



The Development and Evaluation of The Instructional Kid Blog for Teaching Selected Computer Science Concepts in Primary Schools in Ilorin Metropolis

Florence Olutunu Daramola

Department of Educational Technology, University of Ilorin, Ilorin, Nigeria

Correspondence: E-mail: florencedaramona@yahoo.com

ABSTRACTS

This study determined the development and evaluation of an instructional kid blog for teaching selected computer science concepts in primary schools in the Ilorin metropolis. The study adopted design-based research to ten experts from both the educational technology and computer sciences department at the University of Ilorin and five computer studies teachers in Ilorin. The findings indicate that the instructional kid blog was well structured and every expectation was achieved. Both experts and teachers have positive reactions and developed an instructional kid blog that satisfied the required expectations. The study concluded that the instructional kid blog is a powerful instructional tool in the classroom that the ability to enhance teaching and learning in Nigeria. Therefore, it was recommended that an instructional kid blog should be adopted for teaching computer science in primary school in Ilorin to concretize lesson content and abstract that is inherent in computer science.

© 2022 Universitas Pendidikan Indonesia

ARTICLE INFO

Article History:

Received 09 Feb 2022

Revised 04 Mar 2022

Accepted 15 Mar 2022

Available online 16 Mar 2022

Keyword:

*Computer sciences,
Development,
Instructional kid blog.*

1. INTRODUCTION

Information and communication technology (ICT) is being utilized in every part of life. Due to the increasing importance of the computer, students-the future citizens cannot afford to keep themselves aloof from this potential medium. In education, the use of Information and communication technology (ICT) has become imperative to improve efficiency and effectiveness at all levels and in both formal and non-formal settings (Goyal *et al.*, 2010). Education even at the school stage has to provide computer instruction. Information and communication technology can be referred to as any device that can be used to store, retrieve, manipulate, transmit or receive information in a digital form. Information technology is any equipment or interconnected system or subsystem of equipment that is used in the acquisition, storage manipulation, management transmission, or reception of data or information Google Sites.

Instructional packages are collections of materials with various components that are developed to instruct as well as to facilitate the process of teaching. Instructional materials are derived with strict adherence to the curriculum of the concept. It is developed to teach, which is designed specifically to accomplish the aims, goals, and objectives of the teaching and learning situations. The materials range from audio, visual as well as audio-visual which can be accessed manually or electrically. The instructional package helps to disseminate ideas, information, and knowledge from the teacher to the students.

E-Learning is a learning program that makes use of an information network- such as the internet, an intranet (LAN), or extranet (WAN) whether wholly or in part, for course delivery, interaction, and/or facilitation (Ratheeswari, 2018). Technology such as web conferencing, the Ultra net, blogs/wikis, virtual worlds, and online gaming and mobile devices such as iPads, mobile phones, digital cameras, and voice recorders are changing the way teachers teach and the way students learn (Abe & Adu, 2013). With the advancement of e-learning, several means of teaching have been cultivated which include blogging.

Blogs are online platforms that are updated regularly by their author. Blogs contain information related to a specific topic. In some cases, blogs are used as daily diaries about people's personal lives, political views, or even as social commentaries. Blogs can be shaped into whatever the author, want them to be. It is used for all sorts of purposes. Teachers use blogs to communicate with students, companies use blogs to communicate and interact with customers and other stakeholders. Newspapers incorporate blogs into their main website to offer a new channel for their writers. Individuals also created blogs to share with the world their expertise on specific topics). Sometimes, blogs are used as a way of sharing class activities with pupils' family members and caregivers, or as a showcase for pupils' writing – a kind of online school magazine with a wider audience. With the advancements of e-learning, the World Wide Web, Internet, and computer accessibility, along with education's need to advance teaching and learning, the rise of kid blog has emerged.

Kid blog is designed specifically for elementary and middle school teachers who want to provide each student with their blog. It's free, uncluttered, ad-free, easy to set up, and private by default, teachers remain in control, no information is collected from students and student email is not needed. Kid blog is a discovery for teaching and learning. It is a powerful solution to meet both teachers' and students' needs.

