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## TABLE OF CONTENT

Oil Exploration in Nigeria and Its Attendant Effects .....	1
CHRISTOPHER KEMAKOLAM DIKE.....	1
The Innovative Use of Social Media for Teaching English as a Second Language in South African Resource-Constrained Secondary Schools.....	2
CHRISTOPHER RWODZI, L.J. DE JAGER NHLANHLA MPOFU .....	2
Intergovernmental Policy Integration for Effective Service Delivery.....	10
COSTA HOFISI .....	10
Designing Localized Bilingual Surveys for Emotional Literacy and Intelligence Assessment.....	11
FAOUZI BOUSLAMA, LANA HIASAT, CAREN MEDINA, CHRISTINE COOMBE, ROSE MANSER .....	11
The Teaching Practice in a Rising Knowledge Society: Focus on a University in Uganda .....	28
FLORENCE NDIBUUZA.....	28
Efficacy of Rational Emotive-Behavioural Therapy on Anger Management among selected Secondary School Adolescents in Oredo Local Government Area of Edo State: Implications for Education and Teaching.....	29
GODWIN OGHOGHO IGBINOBA (ESQ.).....	29
Landfill Site Selection by Utilizing Ahp With Gis: A Case Study in Misrata Cit, Libya .....	40
IBTISAM ABDULSALAM ALBIRA, CHIJIJOKE UCHE EMENIKE .....	40
Assessment of the Use of Card Reader Technology in Improving the Electoral System in Nigeria.....	41
IDEYI CHIJIJOKE, O.....	41
Utilization of Digital Pedagogies Among University Academics in Rivers State, Nigeria: Problems and Prospects .....	50
JOSEPHINE UZOAMAKA ANEKWE .....	50
My Experience With Nursing Through Compassion .....	70
KALSANG CHOEDON .....	70
Educating Internally Displaced Persons, Re-Integration and Peace Building in Nigeria .....	72
KINGSLEY OTI EYETSEMITAN .....	72
Billion Oyster Project Curriculum and Community Enterprise for Restoration Science (Bop-Ccers) Proposal For Phase II Expansion.....	83
LAUREN BIRNEY.....	83

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Self-Study and the Educator: Autoethnography and Its Influence on Professional Practice in Higher Education.....	84
LAURIE WILLIAMS .....	84
Digital Literary Literacy: How to Operationalize for Educational Contexts .....	85
MAILI OW GONZÁLEZ, ALEJANDRA MENESES .....	85
In the Eyes of the Beholder: A Mixed Method Analysis of Challenges of Computer-Based Test From Candidates’ Perspectives.....	87
MARCEL IKECHUKWU ANEKWE .....	87
Organizational Development in Chile Towards a "Uberization of the Economy" .....	98
NELSON LAY.....	98
The Salience of Teaching Practice in Educational Outcomes Comparative Analysis of Teachers in Public and Private Secondary Schools in Nigeria .....	100
OKORO NGOZI PRISCILLA.....	100
Multiple Sexual Partners and Associated Risks Among Adolescent Females Reared in Step-Parenting Households in the Eastern Cape, South Africa.....	101
S. MKIVA and J.G. KHESWA .....	101
“Proficiency Arabic Language Test” - PALT.....	102
SARAH DAHER .....	102
Digital Initiatives for Access and Quality in Higher Education: An Overview.....	104
SHAKEEL AHMAD .....	104
School Principals’ Roles Toward Teaching and Learning in Rwanda: Practices and Challenges in Four Basic Education Schools.....	106
UKWIZAGIRA EMMANUEL.....	106

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# OIL EXPLORATION IN NIGERIA AND ITS ATTENDANT EFFECTS

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## ABSTRACT

*Oil exploration has over the last five decades impacted positively on the socio-economic resources and external reserves of Nigeria and has disastrously impacted on the socio-physical environment of the oil-bearing communities. The typical Nigerian is a farmer this activity has massively threatened the peasant economy, the environment and the entire livelihood and basic survival of the oil communities. This research work is concerned with the ways oil is exploited and explored in Nigeria and the myriad of effects that follow such economic activities. One major contemporary challenge is the compliance with environmental standards for exploitation, exploration and compensation for damages. In the Third World countries or in countries where the operating laws are not enforced, not easily enforced or are not enforceable, there are always problems on the environment. This work took a cursory look at the contamination of the environment and multifaceted negative effects of oil exploration, not overlooking the positive impacts. There has been extensive destruction of the natural habitats leading to people losing their normal means of livelihood. The Multinational corporations (MNC) are the main actors in the oil industries, and their activities which have brought about some social evils such as environmental degradation, prostitution, rape, high cost of living, massive unemployment, poverty, food insufficiency, health hazards, gas flaring, pipeline leaks, loss of biodiversity, destruction of habitats, lack of compensation and clean ups, broken promises, kidnapping, maiming, abduction of expatriates, etc were also elucidated. The oil communities believe that they have been deprived of their land and means of sustenance, alienated by the government and marginalized and neglected by the oil companies and this has led to various forms of altercations in the area. The approach to this work is based on analysis of literature, available textbooks, journals, magazines, articles and newspaper publications. The study also examined ways and means of ameliorating the problems of the host communities, placating and assuaging their fears and sufferings. In conclusion, it was found that exploration of oil in Nigeria is a blessing to some people and a curse to some others. Solutions were also proffered as to how some of the problems created may be reduced and how the benefits accruing from oil exploration can be sustained and maximized.*

# THE INNOVATIVE USE OF SOCIAL MEDIA FOR TEACHING ENGLISH AS A SECOND LANGUAGE IN SOUTH AFRICAN RESOURCE-CONSTRAINED SECONDARY SCHOOLS

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## ABSTRACT

Curriculum change and innovation due to technological development has necessitated the inclusion of digital tools and digital literacy in the teaching of English as a second language in the South African curriculum. The need to improve English proficiency and inclusion of social media in language teaching has resulted in teachers having to develop new teaching strategies incorporating digital tools. In South Africa, English teachers in township settings have to develop teaching strategies suitable for teaching English using social media platforms particularly in resource constrained secondary schools. From literature and education policies, teaching of digital literacy is strongly recommended but teachers in some township environments are not pedagogically capacitated to teach and use social media in teaching English. To explore the experiences of such teachers, this study explored the use of social media for the teaching of English as a second language in township schools. The study used qualitative approach in an exploratory case study design to understand teachers' initiatives and strategies in teaching English as a second language using social media. Data collection was done using semi-structured interviews with open-ended questions and document analysis. Teachers' voices, actions and documents on the use of social media were analysed inductively and thematically. The research findings indicate that the sampled English teachers used social media for collaboration, networking, communication and out-of-school digital literacy practices as their initiatives. These digital initiatives lead to the utilisation of digital connection platforms for socialisation and teaching and learning English. In addition to dividends of connectivism, visual communication and cyber linguistics were found to have become critically important practices for learners learning English as a second language. The implication is that the education policy makers and planners in South Africa need to revisit the policy on e-learning and ICT usage in schools in order to incorporate the methodological requirements and competences for teachers to use in the teaching of English using social media. In the light of these findings, I recommend that curriculum reform should incorporate new pedagogical strategies for teaching and use of digital literacy to improve English proficiency by learners. Teacher initiatives are a crucial part of adaptive resilience, as teachers need to adjust to shortages of digital technology resources and connectivity. In addition to improvements in policy measures, English teachers in resource-constrained township secondary schools need to improve their digital literacy skills in order to line up themselves for online and out-of-school literacy learning requirements.

**Keywords:** Second Language Learning, Social Media, Teacher Initiatives, Teacher Resilience.

## Introduction and Background

This study explores the initiatives taken by teachers in township secondary schools on curriculum innovation necessitated by the deployment of the Information and Communication Technology (ICT) policy in the teaching of English in township secondary schools in the Gauteng province, South Africa. Three issues in South African education are pertinent today. The first is the pressure of technological advancement and innovation (Mafenya 2013), the second is the English language proficiency of teachers and learners (Nel & Muller 2010), and the third is resource-constrained schools in townships (Ebersöhn 2017). Technological development the world over has commanded curriculum planners and practitioners to incorporate the use of digital tools in high school curriculum implementation (Prensky 2001). The use of digital tools for teaching different subjects and for research is a global phenomenon, and progressive schools are making efforts to improve their digital infrastructure in order to enhance their teaching. The same applies to South Africa. In my opinion, the introduction of computers and the consequent use of digital tools in the teaching of English in particular, resulted in a pedagogical and skills gap for English teachers whose preparation did not incorporate teaching methods involving digital literacy. In the South African context, a knowledge gap exists in strategies of how digital literacy is taught in English to improve English language proficiency of learners in township secondary schools.

In view of the knowledge economy, South Africa has eleven official languages as its linguistic infrastructure, but English is widely used as a language of teaching and learning by the Department of Basic Education (DBE 2011:8). While English is used for teaching and learning, it is taught and used as a second language by many learners with limited proficiency. The proficiency includes the abstract cognitive academic language skills required for thinking and learning (DBE 2011). English is also taught as an independent subject in secondary schools. However, some teachers and education specialist have difficulties in the competent use of English in educational domains. Uys, Van der Walt, Van der Berg and Botha (2007) posit that while it is acceptable that English teachers play a leading role in providing learners with knowledge, skills and understanding for reading, listening and speaking effectively, Crandall (1998) indicates that this may not be attainable if teachers are incapable of assisting the learners in competent and proficient English. Recent policy (DBE 2011) places a particular emphasis on teachers to become proficient in teaching English as a First Additional Language at primary school level in order to build towards better proficiency in secondary schools. In order to improve English language proficiency, digital literacy was incorporated into the South African English syllabus, and requires sound pedagogical support in order to achieve the outcomes. Mafenya (2013) provides insights into e-learning for first year university students and notes the lack of preparedness by students from rural areas and township environments regarding technological and digital equipment.

Ebersöhn (2017) indicates that township secondary schools are characterised by a very high teacher-learner ratio, poorly-trained teachers, a lack of resource materials such as textbooks and electronic devices, and space for teaching and learning. The lack of space results in the erection of temporary classrooms which do not have electricity or internet connections to allow for possible digital literacy teaching. Mafenya (2013) says that teachers in township secondary schools have limited pedagogic skills and strategies to integrate the teaching of English through the application of new pedagogical approaches involving digital literacy. Historically, township secondary schools were disadvantaged in terms of teaching and learning materials, academic service provision and infrastructure as compared to the former model-C schools (Ebersöhn 2017). The limitation in authenticated pedagogic strategies creates the gap for this study to explore the initiatives taken by English teachers in teaching digital literacy. Digital literacy is not about providing digital tools for learners and teachers, updating software, or connecting learners to various networks, but it is about how knowledge is constructed on a variety of socio-cultural digital literacy practices. More important for this study was the exploration of the teacher initiatives, strategies and approaches that were used to teach digital literacy in English for

Currently, some teachers are learning to use digital tools on their own or getting assistance from fellow teachers. More specifically, this study uncovered initiatives that are taken by teachers as they adapt to their pedagogy using digital tools for digital literacy in English. For this reason, I argue that the process of adjusting to new strategies and approaches to teaching digital literacy is part of resilience and therefore needs to be explored.

In this research teacher resilience is understood as an adjustment to varied situations and an improvement of competence in the face of adverse conditions. Windle (2010) defines resilience as the process of effectively negotiating, adapting to, or managing significant sources of stress or trauma. Teachers' adaptation to new methods and paradigms in teaching and adjusting to classrooms with audio visual material is part of resilience. In this exploration, resilience in English teaching needs to be studied in order to make a pragmatic affiliation to digital literacy. The inclusion of teacher resilience in this research is an attempt to understand teachers' initiatives to adapt to new methodologies. Digital literacy in the English intellectual puzzle consists of digital tools, subject content knowledge, adaptation to new learning and teaching material and the pedagogic content knowledge (Blau, Peled &

Nusan 2016). It was the inadequacy and lack of authentic pedagogic strategies that prompted me to explore teachers' initiatives as part of their resilience to teach digital literacy in resource-constrained secondary schools. The gap exists between the content, technological competence (digital competence) and the pedagogic strategies used to teach digital literacy (Pettersson 2017). Poorly-prepared English teachers in resource-constrained secondary schools were participants in the exploration of their initiatives on teaching digital literacy to improve proficiency in English in preparation for tertiary education and the world of work

### **Conceptual Framework**

The major interacting concepts in this exploration are teacher initiatives, digital literacy, and English curriculum pedagogy in township secondary schools. Teacher initiatives are defined as imagined and created strategies of incorporating digital tools into the pre-active, inter-active and post-active stages of their teaching (Leask & Pachler 2013, Hague & Payton 2010). These can be new inventions or creations, or modifications that support the teaching and learning programme – particularly in adverse situations. Hague and Payton (2010) posit that initiatives are generational steps involving creativity, innovativeness and an ability to demonstrate job ability – especially in adverse conditions. In this context, initiatives include human creations, modifications and curation of existing strategies and skills to suit new settings. These initiatives resemble properties of courage, readiness and being proactive in changing the learning landscape for the benefit of the learner (Pahomov 2014, Savage & McGoun 2015). Resilient teachers adapt to new curriculum demands by showing courage, readiness and a positive attitude in order to adjust to new settings

### **Theory underpinning the study**

Social media combines a number of human digital literacy practices. According to Hicks and Turner (2013) creativity, networking, content selection, entertainment, electronic writing, editing and evaluation, critical thinking, and problem-solving through collaboration form part of practices imbedded in the social media interaction process. For this study, socialisation on social media platforms helped learners develop skills through collaboration. Social media provided electronic writing opportunities, creativity in English as a subject in school and an ability to analyse information presented to them in different formats. The knowledge construction as indicated by Savage and McGoun (2015) is informed by constructivism.

Constructivist theories propagate that learning is achieved through active construction of knowledge in different contexts and to serve different purposes (Hew & Cheung 2008). In addition to active construction of knowledge, Wang (2008) says that the belief of constructivism is founded on the premise that knowledge is actively constructed by learners rather than transmitted by the teacher. In the same vein, learners are active knowledge constructors rather than passive recipients. Participation by learners on social media in different diverse groups presents opportunities for them to construct knowledge in their different context. At both concept and theory level, learner participation as part of response to presence of functional technology in behaviourist perspectives and cognitivist context makes a perfect merge and guidance to the teaching and learning of English as a second language learning. In this case, the technology provides stimuli and motivation while the content discussed on line involves cognitive process as the learner and teacher construct knowledge, brings an awareness and understanding of concepts in English as a second language.

### **Methodology**

The study is rooted in the Interpretivist-constructivist world view. According to Creswell (2013) interpretivism attests to how meaning is assigned by participants to their actions as well as how social constructions yield knowledge about their practices. Interpretivism focuses on participants' subjective experiences on how they construct the social world by sharing meanings. Interpretivists assume that reality is not objectively determined, but socially constructed (Nieuwenhuis 2010). Constructivism belongs to the broad framework of interpretivism and was used as foundation for the research process. We used the qualitative approach to explore the strategies used on social media by English language teachers in selected resource constrained secondary schools. We used a case study design for this exploration because the use of social media for teaching English as second language in resource constrained secondary schools is a critical issue in Tshwane North district due to lack of digital resources and limited pedagogical support from curriculum planners. Yin (2012) says that an exploratory case study is pertinent when the research addresses either descriptive question or exploratory question.



### **Selection of Participants**

The study selected English teachers and learner in Tshwane North district but specifically from the resource-constrained secondary schools. The schools are surrounded by informal settlements and the missing middle families. So, some learners have access to digital technology while a majority of teachers use smart phones. Four teachers from three secondary schools were free give their views regarding the use of social media for teaching English as a second language. The English teachers are those who participate on WhatsApp and Facebook on matters relating learning and teaching of English. One teacher from the fourth school was not free to provide access to content on their smart phone.

### **Data Collection Processes and Analysis**

We used individual and group interviews, field notes (jotted down during observations and discussions) and document analysis as research instruments to explore participants' initiatives on teaching English at secondary level (Flick 2014). We used audio recordings of the interviews, and writing pads for capturing additional data (Flick 2014). Scheduled interviews with selected English teachers were done and their views recorded with their permission. We analysed electronic texts, images, pictures and group chats from participants' cell phones to collect data on social media use in the teaching and learning of English as a second language. Documents analysed included the texts on social media, learner activities, pictures and any other graphic images linked to use of social media in learning English. The spiral framework that we used began during data collection when we were managing the data, then organised the data (files and units) followed by reading (making margin notes and comments) and reflecting, as well as forming initial codes. The iterative process continued and was repeated as patterns emerged. We adhered to the ethical considerations of the study in accordance with the recommendations from the Department of Basic Education in South Africa.

### **Findings**

English teachers and learners who were participants use online resources through digital connection to research and then share the information with their classmates on social media groups despite the fact that the use of social media in teaching English is not prescribed by the DBE policy on methodology. The platforms commonly used by English language teachers and learners are WhatsApp, Facebook, Instagram and Twitter. Learning English also involves the innovative use of new and existing cartoons, games and puzzles to understand and practise the use of different language aspects using the social media platforms. Learners and teachers share information on parts of speech, writing skills, study skills and use of visuals for communication in English. The practices are done on digital platforms and participants curate, share, receive and modify content and images as they improve their English language proficiency.

Findings reveal that teachers and learners combine socialisation, working and learning by extending the hours through digital literacy practices. While on the school premises, teachers and learners use smart phones and tablets for typing, storage, transfer, curation and retrieval of information but they continue to access the same information sources even after school on the smart phones. In other cases, teachers use applications such as Share it and Bluetooth to share information and with learners and colleagues. I realised that participants' transition from traditional methods to modern digital pedagogic strategies needs support, because the traditional approaches and language learning theories in a constructivist ideology help to provide for integrating knowledge constructed with the beliefs and values of the community (Belshaw 2012). I mean that social media communication and the use of films and videos in the South African context support a holistic approach to education that seeks to solve human problems in their environment.



**English teachers’ initiatives on use of social media for teaching English as a second language**

**Summary of findings**

Caption 1	Caption 2	Caption 3
Use of digital tools for creative writing, resource and communication in different contexts  •Learning as a social practice in social context •Developing pedagogic strategies on teaching digital literacy	collaboration, networking, learning communities and group (chats) socialisation •Life-long learning (combining old and new skills), connecting to digitally active groups, online opportunities •Developing different literacy practices for different purposes in varying contexts	Emerging form of cyber linguistics •Resource constraints (material and skills constraints) •Limited approved pedagogical strategies for use and teaching of digital literacy •No formal assessment criteria and opportunities for digital tasks

In this context, English language teachers in resource-constrained secondary schools are devising pedagogical strategies such as forming social network groups, presenting learners on social media platforms, and using supplementary digital tools such as cell phones to support the teaching of English as a second language. In township secondary schools learning communities with extended learning hours are created on the basis of the use of digital connections and social network groups for learning and teaching of English. The combination of learning and socialising for teaching and learning of English is quite novel in townships and significantly improves language proficiency.

Computers and digital devices are used for educational games, networking and collaboration among learners and teachers. In support of the strategies, the digital innovative practices create learning and teaching communities on the basis of availability of the connectivity and digital tools. In addition to the practices, teachers use social media for discussions of school work and social issues with learners (Dzvpatsva, G.P., Mitrovic, Z. & Dietrich, A.D., 2014 ). In this process teachers and learners use collaboration, connectivism, networking, group work and online team work to support the teaching and learning of English using digital tools. Other strategies include the use of video clips from YouTube, cartoons and pictures from Instagram as sources of information for storytelling, as well as the teaching of English in different contexts.

One of the students said;

[uummm ehh clearing her voice] I share knowledge with my peers on our social media (Whatsapp) group chat. The ask questions and I also ask questions. The good thing about Whatsapp group is that I can attend to the questions any time and sometimes share jokes they help with solutions or guidelines on life challenges. The use of social media is very very nice. I can even chat to my friends any time of the day or ask questions to teachers any time.

In view of the comments from the participants, I observed that they enjoy the use of social media. The texts analysed and images show how English teachers communicate and discuss matters relating to their school work. The extract below shows how learners and teachers communicate on social media.

## Discussion

The fundamental experience of learners in the social media connection brings a sense of belonging to a network where social matters and academic issues are combined. The practices connect and link with constructivist tenets where knowledge is constructed collaboratively in respective contexts. Learning in this context as mentioned by Yarbro, McKnight, Elliott, Kurz and Wardlow (2016) takes place through collaboration (constructivism), self-correction, self-regulating and self-rewarding. Learning in social media is personalised because each learner is connected to groups of their choice in accordance with their interests and motivation. This study discovered that learners join chat groups such as the cartoon club, spelling competition group on the basis of their interest. Social media incorporates creation of new knowledge through recycling, remix and legitimisation of recycled existing material. This way, new form, patterns, structures and genres of knowledge are created and shared among the group members (Ingre and Basil (2017).

Participants who take up initiatives create strong partnerships with learners in both social and academic matters. Learners seek advice in both social and academic issues on social media platforms. Teachers have become online parents, care givers, mentors, supervisors and counsellors in almost 24 hours of every day. The study found that teachers can provide individual support to learners if group and individual connections with their learners is made available even after school. The social media according to patterns from research reveal that class activities are extended beyond the school timetable thereby creating more opportunities for learning. Based on the constructivist perspective, the interaction of learners on social media as they socialise, creates a platform for them to share knowledge with their teachers, shape their thinking, solve problems and apply to different solutions to challenges in their life (Hew & Cheung 2008). The study reveals that social media communication provides opportunities and teachers learners a second language in diverse contexts and provides access to other digital competence facilities. For example, social media socialisation and learning at the same helps learners with typing skills, editing, copying and pasting, forwarding and resolving differences ideological differences in a professional way. The revealed practices and their implications in language education are a product of constructivist underpinning principles (McGoun 2015).

Digital tools provide access to videos on YouTube, pictures, cartoons, text, diagrams, tables and graphs all combined to communicate and present content to both teachers and learners. The experience of merged learning environments, social and work related settings make digital literacy a socio-cultural practice and excites learners when they combine work, play and learning in one continuous process. Multimodalities and multiliteracies creates opportunities for learners as they develop their identities in social media participation and share cultural beliefs and values across ethnic groups in a multilingual and multi-ethnic South Africa. Learners are experiencing learning in multicultural contexts. Teachers indicated that the social media group chats and discussions took place across ethnic and cultural groups. In situations where social media is used, learners experience, construct, analyse and question knowledge in multiple contexts (Lotherington & Jenson 2011). This practice creates rigour in learning and is based on partnership.

## Conclusion

In view of the technological development, social media supports the teaching of English as a second language by providing electronic writing opportunities, use of symbols and images for communication thereby improving proficiency, multiliteracy, and multimodality skills. Teachers need to develop pedagogical skills in the use of social media in teaching English as second language. In terms of policy development and implementation, the Department of Basic Education needs to provide professional training for English languages teachers to be able to use social media in the teaching of English in resource-constrained secondary schools.

## References

- Blau, I, Peled, Y & Nusan, A. 2016. Technological, pedagogical and content knowledge in one-to-one classroom: teachers developing “digital wisdom”. *Interactive Learning Environments*, 24(6):1215–1230.
- Crandall, JA. 1998. Collaborate and cooperate: teacher education for integrating language and content instruction. *English Language Forum*, 38(1):2–9.
- Creswell, JW. 2013. *Qualitative inquiry and research design; Choosing among five approaches*. London: Sage Publications.
- DBE, vide Department of Basic Education, 2011.
- Dzvpatsva, G.P., Mitrovic, Z. & Dietrich, A.D., 2014, ‘Use of social media platforms for improving academic performance at Further Education and Training colleges’, *South African Journal of Information Management* 16(1), Art. #604, 7 pages.
- Ebersöhn, L. 2017. Enabling spaces in education research: an agenda for impactful, collective evidence to support all to be first among un-equals. *South African Journal of Education*, 36(4). DOI: 10.15700/saje.v36n4a1390.
- Hague, C & Payton, S. 2010. *Digital literacy across the curriculum*. Bristol: Futurelab.
- Hicks, T & Turner, KH. 2013. No longer a luxury: Digital literacy can’t wait; *English Journal* 102.6 58-65.
- Ingre, D & Basil, R. 2017. *Engineering communication: A practical guide to workplace communication for Engineers*. Cengage Learning, Brazil
- Flick, U. 2014(a). *The Sage handbook for qualitative data analysis*. London: Sage.
- Hew, KF & Cheung, WS. 2008. Attracting student participation in asynchronous online discussions: a case student of peer facilitation. *Computers and Education*, 51(3):11–124.
- Leask, M & Pachler, N. 2013. *Learning to teach using ICT in secondary school: a companion to school experience*. Abingdon: Routledge.
- Lotherington, H & Jensen, J. 2011. Teaching multimodal and digital literacy in L2 settings: New literacies, New basics, New pedagogies. *Annual Review of Applied Linguistics* 31 226-246.
- Mafenya, PN. 2013. An investigation of first-year students’ pedagogical readiness to e-learning and assessment in open and distance learning: a University of South Africa context. *Mediterranean Journal of Social Sciences*, 5(20):353–360.
- McGoun, C. 2015. *Teaching in a networked classroom*. London. Routledge.
- Nieuwenhuis, J. 2010. Analysing qualitative data, in *First steps in research*, 4th edition, edited by K Maree. Pretoria: Van Schaik:69–97.
- Nel, N & Muller, H. 2010. The impact of teachers’ limited English proficiency on English second language learners in South African schools. *South African Journal of Education*, 30(1):635–650.
- Pahomov, L. 2014. *Authentic learning in the digital age: engaging students through Inquiry*. Alexandria: ASCD.
- Prensky, M. 2001. Digital natives, digital immigrants. *On the Horizon*, 9(5).1-6.
- Pettersson, F. 2017. On issues of digital competence in educational contexts: a review of literature. *Edu info Tehnol*, :1–17. DOI: 10.1007/s10639-017-9649-3.

- Savage, J & McGoun, C. 2015. *Teaching in a networked classroom*. London: Routledge.
- Wang, Q. 2008. A generic model for guiding the integration of ICT into teaching and learning. *Innovations in Education and Teaching International*, 45(4):411–419.
- Uys, M, Van der Walt, JL, Van der Berg, R & Botha, S. 2007. English as a medium of instruction: a situation analysis. *South Africa Journal of Education*, 39(2):321–336.
- Windle, G. 2010. *What is resilience? A review and concept analysis*. Cambridge: Cambridge University Press.
- Yarbro, J McKnight, K Elliott, S Kurz and Wardlow, A (2016) Digital instructional strategies and their role in classroom learning.
- Yin, RK. 2012. *Qualitative research from start to finish (2<sup>nd</sup> Ed)*. London: The Guilford Press.

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## INTERGOVERNMENTAL POLICY INTEGRATION FOR EFFECTIVE SERVICE DELIVERY

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### ABSTRACT

*This article examines policy integration between two spheres of government focusing on the Provincial Growth and Development Program (PGDP) of the Eastern Cape and the Integrated Development Plan (IDP) of Amathole District Municipality in South Africa. Currently not much research has been carried out in this area focusing on policy integration between two spheres of government in South Africa. This is an empirically grounded study based on the use of a combination of data collection methods, analysis of primary and secondary sources of data including government documents, administering in-depth interviews to a range of informants within government, the community and a questionnaire survey on a sample drawn from members of the community in Amatole district and finally the use of Amatole District as a case study which was the major unit of analysis. Findings reveal that there is lack of integration of policy which implies that legislating for Intergovernmental policy integration does not automatically translate to integration, rather, it is the enforcement of the legislation that matters. Policy integration also suffers from policy inconsistency, a plethora of legislation, competing if not conflicting priorities, non-attendance to Intergovernmental Relations forums, lack of cooperation by sector departments, contradictions between legislation, and turf wars. Integration requires political will, willingness to integrate even if integration is going against the tide. Moreover, policy integration is better achieved under conditions supporting joint accountability while the financial allocation system must grant incentives for joint policy making.*

**Keywords:** Policy Integration, Integrated Development Plan, Provincial Growth and Development Plan.

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## DESIGNING LOCALIZED BILINGUAL SURVEYS FOR EMOTIONAL LITERACY AND INTELLIGENCE ASSESSMENT

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### ABSTRACT

*Universities and colleges across the world are constantly faced with the challenge of assessing the emotional skills of new student intake and providing them with appropriate orientation and counseling services to help them succeed in their academic and personal lives. There are several emotional intelligence (E.I.) tools available to measure students' E.I. skills. However, these tests appear to be lacking clarity and do not take into consideration the linguistic abilities of students, whose mother tongue is not English. As these emotional intelligence tests are becoming an essential tool and an integral part of recruiting, orientation, and counseling strategies at the Higher Colleges of Technology (HCT) in the United Arab Emirates (UAE), it was essential to design and develop a more constructive assessment tool that considered the bilingual aspect of our students, and their level of literacy in the English language. Six bilingual surveys were designed to assess new students' skills in Self-awareness, Self-management, Social Awareness, Relationship Management, Adaptability, and General Mood in the Foundations and Bachelor common year programs. Results show that E.I. levels were inconsistent for the Foundations students while the Bachelor common year students were socially aware, and their adaptability was high reflecting the environment they live in.*

**Keywords:** Emotional Intelligence, Localization, Bilingual, Survey, Assessment, Gulf.

## 1. Introduction

Educational institutions have a considerable interest in identifying links between personality traits and academic success. It has long been known that intelligence quotient (I.Q.) alone is not the sole, or a particularly good, predictor of success. Angela Duckworth's (2016) studies center on what she terms 'grit' and its placement as a good indicator of success in all aspects of life, including education, can be traced back to studies that clearly indicate, unsurprisingly, that conscientiousness is a particularly good indicator of success. Learning rarely occurs in isolation, and so our ability to accurately perceive how others feel or react may also be an indicator, or at least a contributor, to educational success. The capacity to receive emotions, simulate emotion-related feelings, understand the information of those emotions, and manage them is one definition of what has been termed Emotional Intelligence (E.I.) (Mayer & Salovey, 1997). This form of intelligence has been the subject of a wide range of studies related to the workplace and in particular leadership qualities. Chen et al. (1998) found that in their study, 90% of success in leadership positions was attributable to E.I. Other studies have also indicated (e.g. Tinto 1993), albeit less emphatically, that high scores in E.I. contribute to success in life in general. It seems sensible then to investigate the influence E.I. has on the well-being of students in educational settings and whether or not this contributes to academic success. Previous studies in this field have had mixed results, for example, Parker et al. (2005) found limited evidence for a link between high E.I. and academic success among medical students but Parker et al. (2004a, 2004b) found that "academic success was strongly associated with several dimensions of emotional intelligence" in their study of 372 Canadian first-year university students. There is certainly enough evidence to investigate further, and this is reflected in Yale's School of Management currently testing incoming students for E.I. to see if these traits transfer to success later in the students' academic careers. While Vela (2003) found a significant correlation between E.I. and academic skills, he concludes that the "inability to connect cognitive and affective domains in student development has resulted in poorly prepared students in society."

