nigeria*

S/N	Items	Available	(%)	Not Available	(%)	Decision
1.	Computer	87	72.5	33	27. 5	**Available**
2.	Film Projector	21	17.5	99	82.5	**Not Available**
3.	T.V. Set	30	15.8	90	75	**Not Available**
4.	Telephone	103	85.8	17	14.2	**Available**
5.	Mp3 Player	88	73.3	32	26.7	**Available**
6.	Film stripe	38	31.6	82	68.3	**Not Available**

Source: Field Survey, (2024)

Table 3 shows that out of 120, 87 of the respondents representing 72.5% agree that computer system is one of the available ICT tools to teach Islamic Studies while 33 representing 27.5% disagreed. 99 respondents representing 82.5% agreed that Film Projector as an ICT tool is not available to teach Islamic Studies, while 21 representing 17.5% disagreed. In a similar vein, 90 respondents representing 75% agree that T.V Set

as an ICT tool is not available to teach Islamic Studies, while 30 representing 15.8% disagreed. Furthermore, 103 respondents representing 85.8% believe that Telephone as an ICT tool is available to teach Islamic Studies while 17 respondents representing 14.2% disagreed. Also, 88 respondents representing 73.3% are of the opinion that Mp3 Player is available to teach Islamic while 32 respondents representing 26.7% of the respondents disagreed. Furthermore, 82 of the responden representing 68.3% agreed that Film stripe is not available for teaching Islamic Studies while 38 representing 31.6% disagree. This indicates that Telephone and Mp3 are the available ICT tools for teaching Islamic studies while Film Projector, T.V set and Film Stripe are not available to teach Islamic studies among secondary schools, Ilorin, Nigeria.

Research Question 3: To what extent does the utilization of ICT tools facilitate effective teaching of Islamic studies?

Table 4.0. Descriptive Statistics Showing *Level of ICT tools Utilization to Facilitate Teaching of Islamic Studies* **in Ilorin, Nigeria**

Number of Respondents	120
Range	21
Standard Deviation.	21.95
Minimum	7-14
Maximum	22-28

From table 4.0**:** above, the minimum 7-14, the maximum is 22-28, the mean is 21.95 while the standard deviation is 3.13. The computed scores were further categorized as 7-14 "low" level of ICT tools utilization, and 15-21 "moderate " level of ICT tools utilization and 22-28 "high" level of ICT tools utilization. The categorization were subjected to percentages of the level of ICT tools utilization among secondary school Islamic Studies teachers in Ilorin, Nigeria   is presented in table 4.1.

Table 4.1 *Descriptive Statistics Shows Level of ICT Tools Utilization*

Level of ICT Tools utilization	Frequency	%
Low level	77	64.2
Moderate level	42	35
High level	1	0.8

DESCRIPTIVE STATISTICS SHOWS LEVEL OF ICT TOOLS UTILIZATION
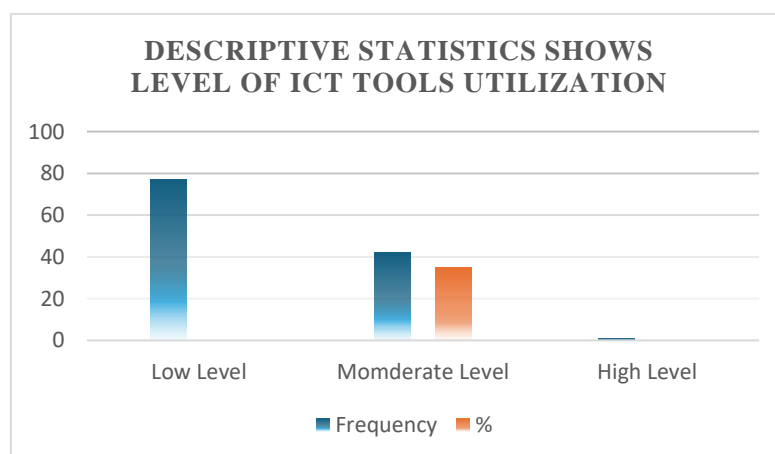
The result in above Table 4.1 shows the level of ICT tools utilization. From the result, majority of the teachers have low level of ICT tools utilization 64.2% (77), 35% of the teachers (42) possessed moderate level of ICT tools utilization while 0.8% of the respondents (1) have high level of ICT tools utilization to teach Islamic Studies Ilorin, Nigeria. This implies that there is low level of ICT utilization among secondary school teachers of Islamic studies in Ilorin, Nigeria. The findings indicate that majority of the respondents agreed that ICT utilization have influence on teaching of Islamic studies among secondary schools in Ilorin, Nigeria. This finding supported the submissions of Opati (2013) that the use of ICT tools made the system of education delivery to change and enhanced teaching and learning in institutions of learning. Furthermore, the integration of ICT tools empowers teachers with new skills that facilitate teaching and learning in a sustainable manner using various educational software or videos. Also, this finding corroborated the submissions of Abdullahi (2013), that effective use of ICT tools enhances the quality of instructional delivery in teaching and learning of Arabic and Islamic Studies in educational institutions in Nigeria. The findings revealed that ICT if properly harnessed and utilized will go a long way in enhancing the quality of teaching and learning of Islamic Studies.

