

# Google Classroom for Distance Learners by National Teachers' Institute: A Case Study of Calabar Study Centre

<sup>1</sup>Udosen, Idongesit N., <sup>2</sup>Adie, Paul Ingiona

Department of Educational Technology and Library Science

University of Uyo, Akwa Ibom State, Nigeria

Id\_udo@yahoo.com

adaprime@gmail.com

---

**Abstract:** This paper examined the Google Classroom Technology for Distance Learners by National Teachers' Institute Calabar Study Centre. A purposive sampling technique was used to select 19 NTI course facilitators for the study. A descriptive survey design was used for the study and a total of 17 item researcher developed instrument tagged: Google Classroom Technology for Distance Learners by National Teachers' Institute Questionnaire "GCTDLNTIQ" was administered. The instrument was validated by experts in the field of Educational Technology and Test and Measurement, tested for validity using Kuder Richardson with a coefficient of 0.97 indicating a high reliability of the instrument. Simple percentages were used in answering the research questions. The result obtained revealed that there is no Google Classroom software technology at the NTI Calabar Study Centre, however, lecturers at the centre possess a high level of competence to use Google Classroom Technology as inferred from facilitators' utilization of similar internet based tasks.

**Keywords:** Google Classroom, G.A.F.E., L.C.M.S., N.T.I., Distance Learning.

---

## 1. INTRODUCTION

### 1.1 Background to the study

No nation can rise above the quality of its educational system especially when you consider that the low quality of teachers such a nation may produce vis-à-vis the quality of knowledge, attitude and skills they impart on learners in the process of facilitating instruction are bound to yield unsatisfactory results. It is on this premise that teacher education was deemed very important to be given much care and attention by various governments. It was therefore imperative to have a uniform nationwide learning system that will help address the knowledge gaps in teacher education hence the distant learning model adopted by the National Teachers' Institute in the effort of harmonise teacher education in line with stated national educational goals.

Distance education or distance learning is the education of students who are not physically present at a school. Courses that are conducted partly through distance education and partly on-site are referred to as hybrid or blended education. Massive open online courses (MOOCs), offering large-scale interactive participation and open access through the World Wide Web or other network technologies, are recent developments in distance education. A number of other terms (distributed learning, e-learning, online learning, etc) are used roughly synonymously with distance education ([www.wikipedia.org](http://www.wikipedia.org)).

The National Teacher's Institute was set up to serve as a distant learning educational institution in order to provide additional means of tackling the following challenges facing teacher education in Nigeria: (a) the need to truly professionalise the teaching profession at all levels, (b) the need to curb the worrisome shortages of professional teachers

nation-wide, (c) the need to provide serving teachers the opportunity to further upgrade/update their qualification and professional competence without necessarily leaving their jobs and finally (d) the need to provide all the above at minimum costs to both the students and the education authorities ([www.nti-nigeria.org](http://www.nti-nigeria.org)).

Information and communication technology use in education especially distance learning is also re-shaping entire organizational structures of universities. Westbrook (2001), observed that the introduction of ICT in education has resulted in changes in four core areas of education such as curriculum, role of teachers and students, organizational structure and learning environment. Given that a growing number of transactions now take place on-line at a distance, appropriately automated systems for recording these transactions, tracking them, keeping and retrieving students' records and so forth must be supported by holistic policies and procedures that take into account all academic related activities. Obviously, ICT has made the culture of learning to shift from the culture of students passively listening in a classroom where attendance matters to the culture of proactive reading, encoding and decoding anytime, anywhere. One of such is the Google classroom technology.

Use of ICT for learning can ignore age, distance and time constraints from the learning process through the use of the Google classroom technology (Adie, 2017). The Google classroom technology is a blended learning platform for schools that aim to simplify creating, distributing and grading of assignments in a paperless way. It was introduced as a feature of Google Applications for Education following its public release on August 12, 2014. Its aim is to be a paperless educational system ([www.wikipedia.org](http://www.wikipedia.org)). Google classroom is a tool that allows educators to create, organize and manage online assignments using Google Documents and Google Drive ([www.google.com](http://www.google.com)). It allows teachers to create a class with just a few clicks. This blended learning platform has just started to create its own generation by inviting literally millions of learners to create a Gmail account and familiarize themselves with the Google ecosystem.