An additional area where E.I. links to student success is in the area of English language proficiency. Hassan and Elhaj (2015) discovered a positive relationship between E.I. and students' increased development in English language competence. The Higher Colleges of Technology, a system of 16 English medium academic institutions located in the UAE are working towards helping their students to increase their bilingual linguistic abilities in both Arabic and English. Other higher order skills that have been prioritized include helping students develop their leadership in 21st century skills. Therefore, since emotional intelligence is considered an important 21st century skill, developing a localized and bilingual E.I. assessment battery is of critical importance.

The literature on E.I. provides very few examples of effective systematic interventions. Zeidner et al. (2009) point out that after twenty years of research, there are still very few examples of successful interventions that specifically increase E.I. and that while self-contained seminars may raise the awareness of E.I., they are unlikely to affect permanent change. However, Nelis et al. (2009) lead a series of workshops where elements of E.I. remained raised 6 months after the interventions. Dacre Pool and Qualter's (2013) extension of this work was able to develop interventions based on the Salovey and Mayer Four Branch Model of ability E.I. that successfully raised elements of E.I. within their large study group of students from an English University.

The reason for a valid Arabic-English E.I. assessment to be established links to research that showed the need for consideration of cultural differences during the interpretation of E.I. When the cultural perspective shifts, it has been discovered that what might show E.I. in one culture, may not be defined to the same degree of E.I. in another culture (Wong et al., 2007; Brackett & Geher, 2006; Hiasat 2019).

The above mentioned-research demonstrates the importance of having a useful emotional intelligence-testing tool whose usage can occur in collaboration with student recruitment, orientation, and guidance counselling support strategies at the HCT in the UAE. Therefore, the purpose of the research was to design six localized bilingual surveys to evaluate the E.I. skills of the new entry-level students at Dubai Men's College in the UAE. These surveys were intended to measure students' skills in the E.I. areas of Self-awareness, Social-awareness, Relationship Management, Self-Management, General Mood and Adaptability. The developed surveys were used to assess the E.I. skills of students in the Bachelor common year and Foundations programs. This article will present a review of the existing E.I. assessment tools as well as a detailed description of how the localized bilingual surveys were designed and their relationship to the existing tools in the literature.

## 2. Review of existing E.I. assessment tools

There are many measurement tools available for E.I., with varying levels of complexity, expertise and cost required for proper administration. The Emotional Quotient Inventory (EQ-i) developed by Reuven Bar-On (2012), Emotional



and Social Competence Inventory (ESCI) and Mayer, Salovey, Caruso Emotional Intelligence Test (MSCEIT) (2012) are the most well know assessments, but are also relatively difficult to administer due to their high cost.

**2.1. Reuven Bar-On model**

Reuven Bar-On is a clinical psychologist and a leading researcher in emotional intelligence who introduced the measurement of emotional and social competence in a quantitative approach. The Bar-On model was developed over a period of 17 years and on 3,831 adults in North America (Bar-On, Handley, & Fund, 2006). The model was supposed to predict human behavior and performance and was described as one of the three main models of emotional intelligence; Mayer-Salovey-Caruso emotional intelligence test, Goleman’s emotional competence inventory, and the Bar-On emotional quotient inventory (Spielberger, 2004). The Bar-On EQ-I model consists of 133 items that are based on a 5-point response scale (Bar-On, Handley, & Fund, 2006). The responses to this measurement would fall into 15 subscale scores in the categories of intrapersonal, interpersonal, stress management, adaptability, and general mood.

**2.2. Mayer, Salovey, Caruso**

The first scales of emotional intelligence date back to the 1990s while the multifactor emotional intelligence scale and the companion adolescent version were developed later (Mayer, Perkins, Caruso, & Salovey, 2001). The Mayer-Salovey-Caruso emotional intelligence test (MSCEIT) is an ability-based test that measures four branches through 141 test items (Consortium for Research on Emotional Intelligence in Organizations, 2018). The four branches of emotional intelligence are perceiving emotions, facilitating thought, understanding emotions, and managing emotions (Mayer, Salovey, & Caruso, 2012). In a review of the MSCEIT test, Skaar (2007) discussed that the test is based on a series of tasks related to emotional problems and the test booklet must be scored by the publishing company. Therefore, the test scores must be either purchased from a web-based response or sent to the company for scoring. As such, it is not possible to review the test without purchasing it. The assessments are available online for purchase and for receiving the score reports.

**2.3. Goleman model**

In his oft-cited book, Daniel Goleman (1995) defines Emotional Intelligence as the ability to realize your own emotions and those of others, the ability to get self- motivated, and the ability to manage one’s own emotions and relationships with others. Goleman (1995) uses the following four quadrants to define the skills and behaviors for emotional intelligence (See Table 1):

TABLE 1. Daniel Goleman’s (1995) Four Dimensions of Emotional Intelligence

<p><b>Self-awareness:</b></p> <ul style="list-style-type: none"> <li>• Self-awareness</li> <li>• Accurate self-awareness</li> <li>• Self-confidence</li> </ul>	<p><b>Social Awareness:</b></p> <ul style="list-style-type: none"> <li>• Empathy</li> <li>• Organizational awareness</li> <li>• Service</li> </ul>
<p><b>Self-management:</b></p> <ul style="list-style-type: none"> <li>• Self-control</li> <li>• Transparency</li> <li>• Adaptability</li> <li>• Achievement</li> <li>• Initiative</li> <li>• Optimism</li> </ul>	<p><b>Relationship Management:</b></p> <ul style="list-style-type: none"> <li>• Inspiration</li> <li>• Influence</li> <li>• Developing others</li> <li>• Change catalyst</li> <li>• Conflict management</li> <li>• Teamwork and collaboration</li> </ul>

**3. Designing and developing constructive surveys**

The original inspiration for our emotional intelligence inventory was the work of Goleman (1995) who defined emotional intelligence as “the capacity for recognizing our own feelings and those in others, for motivating ourselves,

for managing emotions well in ourselves and in our relationships (p. 1).” Goleman used four quadrants to define the skills and behaviors for emotional intelligence. The Goleman model is illustrated in Table 1.

In 2009, Cartwright and Solloway refined Goleman’s 1995 definition and suggested that emotional intelligence “is the ability to understand, accept and recognize our own emotions and feelings, including their impact on ourselves and other people and to use this knowledge to improve our own behaviors as well as to manage and improve our relationship with others (p. 1)”. Like Goleman, they recognized four core competencies of emotional intelligence: Self-awareness, Self-management, Social-awareness and Relationship Management. Their model, however, places Self-awareness at the core of emotional intelligence. It is their belief that unless an individual has a deep and clear understanding of self, they cannot effectively develop and manage the remaining three quadrants or triangles. The Cartwright and Salloway (2009, p. 2) model are depicted in Figure 1.

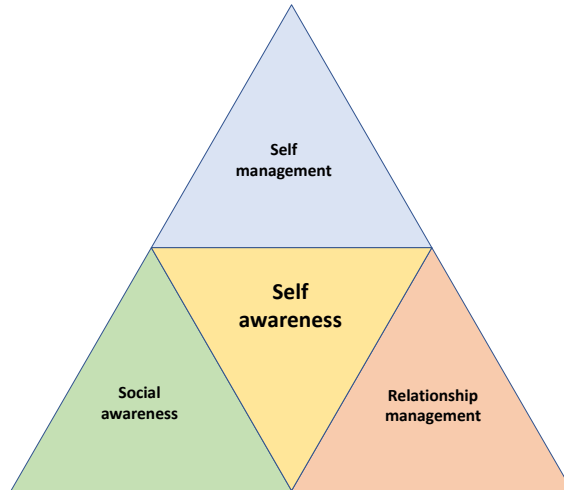


Figure 1. Cartwright and Solloway (2009) Emotional Intelligence Model.

Based on their triangular model, Cartwright and Solloway (2009) developed a series of questionnaires that work in tandem with one another to assess the core skills of emotional intelligence. (See Table 2).

TABLE 2. Cartwright and Solloway (2009) Questionnaires of Core E.I. Skills

Self-awareness			Self-management		
Q #	Question: provide a rate on your skill for the following where 0 means no skill and maximum (5 or 10) means skillful.	# Grad	Q #	Question: provide a rate on your skill for the following where 0 means no skill and maximum (5 or 10) means skillful.	Number Grade
1	I understand and know myself	/1	1	I understand and use self-coaching techniques	/5
2	I know my values and beliefs	/5	2	I understand and use the differences between self-esteem and self-respect	/5
3	I have self-confidence in all situations	/5	3	I am able to become an effective role model	/5
4	I understand and use integrity at all times	/5	4	I can manage personal change effectively	/5
5	I understand my own personal power and its impact on others	/5	5	I set personal goals and take actions towards them	/5
6	I am comfortable in my own skin	/5	6	I practice positive thinking	/5
7	I know what motivates me	/5	7	I can work effectively with my intuition	/5
Total Grade		/4	Total Grade		/35
Social-awareness			Relationship management		

<i>Q #</i>	<i>Question: provide a rate on your skill for the following where 0 means no skill and maximum (5 or 10) means skillful.</i>	<i>Number Grade</i>	<i>Q #</i>	<i>Question: provide a rate on your skill for the following where 0 means no skill and maximum (5 or 10) means skillful.</i>	<i>Number Grade</i>
1	I recognize and value differences and similarities between people	/5	1	I actively seek solutions and solve problems by resolving conflicts	/5
2	I recognize and value differences and similarities between cultures	/5	2	I actively seek solutions and solve problems by negotiation and mediation	/5
3	I recognize and value differences and similarities between perspectives	/5	3	I actively seek solutions and solve problems by seeking win-win solutions	/5
4	I recognize and use empathy effectively	/5	4	I actively seek solutions and solve problems by agreeing to disagree	/5
5	I can understand and enter someone else's world	/5	5	I actively seek solutions and solve problems by knowing when to fight and when to walk away	/5
6	I can establish rapport with others including with others including Pacing and leading rapport	/5	6	I actively help others to be more assertive	/5
7	I can establish rapport with others including with others including mirroring their behavior	/5	7	I can establish and build long-term relationships	/5
8	I can establish rapport with others including with others including initiating conversations	/5	8	I recognize what drives and motivates others	/5
9	I can establish rapport with others including with others including recognizing and using the differences between introvert and extrovert behaviors effectively	/5	9	I can develop and maintain openness, trust and honesty	/5
10	I recognize and understand organizational values, behaviors and beliefs	/5	10	I can act as change catalyst	/5
Total Grade		/50	11	I can collaborate and work in a team	/5
			12	I can set and achieve goals	/5
			Total Grade		/60

### 3.1. Designing and localizing the surveys

Most well-known and reliable E.I. assessments are written in English. However, our students do not have English as their mother tongue and assessments can be costly to distribute. Also, some research shows a possible cultural difference in the interpretation of an E.I. assessment when it is only presented in an English format (Wong et al., 2007; Brackett & Geher, 2006). HCT in the UAE is a bilingual educational setting. Therefore, an E.I. assessment that is only presented to the students in an English format may not be as valid as one that is bilingual. Therefore, our goal was to create emotional intelligence tests in both Arabic and English. In our methodology, to assist with establishing key E.I. survey areas, and question development, we reviewed existing E.I. evaluation tools that industry recognizes including the Reuven-Bar On Model (Bar-On, Handley, & Fund, 2006; Mayer, Salovey, Caruso, 2012) Daniel Goleman's four dimensions of emotional intelligence (1995), and Cartwright and Solloway's questionnaires (2009).

After a comprehensive review of the literature and consideration of both the Goleman (1995) and Cartwright and Solloway (2009) models, the research team expanded the scope and developed a localized six -quadrant model of Emotional Intelligence which features Self-awareness at the center of the model. Two additional dimensions, Adaptability and General Mood, were added to the previous models and localization was included to take into consideration the local needs and cultural aspects particular to the Gulf region. Our model is featured in Figure 2.



Figure 2. Expanded and Localized 6 Quadrant Model (Bousslama et al., 2015).

### 3.2. Developing localized, bilingual surveys

There is a growing body of opinion which advocates the importance of including local content, norms and values into teaching materials and tests (see Brown & Lumley, 1998; Canagarajah, 2006; Clyne & Sharifian, 2008; Dendrinou, 2011, 2013; Tsou, 2015). This reaction is against the earlier “one size fits all” global approach to materials development and language testing in favor of a bespoke test, where the aim is for best fit with the particular needs/demands of a local context. In terms of the present research, the research team examined the existing E.I. instruments for areas of linguistic, cultural, and societal disparity. Where problematic linguistic elements were found, the researchers modified the individual survey items to make them more comprehensible to the local Arabic language speakers. The E.I. instruments were also localized for both specific cultural and societal needs. The sample of students who participated in this research were mostly from the Dubai area who have been exposed to a large variety of expatriate cultures (Hiasat, 2019).

In addition to localization, it was decided that an Arabic version of the surveys would be developed in conjunction with the English version so as to account for differing degrees of English language literacy amongst the students. The six surveys were developed and piloted on Microsoft Office 365 Forms (Microsoft Office Productivity Tools for Home & Office, n.d.). A team of individuals, most of them bilingual, worked together to both simplify concepts in English and cross translate the Arabic version.

The entire six questionnaire survey consisted of 47 Likert scale items in total. Students were presented with an item in both English and Arabic and asked to assess their EI skills using a five-response option scale with 1 being ‘very low’ and 5 ‘very high’. The number of questions and total score per core competency can be found in Table 3.

TABLE 3. Number of Questions and Total Score Competency

Core Competency	# of Questions	Total score
Self-awareness	7	35
Self-management	7	35
Social management	7	35
Relationship management	9	45

<b>Adaptability</b>	10	50
<b>General Mood</b>	7	35

The six surveys were developed and disseminated via the Microsoft Office 365 Forms (Microsoft Office Productivity Tools for Home & Office, n.d.). Tables 4a to f depict the six assessment areas for the localized emotional intelligence English/Arabic survey

TABLE 4 A. Self-awareness Survey

Q. #.	Question in English	Question in Arabic	Grade 1 to 5
1	I understand and know myself	أفهم نفسي وأعرفها جيدا	
2	I know my values and beliefs	أنا مدرك لقيمي ومبادئ	
3	I have self-confidence in all situations	ثقتي بنفسي عالية في المواقف جميعها	
4	I consider myself an honest person	أعتبر نفسي إنسانا صادقا	
5	I understand my own personal power and its effect on others	أعرف قوتي الشخصية وتأثيرها على الآخرين	
6	I am comfortable with myself	أجد الراحة و السلام الداخلي مع نفسي	
7	I know exactly what motivates me	أعرف بالضبط ما الذي يحفزني	

TABLE 4B. Self-management Survey

Q. #	Question in English	Question in Arabic	Grade 1 to 5
1	I understand and use self-coaching techniques	أفهم تقنيات التدريب الذاتي وأستخدمها	
2	I have high self-esteem	لدي تقدير عال لذاتي	
3	I can become an effective role model	أنا قادر على أن أصبح نموذجًا يحتذى به	
4	I can manage personal change effectively	يمكنني إدارة التغيير الشخصي بفعالية	
5	I set personal goals and take actions towards them	أضع أهدافا شخصية وأتخذ إجراءات تجاهها	
6	I practice positive thinking	أمارس التفكير الإيجابي	
7	I trust my intuition	أثق بحدسي وتوقعاتي	

TABLE 4C. Social Awareness Survey

Q. #	Question in English	Question in Arabic	Grade 1 to 5
1	I value differences and similarities between people	أقدر الاختلاف والتشابه بين الناس	
2	I value differences and similarities between cultures	أقدر الاختلاف والتشابه بين الثقافات	
3	I value differences and similarities in different points of view	أقدر الاختلاف والتشابه بين وجهات النظر	
4	I believe I am a caring person	أؤمن أنني إنسان متعاطف مع الآخرين	
5	I can imagine myself in someone else's place	أستطيع أن أضع نفسي مكان الآخرين وأنفهم موقفهم	
6	I can establish and maintain rapport with others	أستطيع إقامة العلاقات مع الآخرين والانسجام معهم	
7	I understand the importance of values, behaviors and beliefs in the workplace	أفهم أهمية القيم والسلوكيات والمعتقدات في أماكن العمل	

TABLE 4D. Relationship Management Survey

Q. #	Question in English	Question in Arabic	Grade 1 to 5
1	I always try to negotiate and mediate acceptable solutions to conflict	دائما أتوسط وأتفاوض للوصول إلى حلول مرضية لجميع الأطراف	

2	I know when to discuss a conflict or issue and when to walk away when solving a problem	أعرف متى أدافع ومتى أنسحب عند حل المشكلات	
3	I help others increase their confidence	أساعد الآخرين ليكونوا أكثر ثقة بأنفسهم	
4	I find it easy to have long-term relationships	من السهل علي إقامة علاقات طويلة الأمد	
5	I recognize what drives and motivates others	أدرك ما يدفع ويحفز الآخرين	
6	I consider myself an open-minded person	أعتبر نفسي إنسانا منفتح الذهن	
7	I am comfortable with change	أقبل التغييرات	
8	I can collaborate and work in a team	يمكنني التعاون والعمل مع الفريق	
9	I can set and achieve goals	يمكنني وضع الأهداف وتحقيقها	

TABLE 4E. Adaptability Survey

Q. #	Question in English	Question in Arabic	Grade 1 to 5
1	I try to see a situation from as many perspectives as possible	أحاول رؤية الموقف من أكبر عدد ممكن من الزوايا	
2	I use my logic rather than my emotions when making decisions in life	أتعامل بمنطقية أكثر من العاطفية اتجاه الأحداث في حياتي	
3	When a situation happens that I don't understand I consult someone I trust to get their opinion	عندما يحدث موقف ما وأنا غير متأكد من طبيعته، أطلب من صديق موثوق به في فهم واقع الموضوع	
4	I brainstorm all the possible meanings before I make a decision	أفكر في كل المعاني المحتملة قبل أن أصل إلى النتائج	
5	I have control over my thoughts and reactions	لدي السيطرة على افكاري وردود الفعل الخاصة بكل حالة	
6	I am aware of what meaning I am attributing to the situations that arise in my life	أنا على علم بكل الأوضاع المحيطة في حياتي	
7	I can deal very effectively with people from different cultures	أستطيع التعامل بفعالية مع الأشخاص من جميع الخلفيات و الثقافات	
8	I do well with non-routine tasks.	أتعامل بشكل جيد مع المهام غير الروتينية	
9	I can deal with stressful situations in my life	أنا قادر على التعامل مع المواقف العصيبة	
10	I try very hard to solve problems on time	أفعل ما بوسعي لحل المشاكل في الوقت المحدد	

TABLE 4F. General Mood Survey

Q. #	Question in English	Question in Arabic	Grade 1 to 5
1	I sleep well at night and wake up feeling ready for the day	أنام بشكل جيد في المساء، وأصحو مستعدا ليومي	
2	I really enjoy what I am studying	أنا حقا أستمتع بما أدرسه	
3	I take good care of my health	أهتم بصحتي بشكل جيد	
4	I feel positive about scientific developments	أشعر بإيجابية اتجاه التطورات العلمية	
5	I have good relationships with my classmates	لدي علاقة جيدة مع زملاء الدراسة	
6	I feel that my life is going very well at the moment	أشعر أن حياتي تسير بشكل جيد	
7	I feel positive about my future career opportunities	أشعر بالإيجابية اتجاه مستقبلتي الوظيفي	

#### 4. Conducting and analyzing the surveys

The research team decided to initially survey the Foundations students whose English level ranges from A1 to B1 Common European Framework of Reference for Languages (CEFR) (Council of Europe, 2001). They are students who access the institution without having met the English requirement and have one year to fulfil it. The Bachelor

common year students’ English Level is B1 and above. They enter their programs directly or are Foundations students who have passed the entry requirement.

The sample of participants consisted of 75 Foundations students and 225 Bachelor common year students took part in the E.I. survey. The Bachelor common year students who were chosen to participate in the project had in common a General Studies course on Life and Study Skills (LSS 1003). The six surveys were conducted during the class meetings of this course. The E.I. research team took turns in conducting the survey following a pre-established calendar by visiting the different classrooms. Several members of the research team were present to conduct the initial surveys so that a systematic procedure could be established across the successive sessions in order to maintain academic rigor. It was noted that the Foundations students lacked the maturity of the Bachelor common year students because they showed a tendency to interact with each other in Arabic commenting on aspects of the survey even though they had been asked to carry out the survey in silence. Fortunately, this was soon detected by members of the team who speak Arabic which may have resulted in inconsistencies found in the results described in the analysis section.

**4.1. Analysis of survey results**

In total 300 students took part in the survey administration. The following sections depict the analysis of the six survey results. In each analysis, the results are presented first for all students and then for Foundations and Bachelor common year students respectively. In addition, the color used in the histogram’s maps with the color of the proposed six dimensions E.I. model shown in Figure 2.

**4.1.1. Self-awareness results**

The results of self-awareness E.I. skill’s assessment are shown in Figure 3.

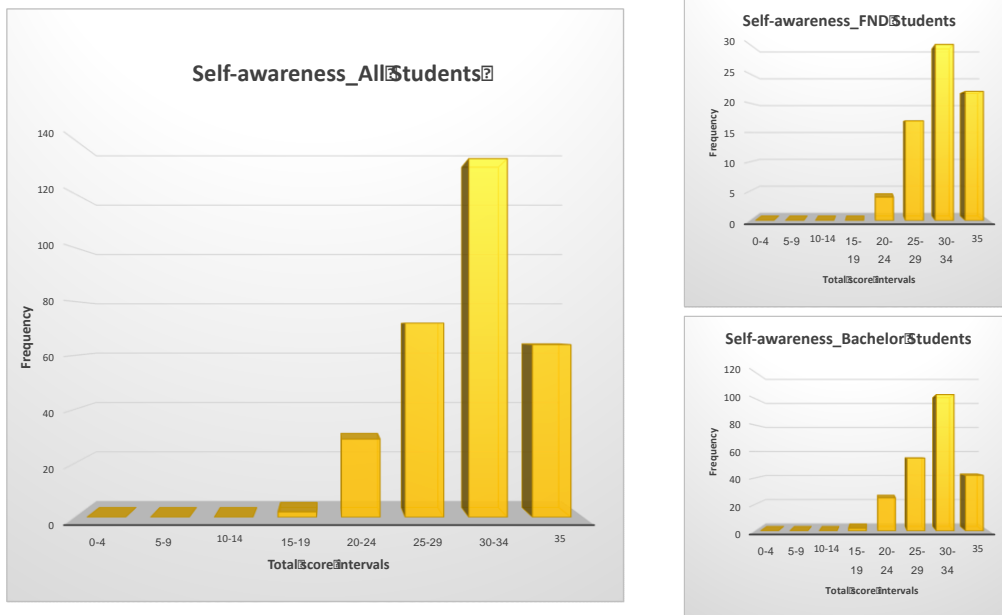


Figure 3. Self-awareness assessment results.



### 4.1.2. Self-management results

The results of the self-management E.I. skill's assessment are shown in Figure 4.



Figure 4. Self-management chart.

### 4.1.3. Social awareness results

The results of social-awareness E.I. skill's assessment are shown in Figure 5.

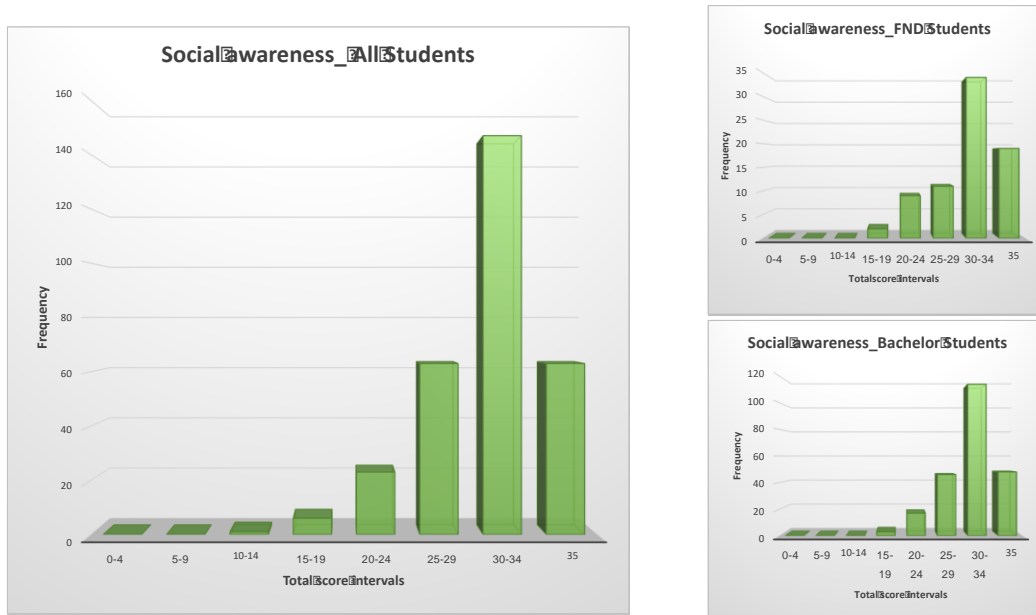


Figure 5. Social awareness assessment results.

#### 4.1.4. Relationship management results

The results of social-awareness E.I. skill’s assessment are shown in Figure 6.

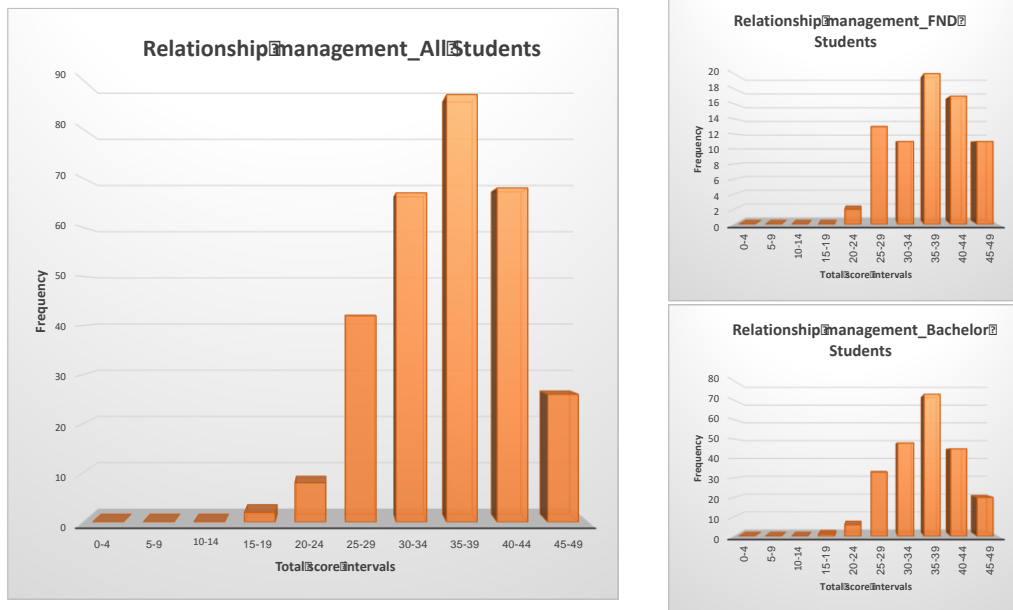


Figure 6. Relationship management assessment results.

