# AVAILABILITY AND USE OF COMPUTER-BASED INSTRUCTIONAL MATERIALS (CIM) BY UPPER BASIC SOCIAL STUDIES TEACHERS IN ILORIN, NIGERIA

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**Abstract**

The central point in the teaching and learning of Social Studies is the human resources that is Social Studies teachers and the central value of the teachers is their skillfulness and resourcefulness in identifying and selecting innovative methods and instructional materials for presenting the content of the subject. *This study examined availability and use of Computer-based Instructional Materials (CIM) by upper basic Social Studies teachers in Ilorin, Nigeria. A descriptive survey research design was adopted. It was guided by three research questions. The sample for this study comprised 150 respondents selected through a stratified random sampling technique. The instrument is aquestionnaire contained four sections. The data collected were analysed using percentage, means and standard deviation. The findings of the study showed that Computer systems are the most prominent materials that are available in the schools. All others are available in various degrees but Internet connectivity and Computer-based Encyclopedia are most unavailable in the schools. Only computer systems* ***are*** *occasionally used for information processing and storage purpose. Based on these findings, it was recommended that Computer-based Instructional Materials (CIM) should be made available in schools. Regular workshops, seminars, and in-service training should be organised to improve teachers' efficiency.*

**Key words:** computers, Social Studies teachers, instructional materials and Upper Basic schools

## Introduction

Instructional materials are very important in teaching the content of Social Studies. Since learners need valid and specific meaningful information about social, political, economic development and technological innovation, conventional talk and chalk approach may not be adequate for the effective

teaching and learning process. *The use of computers for instructional purpose is new innovation in education that can enhance and facilitate the instruction. This new innovation includes Computer-based Instructional Materials (CIM).*

The impact of computer in the society has its origin from schools where the students are trained by teachers on its use for problems-solving. Recent socio-political and economic changes in the world and within nations have brought about changes in educational goals. The teachers are not only to equip the learners with basic knowledge of Social Studies content but also with higher cognitive and affective skills, such as problem-solving and thinking skills that allow for self-development, continuous learning and Information and Communication Technology (ICT) skills. Social Studies is not left out in the change. To meet up with these changes, there is need to move from direct teaching as in the lecture method, note copying and dictations, where the learners are given content to memorize and regurgitate, to constructive instructional approach like Computer-based *Instructional Materials (CIM)* and how they could be constructively use for effective teaching and learning of Social Studies. This new instructional technique is pupil or learner-centered. The learners are not treated as an empty vessel. They are credited with knowledge, skills and attitudes from the day they are born which requires development, encouragement, and motivation, (National Teachers' Institute, 2010).

Basic education in Nigeria is the education given to children aged 0-15 years. It is compulsory on children within the age bracket. The goals of Basic Education include; provision of diverse basic knowledge and skills for entrepreneurs, wealth generation and educational advancement, and provision of opportunities for the child to develop manipulative skills that will enable the child function effectively in the Society within the limits of the child's capacity. In order to fully realize the potentials of the contributions of education to the achievement of the goals, government takes various measures in the formulation and implementation of the policy. These measures include; educational activities shall be learner centered for maximum self-development and self-fulfillment, teaching shall be practical, activity-based, experiential and Information Technology supported, and education shall be related to overall community needs. To implement the policies and achieve the goals, Religion and National Values was made a core subject in all levels of basic education. It comprises Social Studies, Civic Education, Security Education, Islamic Studies and Christian Religious Studies, (National Policy on Education, 2013).

Social Studies is a discipline that addresses problems of survival, it is

continuously modified in the light of current judgment about the needs of the society. The unique nature of Social Studies in deriving its purpose and scope directly from the currently perceived needs of the society makes it more sensitive to change as circumstances in the rate of change in the curriculum (Ogundare, 2010). Social Studies students need valid and specific meaningful information about economic, social, political and technological development of their country. Since several stimuli are competing for learner's attentions, it becomes imperative of learners to be provided with abundant resources in Social Studies instruction. This will not only facilitate and enhance the efficient teachers but also help learners to comprehend the content and demonstrate the experience gained.