The findings also revealed that Telephone and Mp3 are the available ICT tools for teaching Islamic studies while Film Projector, T.V set and Film Stripe are not available to teach Islamic studies among secondary schools, Ilorin, Nigeria. The finding of this study was in line with the submissions of Yusuf, et al. (2013) whose findings showed that some schools with computers do not have the relevant educational software required by their students. There is low level of ICT utilization among secondary school teachers of Islamic studies in Ilorin, Nigeria. This finding supported the submissions of Nwoke and Uzoma (2011) and Yusuf et al., (2013) whose findings revealed that the utilization of ICT tools was a significantly low among teachers and students respectively.

CONCLUSION

The study concluded that ICT tools significantly influence the teaching and learning process. Also, using ICT can improve the quality of teaching. Similarly, it is recommended that seminars, workshops and Conferences should be organized for teachers of Islamic studies on how to effectively utilize the available ICT tools to enhance effective and efficient teaching of Islamic studies among secondary schools in Ilorin, Nigeria. It is recommended that relevant and suitable ICT tools should be provided for teachers of Islamic studies to enhance effective teaching of the subject.

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REFERENCES

Aina, J. K., & Adedeji, T. (2020). ICT integration in Nigerian secondary schools: The challenges and prospects. *Journal of Education and Practice, 11*(35), 59-66. https://doi.org/10.7176/JEP/11-35-07

Anyamene, A., Nwokolo, C., Anyachebelu, F. & Anemelu, V. C. (2012). Effect of Computer-Assisted Packages on the Performance of Senior Secondary Students in Mathematics in Awka, Anambra State, Nigeria. American International Journal of Contemporary Research: 2(7).

Bakhshi B. (2013). Teaching and learning with technology: Effectiveness of ICT integration in schools. International Journal of Research in Educationand Science (IJRES), 1(2), 175-191.

Brown, M. (2020). Digital learning in schools: Moving beyond the hype. *Computers & Education, 146*, 103753. https://doi.org/10.1016/j.compedu.2019.103753

Ezekoka, G.K. & Okoli, A.M. (2012). The Use of Computer in Teaching and Learning in Secondary Schools in Imo State. Journal of Educational Media and Technology, 16(1).

Federal Republic of Nigeria (2004). *National Policy on Education (4th Edition),* Lagos: NERDC Press.

Federal Ministry of Education (2010). National Policy on Information Technologies (ICT) in Education.