Akpan, Ntukidem, Ekpiken and Etor ( ) noted that Information and Communication Technology facilities are lacking in teacher training institutions in Nigeria however Olatumile (2013) had proposed that every university running a distance programme, must as a matter of compulsion, be made to run it on the web. Ahmad (2012) had suggested the use of Learning Management System (LMS) for e-learning in Nigerian tertiary institutions. Ahmad (2012) also anticipated some prospective challenges to be considered by stake holders to include: more personnel training in implementation and management of e-learning, more workshops seminars and conferences on e-technologies and more departments and courses for educational technologies.

Starting an online discussion is a piece of cake in Google classroom; all educators need to do is post a topic or a provocative question to the stream in order to initiate an online forum where community conversation among online learners is encouraged and promoted; problems are discussed and solved, and ideas are shared and expanded (Pappas, 2015). Google drive in Google classroom allows educators not only to distribute handouts online, but also to share announcements. Their learners will be able to find their announcements by accessing the stream, and see reminders of upcoming online tests or assignment due dates (Pappas, 2015). By being able to attach any kind of multimedia to Google drive, such as videos, audio files, PDF documents, etc; educators can support their audience's learning and understanding of what is being taught using a variety of resources. Educators can also encourage their learners to create their own videos and attach them in Google classroom to demonstrate their creative comprehension skills (Pappas, 2015).

Since by nature the distant learning is decentralized, students do not necessarily have to be in the same physical room to do academic work required for their educational certification thus there is a dependence on a plethora of information and communication technology enabled communication channels for students to interact adequately with course facilitators vis-à-vis the course content. Google classroom offers an efficient and contemporary integrated learning content management system that is used worldwide especially for distant learners even though Osong (2014) had noted that most vital physical facilities like ICT centres are not available at the NTI study centers in Cross River State. This, he stated, was in contrast to the findings of Roberts, Irani and Lundy (2004), when they carried out a study on the practices in students' evaluation of distance education courses among Land Grant Institutions. The researchers found out that the most important factor when assessing students' attitude are delivering distance education to both undergraduate and graduate students with the help of ICT such as course management software and video conferencing for delivering instruction.

Since Google Classroom is a new digital pedagogy it will require training of faculty on its use as Osong (2014) calls for constant in-service training of centre facilitators on pedagogies as this will equip the facilitators with the essential skills for guiding in-service teachers with respect to their cognitive, effective and psychomotor educational development.

Olaniyi (2006) harps on the need for the training of staff of Nigerian educational institutions on the latest e-learning tools. Oye, Salleh, & Iahad, (2011) emphasise that the Nigerian Government can take a cue from developed countries best practices in distance learning implementation especially in the area of training. Harping on the need for training of staff of distance learning organization on contemporary ICT packages, Adeola, Adewale & Alese (2013) noted that a teacher has to possess a specific amount of knowledge if he is to be useful in the modern dispensation. It should be noted that instruction is compulsory if a teacher lacks this knowledge. The main challenge of this new concept is that the ICT changes fast and teacher need to be continuously acquainted with the latest development and constantly apply it in his teaching. Akpan, Ntukidem, Ekpiken and Etor ( ) observe that some teacher educators and student teachers' are not ICT compliant. Oye, Salleh and Iahad (2011) advised that University administrators on their part should embark on awareness and training of staff on the use of ICTs in teaching and learning with motivation attached.

### 1.2 Statement of Problem

The processes of teaching and learning are usually traditionally centered on paper and pen. However, contemporary education has gone technological as the computer is used as a tool for many instructional activities. There are issues of missing assignments, late publishing of results, non-attendance of lecturers by students and inadequate teacher-student communication in the National Teachers' Institute (Osong, 2014; & Ndidi & Obioha, 2011). It seems the need for a learning content management system like Google classroom may solve these problems (Torruam, 2012). The use of Google classroom can ensure the creation, distribution and grading of assignments in a paperless way enabling educators to create, organize and manage online assignments using Google document and Google drive.