Computer is a modern technological tool designed to make life easier due to its speed, accuracy, and ability to store large quantities of information and to carry out large and complex operations (Ayoko, 2002). The use of computer is not new in education. It has been applied at various terms as Computer-based Instructional *Materials (CIM)*, Computer Based Education (CBE), Computer Managed Instruction (CMI) and Computer Supported Learning Aid (CSLA). Computer Based Education (CBE), according to MacArthur (2001) is the broadest term which refers to virtually any kind of computer use in educational settings.

Computer-based Instructional *Materials (CIM)* is the means of using computer directly by a teacher as a medium of instruction and information delivery system in schools. It is the technique of using the computer to carry out the teaching and learning activities with the assistance of teacher (Odewumi, 2008). Learners understand and retain with ease a greater percentage of what they hear, see and manipulate. Experiences that may not otherwise be available are provided via Computer-based *Instructional Materials (CIM)*.

The merits of Computer-based *Instructional Materials (CIM)* include; fostering a comparative group atmosphere. When two or more students are working together on a single computer, there is more collaboration and cooperation in problem solving. CIM tends to motivate the spirit of cooperation, an extremely powerful academic mix. It also provides simulation of activities which the students would not have ordinarily experienced in a traditional situation (Babalola, 1998).

New upper basic Social Studies curriculum contains teaching and learning materials that are computer assisted instructional packages. These include internet, CD-Rom, documentaries, simulation games, drill and practice, tutorials information retrieval system, documentaries on family life

education and simulation materials which are expected of Social Studies teachers to facilitate and enhance teaching and learning of the subject, Nigerian Educational Research and Development Council (NERDC, 2007).

The procedure of Computer-based *Instructional Materials (CIM)*should be clearly understood by all teachers before using the instructional programmes. Afolabi, (2001), Ayoko, (2002), and Onasanya, (2002) noted that teacher can employ the services of a professional programmer for the storage of the lesson content in the computer. The process goes as follows; the teacher should identify the lesson content area in the syllabus or scheme of work for that period, the teacher draws the lesson content as well as the stimulus and response based on the content, the teacher breaks down the lesson content into small bits that can be studied in few minutes, the teacher or programmer programs the lesson content into the computer using the programming language that the students are familiar with. The commonest is Beginners All-Purpose Symbolic Instruction Code (BASIC), students are allowed to interact with the computer after giving them all necessary information and instruction about the topic and the programme, the teacher moves round to supervise the students when they are interacting with the computers, the teacher collects the final feedback of the students on the lesson content for record and administrative purpose. The procedure requires a step-by-step process. .

In Kwara State, some public and private schools especially in Ilorin metropolis have set up computer laboratories to aid teaching and learning in the schools. Olaolu, Abdulrahaman and Habibatu (2012) found out that out of one hundred selected secondary schools in Kwara State, in the year 2011, there were 2,109 computers of which 1,275 (60.5%) were functioning, while 834 (39.5%) were not functioning. This is in support of Ukpebor and Emwanta (2012) who discovered that the availability and use of computers and internet in secondary schools in the country are inadequate and insufficient to the extent that many schools may boast of computer laboratory but only a few can be pride themselves of the internet facilities and accessibility. Adekeye (2008) in her study also discovered that audio-visual instructional materials such as television, video, computer and internet are not so available despite the fact that these resources are very important for the successful teaching and learning of Social Studies.

In other developing countries like Turkey, where technology innovations have been integrated into the classroom especially in their secondary schools, variety of modern instructional techniques have been used in the educational institutions. Mehmet (2010) conducted a study on

exemplary Social Studies teachers' use of computer-supported instruction in the classroom in Turkey in the study, participant teachers used a number of computer supported instructional applications in their classrooms. These included; use of the Internet and software programs such as Microsoft Power Point, Word, and Excel were the most common type of computer-supported instruction in the classrooms observed. In addition, computers were used as presentation tools frequently in the classrooms.

The computer was frequently used by Social Studies teachers as a presentation tool in the classrooms, it not only improved the quality of the presentation's visuals and sound, but also gave the teachers flexibility to use other types of tools with the computer, such as connecting to the Internet or to a DVD player. Clearly, it is not possible to have such flexibility and ease in transferring to another presentation tool with a traditional overhead projector. Another common type of computer use by the teachers was the use of software programs. Other software programs such as Microsoft Word, Excel, and PowerPoint were commonly used in the classrooms.

