Contents

***JERT*- Mission Statement**

The Journal of Educational Research and Technology (JERT) is a peer- reviewed journal engaged in the publication of professional educational research with emphasis on educational technology, management information technology, professional development, educational enrichment research, academic and administrative information systems, information sciences, management information consulting, advertisements, academic collegiate conferences, and community education development summits to show the advantages and the broad range of possibilities that education, research and technology can offer in the educational and the world community. The journal is equally engaged in organizing and advising on conferences, workshops and seminars on invitation for publishing and presentation of research papers and original manuscripts that promote further research and knowledge in the humanities and the sciences in the USA, Africa and the world at large. The *JERT* is scheduled to be published three times yearly: January, May and September.

JERT Editorial Policies and Contributions

1. ***The JERT*** editors will consider manuscripts that are organized in accordance with the Mission, Journal Publication, Educational Technology, Management Information Technology, Professional Development, Educational Enrichment Research, Academic and Administrative Information Systems, Information Sciences, Management Information Consulting, Advertisements, Academic Collegiate Conferences, and Community Education Development Summits**.** Please feel free to contact us at (469) 534- 2720 or E-mail: jesin57@gmail.com.
2. Personal and professional opinions, ideas, recommendations articulated in the ***(JERT)*** do not necessary reflect the views of the Editors.
3. All manuscripts must be accompanied by well-synthesized **Preamble** or abstract of approximately 100-200 Words.
4. Manuscripts must not be less than ten (10) pages and not exceed twenty (20) pages in length, and must have outstanding and innovative educational, research, and technology features.
5. Manuscripts must be typed double-spaced in Microsoft Word version 2003 or 2007 and printed on 20 pound papers (8.5" x 11").
6. ***JERT*** will not consider politically goaded manuscripts for publication.

7. The author of the research manuscript must submit two original copies. Each copy should contain a cover page with the name of author, topic/title. The essay proper should not have any author's name or indication of origin, except for the topic/subject at the top of the paper. This is for blind reviewing.

8. All research manuscripts must be submitted with 15-20 cited-references, and 5-10 non-cited references, double-spaced, and arranged in alphabetical order.

9. Footnotes are strongly discourages but when used should be typed double-spaced, and on a separate page.

10. The basic style of writing is the American Psychological Association (APA), though room will be given for the Modern Languages Association MLA where literature and languages are involved.

11. Papers received shall be acknowledged and those accepted for publication will be notified and instructions given as to the status of the paper (accepted for publication, accepted contingent on specific revisions, and the time line for all revisions.

12. Copyright must be authorized and surrendered to JERT, and expressed usage can only be authorized by the Board of Trustees and JERT Editorial Council.

THANK YOU FOR YOUR PATRONAGE

Preamble

The Editorial Council is very delighted to publish Volume IV of the Journal of Educational Research and Technology (JERT). The production of Volume IV could have not possible without the persistent tireless efforts of the JERT Editorial Council and the priceless support of Professor of Emmanuel N. Ngwang, JERT Chief Editor and Professor Anne-Christine Hoff, Principal Editor and all well-wishers.

Professor Joseph O. Esin, the Chief Publishing Editor of *The Journal of Educational Research and Technology (JERT)*, holds a Bachelor of Science in Biology from Saint Louis University, Saint Louis, Missouri; a Master of Arts in Religious Studies with emphasis on Moral Theology from the Society of Jesus College of Divinity, Saint Louis, Missouri; and a Doctorate in Computer Education from the United States International University, San Diego, California. The State of California awarded him a Life-time Collegiate Instructor's Credential in 1989, and in 1996, the United States Department of Justice approved and conferred on him the honor of "Outstanding Professor of Research" in recognition of his contributions to academic excellence.

He met the selection criteria for inclusion in the 1992-93, 1994-95, and 1996-97 editions of Who's Who in American Education for his outstanding academic leadership in management information technology. Furthermore, he met the selection criteria for inclusion in the 1993-94 edition of the Directory of International Biography, Cambridge, England, for his distinguished professional service in academic computing technology. A Professor of Computer Information Technology from 1988-2000, a Director of Higher Education Accreditation operations in accordance with the guidelines set forth by the COMMISSION ON COLLEGES from 1991- 2000. He was appointed Associate Dean of Academic Affairs and a Deputy Provost at Paul Quinn College, Dallas, Texas, from 1997-2000. He is currently a professor of computer information systems at Jarvis Christian College, Hawkins, Texas, USA, a visiting Professor of Research at the University at Calabar, Nigeria and a Research Associate at the Botanical Research Institute of Texas (BRIT) USA. Professor Esin has published several professional journal articles including "High Level of Teachers' Apprehension (HLTA): About the use of Computers in the Educational Process." Journal of Educational Media & Library Science (JEMLS-1991); "Computer Literacy for Teachers: The Role of Computer Technology in the Educational Process." (1992-JEMLS); "Faculty Development: Effective use of Applications Software in the Classroom for instruction." (1993-JEMLS); "Strategies for Developing and