#### 4.1.5. Adaptability results

The results of the adaptability E.I. skill’s assessment are shown in Figure 7.

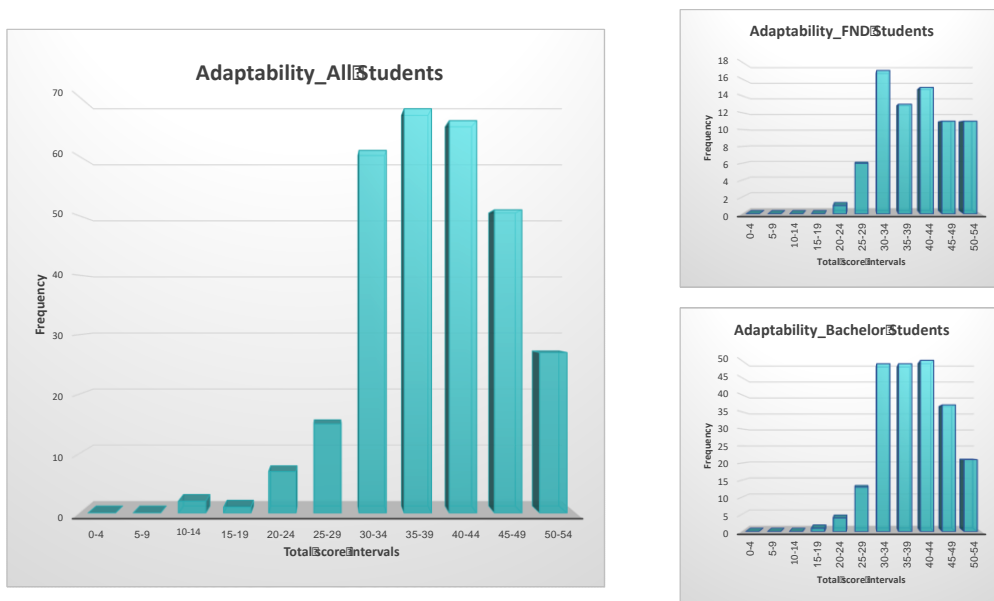


Figure 7. Adaptability assessment results.

#### 4.1.6. General mood results

The results of the general mood E.I. skill's assessment are shown in Figure 8.

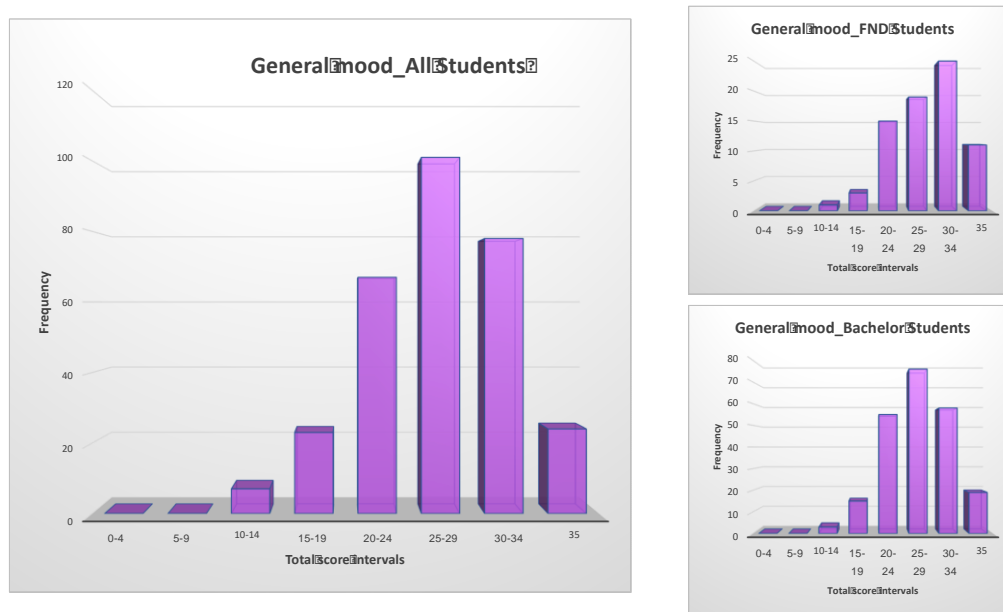


Figure 8. General mood assessment results.

### 5. Establishing the validity and reliability of the survey instruments

Procedures to measure the reliability and validity of the E.I. instruments were conducted to ensure that there was a degree of agreement between the claimed measurement (that of E.I.) and the real world. To measure the content and construct validity of the instruments, a panel of subject matter experts on E.I. was convened and asked to assess whether the questions on the six-part survey measured what they were intended to measure. To determine the content validity of the instruments, the Lawshe test (Lawsche, 1975; Scally, 2013)  $CVR = [(ne - N) - N/2] / 2$  was used. This test is predicated on 'where CVR = content validity ratio' ne = number of experts in the panel answered "yes, relevant"; and N = total number of experts in the panel'. All members on the panel answered that the constructs measured on the surveys were relevant and measured the desired conceptual domains.

To measure the reliability, the internal consistency of the E.I. surveys was examined. Internal consistency concerns the extent to which items on the instruments measure the same thing. This measure was selected because "reliability can be estimated after only one test administration and therefore avoids the problems associated with testing over multiple time periods" (Bolarinwa, 2019, p. 199). According to the literature, the split-half reliability index is one of the most common ways to measure internal consistency, and this method was chosen for our research to see how well the test components contribute to the construct that is being measured.

In split-half reliability, a test for a single knowledge area is split into two parts and then both parts were given to one group of students at the same time. The scores from both parts of the test are then correlated. A reliable test will have a high correlation, indicating that a student would perform equally well (or as poorly) on both halves of the test.

The split-half reliability test was conducted on the Self-awareness part of the E.I. surveys after dropping question 4 which relates to honesty as it was deemed to be problematic to assess. The survey results related to the E.I. skill on Self-awareness was re-analyzed by dropping Question 4 on Honesty. The analysis results shown in Figure 9 and 10 demonstrated that students in Foundations were not consistent in their responses with respect to Part 1 and Part 2 of the survey. Part 1 was based on the first three questions of the survey and Part 2 was based on the last three. On the other hand, the students in the Bachelor common year programs showed more consistency in their responses.

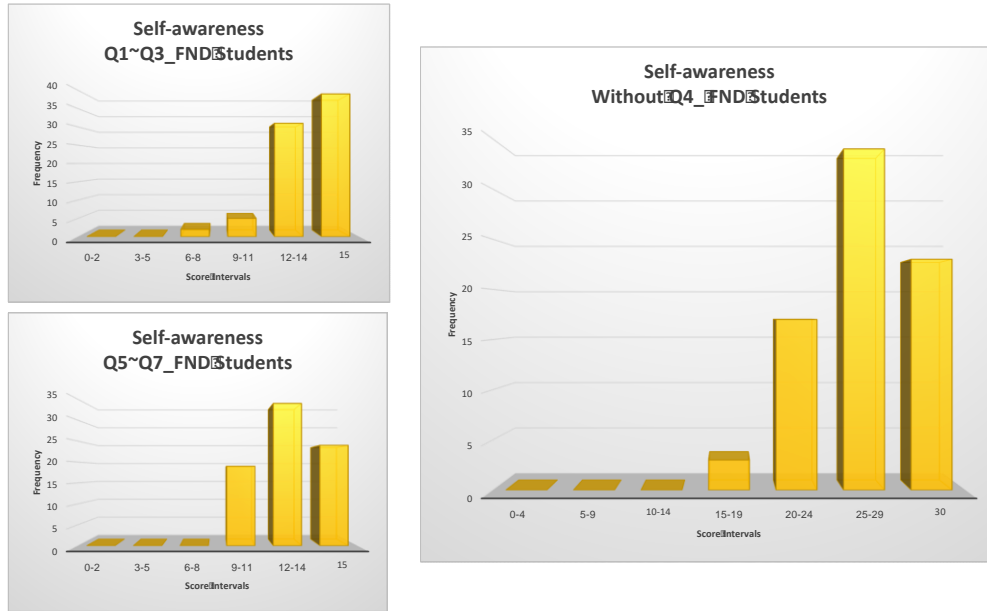


Figure 9. Analysis of Self-awareness without question 4 on Honesty: Case of Foundations Students.

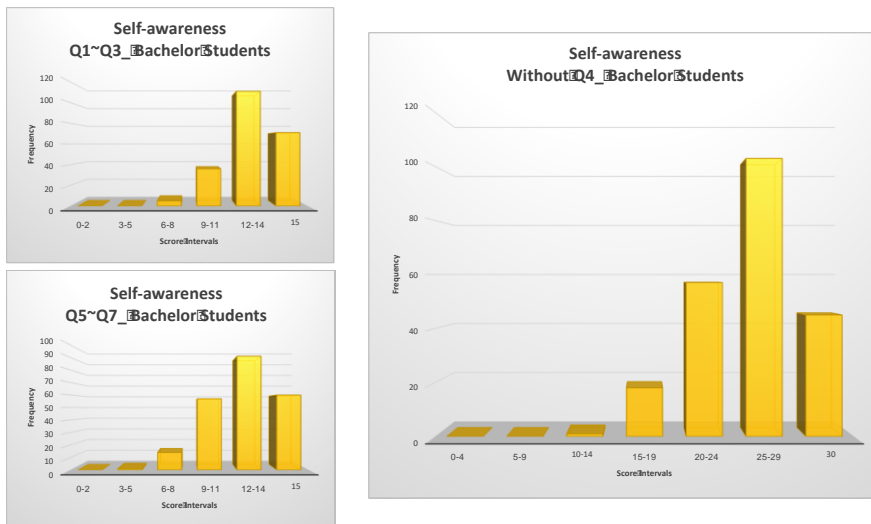


Figure 10. Analysis of Self-awareness without question 4 on Honesty: Case of Bachelor Students.

### 6. Summary of all survey results

The results of all the six surveys are collated and summarized in one plot. Figure 11 showing the boxplots for each of the proposed six dimensions models, is a quick way to see how the survey results are distributed. In fact, each boxplot shows where the lowest, the highest values, and the median value (the line shown in the middle of the box) lie for each survey. The colored box shows which 75% of the students’ survey responses fall. The whiskers, shown by the horizontal lines extending outside the box, refer to the minimum and maximum values of each E.I. survey. These are used to eliminate any outliers. In fact, outliers which are survey results either significantly below or above the rest of the participants are shown in small circles in Figure 11.

In summary, all the six survey results contain few outliers below the minimum value. This is since some participants chose not to answer all the questions of a particular survey. The median value of the Social awareness survey is high showing more participants demonstrating the E.I. skill. In addition, most of the responses are condensed within a narrow box showing most participants having a similar score in this E.I. skill. The remaining skills depict a more

balanced result of the median and spread. The results show achieved skills in Relationship Management and especially Self-awareness. However, this latter was subject to an additional analysis shown in Figures 1 and 10 that highlighted an inconsistency in the results obtained from the Foundations students. The results show less achieved skill in Self-management and General Mood.

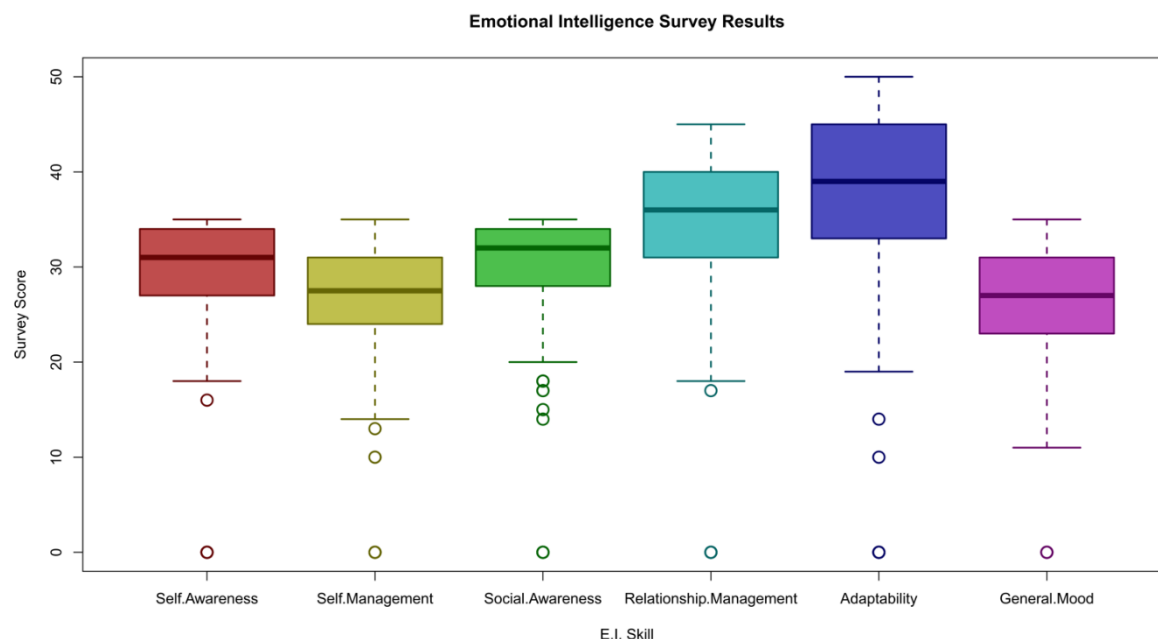


Figure 11. Boxplot of all E.I. assessment results.

## 7. Challenges and recommendations

In this research, the research team faced a number of challenges. One of the major challenges was to have the participants take the survey instruments seriously and to answer the questions honestly. Another challenge was to take the surveys in the order intended. Survey links were shared with participants via institutional email. Despite having discussed potentially problematic linguistic elements of the surveys extensively prior to their administration, students still had issues with a number of words which were not properly understood. For example, the word “حدسي” in Arabic which means “my intuition” in English was found to be not so commonly used by different Arabic speakers.

As a result, the research team propose several recommendations. In order to address the challenge of taking the surveys more seriously, the research team recommends integrating the E.I. surveys within one of the Bachelor common year courses in the General Studies program. More specifically, the team recommends including the surveys in the introductory part of the LSS 1003 course on Life and Study Skills. Additionally, when administering the surveys, it is recommended that a bilingual facilitator be present to provide further explanation and clarification.

## 8. Conclusions

The literature review shows the importance of the link between E.I. and academic success, where the higher a person’s E.I. score, the stronger the association towards academic success (Parker, 2004b). A higher Emotional Intelligence (E.I.) also assists towards improving English language competence (Hassan & Elhaj, 2015). Other benefits to a higher E.I. include success in leadership positions (Chen et al., 1998). A higher score in E.I. is also a contributor towards success in multiple life areas for an individual (Tinto, 1993). Therefore, it is beneficial to assess a student’s E.I. score in an educational setting, to help evaluate their high skill areas, along with their areas that are in need of development.

This article has provided a localized bilingual model of E.I. to assess the emotional intelligence of students in Foundations and Bachelor common year programs. The design and development of the surveys and their initial dissemination revealed preliminary estimates of E.I. levels of participants. However, research also revealed that further

localization and refinement within the six survey instruments needs to be conducted. Therefore, this will constitute the major focus of future research. In addition, we will use the Localized Emotional Intelligence English/Arabic Survey© assessment in pre-testing to establish EI levels with students in the Foundations and Bachelor common year programs. We will work towards developing interventions to hopefully help improve a student's EI levels in the six key areas. Improvement will be assessed with a post-assessment using the Localized Emotional Intelligence English/Arabic Survey©. We are working towards their E.I. skills increasing so that students may experience an increase in their academic success at HCT in the UAE, and in their future career success rate. Given what we know and have learned through this study and those from the literature about the importance of E.I. the research team is planning to develop and integrate E.I. interventions to assist students towards increasing their E.I. levels in the six key survey areas within the General Studies program courses.

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**References**

- Bar-On, R. (2012). *The Impact of Emotional Intelligence on Health and Wellbeing*. Emotional Intelligence - New Perspectives and Applications. doi:10.5772/32468
- Bar-On, R., Handley, R., & Fund, S. (2006). The Impact of Emotional Intelligence on Performance. In V. U. Druskat, F. Sala, & G. Mount (Eds.), *Linking emotional intelligence and performance at work: Current research evidence with individuals and groups* (pp. 3-19). Mahwah, NJ, US: Lawrence Erlbaum Associates Publishers.
- Bolarinwa, O. A. (2019). Principles and Methods of Validity and Reliability Testing of Questionnaires Used in Social and Health Sciences Researches, *Nigerian Postgraduate Medical Journal*, 22: 195-201.
- Bousslama, F., Housley, M. & Steele, A. (2015). Using a fuzzy logic-based emotional intelligence framework for testing emotional literacy of students in an outcomes-based educational system, *Journal of Network and Innovative Computing*, 3: 105-114.
- Brackett MA, & Geher G. (2006). Measuring emotional intelligence: Paradigmatic shifts and common ground. In: Ciarrochi J, Forgas JP, Mayer JD, editors. *Emotional intelligence and everyday life* (pp. 27–50). New York, USA: Psychology Press.
- Brown, A. & Lumley, T. (1998). Linguistic and cultural norms in language testing: A case study. *Melbourne Papers in Language Testing*, 7(1), 80–96.
- Canagarajah, S. (2006). Changing communicative needs, revised assessment objectives: Testing English as an international language. *Language Assessment Quarterly*, 3(3), 229-242.
- Cartwright, A. & Solloway, A. (2009). *Emotional Intelligence: Activities for Developing You and Your Business*. London: Routledge.
- Hiasat, L. (2019). Helping students develop intercultural intelligence in tertiary education, *West East Journal of Social Sciences*, Vol. 8, pp. 25-51.
- Council of Europe. (2001). *Common European framework of reference for languages: Learning, teaching, assessment*. Cambridge, U.K: Press Syndicate of the University of Cambridge.
- Chen, W., Jacobs, R. and Spencer, L.M. (1998). Calculating the competencies of stars. In D. Goleman (ed.) *Working with Emotional Intelligence* (pp. 377-380). New York: Bantam Books.
- Clyne, M. & Sharifian (2008) English as an international language: Challenges and possibilities. *Australian Review of Applied Linguistics*, 31(3), 28.1 –28.16.
- Consortium for Research on Emotional Intelligence in Organizations. (2018). *The Mayer-Salovey-Caruso Emotional Intelligence Test (MSCEIT)*. Retrieved from <http://www.eiconsortium.org/measures/msceit.html>
- Dacre Pool, L., & Qualter, P. (2013). Emotional self-efficacy, graduate employability, and career satisfaction: Testing the associations. *Australian Journal of Psychology*, 65(4), 214–223. doi:10.1111/ajpy.12023
- Dendrinou, B. (2011(ed.)). *The role of language testing in supporting multilingualism, in European Union Civil Society Platform on Multilingualism: Policy Recommendations for the Promotion of Multilingualism in the European Union*. Retrieved on March 26, 2018 from <http://www.xn--sprkfrsvaret-vcb4v.se/sf/fileadmin/PDF/Maangsprakighetsplattform.pdf> .
- Dendrinou, B. (2013). Social Meanings in Global-Glocal Language Proficiency Exams. In D. Tsagari, S. Papadima-Sophocleous, and S. Ioannou-Georgiou (Eds.), *International Experiences in Language Testing and Assessment* (pp. 33-57). Frankfurt am Main: Peter Lang.
- Duckworth, A. (2016). *Grit: The Power of Passion and Perseverance*. New York, NY: Scribner/Simon & Schuster.
- Goleman, D. (1995). *Emotional Intelligence: Why It Can Matter More than IQ*. New York, NY: Bantam Books.



- Hassan, N., & Elhaj, M. (2015). The relationship between Emotional Intelligence and English Language achievements among private secondary schools' students at Khartoum locality. *Ahfad Journal*, 32(1), 15–29. Retrieved from <http://ra.ocls.ca/ra/login.aspx?inst=sandford&url=http://search.ebscohost.com/login.aspx?direct=true&db=aph&AN=111393055&site=eds-live&scope=site>
- Lawshe, C.H. (1975). A quantitative approach to content validity. *Personnel Psychology*, 28, 563–575.
- Mayer, J. D., Perkins, D. M., Caruso, D. R., & Salovey, P. (2001). Emotional intelligence and giftedness. *Roeper Review*, 23(3), 131-137.
- Mayer, J.D., & Salovey, P. (1997). What is emotional intelligence? In P. Salovey & D. Sluyter (Eds). *Emotional development and emotional intelligence: Educational implications* (pp. 3-34). New York: Basic Books.
- Mayer, J. D., Salovey, P., & Caruso, D. R. (2012). *Mayer-Salovey-Caruso Emotional Intelligence Test*. PsycTESTS Dataset. doi:10.1037/t05047-000
- Microsoft Office Productivity Tools for Home & Office. (n.d.). Retrieved April 11, 2019, from <https://products.office.com/en-us?rtc=1>
- Nelis, D., Quoidbach, J., Mikolajczak, M., & Hansenne, M. (2009). Increasing emotional intelligence: (How) is it possible? *Personality and Individual Differences*, 47(1), 36–41. doi:10.1016/j.paid.2009.01.046
- Parker, J. D. A., Austin, E. J., Hogan, M. J., Wood, L. M., & Bond, B. J. (2005). Alexithymia and academic success: Examining the transition from high school to university. *Personality and Individual Differences*, 38, 1257–1267.
- Parker, J. D. A., Creque, R. E., Barnhart, D. L., Iron Harris, J., Majeski, S. A., Wood, L. A., Bond, B. J., & Hogan, M. J. (2004a). Academic achievement in high school: Does emotional intelligence matter? *Personality and Individual Differences*, 37, 1321–1330.
- Parker, J. D. A., Summerfeldt, L. J., Hogan, M. J., & Majeski, S. (2004b). Emotional intelligence and academic success: Examining the transition from high school to university. *Personality and Individual Differences*, 36, 163–172.
- Scally, A. J. (2013). Critical Values for Lawshe's Content Validity Ratio, *Measurement and Evaluation in Counseling and Development*, 47(1):79-86. DOI: 10.1177/0748175613513808
- Skaar, N. R. (2007). Test Review. *Assessment for Effective Intervention*, 33(1), 47–50. doi:10.1177/15345084070330010601
- Spielberger, C. D. (2004). *Encyclopedia of applied psychology*. Oxford: Elsevier Academic Press.
- Tinto, V. (1993). *Leaving college: Rethinking the causes and cures of student attrition* (2nd ed.). Chicago: University of Chicago Press.
- Tsou, W. (2015). Globalization to Glocalization: Rethinking English Language Teaching in Response to the ELF Phenomenon. *English as a Global Language Education (EaGLE) Journal*, 1(1), 47-63.
- Vela, R. H., Jr. (2003). *The role of emotional intelligence in the academic achievement of first year college students* (Doctoral dissertation). Texas A&M University-Kingsville.
- Wong, C.-S., Wong, P.-M., & Law, K. S. (2007). Evidence of the practical utility of Wong's emotional intelligence scale in Hong Kong and mainland China. *Asia Pacific Journal of Management*, 24(1), 43–60. doi:10.1007/s10490-006-9024-1
- Zeidner, M., Matthews, G., & Roberts, R. D. (2009). *What We Know about Emotional Intelligence: How It Affects Learning, Work, relationships, and Our Mental Health*. Cambridge, MA: MIT Press.

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## THE TEACHING PRACTICE IN A RISING KNOWLEDGE SOCIETY: FOCUS ON A UNIVERSITY IN UGANDA

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### ABSTRACT

This paper is based on a study conducted to establish if the teaching practice in a university designated as UoG is changing in response to the knowledge society agenda in Uganda. This paper is motivated by the emerging national needs specific to the quality and quantity of graduates fit for a rising knowledge society. Thus, as the pressure mounts on academia to deliver, establishing trends in the teaching practice in a changing context of operation has become paramount. Therefore, from a neo institutional perspective, a mixed methods case study methodology through interviews and survey addressed the study questions. These were specific to the nature of the teaching practice in UoG, the relationship between the teaching practice and the rising knowledge society and the academics perceptions about the teaching practice in a rising knowledge society. The results showed that the teaching practice is still majorly based on traditional patterns of practice; there is no relationship between the teaching practice and the rising knowledge society and academics perceived the teaching practice to be increasingly dependent on the changing students profile and the labour market. The nature of the results showed a contradiction between the discourse and practice. Thus, the study concluded that the discourse pertaining to teaching in a rising knowledge society may be changing but the practice remains the same hence the teaching practice may not necessarily be responding to the rising knowledge society in Uganda. However, the study focused on a single case thus looking into more cases is recommended for subsequent studies.

**Keywords:** Teaching Practice, Rising Knowledge Society, UoG University, Academia.

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# EFFICACY OF RATIONAL EMOTIVE-BEHAVIOURAL THERAPY ON ANGER MANAGEMENT AMONG SELECTED SECONDARY SCHOOL ADOLESCENTS IN OREDO LOCAL GOVERNMENT AREA OF EDO STATE: IMPLICATIONS FOR EDUCATION AND TEACHING

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## ABSTRACT

*This study investigated the efficacy of rational emotive behaviour therapy on anger management in some selected secondary school adolescents in Oredo Local Government Area of Edo State. In the study, four research questions were raised with their corresponding hypotheses formulated. A pre-test post-test non-equivalent control group research design was adopted in the study. The independent variable was rational emotive behaviour therapy and the control. The moderator variables were gender, age of students and parents socio-economic status, while the dependent variable was anger management. The population consisted of 1210 senior secondary school one (SS1) students in Oredo Local Government Area of Edo State. The sample used for the study comprised of 88 senior secondary school one (SS1) students. The simple random sampling technique was used to select two intact classes of students for the study and was randomly assigned to experimental and control groups. A modified version of standardized test battery on anger scale developed by Odebunmi (1992) was used for data collection. It had a reliability of 0.85 using a Cronbach Alpha. The data was analyzed using Mean Standard Deviation and Analysis of Co-variance (ANCOVA) statistical methods. The results revealed that rational emotive behaviour therapy was effective and superior to the controlled condition in managing anger. REBT accounted for 40% in the student's ability to manage anger. The counselling technique showed no significant difference in the management of anger among students based on gender, age and parents socio-economic status. This implies that the use of REBT is not dependent on gender, age and socio-economic status of students. It was recommended that counsellors should use rational emotive behaviour therapy to manage students' anger emotion, irrespective of their age, gender, and parents' socio-economic status.*

**Introduction:**

Adolescence can be a tumultuous period for many teenagers due to the numerous physical, emotional and intellectual changes occurring during this stage of development (Egbule, 2004). Anger on the other hand, has been one of the world's ancient behavioural problems. It has, in today's Nigeria, wrecked more evil than good on people's psyche. Many problems occur when adolescents try to adjust to changes taking place in them, prominent among which is their experience of anger. Incidence of anger among secondary school adolescents is a common phenomenon. It takes the form of fighting among themselves in the play-ground and even in the classrooms in the presence or absence of teachers. Other forms of expression of anger among adolescents include; quarrelling, biting, yelling, slapping and shoving around, temper tantrums, stiffening of the body, name calling and even use of abusive language. In addition, some engage in finger nail biting, hair twisting (trichotillomania), pencil chewing, throwing objects at others, destroying other students' belongings as well as rejection of friendly invitations. Hence, the researcher decided to investigate the efficacy of rational emotive-behaviour therapy as a means of anger management among secondary school adolescents in Oredo Local Government Area of Edo State.

**What is rational emotive therapy?**

Rational emotive behavioral therapy (REBT) is a type of therapeutic technique introduced by Albert Ellis in the 1950s. It's an approach that helps to identify irrational beliefs and negative thought patterns that may lead to emotional or behavioural issues. Once these patterns are identified, a therapist can then help the individual concerned, to develop strategies to replace them with more rational thought patterns. REBT can be particularly helpful for people living with a variety of issues, including: depression, anxiety, addictive behavioural, phobias, overwhelming feelings of anger, guilt or rage, procrastination, disordered eating habits, aggression and sleep problems.

**What are the principles of REBT?**

REBT is grounded in the idea that people generally want to do well in life. But sometimes, irrational thoughts and feelings get in the way. These beliefs can influence how an individual perceive circumstances and events — usually not for the better. REBT therefore, operates with the core principles called the ABCDE of REBT.

A-refers to the (a)ctivating event(s) or situation that triggers a negative reaction or response.

B-refers to the (b)eliefs or irrational thoughts you might have about an event or situation.

C-refers to the (c)onsequences of A and B, often the distressing emotions, that result from the irrational thoughts or beliefs. This might include feelings of worthlessness or not being good enough.

D-refers to (d)isputing irrational thoughts and beliefs.

E-refers to emotional and cognitive effects of revised beliefs.