Social Studies is designed to develop in students, skills, knowledge and attitude necessary for the overall development of each individual or citizen and imbibe in learners sense of patriotism. These laudable objectives can only be achieved through the use of appropriate instructional materials such as *Computer-based Instructional Programmes (CIP)* which can rich and stimulate learners' experience not only to learn but also to motivate the students to participate actively in the classroom. Effective implementation of the Social Studies curriculum and attainment of its objectives, the new instructional techniques become imperative for the teachers. In order to ascertain their utilization in school, this study examined the availability and use of Computer-based *Instructional Materials (CIM) by* upper basic Social Studies teachers in Ilorin, Nigeria.

**Research questions**

1. Are Computer-based *Instructional Materials (CIM)*available for teaching Social Studies in upper basic schools?
2. To what extent do Social Studies teachers use Computer-based *Instructional Materials (CIM)* for Social Studies?
3. What is the nature of Computer-based Instructional *Materials (CIM)*that Social Studies teachers use in upper basic schools?

## Methodology

The study adopted the descriptive survey research design to collect data from the respondents. The population of the study comprised all upper basic Social Studies teachers in Ilorin. The sample for the study consisted of One hundred and fifty (150) Social Studies teachers who were purposively selected from sixty upper basic schools in three local government areas namely: Ilorin East, Ilorin West and Ilorin South.

Instrument used for this study is a questionnaire. The researcher designed a questionnaire titled "Computer-based Instructional *Materials (CIM)* in Social Studies Assessment Checklist (CIMSSAC)" which was used for data collection. The questionnaire had four sections; A, B, C and D. Section A of the instrument dealt with teachers' demographic information. It contained information about respondents' school, gender, type of school, number of classes taught, number of period per week, number of students taught, qualification, teaching experience, etc. Section B of the instrument dealt with ten items related to availability of Computer-based Instructional *Materials (CIM)*. Section C elicited teachers' level of using Computer-based Instructional *Materials (CIM)* and conventional Instructional materials for teaching Social Studies in upper basic schools in Social Studies. This contained ten items with a modified 3Likert scaling of frequently (3), Sometimes (2), and Not At All (1). Section D contained ten items on nature of Computer-based Instructional *Materials (CIM)*used in Social Studies with a weighted scaling of YES (2) and NO (1). The instrument was subjected to both face and content validity by the two experts in Social Sciences Education Department, University of Ilorin, Ilorin. The reliability of the instrument was determined through the test-retest method and a reliability index of 0.72 was established. The data collected were analysed using frequency counts, means and standard deviation.

## Results

**Research Question 1:** Are Computer-based Instructional *Materials (CIM)* available for teaching Social Studies in upper basic schools?

**Table 1: Availability of Computer-based Instructional *Materials (CIM)* for Teaching Social Studies**

| S/N | ITEMS | TOTAL | AVAILABLE | NOT AVAILABLE |
|---|---|---|---|---|
| 1 | Computer systems | 150 | 78 (52%) | 72 (48%) |
| 2 | Internet facilities | 150 | 37 (24.7%) | 113 (75.3%) |
| 3 | Internet connectivity | 150 | 28 (18.7%) | 122 (81.3%) |
| 4 | Computer-based Encyclopedia | 150 | 29 (19.3%) | 121 (80.7%) |
| 5 | Computer-based simulated materials in Social Studies topics | 150 | 45 (30%) | 105 (70%) |
| 6 | Instructional films in Social Studies | 150 | 52 (34.7%) | 98 (65.3%) |
| 7 | Instructional Software in Social Studies | 150 | 51 (34%) | 99 (66%) |
| 8 | Computer-based documentaries in Social Studies | 150 | 42 (28%) | 108 (72%) |

Results in Table 1 showed that out of eight Computer-based Instructional *Materials (CIM)*identified in this study, 78 (52%) of the respondents revealed that computer systems were available in their schools while 72 (48%) of sampled Social Studies teachers indicated that they did not have computer systems in their schools. Thirty-seven represents 24.7% of the respondents indicated that they have Internet facilities in their schools, while 29 (19.3%) of the teachers indicated that they have Computer-based Encyclopedia, 45 (30%) of the teachers showed that there are Computer-based simulated materials in Social Studies topics, 52 (34.7%) of the respondents indicated that Instructional films in Social Studies are available.