Kid blog is a secure, private blogging platform created specifically for educational use and recommended for the elementary-aged student. This blog emphasizes no advertising of any kind, a simple login menu, clutter-free design, and a central blog directory with simple navigation. It possesses features that are capable to help connect users and getting work done

from anywhere on any device. It is simple to set up, use and manage the application. It is easy to use for both students and teachers, because it is built by teachers, for teachers, so the student can get the most out of the writing process. The mission is to empower teachers to embrace the benefits of coming digital in education.

Kid blog enables students to learn through and about each other's thinking processes. It is used to maximize student engagement, students can pose a thought-provoking question that would normally be discussed in a face-to-face classroom and direct students to post their responses on their blogs. Kid blogs can be a means to attract students to do homework and to support academic activities outside the classroom. Kid blogs are useful in the elementary classroom for reading, writing, science social studies, math, French, etcetera. With the advancements of information and communication technology, Internet, and computer accessibility, along with education's need to advance teaching and learning in the classroom, the rise of kid blogs for learning has emerged. Kid blog has the potential to allow technology to do what it does best—engage the learners. The goals are to personalize and enhance the learning experiences, increase student engagement along with students' 21st-century skills, and use data to inform decisions.

The introduction of the development of computer studies in primary schools occur during the 32 ministerial council meetings of the National Council on Education in 1987, the Federal government of Nigeria decided to introduce computer education into the nation's secondary school system. This was followed by the inauguration of the National Committee on Computer Education the same year. The functions of the committee include "planning for a dynamic policy on computer education and literacy in Nigeria as well as devising clear strategies and terminologies to be used by the federal and state governments in introducing computer education".

The general objectives of the policy include bringing about a computer literate society in Nigeria and enabling present school children to appreciate and use the computer in various aspects of life and future employment. According to the National Computer Policy, the first objective is to ensure that the general populace appreciates the impact of information and computer technology on today's society, the importance of its effective use, and the technologies that process, manage, and communicate the information. The second general objective is to ensure that the people of Nigeria will know how to use and program computers, develop software packages, understand the structure and operation of computers and their history, and appreciate the economic, social, and psychological impact of the computer. The modalities and the strategies for achieving the stated objectives include training teachers and associated personnel, hardware facilities, curriculum development, software developments and evaluation, and maintenance of hardware and peripherals. The policy recommends a continuous evaluation of progress. The starting point of this evaluation is to compare existing school practices with policy stipulations.

The National Computer Education Curriculum for primary schools was developed by the Nigerian Educational Research and Development Council (NERDC) in 2002. Until now, computer studies courses are based on some unapproved document or compilation of topics that lack pedagogical basis and structure in few schools where it is taught. Thus the National Computer Education Curriculum represents the first deliberate attempt, nationally, to guide teachers on what should constitute basic computer literacy concepts and skills to be acquired at that level.

The objectives of the curriculum which are drawn from the national objectives for computer education are to enable pupils to use the computer and thereby acquire basic skills such as using the keyboard, accessing and editing a file at the operating system level, using

the computer to facilitate learning; and develop rudimentary skills in the use of computer for text writing, computation and data entry activities.

Computer as an educational tool can enhance and complement teaching and learning in every curriculum area: when utilized for instruction that is teaching and learning, computer science studies can facilitate the acquisition of the basic science, technology, and mathematics skills by concentrating on complex real-world tasks, facilitate the acquisition of higher-order thinking skills and problem-solving skills, enable learners to access a wider range of information resources/sources for developing appropriate concept and relationship in any course/subject of study, provide learners with a medium of further learning. Teachers can also use Computers to prepare resources for teaching, access and get information and educational software through the Internet and, communicate and share knowledge and information with, experts in specific fields with other schools and with other teachers and parents for the benefit and development of pupils. Meanwhile, teachers and learners could only avail themselves of these benefits of computers if they are computer literate.