Rational emotive behavioural therapy (REBT) has been shown to be effective in the treatment of other behaviour problems such as anxiety, depression, self-esteem, emotional imbalance and others (Chima and Nnodun, 2006). For instance, Ofole and Okopi (2012) used rational emotive behaviour therapy in fostering self-efficacy among academically at risk –learners in National Open University of Nigeria (NOUN). Omiza (1988) also used REBT in managing test anxiety. Banks (2006) also reported the effectiveness of REBT in the management of locus of control and emotional disturbance. REBT has also been used effectively in managing anger among adults and adolescents in the western world. For instance, Shannon, (2003) in Tennessee, Eric (2002) in Hong Kong, Yoosefi, (2006) in Saghez, Pegah (2010) in Iran. However to the best of the researcher's knowledge, not much work have been done on the use of REBT in managing anger among secondary school adolescents in Edo State, hence, this present study.

In the study therefore, four research questions were raised as well as their corresponding hypotheses formulated. A pre-test post-test non-equivalent control group research design was adopted. The Independent variable was rational emotive-behaviour therapy and the control. The Moderator variables were: Gender, Age of students and Parents' socio-economic status; while the Dependent variable was Anger Management. The population consist of **1210** Senior Secondary School One (SSI) students in Oredo Local Government Area in Edo State. The sample used for the study comprised of **88** Senior Secondary School One (SS1) students. The simple random sampling technique was used to select two intact classes of students for the study and were randomly assigned to Experimental and Control groups. A modified version of Standardized Test Battery on Anger Scale developed by Prof. Akin Odeunmi (1992) was used

for data collection. A reliability of 0.85 using a Cronbach Alpha was used as the standard to be adopted to determine the reliability level. The data was analyzed using Mean Standard Deviation and the ANCOVA statistical instruments.

### Theoretical Framework of the Study

This study is hinged on the Social/Learning Perspective Model. The social learning perspective is one of the modern theories of anger propounded by Bandura (1997). This theory postulates that human beings are not born with a large array of aggressive responses at their disposal; rather, they must acquire these in the same way that they acquire other complex forms of social behaviour through direct experience or by observing the behaviour of others. According to Anderson and Bushman (2002), human beings learn from social models on television, movies, and video games who behave aggressively.

The main concept of social cognitive theory explains human behaviour as a dynamic and correlated interaction between the person and the environment. While man is born with inherent characteristics, other characters are learnt. For a person to learn there must be a teacher/model that such a person is looking unto. What he is born with and what he has learnt becomes his or her kind of person. A child can be born with a little array of anger trait in him yet does not grow up as an aggressive person; the reason could be that the environment where he is brought up does not expose him to such aggressive display. In other words, the film he watches, parent style of upbringing, the school, the church he attends as well as the general environment surrounding him, does not display aggression as to influence him negatively.

On the other hand, a child with a little array of anger trait can also grow up to become very aggressive because he is surrounded by aggressive behaviour either from films, parents, friends, peers, school, church or the internet.

It is therefore important to teach students' ways on how to manage their anger as well as to equip parents with the skills needed to manage their children's anger and not to enhance it. Anger is triggered by painful feeling or experience in the environment and it does not occur in isolation. People get angry because of their negative appraisal of events, situations or problems in the environment and these trigger angry feelings in response to the stressor. It is therefore important to teach students skills in anger management and one of such skills is the REBT. It will help in changing the individuals irrational thought about events or situations to a rational and creative one so that they can appraise such events in positive manner and react to people in non-violent ways.

Figure 1 below is the framework of Bandura's Social Learning/Cognitive Theory.

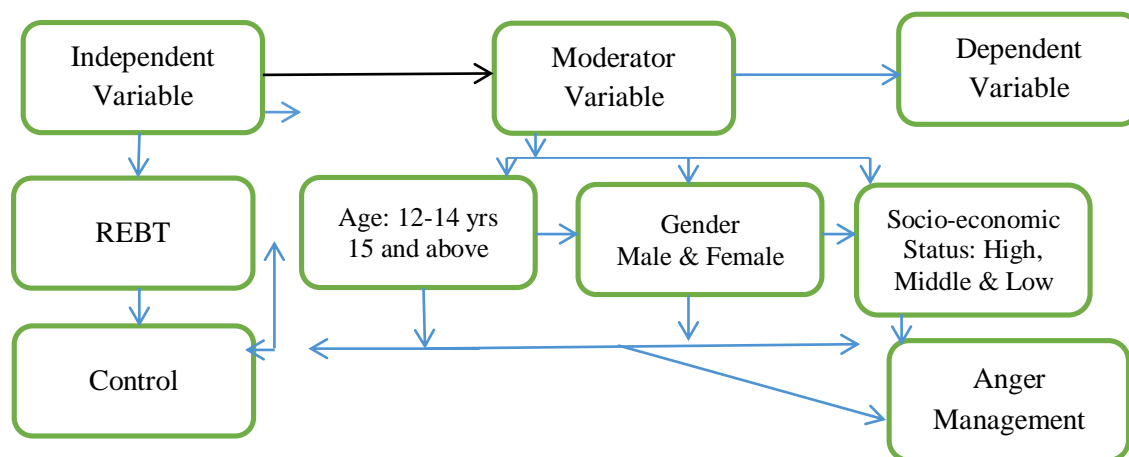


Fig. 1: Adapted from Bandura's Social Learning/Cognitive Theory (1986 & 1995).

### Statement of the Problem

The negative effect of anger on individuals, their victims, the school, families, communities, educational system as well as societies in general, cannot be overemphasized. It reflects on the overall development of the individual through his/her mental health, academic achievement and growth, psychological functioning and adjustment among others (Asuquo, 2000 and Ezeyi, 2003). The victim usually experience long lasting social, emotional, psychological and academic problems; ranging from resentment, depression, fear, truancy, low self-esteem, school expulsion embitterment, lack of concentration, academic failure and change of school to the extent that some of them even drop out of school especially in severe cases. It also leads to poorer health as well as increased risk-taking, poor decision making and substance misuse such as narcotics and hypnotics. Such effects can make it difficult for one to perform routine tasks which can be detrimental to ones future.

Studies have shown that Rational-Emotive Behaviour Therapy (REBT) has been used in other countries and yielded positive results in the treatment of anger among adolescents, but with information at the researcher's disposal, REBT has not been effectively used in managing students' angry behaviour in schools in Edo State. Its adoption proved its effectiveness in managing students' angry behaviour in the state. Hence, the study aimed at investigating the efficacy of Rational-Emotive Behaviour Therapy (REBT) in the management of anger among adolescent students in public senior secondary schools in Oredo Local Government Area of Edo State with a view to examining its effectiveness using age, gender and parents' socio-economic status as moderator variables.

### Research Questions

The following research questions guided the study;

1. Whether the management of anger differs among students exposed to Rational-Emotive Behaviour Therapy and those not exposed to it?
2. If the management of anger differ among students exposed to Rational-Emotive Behaviour Therapy based on gender?
3. Will the management of anger differ among students exposed to Rational-Emotive Behaviour Therapy based on age?
4. Will the management of anger differ among students exposed to Rational-Emotive Behaviour Therapy based on parent's socio-economic status?

### Hypotheses

The following hypotheses were formulated to guide the study at a significance level of 0.05

1. Ho1: There will be no significant difference in the management of anger amongst students exposed to Rational-Emotive Behaviour Therapy and those not exposed to it.
2. Ho2: There will be no significant difference in the management of anger amongst students exposed to Rational-Emotive Behaviour Therapy based on gender. .
3. Ho3: There will be no significant difference in the management of anger amongst students exposed to Rational-Emotive Behaviour Therapy based on age.
4. Ho4: There will be no significant difference in the management of anger amongst students exposed to Rational-Emotive Behaviour Therapy based on parent's socio-economic status.

### Purpose of the Study

The main purpose of the study was to examine the efficacy of Rational-Emotive Behaviour Therapy (REBT) on anger management among secondary school adolescents in Oredo Local Government Area of Edo State. Specifically, the study sought to:

- Find out whether the management of anger would differ significantly amongst students that would be exposed to Rational-Emotive Behaviour Therapy and those that will not.
- Determine whether the management of anger would differ significantly amongst students that would be exposed to Rational-Emotive Behaviour Therapy based on gender.
- Investigate whether the management of anger would differ significantly amongst students that would be exposed to Rational Emotive Behaviour Therapy based on age.
- Examine whether the management of angers differ significantly amongst students that would be exposed to Rational Emotive Behaviour Therapy based on parent's socio-economic status.

### Significance of the Study

This study is of immense importance to students, school teachers, the society, parents, preventive health workers, social workers and school counsellors. Students also would benefit from the study as they will acquire better skills on how to control their behaviour when angry, develop good self-concept and self-esteem, which will help them to perform better in all aspects of life. The society will be better, having youths who learn in time to manage their anger feelings. This will in turn make for a better interpersonal relationship both at home and at the work place. When people concentrate and think clearly, there will be fewer accidents, injuries and other problems in the society. Young people will less indulge in drugs/alcohol use, and their anxiety level would be reduced. Parents shall also benefit from anger management as their children will learn better ways to express themselves without resorting to violent expression of their feelings.



### Scope and Delimitations of the Study

The study was delimited to only two public senior secondary schools that were randomly selected from the sixteen mixed public senior secondary schools in Oredo Local Government Area, of these two schools, two classes or arms were selected and randomly assigned to Experimental Group and the other to the Control Group. Students in the experimental group were treated with REBT, while those in the control group were given a placebo or a dummy, called “study habit discussion” and “Regular attendance at lectures”. Senior secondary class 1 students were used for the study because of their age and level in the educational set up which allowed for a follow-up study to ascertain the outcome of the treatment over time with age, gender and socio-economic status even as the students were studied in their intact class in order to avoid subject bias.

### Methodology

The chapter deals with the method and procedure that were employed in the conduct of the study. These included the research design, population, sample and sampling procedure, research instrument, validity of the instrument, reliability of the instrument, method of data collection, treatment procedure and method of data analysis.

**Table 1: showing sampled schools SS1 classes/arms and the number of participants that were used for the study according to gender and assignment to experimental and control groups.**

S/N	Name of School	Arm	Number of Students by Gender			Experimental Treatment/Discussion
			Male	Female	Total	
1	Asoro Grammar School, Benin City.	B	17	26	43	Rational Emotive Behaviour Therapy
2	Iyoba Secondary School, Ugbowo, Benin City.	A	26	19	45	Control Study Habit Discussion
<b>Grand Total</b>			43	45	88	

### Research Instrument

The research instrument for data collection for the study was the standardized test batteries on anger scale which was adapted from Odeunmi (1992) and modified by the researcher. This instrument consists of two section A and B. Section A of the instrument consists of the respondents demographic information which includes name, age, gender and parents occupation. While section B consists of twenty (20) items that were used to obtain information on student’s anger. The respondents were required to indicate the extent to which these items helped them to recognize anger and what triggers it on a four point Likert type rating scale from strongly agree 4 point, agree 3 point, disagree 2 point and strongly disagree 1 point. A high score of 50 and above indicated very high level of anger, while scores from 50 downwards depicts low level of anger. *See Appendix A for the instrument.*

### Validity of the Instrument

The instrument is a standardized instrument adapted from psychological test for counselling and health management by Odeunmi (1992) and had been previously validated. To ensure the face and content validity, copies of the instrument were given to the supervisor of this work and two experts in the Department of Educational Evaluation and Counselling Psychology, University of Benin, errors were pointed out on the instrument and were suggested to be rephrased and the corrections were made as suggested.

### Reliability of the Instrument

Cronbachs Alpha Measure of internal consistency was used to determine the reliability of the instrument. The instrument was administered to twenty senior secondary class one (SS1) students who were not involved in the main study. Data collected was analyzed using the computerized reliability analysis scale which yielded an index of 0.85. This means that the instrument is highly reliable for the study



### Administration of Instrument

The researcher obtained permission from the principals of the two public senior secondary schools in which the researcher was introduced to the staff and students by the Principals. The Odeunmi instrument on anger scale was administered to the participants to identify student's with anger disorder in their intact classes (that is, a focal group). These student's were studied in their intact classes and the two classes in each schools were randomly assigned to both the experimental and control group and those in the experimental group were treated with REBT together with other student's which were made known to the counselor in order not to create subject bias while those in the control group were given a placebo called study habit discussion,. The process took 45 minutes at each stage. During this process, the researcher made the respondents to be relaxed, friendly and to sit comfortably by establishing good rapport with them through assurance of confidentiality and communication of warmth, genuineness and trust where the researcher explained the instruments on the scale to the respondents. Respondents were given an opportunity to ask questions before and during the period of their response to the scale. Efforts were made to ensure that the atmosphere was conducive for the test devoid of noise and any act of distraction.

### Research Procedure/Treatment Procedure

The study adopted three stages; the pre-test, treatment and post-test procedures. The first stage was the pre-testing of participants in the experimental and control group. The second stage was the treatment of the experimental group using the Rational Emotive Behaviour Therapy with the control group given a placebo (Study Habit Discussion). The third stage was the post-testing of participants in the experiment and control groups. The standardized test battery on anger scale was used for both pre-test and post-test.

### Control of Extraneous Variables

Extraneous variables are those variables that if not checked by the researcher may have significant influence on the dependent variables and may then distort and invalidate the findings. A number of control measures were adopted to control these extraneous variables. The subject bias was checked by not allowing the subjects that were chosen to know whether they are in the treatment or control groups. School condition is another factor to be considered as a variable that could affect the experimental condition. So, there was need to eliminate such influence and this can be done through a proper introduction of the researcher to both the staff and student's. Finally, respondent's error was reduced to the barest minimum through the provision of detailed explanation of questions on the instrument. Students were reinforced after every treatment session during this study and this was attained by refreshing them with cold soft drinks and snacks after every treatment class.

### Method of Data Analysis and Discussion of Results

Descriptive statistics including mean and standard deviation were used to answer research questions 1, 2, 3 and 4 which are presented in a chart while inferential statistics such as analysis of covariance (ANCOVA) was used to test hypotheses 1, 2, 3 and 4, at 0.05 level of significance.

This section deals with the presentation of analyzed data and the results with respect to the research questions and hypotheses stated in the study.

**Table 4.1: Demographic Characteristics of Students**

		Value Label	N	%
Group	1	REBT	43	48.9
	2	Control	45	51.1
Gender	1	Male	43	48.9
	2	Female	45	51.1
Age	1	12-14 years	37	42.0
	2	15 years above	51	58.0

Socio-Economic Status	1	Low	56	63.6
	2	Middle	17	19.3
	3	High	15	17.0

Table 4.1 shows that the study sample consisted of 88 SS1 students' which show that 48.9% are males, while 51.1% are females, for age 42.0% of the respondents are of age group 12-14 years, while 58.0% are of the age group 15 years and above. With respect to socio-economic status, 63.6% are from low socioeconomic status, 19.3% are of middle socio-economic status, while 17.0% are of high socioeconomic status as well.

**Table 4.2 (a): Mean Difference between the Pre-Test and the Post-Test of Experimental and Control Groups**

Group	N	Pre-Test		Post-test		Mean Difference
		Mean	SD	Mean	SD	
<b>Experimental</b>	43	58.91	7.15	41.95	6.94	16.96
<b>Control</b>	45	53.96	7.99	54.80	7.30	0.84
<b>Total</b>	88					

Table 4.2(a) indicate that the experimental group ( $M=58.91$ ,  $SD = 7.15$ ) and control group ( $M = 53.96$ ,  $SD = 7.99$ ) scores were almost equivalent in the pre-test. After the treatment however, there was a difference between the experimental group ( $M = 41.95$ ,  $SD = 6.94$ ) with mean difference of 16.96 and the control group ( $M = 54.80$ ,  $SD = 7.30$ ) with mean difference of 0.84. This is in favour of the experimental group. To determine if these differences are statistically significant, the analysis of covariance (ANCOVA) result is displayed in table 4.2(b).

**Table 4.2(b): Analysis of covariance (ANCOVA) anger management among student's exposed to rational emotive behaviour therapy and the control group**

Source	Type III sum of Squares	df	Mean square	F	P	Partial eta squared	Decision
<b>Correlated model</b>	3709.376	2	1854.688	36.777	0.000	0.464	
<b>Intercept</b>	4720.326	1	4720.326	93.601	0.000	0.524	
<b>Pre-test score</b>	80.528	1	80.528	1.597	0.210	0.018	
<b>Therapy</b>	2958.931	1	2958.931	58.674	0.000	0.408	Significant
<b>Error</b>	4286.579	85	50.430				
<b>Total</b>	215188.000	88					
<b>Correlated Total</b>	7995.955	87					

❖ Significant  $p>0.05$ , R Squared = .464 (Adjusted R Square = .451)

The table 4.2(b) indicates that while controlling for the effect of the independent variable, there is no significant relationship between the covariate which is the pre-test score of the students in anger management and their post-test score  $(1,85) = 80.53, p < 0.05$ . in comparing the post-test scores of students exposed to the Rational Emotive Behaviour Therapy and those who were not exposed to it (while adjusting for the effect of the pre-test score on their scores), it was found that there was a significant difference between the students exposed to Rational Emotive Behaviour Therapy and those who were not exposed to it.  $(1, 85) = 2985.93, p = 0.00$ . Partial eta squared = 0.41. Based on the result of the main test (therapy) the research hypotheses one is therefore rejected. The result therefore implies that there is a significant difference in the management of anger amongst students exposed to Rational Emotive Behaviour Therapy and those no exposed to it. The partial eta squared of 0.408 indicates that a variance of 40.8% in the post-test scores was explained by the therapy.

### **Summary:**

The study investigated the efficacy of REBT on anger management amongst secondary school adolescents in Oredo Local Government Area of Edo State and discovered the following:

1. That there is significant difference in the management of anger among students exposed to REBT and those not exposed to it. REBT contributed 40 percent in the students' ability to manage anger.
2. That REBT is effective in reducing anger
3. That there is no significant difference in the management of anger among students exposed to REBT based on gender.
4. That gender does not influence the efficacy of REBT in managing anger.
5. That there is no significant difference in the management of anger among secondary school adolescents exposed to REBT based on age.
6. That age doesn't influence the efficacy of REBT in managing anger.
7. That there is no significant difference in the management of anger among students exposed to REBT based on socio-economic status
8. That parent's socio-economic status doesn't influence the efficacy of REBT in the management of anger.

### **Conclusion:**

This study has clearly demonstrated REBT as an effective means of managing anger behaviour among secondary school adolescents, and has also revealed that anger is amenable to counselling treatment such as REBT.

### **Recommendations/Implications for Learning and Counselling:**

1. Early identification and remediation of aggressive tendencies and its manifestations are necessary in our schools so as to make for threat-free and conducive learning environment.
2. Counsellors, Psychologists and teachers should be empowered to help individuals so identified with aggressive tendencies.
3. Enlightenment programmes should be organized in form of seminars, conferences, tours and workshops for teachers, counsellors and all stakeholders in the education industry.
4. Guidance and Counselling Units should be strengthened in all schools and colleges to help provide assistance to victims of aggression and violent acts in schools and also help in providing adequate information that would minimize this phenomenon in schools.
5. Adequate and qualified personnel should be trained in counselling psychology to help meet the manpower needs of the state.
6. Teachers should undergo on-the-job and off-the-job training to help them improve on their ability to detect and manage cases of aggression and violence against innocent students in schools.
7. Guidance and counsellor in schools should not be compelled to take teaching load in order to give them enough time to carry out their counselling as a full-time job.
8. Adequate arrangement should be made for students counselling in the school time-table to ensure that students have convenient time for counselling.
9. School counsellors trained in counselling psychology should be posted to various schools in the state.
10. Teachers, school authorities, parents should be educated and oriented on the role of the counsellor to help erase some error they have on the role of the counsellors.

11. The Ministry of Education and the relevant bodies should create awareness on the dangers inherent in violence against children in schools.
12. The Counselling Association of Nigeria (CASSON) should help create more awareness on the importance of counselling as a profession in fighting the menace of violence against children in school.
13. Counsellors in schools should be provided with the conducive and right environment that will help them in executing their functions and promote confidentiality when dealing with cases of violence.

## References

- Anna Peterson, Zoe Hughes & Mary Kroeger (2005), Dropout Rates of Schools in Orange County prepared for Communities in Schools of Orange County. *Education Policy Center, Roosevelt Institute, LeenaPate, University of North Carolina at Chapel Hill.*
- Akinade, E.A. &Owolabi, T. (2011) *Research Methods (A Pragmatic Approach) for Social Sciences, Behavioural Science and Education.* Connel Publications, Lagos.
- Akparanta, B. (1994) Reasons for urban violence in post-civil war Nigeria in *Urban management and urban violence in Africa.* Vol.1 and 2 eds., Isaac Albert; JinmiAdisa.
- Alutu, N.G.(2007) *Theory and Practice of Guidance and Counselling.* Ibadan University Press Aluede, O. and Fajolu,A.S.(2011)*Bully behaviour among secondary school students in Benin metropolis of Edo State, Nigeria: Zimbabwe Journal of Educational Research.*
- Banks, T. (2011) *Helping students manage emotions. REBT as a mental health educational curriculum. Journal of Educational Psychology in Practice.* 27 (4)383-394.
- Buss, A. H. & Perry, M. P., (1992). The Aggression Questionnaire: *Journal of Personality and Social Psychology*, 63, 452-459.
- Centres for Disease Control and Prevention. Youth risk behaviour surveillance-United States, 2011. *MMWR, Surveillance Summaries* 2012;61(no.SS-4). Available at [www.cdc.gov/mmwr/pdf/ss/ss6104.pdf](http://www.cdc.gov/mmwr/pdf/ss/ss6104.pdf).
- Dellinger, R.W (2008)Connection between school dropouts, gangs motivates L.A. youths to lobby in state capitol. Retrieved 28<sup>th</sup> June 2011 from [www.catholic.org](http://www.catholic.org)
- Egbochuku, E.O. (2010). *Constructive strategy as means of reducing the scourge of violence against children in Swaziland schools.* A paper presented at the APS 22nd Annual Convention, Sheraton Boston Hotel, May 27 –30, 2010. Boston, USA.
- Egbochuku, E.O. (2008). *Guidance and counselling; A comparative text.* Benin City:University of Benin Press.
- Hagan J, Foster H 2001. Youth Violence and the End of Adolescence. *American Sociological Review*, 66:874-899.
- Hidden Hurt; Domestic Abuse Information. Retrieved 11<sup>th</sup> January 2012 from [www.hiddenhurt.co.uk/abuse\\_victims.html](http://www.hiddenhurt.co.uk/abuse_victims.html)
- Kudirat, B. Sanni, N. A., Udoh, Abayomi, A. Okediji, F. N. Modo& Leonard N. E, (2010), Family Types and Juvenile Delinquency Issues among Secondary School Students in Akwalbom State, Nigeria: Counselling Implications
- Miller, T.R., M.A. Cohen, and B. Wiersema, 1996: *Victim Costs and Consequences: A New Look*, National Institute of Justice Research Report, NCJ-155282. February 2011 Available at: <http://www.ncjrs.org/pdffiles/victcost.pdf>.
- Mukoro, S. I. (1994) Intra-urban patterns of violent crimes in African cities: Lagos, Nigeria in *Urban management and urban violence in Africa.* Vol.1 and 2 eds., Isaac Albert;
- Osaghae, E. E. (1994). Urban violence in South Africa in *Urban Violence in Africa: Pilot Studies ed.*, IFRA, pp 1-55. IFRA (French Institute for Research in Africa), Ibadan.
- Preventing crime: What works, what doesn't, what's promising?* National Institute of Justice Research in Brief, NCJ No. 171676, <http://www.ncjrs.gov/pdffiles/171676.pdf>.

Robers, S., Zhang, J., Truman, J, Synder, TD (2012). Indicators of School Crime and Safety 2011; National Center for Education Statistics, U.S. Department of Education, and Bureau of Justice Statistics, Office of Justice Programs, U.S. Department of Justice. Washington DC; 2010. Available from <http://nces.ed.gov/pubs2012/2012002.pdf>

School Violence - Causes of School Violence Retrieved 28<sup>th</sup> marc 2013 from [www.law.jark.org/pages/12103/school-violence](http://www.law.jark.org/pages/12103/school-violence)

The Facts on Violence and Bullying Our Communities Retrieved 28<sup>th</sup> March, 2013 from [www.wherepeacelives.org](http://www.wherepeacelives.org)

Tunde, A &Herault, G,. Proceedings of an international symposium on Urban Management and Urban Violence in Africa held at Ibadan, 7-11 November, Ibadan: IFRA (French Institute for Research in Africa), pp. 233-238.

UNICEF, (2007). *Assessment of violence against children at the basic education in Nigeria.*

A publication of Federal Ministry of Education In collaboration with UNICEF

Washington Office on Latin America (WOLA), 2006: *Youth Gangs in Central America. Issues in Human Rights, Effective Policing, and Prevention*, WashingtonOffice on Latin America Special Report, Washington.

YomiOruwari (2006), Youths in urban violence in Nigeria. A case study of urban gangs from Port-Harcourt, Niger Delta Economics of Violence Working Paper.

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## LANDFILL SITE SELECTION BY UTILIZING AHP WITH GIS: A CASE STUDY IN MISRATA CIT, LIBYA

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### ABSTRACT

*Landfill site selection is becoming a significant issue in most developing nations, where improper siting for landfills leads to a serious negative environmental and socio-economic impacts. It is getting much attention from planners and researchers in most developing nation, while in Misrata city as well other cities in Libya are lacking such these studies for waste management. This paper aims to find a suitable location for landfills in Misrata city. In this research, landfill site selection is performed using the Geographic Information System (GIS) and the Analytical Hierarchy Process (AHP) for the area of Misrata city. A proper siting for landfill needs to consider different factors and regulation. In the present research, the criteria such as valleys, soil, coastline, land-cover, build-up area, roads were examined. Each criterion was weighted using Expert Choice software and the ranks was entered into AHP to generate the final map for landfill suitability. The results indicate that 6.7% of the city of Misrata is unsuitable; 76.8%%, moderately suitable; and 16.5%%, most suitable.*

**Keywords:** AHP, GIS, Landfill, Misrata City, Site Selection, Waste Disposal.



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## ASSESSMENT OF THE USE OF CARD READER TECHNOLOGY IN IMPROVING THE ELECTORAL SYSTEM IN NIGERIA

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### ABSTRACT

*Nigeria political history is replete with electoral crises often orchestrated by manipulation of various kinds: vote allocation, under-aged voting compromise by the electoral umpire, ballot box snatching to mention a few. This is why election observers often describe Nigerian election as “a charade, as an exercise lacking in credibility”. The resultant effects of these are: credibility crisis, long litigation, legitimacy crisis, erosion of national leadership etc. This further explains the continuous search for improvement. This paper assesses the usefulness of Card Reader Technology in improving the electoral system in Nigeria. Qualitative Research Technique was used in evaluating relevant literature such as: periodicals, reports of observers as well as publication from Independents National Electoral Commission (INEC). Intensive content analysis of the relevant literature used revealed that the objectives of acquiring and deploying the new technology had not been achieved. It therefore strongly recommended operational efficiency by the operators of the technology to reduce failure rate, passage of electoral law that criminalizes none use of the card reader, transmission of result to secured server, and ultimately INEC should synergise with National Identity Card Management (NICM) to produce credible electronic voters register and PVC that can allow people to vote electronically where ever they are with ease just like using ATM to withdraw money from bank.*

**Keywords:** Technology Card Reader, Electoral System.

## INTRODUCTION

The deployment and use of card reader technology started with the 2015 General election and with the assumed success story in 2015, it was deployed again in 2019 General election. The card reader was a critical component that distinguished the 2015 and 2019 General elections from other elections so far conducted in Nigeria. The Card Reader stands as the greatest technological device setup to authenticate and verify electorates in Nigerian political history. Why did the electoral umpire—the Independent National Electoral Commission (INEC) introduced this technology? Jega (2015) observed that free and fair election is the benchmark of democracy and free and fair election had eluded Nigeria in her 59 years of independence. The card reader is a technological device setup to authenticate and verify on Election Day, a Permanent Voter Card (PVC) issued by Independent National Electoral Commission (INEC). The fundamental basis for the deployment of the technologically-based device by INEC was to ensure a credible, transparent, free and fair election in order to deepen Nigeria's democracy. The Nigerian Electoral Institute, (2015) define Election as the process of choosing a candidate for public office. It further pointed that Election is a critical component of any democratic society. As such, Nigeria's return to democratic rule in the fourth Republic led to the conduct of its general elections in 1999, 2003, 2007, 2011, 2015 and 2019. The Electoral institute further clarified that General elections are elections conducted in the federation at large infederal and state constituencies.