Fifty-one of the respondents representing 34% revealed that Instructional Software in Social Studies are also available in their schools while 42 (28%) of the respondents indicated that Computer-based documentaries in Social Studies are available.

However, in all the Computer-based Instructional *Materials (CIM)*identified, computer system is the most prominent material that is available in those schools sampled. All other materials are available in various degrees but Internet connectivity and Computer-based Encyclopedia are most

unavailable materials in the schools.

**Research Question 2:** To what extent do Social Studies teachers use Computer-based Instructional *Materials (CIM)* in upper basic schools?

**Table 2: Usage of Computer-based Instructional *Materials (CIM)* by Social Studies Teachers**

| S/N | ITEMS | FREQUENTLY | SOMETIMES | NOT AT ALL |
|---|---|---|---|---|
| 10 | Computer systems | 29 (19.3%) | 52 (34.7%) | 69 (46%) |
| 11 | Internet facilities | 15 (10%) | 26 (17.3%) | 109 (72.7%) |
| 12 | Internet connectivity | 16 (10.7%) | 18 (12%) | 116 (77.3%) |
| 13 | Computer-based Encyclopedia | 14 (9.3%) | 28 (18.7%) | 108 (72%) |
| 14 | Computer-based simulated materials in social studies topics | 32 (21.3%) | 30 (20%) | 88 (58.7%) |
| 15 | Instructional films in Social Studies | 28 (18.7%) | 37 (24.6%) | 85 (56.7%) |
| 16 | Instructional Softwarein Social Studies | 23 (15.3%) | 33 (22%) | 94 (627%) |
| 17 | Computer-based documentaries in Social Studies | 23 (15.3%) | 33 (22%) | 94 (62.7%) |

Results shown that out of 8 Computer-based Instructional *Materials (CIM)* identified in the course of this study, 29 (19.3%) of the respondents indicated that they use computer systems frequently, 52 (34.7%) of the teachers use them sometimes while 69 (46%) of the respondents indicated that they do not use them at all. Fifteen representing 10% of the respondents showed that they use internet facilities frequently, 26 (17.3%) of the teachers indicated that they use them sometimes, while 109 (72.7%) of the respondents showed that they do not use them at all in their schools. On the computer-based Encyclopedia, 14 (9.3%) of the respondents indicated that they use it frequently, 28 (18.7%) of the respondents' responses showed that they use it sometimes while 37 (24.6%) of the respondents indicated that they do not use it at all.

Thirty-two representing 21.3% of the respondents indicated that they use Computer-based simulated materials in social studies topics frequently, 30 (20%) of the teachers use them sometimes while 88 (58.7%) of the respondents indicated that they do not use them at all. Twenty-eight representing 18.7% of the respondents showed that they use Instructional

films in Social Studies frequently, 37 (24.6%) of the teachers indicated that they use them sometimes, while 85 (56.7%) of the respondents showed that they do not use them at all in their schools. On the Instructional Software in Social Studies, 23 (15.3%) of the respondents indicated that they use it frequently, 33 (22%) of the respondents showed that they use it sometimes while 94 (62.7%) of the respondents indicated that they do not use it at all.

Twenty-three representing 15.3% of the respondents among the sampled Social Studies teachers indicated that they use Computer-based documentaries in Social Studies frequently, 33 (22%) of the teachers use them sometimes while 94 (62.7%) of the respondents indicated that they do not use them at all.

**Research Question 3:** What is the nature of Computer-based Instructional *Materials (CIM)* that Social Studies teachers use in upper basic schools?