2. LITERATURE REVIEW

2.1. Concept of Information and Communication Technology in Education

The use of Information and Communication Technology (ICT) in teaching and learning has become very common these days. Access to information increases the awareness of students, helps them in increasing thinking and creativity in learning tasks, provides quick access to the subject material, and engages them in adopting strategies that can help in maximizing the quality of learning. The process of learning can become very rich if students have access to the latest information on subjects, can analyze the information quickly by manipulating it on computers through graphical displays, and experiment with the information to effectively communicate their results and conclusions using the technical tools.

Falobi (2014) and Ubulom (2016), highlighted information and communication technology as an umbrella concept that includes any communication device, encompassing: radio, television, cellular phones, computer and network hardware and software, satellite systems as well as the various application associated with them, such as video conferencing and learning. ICT is often used in education, healthcare, libraries, security, etc. According to UNESCO, ICT is a scientific-technological, and engineering discipline and management technique used in handling information in application and association with social, educational, and cultural aspects. Therefore, the integration of information and communication technologies can help teachers and students toward educational planning and development.

The field of education has not been unaffected by the penetrating influence of information and communication technology. Undoubtedly, ICT has impacted the quality and quantity of teaching, learning, and research in traditional and distance education institutions. In concrete terms, ICT can enhance teaching and learning through its dynamic, interactive, and engaging content; and it can provide real opportunities for individualized instruction. Information and communication technology have the potential to accelerate, enrich, and deepen skills; motivate and engage students in learning; helps to relate school experiences to work practices; helps to create economic viability for tomorrow's workers; contributes to radical changes in school; strengthens teaching, and provides opportunities for connection between the school and the world (McGrail & Davis, 2011).

Encourages all stakeholders in education in Nigeria to be concerned about how best to take advantage of the knowledge economy. Application of ICTs in teaching and learning include radio lessons, TV broadcast lessons, computer-assisted instruction (CAI), distance

learning, video conferencing, management information systems, stock taking, and simulations. In all of these applications, communication is involved whether or not the learner is in visual contact with the source of information.

2.2. Concept and Nature of Educational Technology in Nigeria

Educational Technology is a systematic way of designing, carrying out, and evaluating the total process of learning and teaching in terms of specific objectives, based on research in human learning and communication, and employing a combination of human and non-human resources to bring about more effective instruction. Educational Technology refers to hardware and software including television, radio, electronic classroom, instructional devices, still and motion pictures, projectors, computer-assisted or managed instructional equipment and materials, communications, equipment for educational application, and other equipment and materials necessary to assist the process of learning. Educational Technology is concerned with designing the system as a whole: identifying aims and objectives, planning the learning environment, exploring and structuring the subject matters, selecting appropriate teaching strategies and learning media, evaluating the effectiveness of the learning system, and using the insights gained from evaluation to improve that effectiveness for the future. Rowntree (1979).

This new AECT definition becomes the latest guiding tool into the 21st century of states as follows: Educational technology is the study and ethical practice of facilitating learning and improving performance by creating, using and managing appropriate technological processes and resources.

A critical look at this definition implicates key elements that govern the meaning and role of the field. In the first instance, the focus is a study and ethical practice. This is singled out as only one component of a technological system. More so, by definition, it implies ethical practice. Second, the purpose of educational technology is to facilitate learning and improve performance. By so doing learning and performance become the bedrock of our field of study and practice. Be it as it may, facilitating includes the design of the environment, the organizing of resources, and providing of tools that will aid learning which has to be deep rather than shallow learning the third part of the definition tells how things could be done by creating, using and managing.

Nowadays these three keywords relate to three different groups of people. Take, for instance, a professional writer, director, artist, etc. was the director, the teacher was the —manager of instruction, the student or the learner was the end-user. Today as we advance in technology a person with a camera, a laptop, and a network connection can create and upload videos for the world to see. He does not necessarily require every group to be around him before things happen. This falls in line with the definition —creating, using, and managing.

The fourth stage of the definition deals with technological processes and resources. It is through technological processes and resources that creating, adopting, and managing new, novel, and innovative learning experiences become possible. The educators' select technological processes and resources create environments and design learning experiences, and they assess learners and deep learning and evaluate the quality of performance.