Implementing Academic Computing in Colleges and Universities." (1994-JEMLS); "Strategic Planning for Computer Integration in Higher Education through the Year 2000." (1994-JEMLS); "The Challenge of Networking Technologies." (1995-JEMLS); "The Design and Use of Instructional Technology in Schools, Colleges and Universities." (1997-JEMLS); "Decay of the Nigerian Education System." Journal of Educational Research and Technology (JERT-2013); "The Emerging Impact of Information Technology on Education and the Community." (2013-JERT); "Balanced Salary Structure for Academic Professors and Allied Educators as a Pathway to Quality Education." (2014-JERT) and "The Discovery of Computer Information Technology is an avenue for Educational Transformation in a Changing Society of Today and Tomorrow." International Organization of Scientific Research Journal of Engineering. (2014-IOSR-JEN).

He served as a member of Doctoral Dissertation Committee at Southern Methodist University, Dallas, Texas (1998-2000), and Jackson State University, Jackson, Mississippi (2010-2011). He is the author of The Power of Endurance (2008); The Evolution of Instructional Technology (2011); The Messianic View of the Kingdom of God (2011) and Global Education Reform (2013). Professor Esin's current research emphasis is on The Fundamentals of Computer Information Technology in a connected society.

Word of Caution

In order to achieve what is possible, you must attempt the impossible.

Professor Joseph O. Esin,
JERT-Chief Publishing Editor

Professor Emmanuel N. Ngwang, the Chief Editor of *The Journal of Educational Research and Technology (JERT),* is a 1986 graduate of Oklahoma State University with a Ph.D. in American Literature and presently a Professor of English and Foreign Languages at Jarvis Christian College. Before joining the faculty of Jarvis Christian College, he taught in several universities since 1982: a Graduate Associate at Oklahoma State University (1982-1987); University of Yaoundé, Cameroon (1987-1997); Kentucky State University (1997-2003); Mississippi Valley State University from (2003-2010); and at Claflin University (2010-2012). He has edited two books on criminal justice by Peter Nwankwo: *Criminological and Criminal Justice Systems of the World: A Comparative Perspective* (2011) and *Criminal Justice in the Pre-Colonial, Colonial, and Post-Colonial Eras: Am Application of the Colonial Model to changes in the severity of punishment in the Nigerian Law* (2010).

In addition, Professor Ngwang has published and presented research papers on postcolonial, African, and modern dramatic literature and Feminism. Some of his recent publications include "Education as Female (Dis) Empowerment in Anne Tanyi-Tangs *Arrah"* in *The Atlantic Review of Feminist Studies Quarterly (*2012)*.* "Arrah's Existential Dilemma: A Study of Anne Tanyi-Tang's *Arrah* in *Cameroon Literature in English: Critical Essays* (2010), "Spaces, Gender, and Healing in Alice Walker's *The Color Purple* and Mariama Ba's *So Long a Letter*" in *New Urges in Postcolonial Literature: Widening Horizons* (2009), "Re-Configuration of Colonialism or the Negation of the Self in Postcolonial Cameroon in Bole Butake's Plays in *Reconceiving Post colonialism: Visions and Revisions* (2009), Buchi Emecheta's *Destination Biafra*: A Feminist (Re-)Writing of the Nigerian Civil War in *Journal of African Literature: International Research on African literature and Culture (JAL:IRCALC)* (2008)*, "*In Search of Cultural Identity or a Futile Search for Anchor: Africa in Selected African American Literary Work*s*" *Identities and Voices. ALIZES (TRADE WINDS 2007)* "Literature as Politics: Revisiting Bole Butake's *Lake God and Other Plays*" in *The Literary Griot: International Journal of African-World Expressive Culture (2002*)*,* and "Female Empowerment and Political Change: A Study of Bole Butake's *Lake God, The Survivors,* and *And Palm Wine Will Flow"* in *ALIZE (TRADE WINDS): A Journal of English Studies (2004)* (University of La Reunion, France).