**Table 3: Mean and Standard Deviation of Nature of Computer-based Instructional *Materials (CIM)***

| S/N | ITEMS | N | Mean | Std. Deviation | Rank |
|---|---|---|---|---|---|
| 27. | Specific Social Studies documentariesthatare Computerbased InstructionalMaterials (CIM) | 150 | 1.46 | 0.40 | 1st |
| 28. | Computerbased documentaries that are adaptab Social Studies topics | 150 | 1.06 | 0.24 | 6th |
| 29. | Teacher-designed Computer -based Instructional Materials (CIM) | 150 | 1.02 | 0.14 | 9th |
| 30. | Computer programmesthat are Computerbasec InstructionalMaterials (CIM) | 150 | 1.09 | 0.21 | 3rd |
| 31. | Video-broadcast learning materials | 150 | 1.01 | 0.32 | 10th |
| 32. | Manufacturednstructional software | 150 | 1.19 | 0.34 | 2nd |
| 33. | Lesson objective performance task -related Computer based Instructional Materials (CIM) | 150 | 1.09 | 0.28 | 3rd |
| 34. | Computer programmer designed materials | 150 | 1.04 | 0.08 | 7th |
| 35. | Internet-based instructionalmaterials | 150 | 1.04 | 0.20 | 7th |
| 36. | Computer Assisted Instructional packages | 150 | 1.08 | 0.21 | 5th |

Results in Table 3 showed ten items on the nature of Computer-based Instructional *Materials (CIM)*. Item 27 which stated that "Specific Social Studies documentaries that are Computer-based Instructional *Materials (CIM)*" was ranked first (1st) with mean scores of 1.46 and standard deviation of 0.41. Item 32 which stated that "Manufactured instructional software" was ranked third (2nd) with mean score of 1.19 and standard deviation of 0.34. Items 30 and 33 which stated that "Computer

programmes that are Computer-based Instructional *Materials (CIM)*" and "Lesson objective performance task-related Computer-based Instructional *Materials (CIM)*" were ranked first (3rd) with mean scores of 1.09 and standard deviation of 0.21 and 0.28 respectively.

However, the least of all the nature of Computer-based Instructional *Materials (CIM)* is item 44 which stated that "Video-broadcast learning materials" was ranked tenth (10th) with mean score of 1.01 and standard deviation of 0.32.

**Discussion of Results**

Findings of this study revealed that Computer-based Instructional *Materials (CIM)*are not available for use by Social Studies teachers in upper basic schools. Only computer systemsare available in upper basic schools but they are not used for instructional purposes. This could be attributed to introduction of Information and Communication Technology (ICT) as a subject in schools. Many of the teachers see technology facilities in their schools as materials for only Basic technology as a subject. This finding concurred with that of Ukpebor and Emwanta (2012) who carried out a research on availability and the use of computer and internet by secondary school students in Benin City, Nigeria, and discovered that availability and use of computers and internet is very poor in schools. Many schools may boast of computer laboratory but only a few can pride themselves on the internet access. However, most of the schools who could boast of computers in their schools only had out-dated computers from which a few were functioning. It also corroborated with findings of Adekeye (2008) who examined Availability and Utilization of Resources for Teaching Junior Secondary School Social Studies in Kwara State, and discovered that audio-visual instructional materials such as television, video, computer and internet are not so available despite the fact that these resources are very important for the successful teaching and learning of Social Studies.

Moreover, this study also found out that Computer-based Instructional Programmes (CIP) are not used by Social Studies teachers. Only computer systems are occasionally used for information processing and storage purpose. This finding is in line with that of Olaolu et al (2012) who worked on Computer Literacy and Teacher Job Effectiveness in Kwara State Secondary Schools, and found out that out of one hundred selected secondary schools in Kwara state, in year 2011, there were 2,109 computers of which 1,275 (60.5%) were functioning, while 834 (39.5%) were not functioning. These computers are not for teaching Social Studies. They are document and

information processing for general school administration. Similarly, this finding agreed with Saadiyah (2008) who worked on investigating teachers' use of computers in teaching English in Malaysia, and discovered that most of the teachers rarely used the computer to teach English because they felt that they were incompetent and uncomfortable using the computer in the classroom. This finding of the study is contrary to findings of Mehmet (2010) who conducted a study on exemplary Social Studies teachers' use of computer-supported instruction in the classroom in Turkey and found out that only conventional software programs such as Microsoft Word, Excel, and PowerPoint were commonly used in the classrooms in the country.