Nevertheless, the AECT is important because it provides guidance and direction. With the appropriate operational definitions of educational technology, clarity and focus are added to what is being done. Consequently, a new AECT definition deserves to be a starting place in all courses that focus on educational technology. These definitions outline the various operations that are carried out in the field of educational technology. The need for standard

definitions and terms in the field of educational technology has been the concern of the Association for Educational Communication and Technology in the United States of America.

2.3. Nature and Objectives of Computer Science Curriculum in Primary School

Computer education is of paramount importance to national development and it is on this premise that the Federal government of Nigeria sought to introduce computer studies in the education system from primary through to secondary schools. Education systems around the world face formidable challenges that are taxing conventional strategies. Fresh approaches are needed to address persistent problems of the past and provide students with an education appropriate to the needs of a modern, information-based global economy. During the 32 ministerial council meetings of the National Council on Education in 1987, the Federal government of Nigeria decided to introduce computer education into the nation's school system. This was followed by the inauguration of the National Committee on Computer Education the same year.

The functions of the committee include "planning for a dynamic policy on computer education and literacy in Nigeria as well as devising clear strategies and terminologies to be used by the federal and state governments in introducing computer education". The general objectives of the policy include bringing about a computer literate society in Nigeria by the mid-1990s. Enable present school children to appreciate and use the computer in various aspects of life and future employment.

The first objective is to ensure that the general populace appreciates the impact of information and computer technology on today's society, the importance of its effective use, and the technologies that process, manage, and communicate the information. The second general objective is to ensure that the people of Nigeria will know how to use and program computers, develop software packages, understand the structure and operation of computers and their history, and appreciate the economic, social and psychological impact of the computer.

The policy recommends a continuous evaluation of progress. The starting point of this evaluation is to compare existing school practices with policy stipulations. This will provide a framework for policy revision. Furthermore, to adequately respond to the changing needs of the schools, the Ministry of Education, curriculum developers, and teacher trainers must understand existing practice as compared to national goals.

Computer and communication technologies are finally able to offer opportunities to significantly improve teaching and learning. In any educational system, the level of available resources restricts the degree to which any new subject can be introduced into the school curriculum, especially where only the most basic facilities have so far been provided. But information communication technology is of such importance to the future industrial and commercial health of a country that investment in the equipment, teacher education, and support services necessary for the effective delivery of an information communication technology-based curriculum should rank high in any set of government priorities. The curriculum proposed takes account of these resource issues and specifies minimum requirements for effective delivery in different circumstances.

2.4. Relevance of Instructional Kid blog in Teaching and Learning in Primary School

Kid blog (<http://kidblog.org>) provides a platform for students to express and share their ideas while teachers maintain complete control. Among its many features, students can participate in classroom discussions, practice writing skills and create an electronic portfolio. In addition, students can embed videos, presentations, and other work using other

technology tools such as Storybird and Glogster. Students like Kid's blog because it is assessed anywhere. A great feature is that students do not need email accounts. Teachers simply create a class providing a student code for student access. Though students' blogs are private by default, teachers have control to make certain posts viewable opening up collaborating opportunities with schools nationally and internationally.

Kid blog is designed specifically for elementary and middle school teachers who want to provide each student with their blog. It's free, uncluttered, ad-free, easy to set up, and private by default. Teachers remain in control. No information is collected from students and student email is not needed. Kid blogs enable students to learn through and about each other's thinking processes. It is used to maximize student engagement, students can pose a thought-provoking question that would normally be discussed in a face-to-face classroom and direct students to post their responses on their blogs. Kid blogs can be means to attract students to do homework and to support academic activities outside the classroom. Kid blogs are useful in the elementary classroom for reading, writing, science social studies, math, French, etcetera.

3. METHODS

The study adopted a design and development research type. It had been considered appropriate because the research method involves the systematic collection and analysis of knowledge collected from an outsized population that helps to explain the characteristics of population or event as they seem to support the phenomenon into account for this study without external manipulations by the researcher. The population for this study was made from experts and teachers in Ilorin Metropolis. The target population contains 10 experts and five teachers within Ilorin Metropolis. A random sampling technique was used to allocate various respondents in each department. Additionally, random sampling was utilized in each area to select experts and teachers from the sampled department and schools to participate as the respondents during this study.