This research seeks to investigate the level at which the National teachers' Institute, Calabar study Centre uses Google classroom technology for the purpose of learning content management and to foster student-teacher communication, as its usage in the National Teachers' Institute has not been verified. The question therefore is: What is the extent of usage of Google classroom technology in the Calabar study Centre of the National Teachers' Institute.

### 1.3 Purpose of the Study

The main purpose of this study is to investigate the use of Google classroom technology for distance learners by National Teachers' Institute, using Calabar Study Centre as a case study. Specifically the study attempts to:

1. Ascertain the level of **availability** of Google classroom technology in the National Teachers' Institute Calabar study Centre.
2. Determine the **use of features in Google classroom** technology in National Teachers' Institute Calabar study Centre.
3. Determine the **level of competence** by NTI facilitators to use Google classroom technology in the National Teachers' Institute Calabar study Centre.

### 1.4 Research Questions

1. What is the **level of availability of Google classroom technology** at the National Teachers' Institute study Centre, Calabar?
2. What percentage of the lecturers **use features in Google classroom technology** at the National Teachers' Institute study Centre, Calabar?
3. What is the **level of competence by NTI facilitators to use Google classroom technology** at the National Teachers' Institute study Centre, Calabar?

## 2. METHODOLOGY

### 2.1 Research Design

The study used the descriptive survey design, in which Questionnaires were administered to the respondents. The descriptive survey research, according to Nworgu (1991) is a study which aims at collecting data on and describing in a systematic manner, the characteristics, features or facts about a given population. It is only interested in describing certain variable in relation to the population. "Survey" basically involves the studying of a group of people or items by collecting and analyzing data from only a few people or items considered to be representative of the entire group. The survey plan or survey design specifies how such data will be collected and analyzed (55).

## 2.2 Area of Study

Calabar is a city in Cross River State of south southern Nigeria located at  $4^{\circ}57'0''\text{N } 8^{\circ}19'30\text{E}$ . The city is adjacent to the Calabar and Great Kwa Rivers and creeks of the Cross River (from its inland delta). Calabar is the capital of Cross River State. Administratively, the city is divided into Calabar Municipal and Calabar South LGAs. Calabar is a large metropolis today with several towns like Akim, Ikot Ansa, Ikot Ishie, Kasuk, Duke Town, Henshaw Town, Ikot Omin, Obutong, Bakassi, Biase and Akamkpa. It has an area of 406 square kilometres (157 sq mi) with a population of 318,099 by the 2013 census.

Calabar has three principal landlord kingdoms, namely the Qua Kingdom of Ejagham (Ekoi)/Bantu origin, the Efut and the Efik Kingdoms. The Qua Kingdom has the Ndidem of the Qua nation as the Grand Patriarch, the Efut have the Muri Munene as the grand patriarch, and the Efik Kingdom patriarch is known as the Obong. The Efik political authority as it concerns the Obong is hinged on a political tripod: Creek Town, made up of Ambo, Cobham and Eyo; Old Town, made up of Obutong and Duke Town, or Atakpa, made up of Duke/Archibong, Eyamba, Ntiero, Henshaw and Cobham.

The city has an international museum, a botanical garden, a Free Trade Zone/Port, an international airport and seaport, an integrated sports stadium complex, a cultural centre, one of the most prominent universities in the country – the University of Calabar, a State University called the Cross River University of Technology (CRUTECH), a slave history park and several historical and cultural landmarks. It also has several standard hotels, resorts and amusement parks. The Tinapa Resort, a development by the Cross River State government, lies to the north of the city beside the Calabar Free Trade Zone. Calabar is the headquarters of the Eastern Naval Command. The city has a new model school, Nigerian Navy Secondary School, situated in Akpabuyo, about 10 minutes' drive from the airport. This new school complements the existing Nigerian Navy Primary School and Naval Officers Wives Association Primary School, both situated at Ikot Ansa, Calabar.

The Cross River State Annual Christmas Festival held every year attracts thousands from within and beyond Nigeria. The festival includes music performance from both local and international artists. Other annual events include the Calabar Carnival, a boat regatta, fashion shows, a Christmas Village, traditional dances and the annual Ekpe Festival.