Prior to the 2015 general elections, a number of technologically based reforms were introduced such as: biometric register of Voters, Advanced Fingerprints Identification System and Permanent Voter Card (PVC). Animashaun (2010), Jega, (2011) all agreed that, The card Reader technology is a technological device used to scan the PVC in order to verify the identity of a voter in a polling booth, and eliminate multiple voting. Accredited voters Were expected to be transmitted automatically to INEC central server for retrieval when necessary to ensure that the number of votes cast does not exceed accredited voters. All these are aimed at achieving free and fair election. However, in spite of the laudable objectives of the envisaged by the election managers in deploying the device, observations show that the card reader malfunctioned in many places, finger prints of many electorates were not successfully verified, which led to the resort to manual accreditation using incident Forms, fast battery drainage was also an issue (PUNCH Feb. 26 2019), the card was also not deployed in many places.

Worst still the is also current INEC leadership denial that server- a critical component of the technology does not exist is also a matter of concern, there were allegation of massive electoral fraud and public outcry against the outcome of the 2015 election but was adjudged relatively free and fair election but the gains were almost completely lost in the 2019 General election in spite of huge investment on it. Against the above background, the thrust of this paper is to assess the use of card readers technology in improving the electoral system in Nigeria by reducing to the barest minimum if not totally eliminate, the ugly menace of election rigging

Election rigging constitutes a serious threat to peace, stability and national cohesion to any country. Election is a critical component of the electoral system of any democratic state. Consequently achieving free, fair, and transparent and credible election constitute serious burden for the electoral umpire of any state in any democratic state or society. In Nigeria, this moral burden has motivated the electoral umpire. Independent National Electoral Commission (INEC) to acquire and deploy different kinds of technological devices especially since the inception of this fourth republic (1999 till date) to reform the electoral process previously characterize by all manner of electoral fraud that even the winners of an election is ashamed in the committee of nations.

Some of the observed fraud as identified by Jega (2013) Agbu (2016), Lewis (2017) and other writers on Nigeria democracy includes but not limited to: ballot box stuffing, ballot box snatching, over voting, voters intimidation by political thugs, compromise by electoral umpire, underage voting, obtaining victory at gun point and duress financial inducement and every other inducement, the list is endless. All these makes mockery of election and calls for urgent response in form of electoral reform. This reform came through INEC acquisition of technology to improve the process starting with technology that can help to produce reliable and transparent voters register. Jega (2013) listed some other technological innovations put in place to improve the process: Are: electronic voters register, Automatic finger print identification system (AFIS) and in 2015, the smart card reader (SCR) was introduced as an anti-fraud electoral device. The card reader is to be used for accreditation of voters and according to the INEC chairman (Jega, 2013) accreditation using the smart card reader is broken into three: identification, verification and authentication. Identification, involves physical comparison of the face of the card holder with the image displayed on the card reader when PVC is inserted. Verification involves ensuring that the card is original and given by INEC while authentication involves comparison of the finger print stored on permanent voters card (PVC).

However, despite the confidence of INEC the cardreader technology in 2015 and 2019 elections malfunctions in several polling units posing serious challenges which ranged from rejection of PVC by card reader, inability to capture the biometrics of the voter to irregular capturing. This often times resulted in the use of manual accreditation process, and filling of incident form. This observation certainly raised serious concern on the usefulness and reliability of the card reader technology in improving elections in Nigeria.

Technology as tools, procedures, and forms of social organization that increases human productivity capacity, the use of tools and knowledge to manipulate the physical environment practical goals.

### **Conceptual Models of Technology**

Baporikar (2016) Delmater (2018) all viewed “technology,” as human artifacts such as machines, electronic devices, scientific hardware, or industrial manufacturing systems. However, a formal definition by College Dictionary of technology (2010) indicates that it has a more general meaning which includes any “practical application of knowledge” or “manner of accomplishing a task”, the practical application of knowledge especially in a particular area: a manner of accomplishing a task especially using technical processes, methods, or knowledge. Human’s use of technology involves not only machines (e.g., computer hardware) and instruments, but also includes structured relations with other humans, machines, and the environment.

Roger (2005) observed that the dynamic nature of the concept of technology makes it difficult to have one generally accepted definition. However, to operationalize the concept here, the views of Pascarella (2009), Nwakidi (2010) Baporikar (2016) Delmater (2018), is adopted, all agreed that technology is the systematic application of scientific or other organized knowledge to practical tasks to solve socio-economic and political problems in society Kornblum (2011). Kumar et al (2011) explained further that technology consists of two major components:

1. A physical components, which comprises of items such as products, tools, equipment, techniques and process.
2. The second component is information component which consists of technical know-how. In all, this author agrees that technology is connected with obtaining certain result, resolving certain problems, completing certain task with the use of a particular skill, tool devices and techniques. This explanation has effectively captured the topic of this investigation” use of card reader technology to improve the electoral system” in Nigeria.

### **Electoral System and Election**

An electoral system according to Zinbar, (2013) is a set of rules that determine how elections are conducted and how their result are determined. The nature of electoral system is to aggregate voter’s preferences and to convert them into electoral results (Amucheazi and Ibeanu, 2008)

### **Election**

Election is a period of choice making by the electorate in a liberal participatory democracy. Democracy is regarded as the best form of government because its ideology promotes the free expression of the general will of the people (J.J. Rousau) citizens in a democratic republican state have the inalienable political right to decide who should govern them in a free, fair, and transparent conduct called election. Consequently, election constitutes an essential principle in liberal democracy. Deckson (2011) defined election as the record of office holders whose actual performance many have to be compared with promise made when they were previously elected. Election legitimizes leadership, rewards performance and punishes unpopular candidates, with poor performance record, programmes and policies. It is the basis and foundation of peaceful political transition if it is devoid of election rigging. It is to eliminate rigging promote transparency and credibility of the electoral process that informed the decision of electoral managers all over the world to search for cut-age technology to acquire and deploy in the conduct of modern elections this was precisely the philosophy behind INEC decision to acquire and deploy the card reader technology in 2015 and 2019 elections in Nigeria.

### **Theoretical Explanations**

Although there are many theories that explain the application of technology to election, Jega (2011) identified: modernization perspective, globalization perspective and even class struggle perspective as possible theoretical explanations. However, modernization perspective is adopted here.

Modernization theory is used to explain the process of progressive transition from a pre-modern or traditional society to a modern one, according to Oxford research Encyclopedia (2017) modernization theory explains the process of social evolution of society, a process of change, through innovation, and invention. In line with that, Komblem (2010) observed that there exists a high propensity of people in this modern world to seek technological solutions to problems in all aspects of human endeavor. Jega (2011) in applying modernization theory to explain the international dimensions to Nigerian elections pointed out that introducing electronic voters' registers and other devices is in line with the modern global trend, he concluded that elections in Nigeria express a diffusion of democratic norms from the West to the rest of the world. He further explained that participatory democracy and elections had become the current after-effects of modernization, a process in which non-western societies across the world are sucked in by the irresistible and universal movement of modernization that produces an entrenched standard global best practices in election administration. Thus, the introduction of smart card technology in 2015 and 2019 is in line with modernization theory. It is a form of intervention to change the old narrative of flawed elections which had previously characterized the Nigerian Electoral System.

### **Card Reader Technology and Elections in Nigeria.**



The card reader popularly called the smart card reader in Nigeria (SCR) is an electronic voter authentication machine. It was deployed in the 2015 and 2019 general elections in Nigeria. Jega (2011) defined card reader as a highly secure and cryptographic technology that has ultra-low power consumption, with a single core frequency of 1.2Hz and while Usman (2015) stated that the Card Reader is an anti-fraud electoral device used to authenticate a permanent voter's card (PVC) in the process of accreditation. According to them, using the card reader for accreditation involves three stages: identification-. Identification involves physical comparison of the face of the card holder with the image displayed on the card reader when PVC is inserted. Verification involves ensuring that the card is original while authentication involves comparison of the finger print stored on the PVC with what is physically presented and scanned by the card reader. The card reader according to INEC is to be used for all polling units during the election to ensure transparency.

### **Elections in Nigeria**

Free and fair election is the benchmark of democracy. In other words, democracy implies that the people have the opportunity to decide who governs them. Regular elections offer the people the opportunity to accept or refuse the men who are to govern them. It is free and fair elections that confirm the legitimacy of a government as well as withdraw legitimacy from one government and give it to the other. It is the political right enjoyed by the people to decide who should govern them in a free and fair election that separates democracy from any other kind of political system. Election has also been described as the post mortem that investigates the record of office holders to ascertain whether they have kept faith with their election promises or not. (Dickson, 1990). Foremost writer on democracy, Schumpeter (1947) stated that democracy ensures that the people have the opportunity of accepting or refusing the men who are to rule them. Hence democracy is all about elections and choosing political leaders. A review of elections in Nigeria since independence reveals that election rigging has been a constant factor in Nigeria's democratic process. Osinachukwu and Jawan (2011) examined election rigging and its effect on democratic consolidation in Nigeria. Relying on a qualitative approach using data gathered from secondary sources as well as historical analysis by looking

into the histories of election rigging in Nigeria from 1960 to 2007, they concluded that election rigging has hindered the emergence of democratic consolidation in Nigeria. Thereby, elections in Nigeria have not been able to bring about leadership change that will enforce accountability in leadership. "Election riggings in Nigeria were evident in 1964/1965, 1979, 1983, 1993, 1999, 2003 and 2007 general elections." (p.128). Electoral frauds include illegal printing of voters' cards, illegal possession of ballot boxes, stuffing of ballot boxes, falsification of election results, illegal thumb-printing of ballot papers, infant voting, compilation of fictitious names on voters' lists, illegal compilation of separate voters' lists, illegal printing of forms used for collection and declaration of election results, deliberate refusal to supply election materials to certain areas, announcing results in places where no elections were held, switching and unauthorized announcement of results, harassment of candidates, agents and voters, change of list of electoral officials, as well as box-inflation of figures, votebuying among others.

### **Assessment of Card Reading Machine on the Conduct of 2015 and 2019 General Election**



Local and international observers hailed INEC for introducing card readers in the 2015 general elections, which they said, helped in no small measure in reducing election fraud across the country, despite the challenges that came with it. According to them, the card reader technology did not only reduce election rigging and snatching of ballot boxes from polling units, but also enhanced speedy and accurate electoral processes during accreditation of voters in the area that the card worked well (Bamisaye and Awofeso:2017). Chief Executive Officer of Teledom Group, Dr. Emmanuel Ekuwem, told THISDAY that the use of card reader machines for the 2015 general elections has proved that INEC could conduct credible elections with minimal complaints (This Day Live, 2015). The use of card readers for elections is highly commendable because it has helped reduced election fraud like multiple registrations and multiple voting. With the card readers, the true identities of card holders were matched with the details contained in their permanent voter's cards (PVCs), during accreditation and the process helped in reducing fraudulent accreditation that marred electoral processes in the past," (Ayoade 2019). He advised INEC to continue to explore the power of technology in subsequent elections, and called on the electoral body to create a database that is linked with the card readers in order to give voters the opportunity to vote from anywhere in the country, using their PVC, instead of restricting them to vote only in their registration centres. He advised INEC to apply the technology of Automated Teller Machines (ATM) cards issued by banks, which allows card holders to withdraw cash from any bank that is located anywhere in the country.

According to Ekuwem (2015), voters should be able to use their PVCs on any card reader for accreditation and voting in any part of the country, irrespective of where the voter was registered. That it will allow people who may have relocated from their place of registration, to vote in their new areas of residence. Reacting to the situation where some of the card readers malfunctioned during the elections, Ayoade said it was expected because the technology was new and that most of the INEC officials were not conversant with the card reader technology. He said he became pleased with INEC when some of the complaints about card readers were addressed during the Governorship and State House elections this year (Agrees with Ekuwem, 2015). According to him, the card reader technology was able to reduce election fraud by providing accurate records of accredited voters who were the same people that were allowed to vote. He said the card readers were able to address discrepancies between actual voters and fake voters. Chairman of the House Committee on ICT, Honourable Shehu Gusau, told Punch that although the card reader technology is new to Nigerians, it has helped to achieve a fair and free election, without massive rigging (Onapajo, 2014). President of the Association of Telecommunications Companies of Nigeria (ATCON), Mr.



LanreAjayi, also commended INEC for the introduction of card reader machines for election, and described the technology as a worldwide technology that is driving modern transformation in societies

### **Technical Hitches in the use of Card Reading Machine during the 2015 and 2019 General Elections**

According to Jega (2011), the card reader was part of the registration and authentication of duly registered voters – those who had Permanent Voter Cards (PVCs) – and who ultimately participated in Election Day. The card reader had been promoted by INEC as an anti-electoral fraud device and was introduced to enhance the integrity of the voting process and dissuade multiple voting (as only duly accredited and verified PVC holders could vote). The card readers were also programmed to work for specific polling units only. This meant that PVCs could not be used in multiple polling units (Ayoade, 2018). Despite the pockets of challenges concerning its use, which included possible battery failures to a long period in verifying PVC holders and how many voters could be covered within the accreditation process, Nigerians were generally optimistic that the readers would positively impact the voting process if local socio-political realities allow it to function. Sadly, technical hitches were still recorded in 2019 even worse than it was in 2015 (Fawole; 2016). These complications ranged from simple issues, such as the lack (or poor) understanding among INEC's ad-hoc staff on the need to remove film covering from the screen of the device which facilitates better fingerprint decoding, to the outright malfunction or failure of the card readers themselves and deliberate refusal by INEC officials due to political pressure. Of particular note was the failure of some card readers to recognize President Goodluck Jonathan's card in 2015 Agbaje (PDP Lagos State Governorship candidate in 2019 general election) which was quite embarrassing. After four repeated trials and failures, voters were accredited to vote manually in line with stipulated INEC procedure – i.e. filling the incidence form. Afterward, there were a range of reports in the media circulating about similar card reader and finger recognition challenges nationwide. This prompted the INEC to instruct those polling units that were experiencing card reading challenges to immediately revert to the old system of manual accreditation. The announcement seemed to have eased accreditation in these places; however, the announcement may have inadvertently opened the flood gates for electoral fraud by some politicians and polling officials which was what the card reader was meant to check, thus raising fundamental questions of its usefulness.

There were further allegations of voter list mark-up's (manipulation) and ghost voting (electoral fraud), even though, according to the INEC, the card readers functioned in over 75% of polling units nationwide (Punch 2019). While this is a very high reliability factor, a number of aggrieved candidates and their parties were still contesting procedures. The card reader challenges, as well as incidences from use and its impact on the credibility of the election

### **Impact of Card Reader Machine in Reducing Electoral Fraud during the 2015 and 2019 General Elections**

Despite the challenges that confronted the operation of some of the smart card readers during the 2019 and 2015 general election, a significant impact of the device usage was observed after the elections. First, the use of the card reader led to the increase and reinforcement of public confidence and trust in the electoral process. This public confidence is dependent on the integrity of an election which the 2015 general election appears to possess but somehow reduced in 2019. Majority of Nigerians after the elections believed that their votes could count if allowed and as such their will could be respected. This cautious optimism is as a result of snatching and destroying of ballot boxes as witnessed in Okota Lagos (Punch, Thisesday Feb; 26 2019 and this has reinforced doubt in the credibility of democratic process

### **Conclusion**

The applications of technology to election management in Nigeria has to a large extent modernized the electoral system and improved election management in Nigeria. The introduction of (EVR) AFIS, and SCR have reduced the incident of multiple voting but collection and transmission of result still remains a source of worry and a serious threat to the credibility of the electoral process, use of incident form is also another source of concern and the failure rate all over Nigeria is also worrisome

### **Recommendation**

- urgent needed to legalize e- collection and transmission of result to server for proper storage and retrieval
- election should always be rescheduled where the card reader fails to function

- there is need for serious update on the voters register to remove those who have passed on while continuous voter registration should be strengthened to capture those that had turned 18 years
- INEC should fully resolve issues of multiple registration with more improved data capturing machine
- the high level of card readers failure calls for serious concern and there should be an enquiry to find out if it is Technical or man made problem
- Seminars, Advocacy and Political Education by INEC, National Orientation Agency and the Electoral Institute should be promote
- The Issue of card reader battery drainage should be addressed through developing alternative energy power supply such as solar energy to continuously power the battery as it is a critical component of the machine performance.
- INEC should only deploy well trained staff and not just adhoc staff to ensure operational efficiency.



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**REFERENCES**

- Abimboye, D. (2011). "Anarchy in the Temple of Justice" News Watch Magazine, 5<sup>th</sup> September.
- Agbu O.(2016) Umbridled election rigging and the use of technology. The smart cardreader as the joker in Nigeria 2015 election research and studies department, nigria institute of international affairs.
- Amenaghawon, J. (2015) 2015 Nigeria Elections: The Gains, the Challenges and the Lessons. Available at <http://blogs.premiumtimesng.com/?p=167419>. Accessed 20, June.
- Amucheazi, E. &Ibeanu, O (2008). Between the Theory and Practice of Democracy in NigerIA, Condon, Abbey and Adonis Publishers.
- Animashaun, K. (2010). "Regime Character, Electoral Crisis and Prospects of Electoral Reform in Nigeria". Journal of Nigerian Studies 1(1).
- Ayoade, D. (2018). Godfather Politics in Nigeria in Money Politics and Corruption in Nigeria, Abuja: IFES Publishers.
- Bamisaye, O.A, &Awofeso, O. (Ed), (2017). Democracy & Democratic Practice in Nigeria: Issue, Challenge and Prospect, Lagos, Macgrace Publishers
- Baporikar, N. (2016). Technology Integration and Innovation and Communication Technology 2(2).
- College Dictionary of technology (2010). New York University Press. New York.
- Delmater, S. (2014). A Typology of the use of Technology.
- Fawole, A. (2016). Voting without choosing: Interrogating the Crisis of Electoral Democracy in Nigeria, African Journal of Governance & Development Vol 6 (2).
- Jega A.(2012).Report on the 2011 genrd elections independent nationedelectorqal commission
- Jega, A.M. (2011). Nigeria's 2011 General Elections: The International Dimensions and Challenges, Attahiru, M. Jega, NIIA Lecture Series No 89.
- Jega, A.M. 2015a. Preparations for the 2015 general elections: Progress report, presentation to the Council of State, 5 February; Jega, A.M. 2015b. Election postponement speech. Pulse, 7 February Available from: <<http://pulse.ng/politics/2015elections-read-full-text-of-jega-s-election-postponement-speech-id3466565.html>> [Accessed on 28 February 2015].
- Kornblum (2010) Sociology is a changing world, Harcourt college publisher N.Y., USA
- Lewis, T. (2011): democracy and elections in Nigeria. African journal of politics and history. 3(3).
- Roger (2005). Philosophy to Technology, Cambridge University Press New York.

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# UTILIZATION OF DIGITAL PEDAGOGIES AMONG UNIVERSITY ACADEMICS IN RIVERS STATE, NIGERIA: PROBLEMS AND PROSPECTS

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## ABSTRACT

*Universities in Rivers State are making considerable effort toward the integration of technologies and digital learning principles and tools in their education experiences. At the center of this drive are academic staff, who are encouraged to adopt digital pedagogical principles in their instruction provided for students who are mostly digital natives. The present study seeks to investigate the extent to which university academics in Rivers State, Nigeria are utilizing digital pedagogical tools and principles. Adopting the descriptive research design, 360 academics drawn using convenience sampling techniques from the three public universities in Rivers State were used as the sample of the study. A research-developed questionnaire, constructed using the Likert scale format was used for data collection. Reliability analysis using Cronbach method yielded an alpha coefficient of 0.84. Data analysis was done using mean, standard deviation, test and ANOVA. Results showed that digital pedagogical tools were poorly utilized by university academics. This was attributed to administrative bureaucracy and poor electricity supply. Prospect for increased uptake of digital pedagogies included continuous professional development programmes for staff.*

**Keywords:** Digital Pedagogy, University Academics, Digital Natives.

## Introduction

In contemporary era, the world has seen a swift increase in technological innovations. This age steered in the advent of the electronic computer system among other recent technologies. At present the computer technology has infiltrated nearly all aspects of human organizational roles and instruction.

Integrating these technological innovations into curricula with the intent of positively influencing teaching and learning has been in a state of advancement over the past few years (Dockstader, 1999). Driven primarily by hardware and software evolution, accessibility to computers in educational settings, popular instructional technology trends and the cravings of today's learners who are digital natives, technology integration has enclosed the continuum from instruction on programming skills, self-directed drill and practice, interactive learning software, online training, testing, instructional delivery extension, and Internet-based accessibility to information, communication, and publication. Technology integration is intended to be cross curricular rather than advance into a distinct course or topic in itself. Technology should be used as a tool to support the educational objectives such as skills for searching and assessing information, cooperation, communication and problem solving which are important for the preparation of learners for the knowledge society (Drent & Meelissen 2007).

Truth be told, imaginative utilization of ICT can encourage students' focused learning (Drent, 2005). Consequently, every teacher at any level should utilize learning advancements to upgrade their students' learning in each subject since it can connect with the reasoning, basic leadership, critical thinking and thinking practices of students (Grabe and Grabe, 2001). This present period of innovation requires a tremendous change from educators particularly the lecturers to be side by side with further developed advanced instructional method to shape better graduates in Nigeria. Presently straightforward instructional method is moving towards Digital Pedagogy, which is a novel method for educating and learning with ICT. Advanced instructional method is the investigation and utilization of contemporary computerized innovations in educating and learning (Unconference, 2012). Computerized instructional method might be connected to on the web, half breed, and vis-à-vis learning conditions.

Digital Pedagogy interchanges the focus from only ICT tools and skills, to an approach of working in the digital world. The term digital pedagogy began from the connection of technical skills, pedagogical practices and understanding of curriculum design approach, which are appropriate for learners. Digital pedagogy is not merely a way to teach, but also makes up a rapidly expanding field hosting multiple debates and schools of thought (Croxall, 2013). The Digital Pedagogy provides an understanding to teachers about the ways in which learners of digital generation works and learns in a digitalized connected environment. Teachers may combine technology with their teaching which may result in a potential tool to bring changes in the education process by the means of digital pedagogy.

Digital Pedagogy is effective in supporting, enhancing, and transforming the process of teaching and learning and in consequence provides enriched, varied and flexible learning prospects for learners. It also offers a base to engage learners in constructive learning through which learners dynamically construct and apply learning in decisive, purposeful and significant ways. Digital Pedagogy simply means the use of electronic essentials like multimedia, productivity applications, cloud computing, etc. to enhance or to change the experience of education and transforms teaching and learning to provide rich, diverse and flexible learning opportunities for digital generation. It is evident from number of studies that ICT uses could be most effective when both the teacher and the technology challenges learners' understanding and thinking, the method used could be either discussion initiated by the use of an interactive whiteboard involving the whole-class or through individual or paired task to be done on a computer system. Both of the activities could prove to be equally effective if well planned and if the teacher is skilled in organizing and encouraging the activities based on ICT. However, there are some skills and competencies needed for university academics for using digital pedagogy such as; developing lesson plans incorporating students use of technology in the learning process, evaluating and selecting appropriate software for a particular subject area and per student need, managing student data, using data management tools to efficiently manage the learning process, using technology like excel and access for database management to gather, organize and give feedback about student's performance, developing tools to evaluate technology-based student's project including multimedia, word processing, database, spreadsheet, PowerPoint, desktop publishing and internet/telecommunications. The knowledge about ICT is important but not as a separate and unconnected mass of knowledge detached from the context of teaching and learning. However, in Rivers State, Nigeria very few teachers especially in the universities seem to be competent and have a comprehensive knowledge of the wide range of ICT resources now available in education. This means that learners are devoid of diverse learning opportunities that ICT could provide.

Universities are working hard to provide high quality education. Wide use of e-learning/Information Communication Technology (ICT) in education is considered to be an important element in bringing these institutions toward that goal and facilitating improvements with respect to the quality of teaching and learning outcomes. Use of information technology-based tools in education have existed for years, but education today is still dominated by traditional teaching methods, such as face-to-face lectures, tutorials, mentoring, and project work (Ørnes, Wilhelmsen, Breivik, & Solstad, 2011) even though the technology itself has become more sophisticated and has improved dramatically. One of the main questions will be whether teachers have the competence, motivation, and incentives needed to use the technology. Students today have more or less grown up with this new technology often they are described as “digital natives.” Digital natives are those who grew up with the internet and are completely comfortable using online sources to meet their information needs (Prensky, 2001). On the other hand, the above might not be the situation for university lecturers; the availability of ICT does not automatically secure implementation and usage intention. Identifying ways to motivate teachers to utilize ICT has turned out to be a challenge for university management (Ørnes, Wilhelmsen, Breivik, & Solstad, 2011). The technology provides teachers and students with new “possibilities,” not a “ready to use” resource (Sørebo, Halvari, Gulli, & Kristiansen, 2009). The extent and effective utilization of digital pedagogies among university academics in teaching and learning in Rivers State, Nigeria is hence the thrust of this study.

### **Statement of Problem**

Pedagogical beliefs and attitudes of lecturers play an important role in designing such learning opportunities, which are techno-mediated. To enable the lecturers choose the most appropriate resources from a wide collection of ICT resources, extensive knowledge of ICT must be provided to the lecturers. It is also imperative for them to be well acquainted with the knowledge of incorporating and applying ICT into their lessons. Consequently, to achieve this there is dire need to develop new pedagogical practices by using ICT but unfortunately most lecturers in Rivers State of Nigeria seem to be digital immigrants with little or no competence in the use of digital pedagogy; hence the need to ascertain the extent of utilization of these techno-pedagogies by academics in higher education; the statement of problem of this paper reads thus; To what extent do university academics in Rivers State of Nigeria utilize digital pedagogical tools and principles for teaching and learning of digital natives? Providing answers to the aforementioned question is the thrust of this paper.

### **Aim and Objectives of the Study**

The aim of this study is to ascertain the extent to which the university academics in Rivers State of Nigeria utilize digital pedagogical tools and principles for teaching and learning of digital natives.

Specifically, the study intends to;

1. determine the extent to which digital pedagogies and principles are actually utilized in teaching and learning of digital natives
2. identify the challenges facing the university academics in their efforts to teach the digital natives using digital pedagogies and principles
3. determine the prospects accruable from digital pedagogy based teachings and principles in teaching the digital natives

### **Research Questions**

The under listed research questions guided the study

1. To what extent do the university academics in Rivers State of Nigeria utilize the digital pedagogical tools and principles for teaching the digital natives?
2. What are the challenges facing university academics in their efforts to utilize digital pedagogical tools and principles in teaching the digital natives?
3. What are the prospects accruable in utilizing the digital pedagogies and principles in teaching and learning of the digital natives?

## Hypotheses

The following hypotheses guided the study:

1. There is no significant difference in the mean responses of university academics on the utilization of digital pedagogies and principles based on rank.
2. The mean responses of the university academics of the three universities in Rivers state of Nigeria on the challenges facing them in utilization of digital pedagogies and principles will not differ significantly based on ownership
3. The mean responses of university academics in the three universities in Rivers State of Nigeria on the prospects accruable from teaching based on digital pedagogies and principles will not differ significantly based on ownership.

## Literature Review and Conceptual Clarification

The literature review in this work is done under two broad headings, viz theoretical framework and conceptual clarifications.

### Theoretical Framework

#### Technology Acceptance Model (TAM)

The Technology Acceptance Model is generally used when enlightening personal acceptance and utilization of information technology. The Technology Acceptance Model has demonstrated to be a model that explains variances in users' behavioral intentions related to information technology adoption and usage across different contexts (Taylor & Todd, 1995). Technology Acceptance Models (TAM) have traditionally been used to study users' behavioral intentions and perceptions to the usability and ease of use of technology. According to Venkatesh, Morris, Davis, and Davis, (2003), TAM posits that perceived usefulness and perceived ease of use determine an individual's intention to use a system, intention to use being the mediator of actual system use. These two important determinants of the actual system used: Perceived Ease of Use (PEOU) and Perceived Usefulness (PU). Perceived ease of use (PEOU) refers to "the degree to which a person believes that using a technology will be easy and free from effort" (Davis, Bagozzi & Warshaw, 1989). The easier a technology is to be used, the higher its possibility to be adopted. It is the users' estimation of the effort they will have to put in to use a technology. 'Perceived ease-of-use' is advantageous for the early acceptance of an innovation and it is necessary for technological adoption (Davis, 1989). Perceived usefulness' is one of the strong factors in determining user acceptance, adoption and usage of a technology (Mathieson, 1991). It is defined as "the degree to which a person believes that using a particular technology system would enhance his or her academic performance" (Davis, Bagozzi & Warshaw, 1989). It assumes that technology will benefit the user in the performance of educational task. The more positive one's attitude towards technology usage, the better he/she performs in education. Saadé, Nebebe, and Tan (2007) insisted that university lecturers' and students' participation and involvement were important to successful e-learning systems and therefore students' acceptance behavior should be assessed. They suggested that TAM was a solid theoretical model where its validity can extend to the e-learning context. On the context of utilization of digital pedagogies into the teaching and learning, the users (teachers or students) must have perceptions that technology is useful in helping in the teaching and learning process, as its ease of use they will intend to use it when needs arise. The teachers uphill tasks are to make students aware of its use in future workplace, as well as to ensure students confidence that it is easy to use.