Fernandez, J., & Scull, J. (2018). Technology in education: Pedagogical paradigms and performance. *Educational Technology Research and Development, 66*(3), 447-459. https://doi.org/10.1007/s11423-018-9596-1

Ibrahim, A. H., & Hassan, I. (2022). Barriers to ICT adoption in Nigerian schools: A focus on infrastructure and training. *Education and Information Technologies, 27*(1), 121-136. https://doi.org/10.1007/s10639-021-10602-9

Islam, I., & Ishaq, M. (2024). Development of Journalism Development Strategies in The Digital Era at Darul Mukhlasin High School. *JERIT: Journal of Educational Research and Innovation Technology*, 1(2), 71–79. https://doi.org/10.34125/jerit.v1i2.11

Iskandar, M. Y., Nugraha, R. A., Halimahturrafiah, N., Amarullah, T. A. H., & Putra, D. A. (2024). Development of Android-Based Digital Pocketbook Learning Media in Pancasila and Citizenship Education Subjects For Class VIII SMP. *JERIT: Journal of Educational Research and Innovation Technology*, 1(2), 51–60. https://doi.org/10.34125/jerit.v1i2.13

Iswandi, I., Syarnubi, S., Rahmawati, U., Lutfiyani, L., & Hamrah, D. (2024). The Role of Professional Ethics Courses in Producing Prospective Islamic Religious Education Teachers with Character. *INJIES: Journal of Islamic Education Studies*, 1(2), 71–82. https://doi.org/10.34125/injies.v1i2.9

Khofi, M. B., & Santoso, S. (2024). Optimize the Role of The State Islamic High School (MAN) Bondowoso Principal in Promoting Digital-Based Learning. *JERIT: Journal of Educational Research and Innovation Technology*, 1(2), 91–102. https://doi.org/10.34125/jerit.v1i2.7

Khubab, A. I., & Jaya, A. I. A. (2024). Implementation of Quality Education at the Darul Falah Amtsilati Islamic Boarding School. *INJIES: Journal of Islamic*

Education Studies, *1*(1), 1–4. Retrieved from https://injies.unimika.ac.id/index.php/injies/article/view/1

Kustati, M., Indra, R., Efendi, Ritonga, M., Nelmawarni, Yulia, & Karni, A. (2023). The effect of national insight and religious moderation on radical behavior of secondary school students. *Education Research International*, *2023*(1), 2919611.

Mahfudloh, R. I., Mardiyah, N., Mulyani, C. R., & Masuwd, M. A. (2024). Management Of Character Education in Madrasah (A Concept and Application). *INJIES: Journal of Islamic Education Studies*, *1*(1), 35–47. Retrieved from https://injies.unimika.ac.id/index.php/injies/article/view/5

Nwoke, B.I. & Uzoma, P.O. (2011). Impact of Computer-Assisted Instruction on Students" Attitude to Mathematics. *Journal of Educational Media and Technology*: 15(2).

Nkadi, E., & Iheanachor, E. (2022). ICT integration in Nigerian secondary schools: A systematic review of challenges and strategies. *Journal of Educational Research and Reviews, 10*(2), 15-24. https://doi.org/10.33495/jerr_v10i2.22.109

Okafor, C. J., & Ugwuanyi, K. (2021). Enhancing teaching and learning through technology: The role of digital competence in Nigerian schools. *International Journal of Education and Development Using ICT, 17*(1), 102-116. https://doi.org/10.1038/s41539-021-00100-9

Opati, O. D. (2013). The use of information and communication technology in teaching and learning at Makerere University: The Case of College of Education and External Studies (M. Phil.). Higher Education Research, Faculty of Education, University of Oslo, Norway.

Owusu-Ansah, D., Agyei, D., & Amoako, J. (2019). The digital divide in education: A study of ICT accessibility in Ghanaian schools. *Journal of Education and Practice, 10*(29), 1-8. https://doi.org/10.7176/JEP/10-29-01

Oyeleye, O., & Ayodele, M. (2021). The impact of digital technology on student engagement in Nigerian secondary schools. *Journal of Educational Multimedia and Hypermedia, 30*(2), 143-159. https://doi.org/10.1016/j.jemh.2021.02.004

Olutola and Olatoye, 2015). What Motivates Teachers to Use ICT? Paper Presented at the British Educational Research Association Conference. Brighton, September.

Yusuf, I., Kajuru, Y.K. & Musa, M. (2013). The Effect of a Computer Mediated Systems Teaching Approach on Mathematics Achievement of Engineering Students in Nigerian Polytechnics. *Journal of Educational Research and Development: 8*(1), p.364-370. https://core.ac.uk/download/pdf/234635539.pdf