## Conclusion

Based on the findings of this study, it can be concluded that Computer systems are the most prominent material that is available in the schools. All others are available in various degrees but Internet connectivityand Computer-based Encyclopedia are most unavailable in the schools. Only computer systemsare available in upper basic schools but they are not used for instructional purposes. Computer-based Instructional *Materials (CIM)*are not used by Social Studies teachers. Only computer systems **are** occasionally used for information processing and storage purpose. Computer-based Instructional *Materials (CIM)*for teaching Social Studies are characterized by documentaries, programme-designed, manufactured software, internet-based materials but they are not used by Social Studies teachers for instruction.

## Recommendations

Based on the findings of this study, it is pertinent to recommend that governments and private sectors should contribute financially and materially in the provision of Computer-based Instructional *Materials (CIM)*to enhance teaching and learning in schools. All upper basic school teachers should be encouraged to be computer literate and use Computer-based Instructional *Materials (CIM)* for teaching. Regular workshops, seminars, and in-service training should be organized for teachers to enable them acquire the necessary skills and update their knowledge on the importance and proper use of instructional software in teaching of Social Studies. Curriculum developers and other policy makers should include Internet, information retrieval skills in the school syllabus/curriculum for teachers to facilitate teaching and learning of Social Studies. Capacity building on the use of Computer Computer-based Instructional *Materials (CIM)*should be mounted for teachers.

**References**

Adekeye, J.D. (2008). *Availability and utilization of resources for teaching junior secondary school social studies in Kwara State, Nigeria.* An Unpublished M.Ed. Thesis University of Ilorin, Ilorin.

Afolabi, A.O. (2001). Information processing in educational management. In Adeyanju, A. (Ed). *Introduction to Educational Management*, OYSCOED series publication of Oyo State College of Education. Oyo.

Ayoko, A.K. (2002). The importance of the multi-media device in a multi-media resource centre, In *Journal Of Arts and Social Sciences, Oro,* Kwara State College of Education, Oro 2 (2) p. 46-55.

Babalola, I.E. (1998). The need for Computer-based Instructional Programmmes (CIP) in the classroom situation, *Nigeria Journal of Computer Literacy* 2(1) 59-68.

Federal Republic of Nigeria (2013). *National Policy on Education (6th Edition).* Lagos: NERDC Press.

MacArthur, C.A. (2001). Technology applications for students with literacy problems: A critical review. *The Elementary School Journal,* 101, 273-378.

Mehmet, A. (2010). Exemplary Social Studies teachers' use of computer-supported instruction in the classroom in Turkey. In *The Turkish Online Journal of Educational Technology.* 9 (4)pp 66-82. Retrieved January 3rd, 2013 from http://www.tojet.net/volumes/v9i1.pdf.

National Teachers' Institute (2010). *Manual for capacity building workshops of teachers under the federal teachers' scheme on Social Studies*: A MDGs Project 2010 Kaduna: NTI Printing Press.

Nigerian Educational Research and Development Council (2007). *9-year Basic Education Curriculum Social Studies for JSS 1- 3.* Abuja: UBEC.

Ogundare, S.F. (2010). *Invitation to fundamentals of teaching Social Studies.*

Ibadan: Franco-Ola Publishers.

Olaolu, P.A., Abdulrahaman, O.S. and Habibatu, M.Y. (2012). Computer literacy and teacher job effectiveness in Kwara State secondary schools. *Journal of Academic Research International.* 2 (3)pp 329-333.

Onasanya, S.A. (2002). *Effects of instruction in computer and achievement levels on students' performance in a 3-dimensional animation production.* An Unpublished Ph.D. Thesis Presented to the Department of Curriculum Studies and Educational Technology, University of Ilorin, Ilorin.

Saadiyah, D. (2008). Investigating teachers' use of computers in teaching English: A case study.*The Journal of teaching English with Technology*.Vol. 8.Retrieved March 6, 2013 from http://www.tewtjournal.org/pastissues2008.htm.

Ukpebor, O.C. and Emwanta, M.G. (2012).Availability and the use of computer and internet by secondary school students in Benin City, Nigeria.*International Journal of Library and Information Science* 4(2), pp. 16-23. Available online and Retrieved March 6, 2013 from http://www.academicjournals.org/IJLIS