## 2.3 Population

The population of the study comprises all the 20 lecturers in the National Teachers' Institute study centres in Calabar the West African Peoples' Institute (WAPI) and the Management Development Institute (MDI). 15 N.C.E lecturers and 4 Postgraduate Lecturers in Education were used respectively.

## 2.4 Sample and sampling technique

The total sample size include 19 lecturers selected from the West African Peoples' Institute (WAPI) and the Management Development Institute (MDI) Calabar study centres of the National Teachers' Institute of Nigeria.

The purposive sampling technique was adopted. In purposive sampling, specific elements which satisfy some predetermined criteria are selected.

The researchers personally administered the questionnaires to the respondents. All the questionnaires were retrieved the same day, while the centre coordinators were interviewed and their inputs collected.

## 2.5 Research Instrument

The instrument used for this study was a structured questionnaire **“GOOGLE CLASSROOM TECHNOLOGY FOR DISTANCE LEARNERS BY NATIONAL TEACHERS' INSTITUTE QUESTIONNAIRE (GCTDLNTIQ).**

Section A was for demographic information; section B for the variables. There were 3 sections in the questionnaire (1) **the level of availability of Google classroom technology** at the National Teachers' Institute study Centre Calabar, (2) **lecturers' use of features in Google classroom technology** at the National Teachers Institute study Centre Calabar and (3) **the level of competence by NTI facilitators to use Google classroom technology** at the National Teachers' Institute study Centre Calabar. There were 17 items in the questionnaire.

The Likert scale was used in developing the items comprising Strongly Agree (SA), Agree (A), Disagree (D) and Strongly Disagree (SD).

## 2.6 Validation of instrument

Google Classroom Technology in NTI Calabar Questionnaire was designed by the researchers under the supervision of the seminar supervisor who is an expert in educational technology. Other lecturers in the department of Educational Technology University of Uyo also reviewed it. Two experts in the area of educational evaluation also carefully examined the instrument. All these were done in order to establish content and construct validity of instrument.

## 2.7 Reliability of the Research Instrument (GCTDLTIQ)

The data obtained from the lecturers at the Akamkpa National Teachers' Institute study center constituted the pilot study which was used to establish the reliability of the survey instrument (GCTDLNTIQ) using Kuder Richardson's formula to determine the reliability coefficient. The reliability (r) value obtained was 0.97.

## 2.8 Administration of instrument

The instrument was personally administered by the researchers to the respondents at the WAPI and MDI National Teachers' Institute study centers respectively. The researchers applied formally to the State Director of NTI Cross River after which he was approved to administer his questionnaire at the two study centers in Calabar Metropolis. The first place was the WAPI NTI study centre. With the approval from the centre manager, the researchers with the lecturers' assistance administered the questionnaire to each respondent at a time and collected back their responses. Secondly the MDI NTI study centre was visited. Questionnaires were administered and responses collected. Results are as shown below.

## 3. DATA PRESENTATION AND ANALYSIS

### Data Analysis, Result and Discussion:

Statistical Package for the Social Sciences (SPSS) software was used to analyze the data gathered from respondents. Simple percentages were used to answer research questions.

### Respondents' demographic data on Google Classroom Technology by Distance Learners at the NTI study centre Calabar

Table 3.1: NTI Study Centre Distribution

Level	Absolute frequency	Relative frequency
PGDE (M.D.I.)	4	21%
NCE (WAPI)	15	79%

Table 3.2: Sex Distribution

Sex	Absolute frequency	Relative frequency
Male	17	90%
Female	2	10%

Table 3.3: Academic Qualifications Distribution

Qualification	Absolute frequency	Relative frequency
Ph.D	14	74%
Masters in Education	1	5%
Bachelor in Education	4	21%

Table 3.4: Computer Literacy Distribution

Computer literate	Absolute frequency	Relative frequency
Yes	18	95%
No	1	5%

Table 3.5: Age Distribution

Age range	Absolute frequency	Relative frequency
31 – 35	1	5%
36 – 40	3	15%
41 – 45	2	10%
46 – 50	5	26%
51 – 55	5	26%
56 - 60	3	16%

**Research Questions:**

1. What is the level of availability of Google Classroom Technology at the National Teachers' Institute study Centre, Calabar?