Digital pedagogies can be prominent to become a pedagogical cognitive tool to help in changing the focus of the classroom from one that is teacher-centered and controlled to one that is learner-centered and open to inquiry, dialogue, and creative thinking on the part of learners as active participants.

### Constructivism

The term constructivism refers to the fact that learners build knowledge on their own ways where every learner completely and socially develops significantly as he/she learns. This is learning by construction of new Knowledge

by the learner. The contributors of this theory include Jean Piaget and Lev Vygotsky. Abik and Ajhoun, (2012) lamented that students vigorously partake in knowledge construction as they form their own experiences.

The constructivist theory basically states that individuals develop their own particular comprehension and information of the world through connecting with and encountering new things and thinking about those new encounters in the most general sense, this encourages learners to use active technological tools such as smart board, digital videos, audios and computer programs to experiments real-world issues, problem solving etc. thus helping them make more learning and evolve their comprehension of learned facts. Constructivism suit perfectly the learning pattern of digital natives, hence a lot more is required from the teachers who are basically digital immigrants to adapt to this learning pattern of today's learner by integrating technological pedagogy in the classroom to eliminate clash of interest.

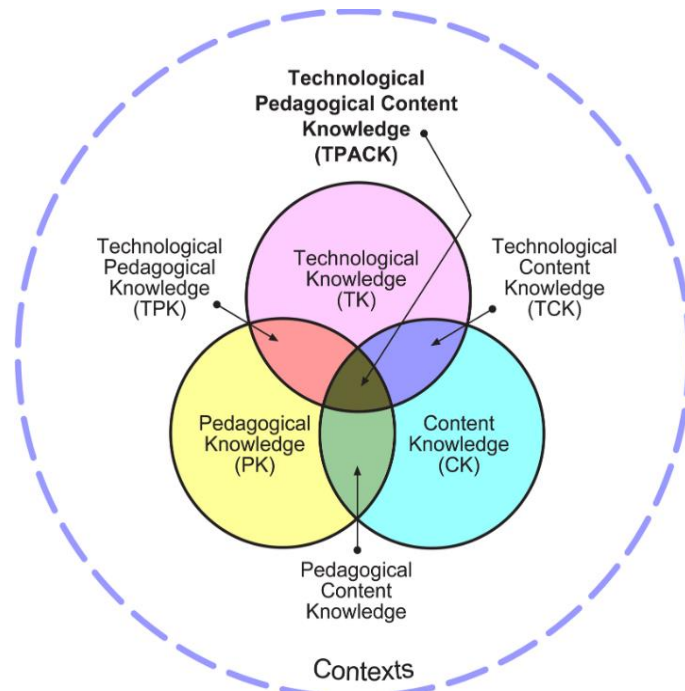
### **Connectivism**

This is a learning theory that clarifies how internet technology opens new doors for both students and teachers to learn and share information across the World Wide Web. These technologies include webs browser, email, YouTube, wikis, blogs and any other tools which will enable users to learn and share information with others around the globe. This theory otherwise called a learning theory for a digital age was advanced by Stephen Downes and George Siemens, (George, 2005). This theory clarifies complex learning in a quickly changing social computerized world. Learning today focuses on connecting specific information sets using computer networks and links that enable learners acquire more knowledge. Hence, the ability to synthesize and recognize connections and patterns becomes an immeasurable skill. The technology tools such as computerized database allow students and teachers to tap in to the huge databases of knowledge with a few clicks to seek for extra knowledge such capacity can help to facilitate learning and research (Patrick, 2013).

### **Technological Pedagogical Content Knowledge (TPACK)**

This is a theory that was developed to explain the set of knowledge that teachers need to teach their students a subject, teach effectively, and use technology. The seminal piece on the TPACK model was written in 2006 by Punya Mishra and Matthew J. Koehler in "Technological Pedagogical Content Knowledge: A Framework for Teacher Knowledge." They explain that their theory comes after five years of studying teachers at all different grade levels with design experiments to see how their classrooms operated. The use of technology accelerates everyday life and conveys many advantages for people. Technologies have the capability to largely modify the way we think about teaching and learning. Technological tools are perceived among the most operational tools both in and out of the school in the educational process of students and teachers. Teachers have a starring role in the schools to incorporate the technology into the learning process. Studies on Information and Communication Technology (ICT) and Technological Pedagogical Content Knowledge (TPACK) have quickly improved in last few years. Basically, there are seven categories of knowledge of teachers such as technological knowledge (TK); pedagogical knowledge (PK); content knowledge (CK); technological content knowledge (TCK); pedagogical content knowledge (PCK); technological pedagogical knowledge (TPK); technological pedagogical content knowledge (TPACK).





**Framework of Technological Pedagogical Content Knowledge (TPACK) for Technology Integration in Education, Source: Adapted from Mishra and Koehler (2006:5)**

**Technological Knowledge (TK):** Knowledge of how to maneuver computers and related software.

**Pedagogical Knowledge (PK):** Knowledge for teaching that includes "...understanding of how particular topics, problems, or issues are ordered, presented, and adapted to the diverse interests and abilities of learners; and the most valuable forms of representation of these ideas, most powerful analogies, illustrations, examples, explanations, and demonstrations, and the ways of representing and formulating the subject that makes it comprehensible to others, (Shulman, 1987).

**Content Knowledge (CK):** This is the grasp of information, processes, principles, theories, and skills within a field of study (Shulman, 2004).

**Technological Content Knowledge (TCK):** Understands technology in a particular subject or discipline; and denotes technology. Pedagogical Content Knowledge (PCK) balances the content and the pedagogy into understanding of how these are related for successful teaching (Shulman, 1986): The category of pedagogical content knowledge includes the most repeatedly taught topics in one's subject area, the most suitable forms of representation of those ideas, the most powerful analogies, illustrations, examples, explanations, and demonstrations, in a word, ways of representing and formulating the subject that make it comprehensible to others. Pedagogical content knowledge also contains an understanding of what makes the learning of specific topics easy or difficult; the conceptions and preconceptions that students of different ages and backgrounds bring with them to the learning of those most frequently taught topics and lessons.

**Technological Pedagogical Knowledge (TPK):** Technological pedagogical knowledge understands how technology can shape the ways of teaching. PCK is described as the relationship between the teaching subject and associated pedagogy. For (Shulman, 1987), pedagogical content knowledge identifies the distinctive bodies of knowledge for teaching. It represents the blending of content and pedagogy into an understanding of how particular topics, problems or issues are organized, represented, and adapted to the diverse interests and abilities of learners, and presented for instruction.

**Pedagogical content knowledge (PCK):** This is the category most likely to distinguish the understanding of the content specialist from that of the pedagogue. In teacher education, Pedagogical Content Knowledge has been seen as an important support for teachers' professional development. In order to acquire and update their skills, teachers must keep pace with increasing educational requirements that necessitates adaptable strategy and a long time commitment. An important factor that can help mathematics teachers keep their potentials is the use of technology in classrooms.

**Technological Pedagogical Content Knowledge (TPACK):** The use of technological tools that helps in delivering PCK (Mishra & Koehler, 2006). TPACK-the new acronym for TPCK has a theoretical framework has been adopted by different researchers in a multitude of educational areas, and is considered to have shown promising results in integrating technology in teachers' practices. In education, there have been several studies in using the TPACK framework.

### *Conceptual Clarifications*

#### **Digital Pedagogies**

The education provided by universities and colleges is becoming increasingly digitalized. Hence the need of time that every teacher should know the proper use of technology, pedagogy and content of particular subject to make their daily classroom teaching effective and efficient. The term 'pedagogy' is not without its critics, particularly in the field of post compulsory education. Malcolm Knowles, for example (1990), notes that the term derives from the ancient Greek word paidagogos, meaning the slave who led children to school, and argues that this makes it inappropriate for the years beyond school in which learners gain in self-direction and self-reliance. Others have found the usual definition of pedagogy as the 'art or science of teaching' at odds with their preferred emphasis on the activity of learning. Digital Pedagogy is precisely not about using digital technologies for teaching and, rather, about approaching those tools from a critical pedagogical perspective. So, it is as much about using digital tools thoughtfully as it is about deciding when not to use digital tools, and about paying attention to the impact of digital tools on learning." In his introduction to the MLA Digital Pedagogy Unconference (2013), Brian Croxall offers a very enlightening discussion around digital pedagogy. He defines it very broadly, stating that it: "is the use of electronic elements to enhance or to change the experience of education." A digital pedagogy includes planning for learning which is less content than problem-solving based. It can present knowledge as problematic rather than as fixed. As such it promotes higher order thinking skills and students move from remembering content to gaining a deep understanding of concepts. .In a truly learner-centred environment, they suggest, teaching should not be the focus of concern. The word 'pedagogy' embraces an essential dialogue between teaching and learning. This is particularly significant in a context of educational discourse in which the two terms have come to be used in tension and even in opposition to one another. In extreme cases, the term 'teaching' is seen as denying the active nature of learning and individuals' unique capacities to learn (Alexander 2002). Pedagogy describes the collected practices, processes, strategies, procedures, and methods of teaching and learning. It also includes knowledge about the aims of instruction, assessment, and student learning (Khirwadkar 2007). Papyrus and paper, chalk and print, overhead projectors, educational toys and television, even the basic technologies of writing were innovations once. The networked digital computer and its more recent mobile and wireless counterparts are just the latest outcomes of human ingenuity that we have at our disposal. The Digital Pedagogy program incorporates contemporary teaching and learning strategies. It features personalized approaches, intellectual rigour and engagement, connectedness to global contexts, supportive and collaborative classroom environments and a clear alignment of curriculum, assessment and reporting to improve outcomes for students." It is a technique to work and learn with ICT tools to assist quality enriched learning experiences for 21st century learners. Digital Pedagogy is precisely not about using digital technologies for teaching and, rather, about approaching those tools from a critical pedagogical perspective. So, it is as much about using digital tools thoughtfully as it is about deciding when not to use digital tools, and about paying attention to the impact of digital tools on learning Digital Pedagogy means the use of ICT tools, techniques and gadgets i.e. social media, multimedia applications, cloud computing, online games and applications, mobile devices, web 2.0 tools, productivity applications, and interoperable systems to enhance or to change to experience of education and transforms teaching and learning to provide rich, diverse and flexible learning opportunities for a digital generation.

Academics must understand the roles required of them in technologically-oriented classrooms. Thus, knowledge about technology is important in itself, but not as a separate and unrelated body of knowledge detached from the context of teaching, it is not only about what technology can do, but perhaps what technology can do for them as teachers.

In digital pedagogy or more appropriately techno-pedagogy, there are three areas of knowledge, namely: content, pedagogy, and technology.

### **The 21st Century Teaching and Learning**

The turn of the new millennium came with a sensational digitalized breakthrough. We now live in a more diverse, globalized and complex media saturated society. According to Kelner (2008), this innovative transformation will greatly affect our society more than that of exchange from oral to print society. This technological development leads to the need for students to be active participants in information creation and utilization and to be able to communicate fluently and to be functional members of the society in local and international levels. This technological advancement brought numerous changes in our daily lives; prominent among these changes is learning technology for the digital age. Learners in this computer age are confronted constantly with a series of computer and social networking applications such as those provided by the web 2.0 tools. As the new technologies continue to grow, they reshape not only the learner's behaviors and needs but also theories and pedagogical principles of learning processes, instructional design and applications. Again, Downes (2008) pointed out that in the Connectivism model, learning group is depicted as a hub which is always part of a bigger system.

### **Today's Learners**

Amid the growing trend of computers in the classroom, various justifications for their use have been made, some of which include increasing students' technological proficiency, improving academic performance, focusing on student-centered activities, allowing for use in and outside of the classroom, promoting collaborative learning, and preparing students for life after their secondary school education (Sell, Cornelius-White, Chang, McLean, & Roworth, 2012). However, few researchers cite an even more obvious matter as the very reason why students should learn via technology.

Today's students, often called digital natives or the Net Generation, grow up with technology. Most of them have never known life without the Internet. They have spent their entire lives using computers, cell phones, and other digital media and have integrated technology into almost everything they do. It is obvious that technology is an integral part of their lives. To engage them in learning, there has been increased emphasis on the integration of technology into the classrooms.

Similarly, Hariadi, Dewiyani, and Sudarmaningtyas (2016) concur that students in school today, considered part of Generation "Z," have quite a different perspective on technology than those of previous generations mostly due to the pervasive nature of it. They claimed current students should be educated differently than their priors based upon their cultural knowledge of technology. They outlined certain characteristics of Generation "Z" students and what they are already capable of doing:

- (1) Comfortable and very dependent on technology, it is because Generation "Z" grew surrounded by technology,
- (2) Multitasking with a variety of online products and sophisticated technology equipment, and appreciate simplicity and the interactive design,
- (3) Have a higher social responsibility with the amount of information that can be accessed online,
- (4) Always connect, communicate through social networks, cross country and culture that indirectly affect their thought and decision-making process. (Hariadi et al, 2016).

The researchers continued by calling for a less conventional view of schooling and a more integrative "learning process" which no longer relies solely on "faculty-centered learning", calling it inappropriate and outdated (Hariadi et al., 2016). They suggested an entirely new model for education, one which builds upon what students of today already know and do, hence the need for adoption of techno-pedagogy.

### **21st Century Skills**

Technology's influence and impact have continually expanded in the last three decades, especially prominent in business and communication. As technology and its influence grow, so do the voices calling for the same influx in the field of education. Business owners, government officials, and educational leaders all appear to agree that students must learn to use modern technology, including computers, in order to best prepare themselves for life after graduation. As a means to be considered global participants and/or competitors, researchers argued that students must utilize the very tools which connect nations (Kepler, Weiler, & Maas, 2014). To this end, schools have responded with

integrations focused on answering business owners' assertion that workers who possess 21st Century skills can effectively utilize technology to research, learn, and connect globally (Ismail, 2015).

Likewise, Fethi-Kayalar (2016) suggested that parents, teachers, and students demand technological integration into schools so that students may be equipped to do the following:

Prepare themselves for their future careers, keep pace with the other students who have technology in their schools, have the chance to interact with their classmates, access to up-to-date information, become more active and engaged in the course, and utilize multiple types of resources online.

He asserted that education must now place more importance on students' personalized learning, rather than on teaching and that students can and should benefit from an education combined with modern technology (Kayalar, 2016). Similarly, Keppler et al. (2014) expanded upon this same view of the necessity of technology in schools by stating that even the, "students desire a technology-rich learning environment, [one] which provides them opportunities to explore, learn, and take responsibility for their progress". Shampa-Iftakhar (2016) summed his research sentiments succinctly: "Teaching in the 21st century does mean teaching 21st generation. It means helping and monitoring the students to learn and implement 21st century skill[s]."

The four C's of 21st Century skills are some of the most popular learning strategies in today's environment. The four C's are:

1. Critical thinking
2. Creativity
3. Collaboration
4. Communication

### **Critical Thinking**

Critical thinking is the practice of solving problems, among other qualities. In addition to working through problems, solving puzzles, and similar activities, critical thinking also includes an element of skepticism. This is important in the 21st Century because it is tougher than ever to verify accurate information especially from the Internet. Critical thinking empowers students to discover the truth in assertions, especially when it comes to separating fact from opinion.

With critical thinking, students do not merely learn a set of facts or figures. Instead, they learn how to discover the facts and figures for themselves. They ask questions. They become engaged in the world around them. They help others think critically, too. That might be the most important part of critical thinking. Once one student has it mastered, it quickly spreads to their peers. Whether they learn how to think critically from spending time online or simply asking "Why?" in everyday life, this skill prepares students for a life of independence and purposeful thought. Still, critical thinking is just one of the four C's in 21st Century skills.

It works just fine when students use it alone. But when students combine it with the next skill, the sky is the limit to what they can achieve.

### **Creativity**

Creativity is the practice of thinking outside the box. While creativity is often treated like a 'you-have-it-or-you-don't quality', students can learn how to be creative by solving problems, creating systems, or just trying something they haven't tried before. That doesn't mean every student will become an artist or a writer.

Instead, it means they will be able to look at a problem from multiple perspectives — including those that others may not see. Creativity allows students to embrace their inner strengths from big-picture planning to meticulous organization. As a student learns about their creativity, they also learn how to express it in healthy and productive ways. More importantly, they also become motivated to share that creativity with others. Just like with critical thinking, which makes creativity contagious. One student creates an interesting or innovative solution to a problem. Then, when they share it, the next student can become inspired to try something similar. That's not to say every single creative endeavor will be a ringing success. Students will fail at some point, and some of their ideas simply won't work. But that's acceptable. The point of creativity is to encourage students to think differently than convention demands. They don't have to do things the way they've always been done. Instead, they can figure out a better way. Students don't have to embrace their creativity alone, either. In fact, creativity works best when combined with the next 21st Century skill.

## **Collaboration**

Collaboration is the practice of working together to achieve a common goal. Collaboration is important because whether students realize it or not, they will perhaps work with other people for the rest of their lives. Virtually every job requires someone to work with another person at some point. Practicing collaboration helps students understand how to address a problem, pitch solutions, and decide the best course of action. It is also helpful for them to learn that other people don't always have the same ideas that they do. In fact, as students practice collaboration more and more, they'll learn that they have almost none of the same ideas that others do. This can affect students in one of two ways. First, it could discourage them since nobody seems to agree with them that often. Second, it could embolden them because they realize they're bringing something unique to every conversation. As a teacher, it is decisive that students are encouraged to look at themselves through that second lens. That way, students learn that they should speak up when they have an idea. They may not be on the money 100% of the time and some of their peers may have strong, opinionated reactions but it'll teach them to speak up when they are working with others.

## **Communication**

Communication is the practice of conveying ideas quickly and clearly. Communication is often taken for granted in today's society. Communication does not necessarily mean saying something. In the age of text-based communications SMS, emails, social media, etc. It has never been more important for students to learn how to convey their thoughts in a way that others can understand them. That's because text-based communications lack tone, which is critical to understanding the context of someone's words. Still, even in situations where vocal tone is available, students need to learn how to communicate effectively. That includes minimizing tangents, speaking directly to an idea, and checking other participants to make sure they are engaged. Reading an audience even if it's just two other people in a group discussion lets students determine whether they should keep expanding on an idea or wrap up their point. The point is that as students practice communication, they become better at efficiently conveying an idea without losing their point "in the weeds," so to speak. With communication locked down, students can streamline their ideas and make a positive impression on those around them. Still, it is imperative to note that communication isn't enough on its own to help students with 21st Century skills. To really succeed, students need to use all four of these skills together.

## **How the Four C's Work Together**

The four C's of 21st Century skills let students create a whole that is greater than the sum of its parts. That may sound overly-generalized, and you may be right. But the skills themselves are so general that it's difficult to pin down what, why, or how students should learn the four C's.

It's most accurate to say that students need the four C's for any and every reason. Critical thinking teaches students to question claims and seek truth. Creativity teaches students to think in a way that's unique to them. Collaboration teaches students that groups can create something bigger and better than you can on your own. Communication teaches students how to efficiently convey ideas. Combined, the four C's empower students to become one-person think tanks. Then, when those students get together, they can achieve almost anything.

## **The Need for the Adoption of Techno-Pedagogy in Higher Education**

The world is advancing at a rapid rate. Events have moved to the electronic stage with the technology at the centre. This development has brought a lot of innovation and revolution into teaching and learning. The 3R's which forms the nucleus of the old system of education has witnessed series of literacy reforms. The world is now in the age of information technology or computers age, hence, there is a need to keep abreast of time. One of the ways of achieving this is through the introduction of digital pedagogies in our institutions of learning.

Technology can provide a convenient technique for designing and developing a course of instruction. It can equally provide dynamic interaction between students and instructional programme not possible with most media. Other potentials of technology in instruction identified by Abimbade are:

1. Technology helps students to learn at their own pace.
2. It produces significant time saving over conventional classroom instruction.



3. It allows students' control over the rate and sequence of their learning.
4. It gives appropriate feedback.
5. It promotes individualized instruction through personalized responses to learner's action to yield a high rate of reinforcement.
6. It provides a more positive affective climate especially for slower learners.
7. It provides appropriate record-keeping and thereby monitors students' progress.
8. It puts more information in the hands of teachers.
9. Novelty of working with a computer raised students' motivation.
10. It provides reliable instruction from learner to learner regardless of the teacher/learner at any time of the day and location.
11. It directs instruction to learners.
12. It provides instruction at comparable expenses to other media.

### **The Role of the Academics in using Technology for Instruction**

According to Kersh (1995), the teacher will never be replaced by programme of self-instruction. Rather, he will be freed to guide the learning of his students in ways that only a human being can. In using integration for instruction, the teacher's role is hypothesized as changed basically from that of informer to learning facilitator. His duty of delivering lectures changes to that of guide and problem solver. In the words of Johnson (1992), the instructor is freed from time consuming chores as compiling, administering and marking tests, has time to work individually with the subjects. At the schools, the instructor is the manager of the learning process. The instructor decides when the students use the terminal, read the textbook, or work with laboratory equipment. This is to say that the teacher is relieved from pure informative tasks. He could dedicate himself to the processing of this information.

The teacher's roles in using technology for instruction are further conceptualized as spending his time in leading group discussions and in working with students individually and in small groups using laboratory work where applicable.

The teacher is not a spectator of perplexity but guides the students in the multitude of diversified documents to make relevant choices. He is a guarantor of assimilation as well as facilitator to help learners use and access knowledge. Hence, the teacher's attitudes, beliefs and preferences will be changed and be adapted.

### **Challenges of Technology Adoption in Education**

As excellent and important as technology is, it has not really gained its root in Nigerian education, let alone the entire society. Its impact is not strongly felt by all, especially by our students. This is because there are some challenges facing its implementations in our society. Some of the challenges are listed below.

The challenges of technology integration in education are both educational and administrative. The prominent among the administrative problems is cost. Over the years, the cost of computer gadgets and facilities has been on the high side. This has been a deterrent to the adoption of technology for instructional purposes in most Nigerian schools. Coupled with this is the exorbitant price of software; it follows the same pattern as that for the hardware. Where attempts are made to purchase computers for instructional purposes, the costs of installation, maintenance and replacement are unavoidable. The depressed economic situation of Nigeria has incapacitated the government to fund education effectively. The meager funding of education in Nigeria coupled with low technological level has been an impediment to the provision of instructional materials and use of technology for instruction in Nigeria at all levels of education.

In addition, lack of trained personnel militates against the use of technology for instruction. Experts with the technical know-how of computers are few except the computer dealers who are profit conscious. Hence, there are no computer

operators, keypunch operators, analysts, computer scientists, computer engineers and technicians to operate service and develop computer course ware for use on a large scale in education (Salisbury, 1998).

Another impediment to use of technology in the classroom could be attributed to the syndrome of resistance to change among the academics. They view the use of computer for education as a means of displacing them from their cherished job rather than an instructional material to enrich teaching and learning. Also, they regard the use of computer as an increase in their tasks in the classroom without adequate compensation.

In addition, dearth of instructional facilities militates against technology integration in education. Facilities such as adequate air condition, appropriate computer environment and building are not provided. Furthermore, electricity which is the primary source of power supply to the computer is not stable. There is epileptic power supply and incessant power surge when there is power.

This causes damages to the computer system and gadgets. Besides, the cost of generator is skyrocketing. Coupled with this, is the scarcity of computer spare parts and the exorbitant cost of maintaining and using the computer for problem solving and information storage.

### Methodology

The research design adopted for this study is descriptive design of the survey type. The population of the study consisted of one thousand two hundred and twenty three (1223) university academics from three universities in Rivers State, Nigeria. 360 academics drawn using convenience sampling techniques from the three public universities in Rivers State were used as the sample of the study. A research-developed questionnaire, titled 'Digital Pedagogies among University Academics in Rivers State (DPAUARS) constructed using the Likert scale format. This instrument was used for data collection. Reliability analysis using Cronbach method yielded an alpha coefficient of 0.84. Data analysis was done using mean, standard deviation to answer the research questions and t-test and ANOVA were used to test hypotheses.

### Results

**Research Question One:** To what extent do the university academics in Rivers State of Nigeria utilize the digital pedagogical tools and principles for teaching the digital natives?

TABLE 1: EXTENT TO WHICH UNIVERSITY ACADEMICS UTILIZE DIGITAL TOOLS IN TEACHING DIGITAL NATIVES

S/N		Mean	SD	CM	Decision
1	Internet	1.51	0.95	2.50	LE
2	E-books	1.54	0.96		LE
3	Google classroom	1.17	0.52		LE
4	Flipped Classroom	1.59	0.89		LE
5	Youtube	1.13	0.43		LE
6	Concept and Mind Mapping	1.51	0.93		LE
7	Facebook	1.65	0.98		LE



8	Moodle	1.09	0.71		LE
	Grand Mean	1.39	0.80		

As shown from Table 1, it can be observed that academic staff in universities utilize most of the tools to a low extent. From the result presented, internet had a mean value of 1.51 (SD = 0.95), E-books had a mean value of 1.54 (SD = 0.96), Google classroom had a mean value of 1.17 (SD = 0.52), flipped classroom had a mean value of 1.59 (SD = 0.89), while YouTube had a mean value of 1.13 (SD = 0.43). Also, concept and mind mapping had mean value of 1.51 (SD = 0.93). Finally, Facebook and Moodle had mean values of 1.65 (SD = 0.98) and 1.09 (SD = 0.71) respectively. On the basis of the reported mean values for each of the digital pedagogical tools above, it can be seen that university academics reported that they utilize digital tools to a very low extent. Furthermore, on the basis of the grand mean of 1.39 reported, it can be seen that university academics in Rivers State utilize digital tools to a low extent.

**TABLE 2: DIGITAL PEDAGOGICAL PRINCIPLES FOR TEACHING DIGITAL NATIVES**

S/N	Item	Mean	SD	CM	Decision
1	Contextualization of concepts	2.34	0.85	2.50	LE
2	Active participation of students	2.78	1.04		HE
3	I prefer using ICT gadgets in the context of the lessons	2.45	0.70		LE
4	Digital technologies enable me to share information and connect ideas with colleagues and students.	2.91	1.00		HE
5	Digital technologies increase class engagement	2.62	1.14		HE
6	Principle of transfer of learning is not utilized in learning	1.78	1.02		LE
7	My students are assigned to challenging activities	2.75	0.78		HE
8	I imbibe in the students the principles of critical thinking	2.81	0.93		HE
9	I encourage the spirit of creativity in my students	2.60	0.87		HE

Result of the extent to which university academics are aware of digital pedagogical principles is displaced in Table 2. From the table, it was shown that item 1 (Contextualization of concepts) had a mean rating of 2.34 (SD = 0.85) which indicated a low extent, while item 2 (Active participation of students) yielded a mean value of 2.78 (SD = 1.04) which indicated a high extent. For items 3 (I prefer using ICT gadgets in the context of the lessons) and item 4 (Digital technologies enable me to share information and connect ideas with colleagues and students) had mean values of 2.65 (SD = 0.70) and 2.71 (SD = 1.00) respectively. Regarding items 5 (Digital technologies increase class engagement) and 6 (Principle of transfer of learning is not utilized in learning) had mean values of 2.62 (SD = 1.14) and 1.78 (SD = 1.02) respectively. Finally, the result showed that items 7 (My students are assigned to challenging activities), 8 (I imbibe in the students the principles of critical thinking) and 9 (I encourage the spirit of creativity in my students) had mean values of 2.75 (SD = 0.78), 2.81 (SD = 0.93) and 2.60 (SD = 0.87) respectively. Based on the grand mean rating

of 2.56 (SD = 0.93), it indicates that the respondents reported that they are aware of digital pedagogical principles to a moderate extent.

**Research Question Two:** What are the challenges facing university academics in their efforts to utilize digital pedagogical tools and principles in teaching the digital natives?

<b>Administrative Factors</b>					
		<b>Mean</b>	<b>SD</b>	<b>CM</b>	<b>Decision</b>
<b>1</b>	Inability of university administrators to provide adequate digital facilities.	2.87	0.94	<b>2.50</b>	Agreed
<b>2</b>	Lack of internet connectivity in the universities is a major setback to the use of digital technology	2.97	1.11		Agreed
<b>3</b>	Lack of sponsorship for national and international conferences and training related to digital pedagogies in the context of the lesson.	2.69	1.03		Agreed
<b>4</b>	Inadequate power supply/electricity is a factor militating against digital integration and utilization in education	2.93	1.02		Agreed
<b>5</b>	Lack of training by academics in the usage of modern digital pedagogies	2.78	1.07		Agreed
<b>6</b>	Large number of students in universities	2.53	0.91		Agreed
	Grand Mean	2.76	1.01		

On the basis of the reported results in the above table, it can be observed that the administrative challenges militating against the effective use of digital pedagogy tools and principles included inability of university administrators to provide adequate digital facilities (mean = 2.87, SD = 0.94), lack of internet connectivity in the universities is a major setback to the use of digital technology (Mean = 2.97, SD = 1.11), lack of sponsorship for national and international conferences and training related to digital pedagogies in the context of the lesson (mean = 2.69, SD = 1.02), inadequate power supply/electricity is a factor militating against digital integration and utilization in education (mean = 2.93, SD = 1.02), lack of training by academics in the usage of modern digital pedagogies (mean = 2.78, SD = 1.07) and large number of students in universities (mean = 2.53, SD = 0.91). Based on the grand mean of 2.75 (SD = 1.01), it therefore indicates that the various factors constitute significant administrative challenges limiting effective adoption of digital pedagogical tools by university academics in Rivers State.