Professor Ngwang has also been a recipient of prestigious awards in recognition of his academic and research endeavors: 2013-2014 Faculty Scholar Award in Recognition of His

Outstanding Research and Publication Work conferred by the Faculty Governance Senate of

Jarvis Christian College, Hawkins, Texas; the *2004 Humanities Teacher of the Year Award* from the Mississippi Humanities Council, Jackson Mississippi; *2002-2003 Excellence in Scholarship and Creative Activities*, College of Arts and Sciences, Kentucky State University; and two-time nomination to the *Who's Who Among America's Teacher* (2001 and 2002 respectively), Educational Communications, Inc.; Lake Forest, Illinois.

A word to think about:

We are remembered by what we leave behind

For what we leave behind tells the true story of who we

were And how and for what we lived.

Professor Emmanuel N. Ngwang
JERT-Chief Editor

Introduction

The JERT Editorial Board is again delighted to present to you Volume 4 of the *Journal of Educational Research and Technology* (*JERT)*, which takes a swift turn in the area of technological research. The inclination towards expulsion of African, earth sciences and integration of information technology in the articles presented shows the determination of the Editorial Board to include and embrace all areas of research, especially the research the shares knowledge of our homeland and mother Earth.

This Volume is dignified by the continuous efforts of Professor Joseph O. Esin to bring the integration of technology into the educational process, instruction, every learning and business environment especially in today's world of globalization and cyber gyration. In Article 1, Integration of Information Technology in Education, Instruction and Learning in a Connected Society, Professor Esin takes the reader back to the domain of the classroom instruction, learning endeavors, the invasion and role of information technology in education and computer literacy. Professor Esin continues to insist on the reality of the overpowering nature of instructional technology, which is here to stay and eventually make instruction and learning less stressful. His research has revealed that today's "professors, allied educators, students and consumers are using technology to prepare, educate, manage and deliver instruction, publish and disseminate information that was previously too expensive and almost impossible to produce and distribute to the general public." He goes further to declare emphatically that, "the era of integrated technology is sponsoring the democratization of the production and flow of information to the educational community and the masses." This research reveals the incontestable value of educational technology and the need for all— both in the educational world and the public spheres—to welcome and embrace this initiative wholeheartedly to "unlock students' academic potential" and global communications.

This article particularly resonates with the "Y" and Millennium generations who are much more attached and atoned to technology in all aspects of their lives, including academic advancement. This article tends to argue for them and support their determination to be computer savvy, because that is the way of today's word and nobody wants to be left behind. This approach will definitely revolutionize education and move it from the constraints and limitations of the classroom to the outside world academic projects and class assignments can be done from the ease of a sitting room, in the pew of a church or the arm chair of the airplane. Professor Esin also addresses the Best Practices of tailoring educational delivery to the learning styles of the students so as to get the best, "to trigger students' critical thinking ability, productive outcomes and lasting solution to learning processes." He particularly draws his conclusions from a set of questionnaire he administered to college students who indeed are the core and cardinal partners of his research initiative.

Article 2 opens up with the current, disturbing, yet aggressive research on immigration and identity. Appropriately entitled The Lost Generation or the Peril of Belonging: A Study of Africans in Exile, Professor Emmanuel N. Ngwang's article takes a bold review of the dilemma and frustrations incumbent on African immigration into the USA. This article takes a position different from those that have often glorified immigration and the attendant benefits thereof. From Professor Ngwang's research, personal experience and interviews, the article depicts the trauma of exile as those on voluntary or forced immigration face the almost insurmountable journey of searching for peace and a successful life in a society that seems, on the outside, very welcoming, but in the inside very unreceptive to the "African" foreigners. Professor Ngwang documents instances of broken families, murders and tempted murders, accusations and victimization which these Africans have receive from vast segments of American communities inclusive of African Americans and white Americans who had migrated before them and the

Americans who consider the immigrants a continuous threat to their economy and freedom. Professor Ngwang's research gives an interesting perspective on immigration and tempts to advance a solution to the continuous conflict that tends to define and fuel the relation between African-born of African Americans and the traditional African-born Americans. The article also diagnoses the problems and issues that aggravate and intensify these feelings of loneliness, disconnectedness, and "loss," which surface in many encounters between the "the New Generation African American" and the African Americans where complexes have determined the fate of each group. The answer seems to be in the continuous lack of trust created by the receiving nation and the betrayals emerging from marital relationships and the continuous struggle among natives and colleagues to betray each other in order to move forward to the attainment of the American Dream.