Table 3.6: Respondents' opinion on the level of availability of Google classroom technology at the National Teachers' Institute Study Centre, Calabar.

S/N	Item	Yes	%	No	%
	Availability	Absolute Frequency (AF)	Relative Frequency (RF)	Absolute Frequency (AF)	Relative Frequency (RF)
1	There is Google classroom software in the computer systems at the NTI Calabar study Centre.	0	0%	19	100%
2	The Google classroom learning content management software is used every semester at the NTI Calabar study Centre	0	0%	19	100%
3	There are enough computer systems at the NTI Calabar study Centre for students to use.	0	0%	19	100%
4	The computer system at the NTI Calabar study Centre are internet enabled.	0	0%	19	100%

Table 3.6

1. The responses on the four (4) items presented in the table indicates that Google classroom technology is not available at the National Teachers Institute study Centre, Calabar. This shows clearly that in all the responses, all respondents recorded "No".
2. What percentage of the lecturers' use of features in Google classroom technology at the National Teachers Institute study Centre Calabar?

Table 3.7: Respondents' opinion on lecturers' use of features in Google classroom technology at the National Teachers' Institute study Centre, Calabar

S/N	Item	Yes	%	No	%
	Use of features of Google classroom	Absolute Frequency (AF)	Relative Frequency (RF)	Absolute Frequency (AF)	Relative Frequency (RF)
5	As an NTI course facilitator, I usually make use of Google classroom for posting assignments for students.	1	5%	18	95%
6	As an NTI course facilitator, I usually make use of Google classroom for grading the assignments of students.	1	5%	18	95%

7	An an NTI course facilitator, I usually archive courses previously taught in class on Google classroom for students who were not available during the lecture to access them.	1	5%	18	95%
8	NTI course facilitators usually communicate in Google classroom environment as regards students' academic progress.	1	5%	18	95%
9	As an NTI course facilitator, I usually make use of Google classroom for receiving assignments from students.	1	5%	18	95%
10	As an NTI course facilitator, I usually make use of Google classroom to publish students' grades.	1	5%	18	95%

**Table 3.7:** The six items presented in the table indicates that lecturers' at the National Teachers' Institute study Centre, Calabar do not use features in Google Classroom technology. This shows clearly in the responses based on Yes while others accepted No. The only yes seems not to have understood the question.

3. What is the level of competence by NTI facilitators to use Google classroom technology at the National Teachers' Institute study Centre, Calabar?

**Table 3.8: Respondents' opinion on the level of lecturers' competence to use Google classroom technology at the National Teachers' Institute study Centre, Calabar.**

S/N	Item	SA	A	D	SD
	<b>Level of Competence</b>				
11	I am good in using Microsoft internet explorer for browsing.	26%	54%	10%	10%
12	I have a functional personal e-mail account.	26%	47%	11%	16%
13	I often watch tutorial videos on www.youtube.com	11%	28%	39%	22%
14	I often fill in online forms by myself several times.	26%	32%	26%	16%
15	I usually attach files with my email account	16%	32%	32%	20%
16	I also use other internet browsers like Mozilla Firefox, Chrome browsers.	26%	32%	26%	16%
17	I use my personal internet modem accessing the internet.	37%	32%	11%	20%

**Table 3.8**

The seven (7) items presented in the table indicate the level of competence to use Google Classroom Technology by lecturers at the NTI student Centre, Calabar.

26% of the respondents Strongly Agreed to be good in using Microsoft internet explorer for browsing, 54% of the respondents Agreed to be good in using Microsoft internet explorer for browsing, 10% disagreed to be good in using Microsoft internet explorer for browsing, 10% of the respondents Strongly Disagreed to be good in using Microsoft internet explorer for browsing.

26% of the respondents Strongly Agreed to owing a functional personal e-mail account, 47% of the respondents Agreed to owing a functional personal e-mail account, 11% of the respondents Disagreed to owing a functional personal e-mail account and 16% of the respondents Strongly Disagreed to owing a functional personal e-mail account.

11% of the respondents Strongly Agreed to watching tutorial videos on www.youtube.com, 28% Agreed to watching tutorial videos on www.youtube.com, 39% Disagreed to watching tutorial videos on www.youtube.com and 22% Strongly Disagreed to watching tutorial on www.youtube.com.