3.1. Research Instruments

The instruments used were developed instructional kid blog and for data collection was an adapted questionnaire from David titled "Questionnaire on Development and Evaluation of Kid blog for learning a selected computer science concept in primary school in Ilorin metropolis". The questionnaire instrument was divided into two sections (A and B): Section A addressed the demographic data of the respondents, and Section B elicited information on expert and teachers' ratings of the developed kid blog for learning. The questionnaire responses for section B were rated on a 4-point Likert scale mode: Strongly Agree (SA), Agree (A), Disagree (D), and Strongly Disagree (SD).

3.2. Validity and Reliability of the Instruments

The research instrument was validated by the researcher supervisor and three Educational Technology experts in the Department of Educational Technology at The University of Ilorin for face and content validity. All necessary corrections, amendments, modifications, and suggestions were made before and administration of the instrument.

3.3. Procedure for Data Collection

The researcher obtained a letter of introduction from the Head of the department, Educational Technology, The University of Ilorin, to seek permission from the acceptable

authority within the sampled schools to facilitate easy administration of the questionnaires. The researcher read and explained the aim of the study to the participants. The respondents got sufficient time to answer the questionnaire. After which, the researcher personally collected the answered questionnaire and reviewed the qualified and sufficiently completed questionnaire. Insufficient information or a doubtful answer like showing observable patterns was removed for those particular items only. Through the assistance of the statistical analyst, the researchers tabulated the data collected from the participants using Microsoft Excel and eventually process the data collected using Statistical Package for Social Sciences (SPSS).

3.4. Ethical Consideration

Ethical consideration was maintained through the period of data collection. The researcher ensured that respondents were not coerced to fill out the questionnaire and respondents were allowed to participate voluntarily. Also, utmost confidentiality and secrecy of the respondents were maintained during the administration, collation, and report of research findings.

3.5. Data Analysis Techniques

The data collected were analyzed using Descriptive Statistics. Mean and Standard deviation was used to analyze collected data with the aid of the Statistical Package for Social Science (SPSS).

4. RESULTS AND DISCUSSION

4.1. Research Question One: What are the processes involved in the development of an instructional Kid blog for teaching computer science concepts in the Ilorin metropolis?

The development of an instructional Kid blog for teaching computer science in the Ilorin metropolis was carried out using the Product Oriented Model which is a front-end system design with four phases (Course Outline, Selection of Media, Development/ Production of material, and Course Delivery). The course outline was selected from the computer studies syllabus in secondary school in the Ilorin metropolis. The images and audio file was downloaded from open-sourced websites most especially Google. The downloaded images and audio were further arranged and developed through the use of Microsoft Office 2016 PowerPoint logically and sequentially to create a series of images with captions explaining parts of the computer and their function.

4.2. Research Question Two: How do educational technology experts rate the developed Kid blog for teaching computer science concepts in the Ilorin metropolis?

To answer research question two, an educational technology expert rating guide was used in the validation of the developed Kid blog in computer science for primary school students in the Ilorin metropolis. The data were analyzed using mean, while the grand mean was used to determine the validation rate developed kid blog on computer science for primary schools in Ilorin metropolis. A benchmark of 3.0 of a 5-point Likert scale was adopted. Results of the analysis are shown in **Table 1**.

Table 1 indicates the mean of educational technology experts on a Kid blog on computer science in upper basic schools in the Ilorin metropolis. The table revealed that the grand mean score of educational technology experts' rating of a developed kid blog on computer science for upper basic schools in the Ilorin metropolis is 3.47 which is higher than the benchmark of

2.50. This implies that the developed Kid blog was well structured and every expectation in the developed kid blog was achieved.

Table 1. Mean of educational technology experts on a developed kid blog on computer science.