Professor Ngwang's article also attempts to find solutions and propose suggestions to the solutions of those factors that are catalytic to the situation. The onus of redress lies on the incoming immigrants (strangers), who arrive with pumped up and faulty, fantastical misconceptions about the ease attendant in obtaining the American Dream in the United States, a promised land flowing of milk and honey. They envision the United States as a land of challenges where anything is possible and everything is impossible. Such a realistic approach will take away the veneer of sobriety and luxury that has tended to embroider the USA Hollywood pictures so that the real pictures of the hard knocks will become available. Secondly, there is an attempt to ask for a more humanistic and welcoming attitude on the part of the Native African Americans who tend to receive and operate with the immigrant Africans purely on artificial and suspicious terms. Globalization is a give and take and this calls for a certain measure of acceptance, understanding, tolerance, faith and collaboration from both parties.

In Article 3: Relative Age and Paleo Environment of Sandstone – conglomerate Deposits in the Northeastern Niger Delta, Nigeria, Dr. David Inyang and Professor L. C. Amajor of the Department of Geology in the University of Calabar and Port Harcourt respectively, and Dr. M. U. Udoh, a South-Sea Petroleum Consultant affiliated with both universities lead the reader into a bold attempt to determine the relative age and paleo environment of Sandstone-Conglomerate deposits in the Northeastern Niger Delta of Nigeria. This collaborative study, sponsored by the University of Calabar, Nigeria in collaboration with the South-Sea Petroleum Consultants, uses sophisticated cutting-edge technology to analyze and deduce the age of the sand-conglomerate deposits outcropping in the northeastern region of the Niger Delta. This scientific and intellectual exercise reveals and thereby confirms previous suspicions studies of the area that though the contiguous sedimentary units of the area studies were deposited in neritic environments. Based on the result of this study, it is worth noting that the sandstone- conglomerate bodies are of fluvial/continental plain origin. Furthermore, their research also found that the palynomorphs found in the sandstone-conglomerate units were mostly forest, savanna, and montane species asserting that these deposits are continental/fluvial plain in origin. Of great significance to the lay person is the vegetation or horticultural significance of the studies which revealed the level of salt and acidity and how these could affect vegetation and farming.

The overall significance in this study is the determination of the underlying bedrocks of the areas and their ultimate ramification of an implication for mineral resources, horticulture, settlement, natural disasters and mitigation as all these factors intertwine and depend very much on the solidity and chemical composition of the soil and rocks that underlie the area of study.

Article 4: Pebble Morphometric Analysis of Awi Formation in Calabar Flank, Nigeria" presents the studies and findings of Drs. Asukwo E. Itam, David O. Inyang, Etie B. Akpan and

Dieugo O. Ikoro who navigate the reader to the domain of earth science within the Calabar Delta in South Eastern Nigeria, that in actual fact, is an area rich in minerals, especially oil. The highly intensive and informative study of the earth composition in the area reveals to lay readers the geological set up of the area the people live in an attempt to give an approximate age of the land. It also gives geologists and other scientists a pretty solid picture of the area as prelude to mineral exploitation and basic knowledge of the environment. As indicated earlier, knowledge is power; therefore, the knowledge gleaned from this research will contribute immeasurably to the knowledge and strength of the local people who can talk effectively and assuredly about the geological rock formation of their area of origin. This knowledge will also be beneficial in mitigation occupations in terms of regional construction and attendance to natural disasters such as erosion and the probability of earthquakes and fault lines. It will also be useful for horticultural investments, since the composition of the soil will determine its suitability to such activities and determine which horticultural activities would best adapt to and nourish in such an environment and on such soils. Articles 3 and 4 are rich in the research and composition of the rocks that compose the mineral rich parts of Nigeria and should attract geologists and engineers to prospect for more mineral deposits on the bases of what the outcropping rocks reveal about the underground bedrocks of the areas.

Professor Emmanuel N. Ngwang
JERT-Chief Editor

EDUCATION

Integration of Information Technology in Education, Instruction and Learning in a Connected Society.