26% of the respondents Strongly Agreed to often filling in online forms by self several times, 32% of the respondents Agreed to often filling in online forms by self several times, 26% of the respondents Disagreed to often filling online forms by self several times and 16% of the respondents Disagreed to often filling in online forms by self several times.

16% of the respondents Strongly Agreed to being able to attach files with their e-mail account, 32% of the respondents Agreed to being able to attach files with their e-mail account, 32% of the respondents Disagreed to being able to attach files with their e-mail account and 20% of the respondents Strongly Disagreed to being able to attach files with their e-mail account.

26% of the respondents Strongly Agreed to being able to use other internet browsers like Mozilla Firefox and Chrome browsers, 32% of the respondents Agreed to being able to use other internet browsers like Mozilla Firefox and Chrome browsers, 26% of the respondents Disagreed to being able to use other internet browsers like Mozilla Firefox and Chrome browsers and 16% of the respondents Disagreed to being able to use other internet browsers like Mozilla Firefox and Chrome browsers.

37% of the respondents Strongly Agreed to being able to use their personal internet modem for accessing the internet, 32% of the respondents Agreed to being able to use their personal internet modem for accessing the internet, 11% of the respondents Disagreed to being able to use their personal internet modem for accessing the internet and 20% of the respondents Strongly Disagreed to being able to use their personal internet modem for accessing the internet.

#### 4. DISCUSSION OF FINDINGS

The researchers noted that there is no availability of Google Classroom Technology at the NTI Study center Calabar. This is in line with the observation of Osong (2014), who noted that most vital physical facilities like ICT centres are not available at the NTI study centers in Cross River State. This, he stated, was in contrast to the findings of Roberts, Irani and Lundy (2004), when they carried out a study on the practices in students' evaluation of distance education courses among Land Grant Institutions. The researchers found out that the most important factor when assessing students' attitude are delivering distance education to both undergraduate and graduate students with the help of ICT such as course management software and video conferencing for delivering instruction. The researchers then recommended that efforts be made by NTI and the government to equip centers with basic facilities like ICT centers to provide teachers with basic skills for further transfer to their students using Technologies like the Google Classroom.

The researchers also noted that lecturers at the NTI Study center Calabar do not make use of features of Google Classroom Software as the Learning content management software is unavailable there for use. This reiterates the observation of Osong (2014), who noted that most vital physical facilities like ICT centers are not available at the NTI study centers in Cross River State. Akpan, Ntukidem, Ekpiken and Etor ( ) noted that ICT facilities are lacking in teacher training institutions. However Olatumile (2013) had proposed that every university running a distance programme, must as a matter of compulsion, be made to run it on the web. Ahmad (2012) had suggested the use of Learning Management System (LMS) for e-learning in Nigerian tertiary institutions Ahmad (2012) Also anticipated some prospective challenges to be considered by stake holders: more personnel training in implementation and management of e-learning, more workshops seminars and conferences on e-technologies and More departments and courses for educational technologies.

However the researchers also noted that there is a high level of competence to use the Google Classroom Learning Content Management System at the NTI Study Center Calabar by Lecturers as they show practical familiarity with similar Google Classroom Software operational tasks as there is a high level of internet literacy within the Faculty at the NTI study Centre Calabar however if Google classroom technology will be deployed there will be a need for fresh and adequate training of staff on the use of such a software technology for maximal productivity. Osong, (2014) had recommended that there should be constant in-service training of centre facilitators on pedagogies as this will equip the facilitators with the essential skills for guiding in-service teachers with respect to their cognitive, effective and psychomotor educational development. Olaniyi (2006) recommended the training of staff of Nigerian educational institutions on the latest e-learning tools. Oye, Salleh, & Iahad, (2011) had recommended that the Nigerian Government can take a cue from developed countries best practices in distance learning implementation especially in the area of training.