S/N	Statement	Mean
1.	The structure of the kid blog package is well organized.	3.20
2.	The instructional kid blog package will motivate and increase learners' confidence	3.11
3.	There is flexibility in the use of the kid blog instructional package	3.67
4.	The Content in the kid blog is accurate and precise.	3.21
5.	The kid blog effectively uses instructional design principles.	3.00
6.	The kid blog uses proper font and style.	3.07
7.	The instructional kid blog is easy to navigate	3.12
8.	The kid blog contains the use of pictures and graphics that can motivate learners.	3.21
9.	Students can learn in their space through the use of kid blog packages	3.33
10.	The instructional kid blog package will motivate learners to learn	3.33
Grand Mean		3.47

4.3. Research Question Three: How do Computer science experts rate the developed Kid blog on teaching computer science concepts in the Ilorin metropolis?

To determine validation of computer sciences teachers in upper basic schools to the Kid blog on teaching computer science concepts in Ilorin metropolis. A subject content validation questionnaire was used. The data collected were analyzed mean, while grand mean was used to determine the overall reaction of computer science experts in upper basic schools to the developed Kid blog. The benchmark of 2.50 of a 5-point Likert scale was adopted. The results of the analysis are shown in **Table 2**.

Table 2 indicates the mean responses of computer science expert rating of the developed kid blog. Using a benchmark of 2.50, the grand mean result revealed that the mean score for each of the ten (10) items on the questionnaire is above 2.5, while, the grand mean score for the ten (10) items is 3.64. This indicates that computer science experts rated the developed kid blog good for teaching.

Table 2. Mean of computer science expert rating of instructional kid blog.

S/N	Items	Mean
1.	The structure of the kid blog package is well organized.	3.20
2.	The instructional kid blog package design is aesthetically appealing and attractive	3.31
3.	The instructional kid blog cost of services or activities reasonable concerning learning outcome	3.16
4.	The Content in the kid blog is accurate and precise.	3.12
5.	The instructional kid blog effectively uses instructional design principles.	3.00
6.	The instructional kid blog uses proper font and style.	3.11
7.	The instructional kid blog is easy to navigate and user friendly	3.02
8.	The instructional kid blog is beneficial to the target population.	3.32
9.	The instructional kid blog graphical user interface has adequate and clear visuals.	3.21
10.	The instructional kid blog use of text follows the principle of readability	3.22
Grand Mean		3.14

4.4. Research Question Four: How do Computer science teachers rate the developed Kid blog on teaching computer science concepts in the Ilorin metropolis?

Table 3 indicates the mean responses of computer teachers rating the developed kid blog. Using a benchmark of 2.50, the grand mean result revealed that the mean score for each of the ten (10) items on the questionnaire is above 2.5, while, the grand mean score for the ten (10) items is 3.24. This indicates that computer science teachers rated the developed kid blog good for teaching.

Table 3. Mean of computer science teachers rating of instructional kid blog.

S/N	Items	Mean
1.	The instructional kid blog structure is learner's centered.	3.11
2.	The instructional kid blog motivate and increase learners' confidence	3.21
3.	The instructional kid blog enhances pupils' creativity in writing.	3.66
4.	Instructional kid blog is cost-effective	3.22
5.	The contents of the instructional kid blog consider the learners' age.	3.10
6.	Instructional kid blog contains pictures and graphics that can motivate learners to learn.	3.01
7.	The instructional kid blog allows learners to learn at their pace.	3..71
8.	The instructional kid blog allows the use of instructional material.	3.21
9.	The instructional kid blog caters to students' learning styles and stimulates the learners to learn.	3.1
10.	The instructional kid blog allows learners to interact with themselves and with the teacher.	3.22
Grand Mean		3.24

4.5. Research Question Five: what does it cost to develop a kid blog on computer science in the Ilorin metropolis?

In answering research question 5, the researcher calculated the total amount of the money spent in the development of an instructional Kid blog on computer science in the Ilorin metropolis. The activities involved 4 steps, the rate at which they were executed and the amount spent on each activity were tabulated and presented in **Table 4**.

Table 4 indicates that the total sum of four thousand, three hundred and two nairas (N4302) only was the cost estimate for the development and validation of an instructional kid blog to teach computer science in upper basic schools in the Ilorin metropolis. The benefits of the kid blog are unquantifiable and incomparable with the cost.