Dr. Joseph O. Esin

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Abstract

The integration of information technology into the educational process has allowed greater participation in the innovative and creative process by turning professors and allied educators into resourceful producers and hypercommunicators who use multiple tools to manage and deliver instruction. Indeed, the era of integrated technology is sponsoring the democratization of the production and flow of information to the educational community and the masses. Today, professors, allied educators, students and consumers are using technology to prepare, educate, manage and deliver instruction, publish and disseminate prominent information that was previously too expensive and almost impossible to produce and distribute to the general public. Survey to collect data on various students perspectives about effective and efficient utilization of information technology in the classroom for instruction and learning proficiency in different subject areas revealed that effective and measurable academic performance should involve student's collaborative efforts to integrate technology in all latitude of learning endeavors, awareness and self-discovery through creative thinking, and importance of effective reading, writing and communication skills. 60 out of 63 students supported the view that successful integration of technology in the educational process will help to eradicate students' reading, writing and communication deficiencies. In other words, the integration of technology in education, instruction and learning will certainly reinforce student's ability to learn. The on-going utilization of technology in academic settings is not stressful as was formerly perceived. Today, education and technology is a dominant vehicle for self-transformation, suggesting that the integration of technology in the educational system has created a dynamic change, by strengthening the culture of instruction and learning. Such a change has triggered students' ability to learn how to solve complex academic and social problems.

This project set out to conduct research on the integration of information technology in education, instruction and learning in a connected society. Students who enrolled in computer information systems, and more importantly, attended classes were considered credible sources for the study. The sample selection for this study was drawn from one hundred and five (105) students currently enrolled in a computer information systems classes at Jarvis Christian College. The sample population was seventy (70) students randomly selected from the universe of a hundred and five (105) students currently enrolled in the class. Upon a comprehensive review of relevant

literatures, class materials, and engagement with students during each class session and

one-on-one sessions during office hours, a number of challenges to long-term benefits of integrating technology into the educational process were identified. Instructional deficiencies such as inability to read, write, communicate, and locate instructional materials, and emotional challenges such as nervousness, intimidation and stress were delineated as possible factors influencing integration of technology in education, instruction and learning in a connected society. The survey instrument consisted of a cover letter, a demographic data and ten questions that asked participants about challenges and benefits of integrating technology into the educational process, especially instruction. Students were grouped according to classifications (freshmen, sophomore, junior and graduating senior) and gender (male and female), and given a list of ten questions. Survey instruments were disseminated ten minutes prior to the end of the each class session. From the seventy (70) questionnaire distributed, 63 were answered completely and were thus, usable for the study. Responses consisted of 35 freshmen, 35 sophomores, 6 juniors and 5 graduating senior students; and 38 males and 25 female students.

		Yes	No
1.	Integration of technology in the educational process will promote the development of students' reading, writing and communication skills.	60	3
2.	Technology is an effective and important instructional delivery tool.	60	2
3.	The use of technology contributes positively to students' learning endeavors and society	57	6
4.	Integration of technology into education plays a key role in the development of students' interpersonal skills and ability to communicate with others.	56	7
5.	I can complete my undergraduate and graduate studies without the help of technology.	61	2
6.	I get nervous with continued use of technology in the classroom for instruction.	20	43
7.	The use of technology can motivate students to get involved in all-inclusive learning endeavors.	61	2

8.	The use of technology can enhance easy access to instructional materials.	20	43
9.	On-going utilization of technology in academic settings is very stressful.	21	42
10.	I feel intimidated as a result of intensive use of technology for instruction and learning.	14	49

Technology, education and a connected society

According to Esin (2011), Merrill (2009), and Frick, et.al. (2008), technology is an effective and efficient instructional delivery tool; consequently, the integration of information technology into the field of education in a connected society will certainly help to reinforce learners' acquisition of reading, writing and communication skills. The majority of colleges and universities in the continental United States are embarking on Quality Enhancement Planning (QEP) to tackle college and university students' deficiencies in reading, writing and communication.

Expertise in all fields of human endeavors is a lasting pilgrimage; therefore, proficiency across academic disciplines involving reading, writing and communication is an open-ended journey. It is incontestable that education, technology, instruction and learning are demanding and challenging undertakings, whose rewards are reliable, steady and endless. Furthermore, the benefit of the integration of information technology in education will inevitably contribute to nation-building and will enhance students' ability to read, write and communicate at a college level and to proceed beyond completing the loop of acquiring basic technology skills. All attempts to integrate technology in education at all levels of academic endeavors must be viewed as a combination of infusion of writing, reading and communication, growth, and development that emerges directly from determined ability to unlock human growth and potential (Wirth and

Perkins, 2008 and Esin, 2014). Education is one of the indisputably valuable investments that contribute immensely to the development and enhancement of the current and future economic progress and good governance of every nation on earth. On Question One, *"Integration of technology in the educational process will promote the development of students' reading, writing and communication skills,"* 60 out of 63 respondents supported the view that successful integration of technology in the educational process will promote the development of students' reading, writing and communication skills. Cogently, the integration of technology in educational instruction and learning will certainly reinforce student's ability to learn. Today, education and technology is a dominant vehicle for human liberation, growth and development, and a noble benchmark requirement for financial autonomy, self-transformation, and the eradication of language barriers (Bednar & Sweeder 2005).