Harping on the need for training of staff of distance learning organization on contemporary ICT packages, Adeola, Adewale & Alese (2013) noted that a teacher has to possess a specific amount of knowledge if he is to be useful in the modern dispensation. It should be noted that instruction is compulsory if a teacher lacks this knowledge. The main challenge of this new concept is that the ICT changes fast and teacher need to be continuously acquainted with the latest development and constantly apply it in his teaching. Akpan, Ntukidem, Ekpiken and Etor ( ) noted that Some teacher



educators and student teachers' are not ICT compliant. Oye, Salleh and Iahad (2011) University administrators on their part should embark on awareness and training of staff on the use of ICTs in teaching and learning with motivation attached.

## 5. CONCLUSION

Google classroom is a learning content management system whose utilization in a distance education set up like the National Teachers' Institute will foster the achievement of 21<sup>st</sup> century learning goals specifically in the areas of collaboration skills, media literacy skills, information literacy skills and ICT literacy skills. More so, the fourth agendum in the NTI repositioning mandate calls for the inclusion of ICT in all of the operations of the Institute. The National Policy on Education (2004) Section 9 Sub-section 93(IV) states: "The Federal Government shall liaise with media houses, information and communication technology provides and others relevant bodies in enhancing open/distance education".

Google classroom technology offers a paperless teaching and learning opportunity with plenty of benefits for the distant teacher and student, thus as inferred from the study, it will only be appropriate that the NTI adopts Google classroom technology in pursuance of the aforementioned goals.

## 6. RECOMMENDATIONS

1. The National Teacher Institute Nigeria should adopt and implement the Google Classroom Technology since it is available free online and it is in line with the Institute's goal to include ICT in all of her operations especially that will enable paperless and remote transaction between staff and students and among students.
2. In training staff of NTI on the use of Google classroom technology it will be very important that they be practically shown how to use the software to: (i) post assignments and announcements for students (ii) grade and publish students' assignments, (iii) archive courses taught, (iv) chat or communicate within the Google classroom software environment and receive assignments from students etc. This will enable the institute to benefit from the plethora of gains this purposeful software solution offers.
3. Practical retraining of staff of NTI on how to use the internet for academic purposes will be essential as the internet is not just for browsing or searching for academic literature. But such training will reveal the taxonomy of internet based instructional media and how to use them for educational purposes.

## REFERENCES

- [1] Adeola O, Adewale O. S., Alese B. K. (2013). Integrated E-Learning System (IES) for the Nigeria Universities: An Architectural Overview in American Journal of Database Theory and Application 2(1): 1-8.
- [2] Ahmad S. A. (2012). Essentialities for e-learning: The Nigerian tertiary institutions in question Academic Research International, vol.2, No.2, ISSN-L: 2223-9553, ISSN: 2223-9944.
- [3] Ajadi, T. O. & Salawu, I. O. & Adeoye, F. A. (2008). E-learning and distance education in Nigeria in the Turkish online Journal of Educational Technology-ToJET ISSN: 1303-6521 volume 7 (4).
- [4] Akpan, C.P., Ntukidem, P.J., Ekpiken, W and Etor, R ( ) the challenges of teacher education in Nigeria *International Journal of Internet Education* ISSN 1687 – 6482
- [5] Anene, J. N. H. & Imam, T. O. (2014). Problem and prospect E-learning in Nigerian universities International Journal of Technology and Inclusive Education (IJTIE), volume 3, (2).
- [6] Asodike, J. D. & Ebong, J. M. (2012). Resource provision for the implementation of National Teachers' Institute (NTI), Kaduna, Distance Learning Programme in South-South, Nigeria in Global Journal of Human Social Science Linguistic & Education Vol 12, (10).
- [7] Ebisine, S. S. & Ajuar, N. H. (2015). Assessment of instruction delivery in distance education in Nigeria in Mediterranean Journal of Social Sciences MCSER Publishing, Rome-Italy Vol.6 (4).
- [8] Fayomi, O. O., Ayo, C. K., Ajayi, L., & Okorie, U. (2015). The impacts of E-learning in facilitating academic performance among private secondary schools and tertiary institutions in Ota, Ogun State, Nigeria.
- [9] <http://edteachteacher.org/g-suite-for-education/>
- [10] <http://www.nti-nigeria.org/setup.html>