Table 4. Cost implication of developed kid blog in computer studies for upper basic schools.

S/N	Activities	Rate	Amount
1.	Internet connectivity data for downloading images from google.com	N600/ Per Gigabyte	N1200
2.	Editing of downloaded images	N20/Per Instrument	N600
3.	Uploading and Synchronizing of images to produce a Kid blog-series	N40/ Per Slide	N1505
4.	Miscellaneous		N2000
Total			N4302

Findings revealed that the development of a kid blog in computer studies for upper basic schools in the Ilorin metropolis can be done using the Product Oriented Model which is a front-end system design with four phases (Course Outline, Selection of Media, Development/

Production of material, and Course Delivery). These findings complement the assertion of Dick, and Carey who made a significant effort to build on the ADDIE model and postulated that the design of instruction and classroom instructional materials should be based on a whole system that focuses on the interrelationship between contexts, content, learning and instructional technique (Almelhi, 2021).

Findings also revealed that the development for Computer sciences was well structured and every expectation in the developed instructional kid blog was achieved. A kid blog showed higher scores on standardized measures of achievement, and also rated higher on as an attitude instrument. Not only is there evidence for achievement, but also evidence for improvement in attitude.

Findings revealed that computer science teachers have a positive reaction to the developed Kid blog. The visual materials have been an important component of the classroom over the years, and teachers have a positive reaction to the use of visual materials in the classroom (Idris *et al.*, 2018). The researcher claimed that visual materials such as film strips, pictures, slides, and pass-around objects are mostly liked and utilized by teachers in the classroom compared to other instructional materials. Thus, visual materials such as digital are considered a useful tool for teachers in almost every trend of classroom instruction.

4. CONCLUSION

The study concluded that instructional media or materials such as kid blogs work as a powerful tool in the classroom and can be used to enhance the teaching of computer science in Nigeria, more particularly, the Ilorin metropolis. Kid blog is appreciated by the teachers and they are ready to use it in the classroom to provide the opportunity for learners to visualize materials that are not readily available in the school and to show the actual meaning of the lesson content. This conclusion is based on the mean rating revelation that shows positive.

6. AUTHORS' NOTE

The authors declare that there is no conflict of interest regarding the publication of this article. The authors confirmed that the paper was free of plagiarism.

7. REFERENCES

- Abe, T. O., and Adu, E. I. (2013). Influence of qualification on development and assessment of computer programmed instructional package on energy concept in upper basic technology in Ekiti State. *April Journal Science Technology*, 3(6), 611-618..
- Almelhi, A. M. (2021). Effectiveness of the ADDIE Model within an E-Learning Environment in Developing Creative Writing in EFL Students. *English Language Teaching*, 14(2), 20-36.
- Falobi, O. V. (2014). An investigation into the impact of ICT on commercial students' academic performance in public schools in Lagos State. *Journal of Association of Business Educators of Nigeria*, 1(1), 48-154.
- Goyal, E., Purohit, S., and Bhagat, M. A. N. J. U. (2010). Factors that affect information and communication technology usage: A case study in management education. *Journal of Information Technology Management*, 21(4), 38-57.

- Idris, A. T., Shamsuddin, I. M., Arome, A. T., and Aminu, I. (2018). Use of audio-visual materials in teaching and learning of classification of living things among secondary school students in Sabon Gari LGA of Kaduna State. *Plant*, 6(2), 34.
- McGrail, E., and Davis, A. (2011). The influence of classroom blogging on elementary student writing. *Journal of Research in Childhood Education*, 25, 415-437.
- Ratheeswari, K. (2018). Information communication technology in education. *Journal of Applied and Advanced Research*, 3(1), 45-47.
- Ubulom, W. J., Kayii, N., and Dambo, B. I. (2016). Information and Communication Technology and Business Studies Students' Academic Performance in Upper Basic Education in Tai Local Government Rivers State, Nigeria. *International Journal of Innovative Social and Science Education Research*, 4(1), 1-7.