Education is the foundation of our humanity, a reservoir of human knowledge. Merrill (2009) and Esin (2013) posited that integration of information technology in educational process is the premier conduit for electronic data, voice and information transmission, Wirth and Perkins (2008) and Merrill (2013) asserted that instruction is an undeniable pathway to a well-matched and never-ending instruction and learning process, through inquiry and investigation of knowledge that leads to guaranteed improvement of minds, memory and humanity. In answer to Question Four, "*Integration of technology into the education plays a key role in the development of students' interpersonal skills and ability to communicate with others,"* 56 out of 63 respondents, confirmed that education is an unquestionable and guaranteed pathway to academic transformation, self-actualization, development of professional skills and ability to communicate with peers and colleagues. Professors and allied educators tend to maintain that in every instructional setting, students learn and secure a stable education. Learners in the same vein assume that because they showed up to class, read the required textbook and memorized facts,

they have acquired the educational expertise they need to be successful in a challenging and demanding society. Professors and allied educators must recognize and accept each learner's inspired determination to leave the house, dormitory, get ready and come to class as one of the acceptable educational landmarks. Wirth and Perkins (2008) in their recent studies on learning how to learn concluded that the majority of graduates have neither good governance, integrity, ethics, nor expertise and leadership skills to function effectively in the current challenging and demanding society.

Notably, professors and allied educators of our generation are confronted with colossal frustration and disappointments regarding class attendance, late coming to class, incomplete class projects, and, in a worst case scenario, students showing up for class without textbooks, notebook, pens, papers and remotely not ready to retain material covered during the class session. Sutphin (1978) and Schickedanz (2008) posited that students are intimidated and nervous as a result of intensive use of technology in the classroom for instruction. On the contrary, Esin (1988), in his study of the relationship between teachers' knowledge and experience and their apprehension about the use of microcomputer technology in the classroom for instruction, noted that the majority of instructors and students are comfortable about the on- going utilization of technology in the educational process. In response to Question 9, *"On-going utilization of technology in academic settings is very stressful,"* 43 out of 63 students indicated that they do not find the integration of technology in educational setting stressful. Furthermore, for Question 10, *"I feel intimidated as a result of intensive use of technology for instruction and learning,"* 46 out of 63 responses affirmed that large segments of learners are not intimidated about the integration of technology for instruction and learning.

Thomas (1996), in his studies on educational equality and excellence, noted that students today lack respect for anybody, professors, allied educators, parents, police officers and

themselves. Indeed, they act like they do not care about anything, especially, paying attention to instruction and learning during the class sessions. He further stated that "students today don't want to do anything for themselves, always angry about everything, engage on negative and pessimistic action and are full of uncontrolled rage." This frustration seems to emanate from students' dissatisfaction with traditional methods of instruction and learning. Today's generation is technology inclined; therefore, the integration of technology in education will satisfy the void and fulfill the desire to learn through technology. In order to shape the future of education, reinforce learners' endeavors, overcome the recipients' inability to focus on the educational objectives such as reading, writing and communication, the educational enterprise must be prepared and willing to redouble their steps and focus on a new culture of instruction with emphasis on course content, student engagement, hands-on practical applications, individual and group class projects using technology as management and delivery tools.

Technology in the classroom for instruction

The integration of information technology into the classroom for instruction calls for a systematic approach on how to effectively utilize technology and associated equipment to deliver content in different subject areas and through a totally different methodology. Henrickson (2007) and Keengwe (2007) noted that instructional use of technology in the classroom must focus on learner's growth, proficiency and academic performance. Respondents had divided reactions of Question 6: "*I get nervous with continued use of technology in the classroom for instruction*." 43 of 63 stated that they are not nervous about the use of technology in the classroom for instruction. The users' response clearly indicates reluctance to a total endorsement of the use of technology to manage and deliver instruction in the classroom. It is worth noting that technology will not replace professors and allied educators and must be viewed as a platform

for educational advancement. Hanushek (1994), Lynch (2000) and Morley (2013) asserted that

the integration of information technology in higher education and corporate enterprise will continue to require the direct involvement of professors, allied educators and the entire educational community. The process, if properly implemented, will undoubtedly play a key role in nurturing and possible reinforcement of simultaneous innovative problem-solving skills amongst learners.