- [11] <https://edu.google.com/products/productivity-tools/classroom/>
- [12] [https://en.wikipedia.org/wiki/distance\\_education](https://en.wikipedia.org/wiki/distance_education)
- [13] [https://en.wikipedia.org/wiki/learning\\_management\\_system](https://en.wikipedia.org/wiki/learning_management_system)
- [14] Ibe-Bassey G. S. (2009). Integrating of Information and Communication Technology (ICT) in open And Distance Learning and Special Education. A lead paper presented at the 2009 Annual Conference of the Nigeria Association for Educational Media & Technology (NAEMT) at the University of Uyo, Uyo from Oct. 59.
- [15] Janzen, M. (2014). Google classroom retrieved from <http://tlt.psu.edu/2014/12/04/hot-team-google-classroom/>
- [16] Logofatus, Visan Branescu, & Ungureanu (2015). Department of distance learning University of Bucharest First Experience in using google classroom retrieved from [www.conference.pixel-online.net/FOE/files/foe/ed005/FP/0866-ENT1053-FP-FOES.pdf](http://www.conference.pixel-online.net/FOE/files/foe/ed005/FP/0866-ENT1053-FP-FOES.pdf).
- [17] Nworgu B. N. (1991). Educational research: Basic & issues methodology. Ibadan: Wisdom Publishers Ltd.
- [18] Obioha, M. F. and Ndidi, U. B. (2011). Administrative problems of open distance education in Nigeria: A case study of national open university of Nigeria proceedings of the 1<sup>st</sup> International Technology, Education and Environment Conference African Society for Scientific Research (ASSR).
- [19] Okafor, E. N. ( ). E-learning and distance education: Rationale and problems from <http://www.globalacademicgroup.com/journals/pristine/E-LEARNING%20AND%20DISTANCE.pdf>.
- [20] Okworo, Gibson Samuel & Adie, Paul Ingiona (2015). Educational resource centre: A veritable delivery system for effective implementation of distance learning education in a cloud computing environment in Nigeria.
- [21] Olakulehin, F. K. (2007). Information and communication technologies in teacher training and professional development in Nigeria. *Journal of Distance Education-TOJDE* January 2007 ISSN 1302-6488, volume: 8 Number: 1 Article: 11.
- [22] Olatumile, A (2013) Web-Based Tools and Effective Delivery of Distance Learning forTertiary Education in Nigeria New Media and Mass Communication . ISSN 2224-3275 (Online)Vol.16,
- [23] Olaniyi, S. S. (2006). E-learning technology: The Nigeria experience shape the change XXIII FIG Congress Munich Germany.
- [24] Olojo, O. J., Adewumi M. G. & Ajisola K. T. (2012). E-learning and its effects on teaching and learning in a global age in *International Journal of Academic Research in Business and Social Sciences*. Vol.2, No.1, ISSN: 2222-6990.
- [25] Omotosho, A. O. Lateef, E. B., Amusa, O. I. and Bello, T. O. (2015). Information and communication technology adoption and use among students of a Nigerian University for distance learning in library philosophy and practice (e-journal).
- [26] Osong, O. U. (2014). Evaluation of Nigeria certificate in education by distance learning system of national teachers institute in Cross River State. Masters Thesis University of Nigeria, Nsukka.(Published)
- [27] Oye, N. D., Salleh, M. & Iahad, N. A. (2011). Challenges of E-learning in Nigerian University Education based on the experience of developed countries in *International Journal of Managing Information Technology (IJMIT)*, vol.3, No.2.
- [28] Pappas, C. (2015). Google Classroom Review: Pros and Cons of using Google Classroom in E-learning, retrieved from <http://e-learningindustry.com/google-classroom-review-pros-and-cons-of-using-googleclassroom-in-elearning>.
- [29] Pappas, C. (2015). Toop-10-google-classroom-best-practices retrieved from <http://elearningindustry.com/top-10-google-classroom-best-practices>.
- [30] Rosen, D. J. & Stewart, C. (2013). Blended learning for the Adult Education Classroom Essential Education.
- [31] Torruam, J. T. (2012). Application of e-teaching and e-learning in Nigeria educational system in *Academic Research International* ISSN-L: 2223-9553, ISSN: 2223-9944, vol.3, No.1.