**Table 4: Individual factors limiting effective utilization of digital pedagogy**

<b>Individual Factors</b>					
	<b>Items</b>	<b>Mean</b>	<b>SD</b>	<b>CM</b>	<b>Decision</b>
<b>1</b>	Negative attitude to using digital pedagogy by academics is an impediment to digital integration	3.19	0.81		

2	Lack of 21st century skills by academics is a setback to the use of digital pedagogies	3.10	0.83	2.50	
3	Concern for personal privacy is a challenge to the utilization of digital pedagogy	3.25	0.84		
4	Inability of the academics to avail themselves for digital pedagogical self-development	3.25	0.89		
5	Lack of research in digital pedagogical areas for self-improvement	2.85	0.96		
6	Poor collaboration among academic staff on utilizing digital pedagogies.	2.81	1.03		
	Grand Mean	3.08	0.89		

From the table above, the result revealed that some of the individual factors militating against the effective utilization of digital pedagogies included negative attitude to using digital pedagogy by academics is an impediment to digital integration (mean = 3.19, SD = 0.81), lack of 21<sup>st</sup> century skills by academics is a setback to the use of digital pedagogies (mean = 3.10, SD = 0.83), concern for personal privacy is a challenge to the utilization of digital pedagogy (mean = 3.25, SD = 0.84), inability of the academics to avail themselves for digital pedagogical self-development (mean = 2.85, SD = 0.96), and lack of research in digital pedagogical areas for self-improvement (mean = 2.85, SD = 0.96), and poor collaboration among academic staff on utilizing digital pedagogies (mean = 2.81, SD = 1.03). Furthermore, the grand mean of 3.08 (SD = 0.89) indicated that individual factors contribute significantly towards militating against the effective utilization of digital pedagogies in Rivers State.

**Research Question Three:** What are the prospects accruable in utilizing the digital pedagogies and principles in teaching and learning of the digital natives?

		Mean	SD	CM	Decision
1	Improved technology proficiency	3.25	0.84	2.50	Agreed
2	Promotes student-teacher relationship	3.20	0.81		Agreed
3	Improved receptivity to new ideas	3.13	0.98		Agreed
4	Teaching and learning can extend beyond classroom	3.28	0.86		Agreed
5	Collaborative problem solving	3.31	0.87		Agreed
6	Creativity is enhanced	2.94	1.02		Agreed

7	Promotion of critical thinking	2.86	1.06		Agreed
		3.18	0.92		Agreed

On the opportunities open for increased utilization of digital pedagogies, it was agreed that digital pedagogies contributes to improved technology proficiency (mean = 3.25, SD = 0.84), promotes student-teacher relationship (mean = 3.20, SD = 0.81), improved receptivity to new ideas (mean = 3.13, SD = 0.98), teaching and learning can extend beyond classroom (mean = 3.28, SD = 0.86), collaborative problem solving (mean = 3.31, SD = 0.87), creativity is enhanced (mean = 2.94, SD = 1.02) and promotion of critical thinking (mean = 2.86, SD = 1.06). This result had mean values greater than 2.50 which suggest that the respondents agreed to all the items are prospect of digital pedagogies.

### Test of Hypotheses

**Hypothesis One:** There is no significant difference in the mean responses of university academics on the utilization of digital pedagogies and principles based on rank.

**Table 6: ANOVA of the influence of rank on utilization of digital pedagogies and principles**

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	24.939	2	12.469	.469	.626
Within Groups	9486.383	357	26.573		
Total	9511.322	359			

From the result obtained regarding the influence of rank on the extent to which university academics utilize digital pedagogy principles, an F-value of 0.469 was obtained with a corresponding p-value of 0.626 which was greater than the chosen alpha of 0.05. Since the p-value obtained was lesser than the chosen alpha, it therefore indicates that there is no significant difference in the extent to which rank influences the utilization of digital pedagogies and principles in Rivers State. The null hypothesis was therefore retained.

**Hypothesis Two:** The mean responses of the university academics of the three universities in Rivers state of Nigeria on the challenges facing them in utilization of digital pedagogies and principles will not differ significantly based on ownership

Ownership	N	Mean	SD	df	t	p	Decision
Federal	120	24.46	5.15	358	0.404	0.483	Retain HO <sub>2</sub>
State	240	24.05	5.14				p>0.05

From the analysis shown in the table above, it can be observed that university academics from federal-owned universities (n=120) had a mean of 24.46 (SD = 5.15), while those from state-owned universities (n = 240) reported a mean score of 24.05 (SD = 5.15) on the extent to which they utilize digital pedagogical tools and principles. When these values were subjected to independent sample test analysis, a t-value of 0.404 was obtained with a corresponding p-value of 0.483, which was lesser than the chosen alpha of 0.05. This therefore indicates that there is no significant difference in the extent to which ownership influences university academics' utilization of digital pedagogical tools and principles. The null hypothesis was therefore retained.

**Hypothesis Three:** The mean responses of university academics in the three universities in Rivers State of Nigeria on the prospects accruable from teaching based on digital pedagogies and principles will not differ significantly based on ownership.

Ownership	N	Mean	SD	df	t	p	Decision
Federal	120	22.47	5.16	358	0.783	0.434	Retain HO <sub>3</sub>

State	240	22.00	5.37	p>0.05
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From the analysis shown in the table above, it can be observed that university academics from federal-owned universities (n=120) had a mean of 22.47 (SD = 5.16), while those from state-owned universities (n = 240) reported a mean score of 24.05 (SD = 5.37) on the prospect accruable from teaching based on digital pedagogies and principles in universities. When these values were subjected to independent sample test analysis, a t-value of 0.783 was obtained with a corresponding p-value of 0.434, which was lesser than the chosen alpha of 0.05. This therefore indicates that there is no significant difference in the prospects accruable to universities that utilize digital pedagogical tools and principles. The null hypothesis was therefore retained.

## Discussion of Findings

The results obtained in research question one and hypothesis one revealed that university academics utilize digital tools to a very low extent. Findings showed an abysmal lack competence in the use of digital pedagogical tools and media in teaching and learning. This finding is not line with the results of a study conducted by Hinostroza, Ibieta, Claro, and Labbe (2016) which showed that teachers are using digital technologies and pedagogies to replace the traditional technologies used for teaching with a more advance technology and presentation software, such as PowerPoint, and that the predominant pedagogical purpose is linked to content delivery.

Results obtained from research two and hypothesis two showed that university ownership does not have influence on the challenges facing the utilization of digital pedagogies by university academics. Much has been discussed on the challenges faced by education institutions and schools in regards to the pedagogical uses of ICT. Since teaching encompasses different interrelated areas, we recognize the importance of the development of diverse skills related to technology uses inside the classroom. Particularly, the abilities of academics to operate ICT are important. However, lecturers' cognitive, pedagogical and evaluation skills are even more significant, as they enable education professionals to teach according to the technological changes experienced in this era. In this sense, the need to highlight the significance of teachers' digital pedagogical literacies in light of the need to stimulate a more systematic comprehension of how digital pedagogies and technologies that can work in education and how teachers can promote more thoughtful ways of using such resources in different learning contexts. This understanding above is not really influenced by the location, rank or status of a university but by the ability of academics to acquire the requisite competence, skills and know-how use digital pedagogical tools.

Research question three and hypothesis three showed that respondents were in total agreement of the prospects accruable from teaching based on digital pedagogies and principles irrespective of ownership. This study is in line with the finding of Kiran and Shipra (2016) which revealed simple pedagogy is shifting towards Digital Pedagogy, which is a novel way of teaching and learning with ICT. Digital Pedagogy moves the focus from only ICT tools and skills, to a mode of working in the digital world. Digital Pedagogy means the use of electronic fundamentals like multimedia, productivity applications, cloud computing, etc. to enhance or to change the experience of education and transforms teaching and learning to provide rich, diverse and flexible learning opportunities for digital generation, in a nutshell the prospects accruable with the integration of digital pedagogical principles in teaching and learning is unquantifiable.

## Conclusion

This paper sought to explore digital pedagogy and its utilization among university academics. The present age of technological advancement has brought changes into practically all human endeavors including education. As such academics are faced with the enormous challenge of trying to be on par with these technological innovations. The acquisition of digital pedagogies and skills are sin-qua-non for an efficient 21st century classroom leaving teachers with little or no choice other than to imbibe and utilize these skills. They must understand their role in technologically oriented classrooms and develop skills to make use of digital pedagogy and internet technology, exploring them, perform information processing and management to use in teaching and learning. Therefore, objective must be shifted from mere acquisition of knowledge and understanding of techno-pedagogy to the attainment of application and utilization.

Results obtained from hypothesis three showed agreement on the prospects accruable to universities that utilize digital pedagogical tools and principles. Digital Pedagogy provides an understanding to teachers about the ways in

which learners of digital generation work and learn in a digitalized connected environment. University academics may combine technology with their teaching which may result in a potential tool to bring changes in the education process by the means of digital pedagogy, therefore the prospects accruable in the utilization of digital pedagogical tools and principles are overwhelming.

### **Recommendations**

Based on the findings and conclusion of this study, the following recommendations are made:

1. University academics should in their training programme and during their professional development inculcate pedagogical use of technology.
2. Conferences, workshops and symposium should be organized to train and enlighten university lecturers on the need for digital pedagogical principles.
3. University lecturers should be intrinsically motivated to acquire the relevant digital pedagogical skills and competences required in the 21st century learning environment

## References

- Abik, M., & Ajhoun, R. (2012). Impact of Technological Advancement on Pedagogy. Turkish online journal of distance education (TOJDE), 13(1).
- Abimbade, A. (1997). Principles and Practice of Educational Technology, Ibadan: International Publishers Ltd. Massachusetts: Harvard University Press.
- Anderson, J. G. (2002). Evaluation in health informatics: social network analysis. *Computers in Biology and Medicine*, 32(3), 179–193. doi:10.1016/S0010-4825(02)00014-8
- Davis, F. (1989). Perceived usefulness, perceived ease of use and user acceptance of information technology. *MIS Quarterly*, 13, 319-340.
- Davis, F., Bagozzi, R., & Warshaw, P. (1989). User acceptance of computer technology: a comparison of two theoretical models. *Management Science* 35(8), ss. 982-1003.
- Digital Pedagogy. A Digital Pedagogy Unconference. 2012-08-30. Retrieved 2017-01-06
- Dockstader, J. (1999). Teachers of the 21st century Know the What, Why, and How of Technology Integration. *T.H.E. Journal*, 73-74., January
- Downes, S. (2008). Connectivism: Learning theory of the future or vestige of the past? The international review of research Vol 9, No 3 (2008).
- Drent, M. (2005). In Transitie: *Op Weg Naar Innovatief ICT-gebruik op de PABO [In transition: On the road to innovative use of ICT in teacher education]* (doctoral dissertation). Enschede: University of Twente.
- Drent, M., & Meelissen, M. (2007). Which Factors Obstruct or Stimulate Teacher Educators to Use ICT Innovatively? *Journal of Computers & Education*, (ARTICLE IN PRESS)
- George, S. (2005). *Connectivism: A Learning Theory for the Digital Age*. Retrieved December 12, 2004, from <http://www.connectivism.ca/>
- Grabe, M., & Grabe, C., (2001), *Integrating Technology for Meaningful Learning*. Houghton Muffin Company. USA
- Hariadi, B., Dewiyani, M. & Sudarmaningtyas, P. (2016). Development of web-based learning application for generation Z. *International Journal of Evaluation and Research in Education*, 5 (1), pp. 60-68.
- Kayalar, F. (2016). Cross-cultural comparison of teachers' view upon integration and use of technology in classroom. The Turkish online *Journal of educational technology. Education*, 15(2) pp. 11-19.
- Keppler, M., Weiler, S. C. & Maas, D. (2014). Focused ubiquity: A purposeful approach to providing students with laptops. *Educational technology & society*. 17(4). 278-285
- Kiran L. D. & Shipra S. (2016). Digital pedagogy in teacher education: *International Journal of Information Science and Computing* 3(2): December, 2016: p. 67-72 DOI : 10.5958/2454-9533.2016.00008.9
- Hinojosa, J.E.; Ibieta, A.I.; Claro, M.; Labbé, C. Characterisation of teachers' use of computers and Internet inside and outside the classroom: The need to focus on the quality. *Educ. Inf. Technol.* 2016, 21, 1595–1610.
- Khirwadkar, A. (2007) Integration of ICT in education: pedagogical issues. Retrieved from [http://www.journal.au.edu/edu\\_journal/jan2007/article06\\_vol1no.1.pdf](http://www.journal.au.edu/edu_journal/jan2007/article06_vol1no.1.pdf) on 10/03/2012
- Mishra, P. & Koehler, M. (2006). Technological pedagogical content knowledge: A framework for teacher knowledge. *Teachers college record*, 108(6):1017-1054.
- Nwankpo, O.C. (2013). A practical guide to research writing. (Revised sixth edition). Port Harcourt; M & J Grand Orbit and Communication Ltd
- Ørnes, H., Wilhelmsen, J., Breivik, J., & Solstad, K. J. (2011). *Digital tilstand 2011 Norgesuniversitetets monitor*. Tromsø: Norgesuniversitetet.
- Patrick, B. (2013). The International HETL Review, Special Issue. ISSN: 2164-3091 2013 HETL Conference, Orlando, Florida, USA
- Prensky, M. (2001). Digital natives, digital immigrants. *On the Horizon*, Vol. 9 No. 5, 1-6.
- Shulman L. S. (1987). Knowledge and teaching: Foundations of the new reform. *Harvard educational review* , 57: 1-23.
- Shulman L. S. (2004). The wisdom of practice: Essays on teaching, learning, and learning to teach. S. Wilson (Ed.). San Francisco: Jossey-Bass, Inc
- Sørebø, Ø., Halvari, H., Gulli, V. F., & Kristiansen, R. (2009). The role of self-determination theory in explaining teachers' motivation to continue to use e-learning technology. *Computers & Education* 53, pp. 1177-1187.
- Sweller, J. (1988). Cognitive load during problem solving: Effects on learning. *Cognitive Science*, 12, 257–85.
- Vygotsky, L. S. (1978). *Mind in society: The development of higher psychological processes*.



**Author's Profile**

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## MY EXPERIENCE WITH NURSING THROUGH COMPASSION

KALSANG CHOEDON

*Apollo Hospital*

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*In human relationship and medical system, compassion is one of the basic fundamentals for happiness, wellbeing and recovery. In this paper I will not only highlight upon what is compassion and how compassion is defined but lay out my thoughts on compassion and my experience with nursing through compassion.*

*What is Compassion? Compassion is a complex positive emotion having no definite meaning or generally accepted definition. According to commonly accepted definition, compassion is a deep awareness of suffering of another coupled with wish to relieve it. While in nursing the compassion feeling towards a patient and wishing to relieve their pain alone is not enough, one need to understand the patients feeling, and respect their privacy and dignity, and build trust with the patient before laying out care plan for the patient. Yet, the root of establishing a healthy relationship begins with compassion, without which there won't be any empathy to build trust between the nurse and the patient.*

*My thought on compassion I am a Buddhist and compassion is what we are taught from a very young age, but it doesn't mean and I am not implying that other religions, atheist community don't have the means or tradition of imparting compassion towards younger generations, in fact, I personally believe that compassion is not really a religious doctrine. It is a universal positive emotion.*

*Through my limited experience with compassion in my personal life and nursing, I think the most important aspect of compassion should not be feeling sorry or sympathy towards patients or the less fortunate one. Because if you are feeling sympathy towards someone, it could cloud your intention even if you help them. So, I think the essence of compassion should be putting yourself in other people's shoes. If you think what you would be going through if you are that patient, then you would know you would want a compassionate nurse and doctor to treat you and help you medically, emotionally to recover from the illness. In a way, empathy is what I am saying is essential. Though many people define empathy and compassion as two different emotions, but there are almost intertwined that it seems to me that there are of essence to each other, especially in nursing through compassion. If you could see the patient as not someone weaker than you physically or emotionally but as a person who is as same as you who has the same desire to be happy and not suffering, it will make you more compassionate towards the patient.*

*My experience with nursing through compassion for my experience, I am working in a highly dependent unit and most of the patients are totally dependent on nursing care. So, I am going to talk about my experiences with nursing through compassion with three patients. 1. One day I got a patient who was 70years old suffering from breast cancer with lots of other complications; bedridden for two months and she was on palliative care but due to severe pain she needed hospitalization for pain management. So I started our day by saying good morning madam with a warm smile and I introduced myself to her as usual. At 8:30 am they served her breakfast but she refused to have it. I went near to her bed and therapeutically asked her "why?" She said she don't want to eat as she was not hungry. Then I took her hand in mine and told her I will help you to eat. I took the spoon and asked her to just taste one spoon, she started having it and when she refused to take again then I gently asked her to take one spoon for me and one spoon for yourself, and she did listen to me. Such things also work when we get emotionally volatile patients. At last she was in shock to see her plate was empty. 2. On another day I was assigned to a patient who was unknown, whom had been in car accident and brought to the hospital by police. He had head injury and had to undergo surgery. Even though he recovered well but he was not able to remember his own family members and not able to connect with his family. So we were everything to him. Whenever I was on duty, I listened to whatever he said and helped him to remember his family*

*members by asking about his name and how many family members were there in his family. And also he always refused to take medicine by saying he was not sick. I encouraged him to take medicine by saying that it will help him recover soon and get to meet his family soon. I also promised him that if he took his medicine, I would help him find his family members. So whenever he saw me passing by his bed, he used to greet me and even kept some of his foods for me and asked me to have it. That means he was feeling our genuine care, love and compassion. Hence compassion in care is the gate way to build trust between the patient and healthcare professionals before laying out any care plan to heal the patient.*

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## EDUCATING INTERNALLY DISPLACED PERSONS, RE-INTEGRATION AND PEACE BUILDING IN NIGERIA

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### ABSTRACT

*In recent years, the Nigerian state has witnessed high incidence of crises in such forms as communal, ethno-religious, electoral violence, herdsman and farmers conflicts, insurgency among others. These crises have brought about material/physical losses and displacements of victims, who are forced most times to move out from their natural abode within their boundaries as Internally Displaced Persons (IDPs) and a few times, across state borders as refugees. The current statistics of IDPs in camps scattered across Nigeria is high as a result of the unabating trend of crises. This has raised serious concerns among stakeholders on how the fortunes and circumstances of the IDPs can be managed for better productivity, survival, re-integration and attainment of peace in the state. This paper is focused on using qualitative means to review relevant literature, reports and periodicals in order to interrogate the relevance of education as intervention strategy to manage the conditions of IDPs, on how to empower them for the world of survival and re-integration to normal life through relevant vocational and entrepreneurial skills. By way of recommendations, specific income generating skills such as soap making, cake and shoe and phone repairs etc are proposed. The use of civic, human rights and peace education to mollify the divisive sentiments among the IDPs is also advocated.*

**Keywords:** Education, Internally Displaced Persons, Re-Integration, Peace Building.

## Introduction

Internally Displaced Persons (IDPs) is a global phenomenon in view of its occurrence in many state, which are forced to contend with the management of the causative internal violence and conflicts within their borders, and the consequences on the socio-economic lives of the victims of such anomic developments.

Displacements of victims as a result of violence and conflicts also affect the developments and stability of communities where they are generated from and where they are sheltered as host communities.

An IDPs is forced to leave home or local environment because of war, conflict or similar grave dangers but still remains in his country. It is a forced and compelling reality for the victims, who have no choice but to relocate for safety and survival.

In Nigeria, there is an upward trend of IDPs as affirmed by the current statistics of IDPs scattered across the several camps of over (2 million). This huge number is well linked with the peculiar nature of the Nigerian society, which has thrown up several socio-economic and political differences among the component ethnic groups, with its propensity to trigger violence. The composition reflects more of motley of disaggregated ethnic groups, which unfortunately undermines harmonious relationship and cooperation and ensures that the quest for the much touted unity among them is a mere façade.

Some of the common socio – economic and political traits and diversities among these Nigerian ethnic groups include the bifurcation between political regions of North and South, religious divide between Islam and Christianity, majority versus minority tribes, rivalry between settlers and indigenes, as well as uneven economic and natural resources and endowments across the regions/state Dible (2002). This division becomes easy signpost, recipe and triggers for ethnic and communal violence, forcing displacements of victims across the nation when exploited and manipulated by political leaders.

From the immediate post independent Nigerian state till date, there has been manifest illustrations of violence and conflicts across the nation. These include political crises in the regions between (1964 – 1966), the first military coup (1966), civil war (1967 – 1970), June 12, (1993) election crises, post 2011 General Election crisis, several ethno communal conflicts, Maitasine religions crisis (1990) and currently, the Boko Haram insurgency of 2010 to date, among many others.

The displacement of IDPs as a result of these anomic events showed clearly that there has been a consistent growth. While the number of victims in the earlier conflicts which predates the outbreak of Boko Haram insurgency were modest, the figure of IDPs generated and attributed to the Boko Haram insurgency is huge. It is estimated that over (2 million) IDPs have been generated and displaced as a result of the Boko Haram insurgency, and this figure also represent the biggest wave of IDPs in Nigeria's political history. The IDPs from the Nigerian civil war is still a far cry from that associated with Boko Haram.

When forced by such circumstances as described above, the IDP victims are faced with some indignities, frustrations and deprivations such as lost identity, suffer discrimination, severe social, economic and political deprivations, low quality of life, disrupted aspirations, loss of jobs, emotional trauma, gender abuse, violence and limited enjoyment of their rights.

Management of IDP victims is not an easy task as several relevant stakeholders as government, non-governmental, humanitarian bodies, civil society organization, faith based organizations, corporate organizations etc are charged with the responsibility within humanitarian and legal purview an obligation to lend some hands of support, to mitigate their plight. These include the provision of shelters, medical care, and security among others, with particular thrust on satisfying physical and safety needs of the victims, especially in creating a new orientation that would wean the victims out of them trauma and general depression.

Deploying several interventions and strategies by stakeholders is therefore necessary for the well being of the IDP victims as well as the stability and security of the communities, where the violence erupted from initially, the host

communities, where the victims have been sheltered in camps. The objective of such intervention is aimed at empowering the victims with skills and knowledge, through the tool of education, considered as a vital means of modifying their bellicose perception of violence to embrace peace as an alternative.

Such effort is complemented by other creative means as pursuing re-integration and resettlement programmes for the victims. This could prepare those IDPs effectively with post conflict and camp life, towards positive productive engagements and enduring peace process of peace building, albeit with some inherent surmountable challenges. This paper addresses these identified issues closely.

### **Clarification of Concepts**

Explanation of the following concepts would be necessary to give direction to the discussion in this paper.

#### **Education**

Education is the process of learning or sharing knowledge which empowers man and ensures his usefulness and overall functionality to self, society, community and humanity at large. It is therefore seen as essential to human existence and a catalyst for progress and social change.

Fafunwa (1974) describes education as ‘the aggregate of all the processes through which a child develops attitudes, abilities and other forms of behaviour which are positive to the society. Education can be formal and non – formal, it is seen as formal by virtue of its formal institutional framework, functionality and ability to transform its recipients knowledge, skills and attitudes towards their personal improvement and positive contributions to the society in which they belong (Salawu, 2019). It is non formal when it dwells on the acquisition of ‘vocational’ training with focus on skill development, directed at individual and community benefits.

#### **Internally Displaced Persons**

According to African Union Convention for Protection and Assistance of IDPs in Africa (Kampala Convention, 2009), the term ‘IDPs’ is defined as ‘persons or groups of persons who have been forced or obliged to flee or to leave their homes or places of habitual residence, in particular as a result of or in order to avoid the effects of armed conflicts situations of generalized violence, violations of human rights or natural or human made disasters and who have not crossed an intentionally recognized state border (Article 1(K).

IDPs are not refugees in the real sense of the term as refugees are described as those victims who are forced to flee for safety across borders due to outbreak of violence and environmental and other natural disasters.

IDPs are therefore victims forced to leave their homes, or local environment because of war, or similar grave dangers, but still remains or reside in his country (Awake, 2002).

#### **Re-Integration**

It is a conscious process to rebuild lives of victims of conflict to reconnect to their previous socio-economic lives after the fractured relationship induced by conflicts and hostilities.

It is aimed to provide services to assist the displaced into meaningful engagement and other forms of economic empowerment within the society and to stimulate the development of effective service delivery (IDP National Policy, 2011).

Re – integration process is usually driven by critical stakeholders as government, non governmental organizations, international agencies, etc who collectively offer necessary support systems to influence a speedy return to normal and productive life, either in form of “rehabilitating” physical conditions or providing a social – empowerment objectives of providing useful skills that can occupy the attention of victims in the post conflict environment. Education and empowerment programmes and development of income generating skills are critical here.

## **Peace Building**

This refers to the deliberate management of a broken relationship after a conflict in order to mitigate its reemergence. It is the action to prevent disputes from escalating into conflicts and to limit the spread of the latter when they occur (Boutros Ghali, 1992:5). It is further averred by Boutross (1992) that peace building is exclusively to military and civilian post conflict support for forestalling future eruptions by strengthening structures necessary for promoting sustainable peace and post war reconstruction.

It is more of a post – conflict phenomenal action employed to identify and support structures which will tend to strengthen and solidify peace in order to consolidate peaceful relationship and create an environment, which deters the emergence or escalation of tension which may lead to conflict (Boutross Ghali, 1992 cited in Albert, 2011).

## **Nature of Conflicts in Nigeria and IDPs Generation Factors**

Conflict is dynamic in nature and should be seen as an integral part of human existence because of its benefits of change and development. It could be positive or destructive. The fall out of a destructive conflict include the generation of victims, either as internally displaced persons or as refugees.

Causes of conflicts are not single, but are influenced by a combination of factors across communities and states. Foster (1966:142) averred that conflict by its very nature is beyond any single causation. It is usually influenced by multiple of social economic and political issues, commencement by deep rooted traditional historical relationships which trigger violence easily.

In Nigeria, these causative factors range from ethnic, communal, religious, economic resource management/and other environmental issues. Afolayan (2001) also identified these conflict causes to include ethnic and communal conflicts, systemic and profound economic oppression and repressive regimes built on severe human rights violation among others. In the same breadth, Omojugba (2017) summed up the factors responsible for ranging phenomenon of the Boko Haram insurgency conflict in Nigeria to include poverty, unemployment regime, illiteracy and ignorance as well as religious intolerance.

It is established therefore that there is a close relationship between conflict and displacement of victims, either as an internally displaced person or refugee. The National policy on IDP (2011) acknowledged this in its categorization of conflict and generation of displacements.

According to the policy, displacements of victims are linked with either conflict induced displacement, disaster induced displacement or development induced displacement. In Nigeria, the bulk of displacements of victims are associated with man-made conflicts, occasioned by destructive violence conflicts that are poorly managed. According to Eyetsemitan (2002) ethno/communal and religions violence in Nigeria are typical of this nature of displacement. Disaster induced displacement are linked with effects of natural disasters such as flooding, erosion, volcanoes, and earthquake on the lives of people. These natural occurrences are largely episodic as they do not occur often and not regular as the conflict induced displacement. Development – induced displacement on its part is linked with deliberate and conscious need by government to displace people for purposes of development in the state.

The following tables graphically illustrate the relationship between conflict and displacement of victims as cost and consequences. Table also depict the nature and character of conflict in Nigeria within a period of two decades of 1999 – 2019.