Partee (2002) posited that information technology tends to produce an overabundance of information, but such influx will lack the pedagogical insight that can help to empower learners with a deeper understanding of the components of instructional strategies and learning how to learn and critical thinking skills. However, in order to unleash the full potential of the integration of technology into academies, professors and allied educators must acknowledge the outstanding promise and convincing benefits of this new initiative in the educational community and society. Responses to Question 5: "*I believe that I can complete my undergraduate and graduate studies without the help of technology"* on the impact of technology in academic achievement yielded the following response. 61 out 63 respondents indicated that it is almost impossible for them to complete their education without the integration of technology in the educational system. Indeed, technology is a remarkable agent of change and academic transformation; therefore, professors, allied educators and students must be prepared to grow above the mindset of quick fix and of myopically using technology for digital games and associated social activities. Today, the integration of information technology into the educational process has considerable impact on the way students and society utilize technology. In this study respondents (students) confirm that there is tremendous potential to make students accountable through the use of information technology in the educational system. Certainly, technology is shaping our ways of communication and preparing the youngest generations for work and citizenship. In response to Question 7, *"The use of technology can motivate students to get*

involve in all-inclusive learning endeavors," 61 out of 63 respondents asserted that the reliance on technology in the educational enterprise is a credible avenue for multiple intelligence building opportunities leading to effective learning supported by doing through discovery, learning by practice and knowledge by searching. In sync with respondents confidence in the integration of technology to complete their undergraduate and graduate studies, Schofield (1995), Oz (2009) and Vermaat (2014) noted that the integration of information technology in the classroom for instruction has changed the culture of instruction and leaning process and has become a bridge to contemporary, meaningful learning, growth and development of human competence.

It is true that the majority of professors and allied educators are becoming increasingly disjointed and unable to cope with constant and lingering changes about the incorporation of information technology by the higher education system relative to general education and core requirements for bachelor degree programs. There are hardly enough hours in a semester, in a quarter, and in a year to satisfy everything that professors and allied educators are asked to comply and complete within a stipulated time frame. The majority of institutions of higher learning are confronted with multiple problems including the federal and state, accreditation, and institutional requirements in order to validate that the recipients have, in actual fact, completed required credits hours for a degree programs. It is true that technology can motivate students to get involved in all-inclusive learning endeavors. In addition, information technology is certainly an expressive and effective communication and instructional delivery tool and must not be viewed as a magical solution to higher education instruction and the learning process.

Current education researchers, such as Esin (2011), Merrill (2009), Frick, et al. (2008) and Marzano et al. (2001) have maintained and advised that the mission of a successful integration of instructional technology in the educational settings must embrace a wide-range of interrelated instructional scholastic culture. Merrill (2009) further asserted that the expected

"scholastic culture" must demonstrate a binding instructional procedure that will provide a demonstration of content that is relative to the needed skills, which engage learners in peer-discussion, peer-demonstration, peer-collaboration and peer-critique. In addition, the foreseeable "scholastic culture" must include a broad range of opportunities to stimulate relevant cognitive structures through demonstrating of previous experience and empowerment of learners with innovative ways to explore and utilize all-inclusive newly acquired skills and expertise to function effectively in a connected society. These skills and goals can only be easily acquired and enhanced through the infusion of information technology in the educational setting.

The integration of computer information technology into the scholastic culture must be accepted as a journey of all-inclusive method of instruction and learning endeavors. Consequently, instructional technology is a credible vehicle of transformation and a viable benchmark for innovation, creativity, quality instruction and universal approach to learning. While many technologies are valuable resources, they must be used in a systematic method that will contribute to the development of human competence. Response to Question 10 *"I feel intimidated as a result of intensive use of technology for instruction and learning"* about users' feeling of intrusion of technology in their academic life, 49 out of 63 expressed that they were not unsettled and overwhelmed about the integration of technology in the educational enterprise. The successful incorporation of information technology in instruction and learning lies in a thoughtful approach to covering the course content in a traditional class session in order to obtain measureable outcomes of learners' performance. Authentic learning must include understanding, awareness and engagement of learners' in the critical-thinking, creation of new ideas, skills, productivity, reading, writing, communication and measurable academic performance (Wirth and Perkins 2008 and Esin 2011). The response to question ten have re-heightened my instructional

approach and led to the conclusion that effective and measurable academic performance should involve the following:

- Learners' collaborative efforts to integrate technology in all latitude of learning endeavors;
- Learners' conviction, acceptance and trust in learning how to learn, awareness and self-discovery;
- Learners' application of innovative and creative thinking, and development of first-hand reading, writing and communication skills;
- Learners' ability to coordinate the connection of new ideas with individuals, groups and reasoning above the realm of just classroom experience;
- Learners' determined effort to overcome the fear of making mistakes, master the quantity of physical and intellectual involvement and long-term benefits about the integration of computer technology in education.
- Learners' acquisition of conceptual knowledge, self-discovery, retention and acquired expertise; rather, than memorization and recalling answers from mobile phones during examinations;
- Learning how to learn must be viewed as a permanent change in the culture of human learning behavior, a solution to all inclusive learning processes and as dynamic shift from the ability to memorize and recall information just to pass examinations;
- Acceptance and recognition of how learning how to learn is a constructive effort that leads to productive, promising and open-ended reward.

A lifelong education is a noble journey of inheritance for everyone

In a traditional sixty (60) minute classroom session, two (2) minutes are used to acknowledge the presence of all students in attendance. However, the culture of education has

changed and professors and allied educators should recognize the fact that anyone that is able to wake up in the morning and get to classroom at scheduled time in preparation for academic activities has made a giant step toward a measurable education driven goal. Forty-six (46) minutes of the class period are fully utilized for instructor-led content lecture; ten (10) minutes are used for class collaborative engagement and discussing in attempt to establish connection with what has transpired in the past 46 minutes and the last two (2) minutes for roll call to ensure all students are in attendance.

Collaboration requires active participation

Computer Laboratory sessions are held once a week. Two (2) minutes are used for attendance and fifty-six (56) minutes are fully utilized for collaborative group learning and the last three (3) minutes to recapitulate the class activities. Indeed, the on-going utilization of technology in academic settings is not stressful as I had thought. The majority of students were able to recall their user name and institutional identification that serves as password, complete the assignment in word processing, electronic spreadsheet and Power Point, generate printouts and turn their assigned projects in on a scheduled date and time. Most effective learning is accomplished when students describe, discuss and defend assigned projects in a dignified attempt to come to agreed solutions.

Notably, the integration of instructional technology into educational settings has complemented original standard of traditional methods of instruction and learning. Indeed, the integration of information technology in education does not in any way guarantee fundamental change in the instruction and learning process and a magic solution to learners' academic performance. Education researchers like Moersch (1998), Esin (2013), Partee (2000) and Wirth and Perkins (2008) emphasize that professors and allied educators are fully responsible for the adoption of information technology as a promising delivery tool to prepare students on how to

solve academic puzzles and also as a terrain for self-discovery, academic achievement, the establishment of a balanced benchmark to monitor students' academic performance on a daily and monthly basis.

Integration of technology and learning endeavors

Education is a guaranteed life-long commitment and a journey that cannot be completed in just four years on a college campus. Learning is an open-ended expedition that requires comprehensive understanding of new information (comprehension), creation of new learning procedures (synthesis), validation of new information (analysis), times and efforts to retain acquired materials (assessment). Learning is a combination of intellectual awareness, mental capability, commitment and willingness to accept new information. It is my line of reasoning that the combination of instruction and learning is a noble vehicle for productive and promising avenue to learn different subject areas with greater precision and in more than one dimension. Wirth and Perkins (2008), in their studies on learning how to learn, support the premise that education, information technology, instruction and learning is a credible pathway to critical- thinking, productive outcomes and lasting solution to growth, productivity and citizenship.

Conclusion

In response to Question 1, *"Integration of technology in the educational process will promote the development of students 'reading, writing and communication skills."* 60 out of 63 students supported the view that successful integration of information technology in the classroom for instruction will promote the development of students' reading, writing and communication skills. In other words, the integration of technology in education, instruction and learning will certainly reinforce students' ability to learn and retain what has been learned. Integration, according to students' respondents, embodies an art of inclusiveness, unity and a scholastic tradition that should be accepted as a landscape, a credible vehicle of transformation and a universal method of

approach to instruction and learning. Response to Question 10, "*I feel intimidated as a result of intensive use of technology for instruction and learning."* Relative to users' feeling about the intrusion of technology in their academic life, 49 out of 63 respondents indicated that they are not unsettled and overwhelmed about the integration of information technology into the instruction and learning process. Respondents' assertion confirmed that the incorporation of information technology in education, instruction and learning process will enhance improved measureable outcomes of learners' performance with emphasis on reading, writing and communication.

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