## A HARVEST OF CONFLICTS

Since the return to civil rule in May, 1999, the nation has been embroiled in ethnic and religious violence

1.	Ogun (Imosan)	Nov. 9, 99 (Hausa/Fulani Muslims Vs Oro Cult members)
2.	Delta	Nov. 11, '99 (Itsekiri Vs Urhobo)
3.	Lagos	Nov. 27, '99 (Hausa/Fulani Muslims Vs Yoruba)
4.	Kwara	Dec. 19, '99 (Hausa/Fulani Muslims Vs Christians)
5.	Oyo	Jan. 5, 2000 (Hausa/Fulani Vs Yoruba)
6.	Kaduna	Feb. 21, 2000 (Hausa/Fulani Vs Others)
7.	Abia	Feb. 28, 2000 (Reprisal Violence on Hausa/Fulani Muslims)
8.	Rivers	Mar. 18, 2000 (Elemo Vs Okirika)
9.	Borno (Damboa)	Mar. 28, 2000 (Hausa/Fulani Muslims Vs Others)
10.	Oyo (Saki)	April 24, 2000 (Hausa/Fulani Muslims Vs Christians)
11.	Onitsha	May, 2000 (Hausa/Fulani Vs Igbo)
12.	Oyo (Saki)	May 6, 2000 (Hausa/Fulani Muslims Vs Yoruba)
13.	Abia (Aba)	May, 2000 (Hausa/Fulani Muslims Vs Igbo)
14.	Kaduna	May 20, 2000 (Hausa/Fulani Muslims Vs Others)
15.	Ogun (Shagamu)	July 18, 2000 (Hausa/Fulani Muslims Vs Yoruba)
16.	Kano	July 12, 2000 (Hausa/Fulani Muslims Vs Yoruba)
17.	Lagos	Oct. 15, 2000 (Hausa/Fulani Muslims Vs Yoruba)
18.	Oyo (Ibadan)	Oct. 2000 (Hausa/Fulani Muslims Vs Yoruba)
19.	Lagos (Alaba Rago)	Oct. 16, 2000 (Hausa/Fulani Muslims Vs Igbo)
20.	Lagos	Oct. 17, 2000 (Hausa/Fulani Muslims Vs Odua Peoples Congress)
21.	Kwara	Oct. 17, 2000 (Hausa/Fulani Muslims Vs Yoruba)
22.	Niger (Minna)	Oct. 24, 2000 (Nupe, Hausa/Fulani Muslims Vs Yoruba)
23.	Lagos	Nov. 25, 2000 (Hausa/Fulani Muslims Vs Yoruba)
24.	Katsina	April 7, 2000 (Hausa/Fulani Muslims Vs Katafs)
25.	Kaduna (Zango Katafs)	April, 2001 (Ikuku Vs Bajiu)
26.	Bauchi (Tafawa Balewa)	June 18, 2001 (Hausa/Fulani Muslims Vs Others)
27.	Gombe	June 18, 2001 (Hausa/Fulani Muslims Vs Others)
28.	Nasarawa	June 25, 2001 (Hausa/Fulani Muslims Vs Others)
29.	Jigawa	July 2001 (Hausa/Fulani Muslims Vs Others)
30.	Birnin Gwari	August 2001 (Hausa/Fulani Muslims Vs Others)
31.	Jos	Sept. 7, 2001 (Hausa/Fulani Muslims Vs Birom & Others)
32.	Taraba	Sept. 8, 2001 (Fulani/Jukun Vs Tiv)
33.	Zamfara (Gusau)	Oct. 2001 (Hausa/Fulani Muslims Vs Others)
34.	Delta	Oct. 10, 2001 (Itsekiri Vs Urhobo)
35.	Kano	Oct. 12, 2001 (Hausa/Fulani Muslims Vs Christians)
36.	Benue	Oct. 12, 2001 (Jukun Vs Tiv)
37.	Osun (Oshogbo)	Nov. 29, 2001 (Yoruba Fundamentalists Vs Christians)
38.	Jos	Dec. 29, 2001 (Hausa/Fulani Muslims Vs Biron/Anaguta)
39.	Delta	Jan. 2002 (Itsekiri Vs Urhobo)
40.	Lagos	Feb. 2, 2002 (Hausa/Fulani Muslims Vs Yoruba)

*Source: Tell, February 18, 2002.*

In recent times, the Boko Haram insurgency conflict in the North of Nigeria has dominated the political space in Nigeria. This is due to its deadly effect in terms of loss of lives and property. This has brought above the huge number of displacements of victims, after a series of attacks across communities in Nigeria

According to Olowoselu (2014), the violence perpetuated by Boko Haram insurgents in Nigeria since its emergence in 2010 is serious, deadly and has a consistent pattern on soft target. These range from attacks on school, worship centres, police station, markets and prisons among others. A few instances will suffice here:

- In January 2010, the group struck in Borno State, killing four people in Dala Alem den Waid Maiduguri Metropolis.
- On September 7, 2010, Boko-Haram freed over 700 inmates from a prison in Bauchi State.

- In December 2010. Boko Haram were accused of bombing a market, following the arrest of 92% of its members.
- On January 28, 2011, a gubernatorial candidate of All Nigeria People Party (ANPP) was assassinated along with his brother and four police officers around Maiduguri.
- On March 29 2011, police thwarted a plot to bomb an (ANPP) All Nigerian people party election rally in Maiduguri, Bomu State.
- On April 1, 2011, Suspected Boko-Haram attacked police station in Bauchi
- On April 15' 2011 the independent National Electoral Commission building was bombed in Maiduguri.
- April 22, 2011, Boko-Haram freed 14 prisoners in Yola.
- May 29, 2011, multiple bombing in Northern Nigeria.
- June 26, 2011, bombing of a beer parlour in Maiduguri, 25 people died.
- June, 16 2011, bombing of police forces Headquarters. Abuja.
- August 12, 2011, killing of prominent Muslim Cleric. Liman Borno
- August 26, 2011, bombing of United Nations Building in Abuja, 23 people died
- November, 2011 attack on the convoy of Borno State Governor Kassim Shettima on his return from a trip.
- November 2011 - coordinated bombing and shooting attacks on police facilities in Postiskun and Damaturu in Yobe state 150 people died.
- December 25, 2011 – Multiple bomb attacks killed dozens including 35 worshippers at St. Theresa Catholic Church, Madala.
- January 5 & 6, 2012, Multiple bombing in Kano.
- January 20, 2012, the bombing of Kano city.
- February 8, 2012 – suicide bombing at army Headquarters in Kaduna
- February 16, 2016 – prison break in central Nigeria 130 prisoners released.
- April 26, 2016, 15 church goers killed in Bauchi.
- June 17, 2012 – Suicide bombing attacks on three churches in Kaduna 100 worshippers died.

The number of Internally Displaced Persons (IDPs) generated from these conflicts over the years are not static. They are usually dynamic as the growth is in a state of flux, with constant movements among the victims, with some moving in, while others moving out to camps. What is remarkable in the recent nature of conflict in Nigeria particularly with the Boko Haram insurgency is the high number of IDPs that it has generated.

According to (Omojugba, 2017), it was estimated that there are almost (2,152,000) Internally Displaced Persons (IDPs) in Nigeria as at December 31, 2015, based on assessment by International Organization for Migration (IOM) in 207 Local government areas of 12 Northern states in Nigeria.

	STATES	NO OF IDPS
1.	Abuja	13,481
2.	Adamawa	136,010
3.	Bauchi	70,078
4.	Benue	85,393
5.	Borno	1,434,149
6.	Gombe	25,332
7.	Kaduna	36,976
8.	Nassarawa	37,553
9.	Plateau	77,317
10.	Taraba	50,227
11.	Yobe	131,203
12.	Zamfara	44,929

**Source:** International Organization for Migration and National Emergency Agency (NEMA) 2015

It should be noted that the bulk of the IDPs in this table were generated from the Boko Haram Insurgency (Abuja, Bauchi, Borno, Gombe, Yobe, Zamfara) while few sourced from regular ethno – communal conflicts (Plateau, Nasarawa, Kaduna) in specific terms. According to International Displacement Monitoring Centre 2015), over 85% of the IDPs in Nigeria were due to Boko Haram insurgency while 12.6% were due to communal clashes, the remaining 2.4% by National disasters like flood.

IDPs induced by Boko Haram violence has spread to cover about 13 states, with majority in Borno, Adamawa and Yobe. Of the 2.2 million IDPs figure in Nigeria by 2018, about 80% are found only in Borno. This explains why Borno state and particularly Maiduguri boasts of the highest number of 32 IDP camps in Nigeria. The other camps in Abuja, Benue and other states are in response to meet the needs of victims of violence peculiar to their environment.

### **Socio – Economic profiles of Internally Displaced Persons (IDPs)**

Internally Displaced persons are obvious victims and outcomes of violence, conflicts and disasters in several communities. It is a painful reality that has dominated our communal existence as the issue of conflict is experienced by virtually every individual, communities and nations. According to the Internal Displacement Monitoring Centre (IDMC), 2019, the number of internally displaced persons (IDPs) resulting from armed conflicts and protracted violence has reached approximately 27.1 million by end of 2009. As consequences, homes, villages, communities, cities are sacked and people are in turn either killed, maimed or forced to abandon their territorial homes, while many others are compelled to adjust from their traditional cultural, economic and social existence.

It is significant to state that Internally Displaced persons are confronted with some peculiar challenges, which defines their unique profile, to include severe psychological trauma, frosty reception and hostility from host communities, low esteem, quality of life, loss of jobs, discrimination, diseases and limited enjoyment of rights.

IDPs are typically uprooted from their natural environment and vocations, and thus forced to face new vista of challenges in camps. Camps are artificially created to accommodate IDPs as response to the emergency.

Camps according to National policy on IDP, (2011) are erected sites with non permanent shelters (tents) used for the collective and communal accommodation of evacuated or displaced person. They can be planned (purposely – built sites, completed before or during the influx) or self settled (i.e.) set up spontaneously by IDPs or host communities without the support of the government or the humanitarian community.

Life in camp is indeed difficult, uninteresting and challenging. It is not an ideal place to bring up a child as kids often get into fight easily due to the closeness of the tents to each other and the pervasive frustration that envelopes everyone in the camp. Parents in camps also get into easy altercations and fights with each other (Refugee, 1997:107).

Many of these IDP victims accept the realities of their new lives by keeping to camp rules with determination to cope with bare subsistence means offered by Humanitarian agencies and Non governmental organizations.

The quality and availability of food in camp for IDPs is usually inadequate. Most of the victims are concerned with their safety and survival and thus compromise their living conditions. This is why camps are associated with outbreak of infections and communicable diseases due to existence of limited basic facilities of toilets, bathrooms and kitchens and general medical care and sanitation facilities.

Family life is also usually disrupted among IDPs, both in camps and in flight because of emergencies associated with conflicts. Children, women are usually worst victims and most vulnerable in camps while men find it extremely challenging to eke meaningful existence, outside the material hand-outs that are offered by NGOs and humanitarian groups. The issue of discrimination, limited movements, communication barriers and unreceptive disposition by host communities put further pressure on the well being of IDPs.

### **Educating Internally Displaced Persons for Reintegration and Peace Building**

Educational programmes offered to victims of conflicts and disasters by relevant stakeholders to bring succor is referred to as Education in Emergencies (Sinclair, 1999). And such programme is underlined by objectives contained in the 1989 Convention on the Rights of the child. This Convention enjoin governments and agencies to dedicate and commit themselves to implementing as an ethical and humanitarian duty and task. This is anchored on the attainment of the four elements of Availability, Accessibility, Acceptability, and Adaptability Katarina (2001). The African Union (AU) has also given legal framework for protecting the right to education of IDPs as enshrined in regional documents (African Charter on Human and Peoples Right (ACHPR) in 1981 (Amy, 2010).

These objective of Education in Emergencies are targeted for the benefit of individual victims and the society at large which are surmised by Sinclarr (1999) as;

- Provide a sense of normality
- Restore hope through access to the 'ladder' of education
- Support psychological healing from traumatic experience through structured social activities in a 'safe space'
- Convey life skills and values for health and prevention of HIV/AIDS, gender equality and prevention of gender based violence, conflict resolution, peace building, responsible citizenship and environment awareness.
- Protect the investment that children, families and nation have made in children's education
- Provide protection for marginalized groups-minorities, girls, children with disability, out of school adolescents – often at risks of exploitative or unsafe work as prostitution or recruitment by militias.

In effect, education is to engage and empower displaced persons and serve as a catalyst for community dialogue and healing (Amy, 2010).

It should be noted that the identified limitations to the attainment of these educational objectives on the IDPs must be addressed if global peace and development must be achieved. These barriers and challenges to IDPs education include discrimination, documentation, language barriers, distance, inadequate minority, supervision, insecurity and poverty.

On account of the above, necessary interventions would be needed to enhance better access to educational opportunities, protection as well as securing the interest of the victims, promoting the quality of educational opportunities and available facilities and manpower to the victims.

Educational opportunities are therefore required to be extended to all categories of IDP victims. This is to help address their inherent socio-economic and psychological trauma, depression and make the society a better place. And this would also lay a solid foundation for a more peaceful, stable and prosperous nation.

To achieve the benefits, a high quality of education that conforms to human rights principle of non-discrimination and equality is necessarily. These according to UNCHRC Education guidelines and principles are:- Community Based and Capacity Building, Training Community Member in School Management, sustaining study skills and re-introducing schooling, and conveying peace-building messages and skills as well as policy commitments to education in emergencies.

Other benefit of education to IDPs include those to the communities curriculum planners and the individuals. As victims of conflict and disasters, they are likely to benefit more from fresh educational opportunity, especially to those who never had the opportunity to learn. It also establishes some sense of stability, normally as it create a feeling of regulated lifestyle, completely different from the chaos that characterized the period of conflict.

Education further mitigates the psychological impact of conflict and disasters by giving a sense of normality, stability, structure and hope during a time of crisis and provides essential building blocks for social reconstruction and future economic stability Munoz (2008).

Ability to design relevant curriculum - the knowledge and skills to be shared to IDP victims is critically in the hunt for an integrated and harmonious relationship among the victims and the new environment they find themselves. It is also useful for re-integration and peace guiding of the society via fusion of diverse interest.

As the victims of conflict struggle to get over their trauma, education managers, curriculum planners and stakeholder strive to fuse all the divergent sensibilities of the victims and their emerging concern and interest into a balanced, equitable framework, which promote inclusivity of all persons (Amy, 2010).

Adoption of relevant curriculum that reflects the mood and sensibilities of IDP victims can help moderate their initial perceptions to societal issues which unfortunately led to conflicts and crises.

Vocational and adult education benefits to IDPs is seen from the perspective of informal and non-formal education. This is focused on empowering people for the world of work and sustainability. This is against the background that albeit, is not an legal right, like that of children, education can still be extended to people in this age bracket so that

they can all be trained to acquire some skills to enhance their effective participation in their community. In most cases, the vocational skills acquired by adult IDPs in camps and outside camps to earn a living are within this purview. These include agricultural venture animal farming, shoe making and repairs, telephone repairs and soap making among others.

Peace-Building generally among IDPs in Nigeria is predicted also on the tool of education especially as it focuses on conflict mitigation and prevention. For societies and communities to guarantee peace and development they must invest heavily on education through generous to ensure that opportunities gets to wide ranges of people. The government must also demonstrate this goal with determination to provide massive opportunities to peoples.

Inadequate funding and limited access to education will undermine the process of peace building. This is why the Nigerian government must sustain the provision and allocation of funds to manage the affairs of the IDPs and broaden space for its victims.

These efforts must be in concert or collaboration with other stakeholders such as United Nation agencies, Non Governmental Agencies, Corporate Bodies, Faith-based organization, individual, who are expected to lend some supports as government alone can not handle it effectively.

In recent times, the Nigerian government has demonstrated bold effort to manage the integration and peace-building process by the formal creation of Ministry of Humanitarian and Disaster management, in alliance with existence of National Commission for Refugees, Migrants and Internally Displaced Persons, which has been managing the affairs of the IDPs. All of these efforts are directed of mitigating the challenges of the IDPs towards a united and stable and community.

### **Conclusion**

Effort has been made in this paper to explain the rationale for the phenomenal of internally displaced persons as an outcome of conflict and disasters across the globe and particularly trending in new nations such as Nigeria, due to her peculiar fabrication of divergent ethnic groups, and socio-economic and religious inherets. The inability of the managers of state to manage these societal differences have led to series of conflicts that have generated huge number of IDPs across the nations and who are scattered in camps. These ugly conflicts began shortly after independence, running through the war years, the pose democratic years of 1990s, to the more contemporary time of out break of the Boko Haram Insurgency.

These developments have created a huge problems of stability in Nigeria because the future of IDP is at stake if they are not well managed. The tool of education is therefore examined as a relevant means to re-integrate the victims of these crises as well as inculcating Peace Building strategies and interactions. This is in order to generate a better, safer and more integrated society.

### **Recommendations**

To guarantee a sustainable integration of the IDPs in Nigeria and ensure that they fit well in the peace-building process, the following recommendations are offered.

- The political will by government must be clearly identified, pursued and sustained with financial and political support.
- Relevant Government Agencies and Departments must work collectively with a common focus in addressing the needs and aspirations of the IDPs.
- Government must endeavor to be more proactive in addressing the internal issues that triggers conflicts and violence and which gives rise to generation of IDPs via advocacy, civic and political education.
- The relevant stakeholders, Government, United National Agencies, Host Communities, Non-Governmental Organizations, Faith Based Organization, Corporate Organizations, Individuals should identify with the cause of IDPs by offering generous support.
- Efforts should be sustained by Government as a way of giving direction to maintain minimum standards of implementation of legislation on global practice on the condition and interests of IDPs.

- Empowerment programmes to engage the IDPs should be encouraged and supported. So as to stave off relapse to violence.

**Author's Bio-Data**

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## References

- Afolayan, A. A. (2003). Dynamics of Refugees flows and forced repatriation in Africa. *Africa Journal of Peace and Conflict Studied*. Vol. 1, No 1, June.
- Albeit, I. O. (2001). *Introduction to Third Party Intervention in Community Conflicts*. Ibadan, John Archers Publishers
- Amy, S. Rhoades (2010). *Displaced futures: Internally Displaced Persons and teh right to education*. U. N. University for Peace.
- Awake, Refugees. Will They ever find a Home? January 22, 2002
- Boutros – Ghali, B. (1992). *An agenda for Peace*, New York: United Nations.
- Dibie, Robert (2000). *Understanding Public Policy in Nigeria a Twenty – First Century Approach*. Lagos. Mbeyi & Associates Ltd.
- Eyetsemitan, Oti (2002). “Rising Incidence of Ethnic Violence in Post Democratic Nigeria: Implications for National Integation. *Journal of Knowledge review* 5(5) 80 – 85.
- Fafunwa, A. B. (1974). *History of Education in Nigeria*. London: George Allen and Unwin.
- Foster, A. (1996). “Violence and the fanatical left and right annual of the American. *Academy of Political Science*. 361.
- IDM & NEMA (2015). *Report on Internally Displaced people*. Abuja, Nigeria.
- IDMC (2009). *Nigeria: No End to Internal Displacement*. Norwegian Refugee Commission. Internal Displacement Monitoring Centre.
- International Organization for Migration (2015). *Data tracking Monitoring. Nigeria Report*. Abuja.
- International Organization for Migration (I.O.M) (2015). *Report on Crisis in the North – East, Nigeria*. Nigeria TOM.
- International Organization for Migration Displaced Tracking Matric (2015). *Report on North East Crisis*, Abuja, Nigeria.
- National Emergency Management Agency Act (1999).
- National Policy on Internally Displaced Persons in Nigeria. September 2011.
- Ohanado, E. S. (1999). *Individuals with Special Needs and Equalization of Education Opportunity in Nigeria: An Appraisal paper presented at 2<sup>nd</sup> National Conference, Federal College of Education (T) Bichi, Kano, 22 – 25 June, 1999*.
- Olowoselu, F. (2014). *Historical Analysis of Boko - Haram Insurgency on Education Management in Northern Nigeria*. *Global Journal of Arts, Humanities and Social Science* 2, 10. 77 – 83.
- Omojugba, V. O. (2017). *Assessment of Psycho – social effect of insurgency on Education in North – East in Nigeria*. Paper presented at 2017 Spring Global Conference on Education held at University of Riverside. California, May 18 – 19.
- Salawu, I. O. (2019). “Educating Digital citizens for Leadership and Employment” keynote Address on the occasion of the 9<sup>th</sup> National Conference of the School of Education, federal College of Education (Tech) Akoka, 23<sup>rd</sup> July, 2019.
- Sinclair, M. (1998). “Refugee education in mid – 1990s in G. Retamal and R. Aedo – Richmond (eds). *Education as a humanitarian response*, London, Cassell. UNESCO International
- Sinclair, M. (1999). *Refugee education in the 1990s and issues for the next Decade*. UNHCR, Geneva.
- Tell magazine, February 18, 2002.
- UNESCO (1999). *The Right to education: An Emergency Strategy*. UNESCO, Paris.



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# BILLION OYSTER PROJECT CURRICULUM AND COMMUNITY ENTERPRISE FOR RESTORATION SCIENCE (BOP-CCERS) PROPOSAL FOR PHASE II EXPANSION

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This project will advance efforts of the Innovative Technology Experiences for Students and Teachers (ITEST) program to better understand and promote practices that increase student motivations and capacities to pursue careers in fields of science, technology, engineering, or mathematics (STEM) by expanding and testing an innovative curriculum model that features locally relevant, problem-based learning. The curriculum model is organized around habitat restoration in New York harbor and will engage students and teachers in a sequence of activities that span the elementary, middle school, and high school grades of the nation's largest urban school system. Students will conduct field research in support of restoring native oyster habitats, and the project will be implemented by a broad partnership of institutions and community resources, including Pace University, the New York City Department of Education, the Columbia University Lamont-Doherty Earth Observatory, the New York Academy of Sciences, the New York Harbor Foundation, the New York Aquarium, and others. The project focuses on important concepts in the geological, environmental, and biological sciences that typically receives inadequate attention in schools: watersheds and the roles of keystone species. This project builds on and extends the Billion Oyster Project of the New York Harbor School. The project model includes several interrelated components, including: a teacher education curriculum that includes a component for elementary teachers that focuses on restoration science; a student learning curriculum; a digital platform for project resources; an aquarium exhibit; an afterschool STEM mentoring program and a near-peer mentoring program; community based restoration science hubs, and advanced methods in restoration science for high school students that includes genetic barcoding (species ID), environmental DNA sampling and analysis, bacterial monitoring, and basic water chemistry analysis. The project targets students in low-income neighborhoods with high populations of English language learners and students from groups underrepresented in STEM fields and education pathways. The project will directly involve 97 schools, over 300 teachers, and approximately 15,000 K-12 students over a period of four years. A quasi-experimental, mixed-methods research plan will be used to assess the individual and collective effectiveness of project components. Multivariate analyses will be used to identify effective program aspects and assess the individual effectiveness of participation in various combinations of program components. Questions guiding the research include: 1. How does the project influence motivation and preparation to pursue STEM careers among K-12 students? 2. What aspects of the project have a positive influence on underrepresented students' motivation and preparation to pursue STEM careers, compared to other students? And 3. What curricular innovations associated with the project contribute to heightened awareness of and intent to pursue STEM careers among students? This award reflects NSF's statutory mission and has been deemed worthy of support through evaluation using the Foundation's intellectual merit and broader impacts review criteria.

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## SELF-STUDY AND THE EDUCATOR: AUTOETHNOGRAPHY AND ITS INFLUENCE ON PROFESSIONAL PRACTICE IN HIGHER EDUCATION

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*The study of Self through the qualitative research methodology of autoethnography can be a valuable tool for educators striving to create an academic environment that is more inclusive and sensitive, one that reflects a more holistic representation of the diversity of its learners (Austin and Hickey, 2007; Trahar, 2013). Autoethnography evokes a process of profound self-reflection and personal analysis, leading to a clearer self-concept and a better understanding of how the researcher's experience reflects a microcosm of the larger society. An educator may or may not share the same life course of students, but through the autoethnographic process, can become more aware of the deep impact one's journey has on how one views the world around them, learns new concepts, and interacts with others. In Higher Education, this not only affects pedagogy in the classroom, but how effectively student services are delivered. This presentation explores the lessons learned from an educator's experience of exploring her own racial and ethnic identity through autoethnography as a 2<sup>nd</sup> generation Haitian-Canadian who has lived the majority of her life in the United States. This visual and narrative self-study has shaped her educational practices in both faculty and staff roles at a diverse community college. Practical methods focused on helping students express, function in, and embrace their true selves within an academic setting will be shared.*

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## DIGITAL LITERARY LITERACY: HOW TO OPERATIONALIZE FOR EDUCATIONAL CONTEXTS

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### ABSTRACT

*Life in the 21<sup>st</sup> century entails easy access to text editing tools and mobile devices connected to the World Wide Web. This digital scenario positions students as online content creators, a possibility not contemplated by previous generations. The content evolved from written language to diverse multimodal languages where each interact to produce videos, still images, memes, and many other forms of online digital communication. From a semiotic approach, a change in the way modes and medias are intertwined for multimodal meaning-making require a different understanding of literacies. These processes are not isolated threads, instead they are part of a continuum in which readers are, at the same time, producers. Acknowledging that the skills of reading and writing are rarely observed as discrete variables is, therefore, fundamental.*

*The access to digital tools has brought not only a variation in the medium –from printed sheets of paper to colourful animated screens–, but also a new definition of literacy. Besides the material nature of the reading device, new communication resources, such as images, sound or video, come into play. These resources' potential extends beyond the written word possibilities. Chartier (2009) refers to the matter by posing an urgent question to educators related to a future reading-based educational project: how television, computers and internet are reshaping the book as artefact. It is mandatory to question how actual digital tools are transforming reading practices by improving new meaning-making procedures that incorporate material medium, textuality and connectivity (Burnett, 2014).*

*Digital literary reading is set in a social context in which the Web is a social and cultural space that has an impact in non-virtual social spaces. Blurring the line between the consumption of content and the production of it, allows digital environments to encourage practices that go beyond reading. That is why the concept of literacy better describes the complex processes that take place in digital settings. Barton and Hamilton (2007) understand literacy as a social practice surrounding texts (oral or written) because it takes into account behaviours, values, attitudes, feelings and social interactions. They also state that not all literacies possess the same status (power, social, and cultural reach). Literacy, conceived as a practice, is historically linked to social rules that determine the use and circulation of text. These regulations dictate what can or cannot be done with a certain document. Different literacies relate to different domains, such as home, education or workplace, each one with its own defined but still permeable boundaries. Domains have a certain structure, materialized through patterns, in the contexts that the specific literacy is learnt and used. Socially powerful institutions, such as school, tend to validate “dominant literacy practices”. Dominant literacy practices can be understood as part of a whole in the making of discourse, in the institutionalized power configurations and in the knowledge embedded in social interactions (Barton & Hamilton, 2007).*

*Research points out that students who have been intentionally exposed to digital literacy experiences evolve from digital readers to digital creators and/or investigators. They go beyond text, being able to participate in conversations as members of online communities. Fan fiction, websites worshiping literary authors and other diverse forms of interactions between the user and the fictional sphere appear in today's highly connected landscape. The user is a digital literary reader fluent in digital literacy. In other words, he or she knows how to consume and produce discourse in a digital environment created for that type of exchange. Buckingham (2015) mentions that digital literacy practices not only include technical and literate skills, they also involve social and cultural practices that lead to typical student experiences in and out of the school context.*

*According to Buckingham (2015), the skills needed to navigate digital media platforms go beyond the gathering of data. Children and teenagers must critically assess information if they mean to transform it into knowledge (a skill also crucial when analysing printed material). They must question their sources, the author's interests and intentions and the way said source is depicting the world; they must draw conclusions about how technological improvement goes hand in hand with greater social, political and economic forces. In other words, there should be a clear differentiation between "educating about media" and "educating with or through media". Students must be given the chance to analyse and criticize media based on the premise that neutrality is an illusion in this field.*

*Digital literacy's purpose is to provide students with a set of tools to help them visualize technologies as cultural expression vehicles. Technologies, such as the Internet, online videogames and mobile devices, offer new ways of representing the world, of mediating and interceding in our understanding of the world and of communicating and relating to others. These "new ways" unfold, in most cases, outside of school. Institutions tend to not acknowledge them and/or punish students who exhibit these practices. Educators who design learning environments through new media must be careful enough to treasure previous experience and promote digital literacy (Buckingham, 2015).*

*The aim of this presentation is to expose the initial findings of a study, financed by the Education Ministry, that sought to illustrate digital literary literacy in Chilean students between 12 and 17 years of age. The study also intended to identify and understand ~~the~~ facilitating or hindering factors for developing said literacy. Even though research about young people's approach to reading has been conducted in the past, there has not been much light shed on ~~the~~ digital literary practices that take place in and out of school and how they are promoted, or not, by these educational contexts. In conclusion, the investigation connects three fields, Literature, literacy and digital spaces, in order to take on a partially studied concept: Digital Literary Literacy. It is expected that the findings can inform policies for public education, specially those focused on educating the new generations of readers.*

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# IN THE EYES OF THE BEHOLDER: A MIXED METHOD ANALYSIS OF CHALLENGES OF COMPUTER-BASED TEST FROM CANDIDATES' PERSPECTIVES

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## ABSTRACT

*Introduced as the general method of test administration by the Joint Admission and Matriculation Board (JAMB) in 2015 for the conduct of its flagship examination, the Unified Tertiary Matriculation Examination (UTME), the Computer-Based Test (CBT) has been commended and condemned. Many candidates experience challenges which are believed to limit their academic yield and their prospect for tertiary education and self-development, which is a significant concern if the goal of the introduction of the CBT is to be achieved. Adopting a mixed method design involving quantitative and qualitative data collection and analysis, the present study investigated the challenges militating against the effective administration of CBT examination during the 2018/2019 UTME as perceived by candidates. A sample of 46 candidates obtained conveniently through a web-survey was used for the study. Data collected through a semi-structured questionnaire and interview schedule was subjected to statistical analysis of mean, standard deviation and rank order, as well as thematic content analysis. Result revealed that erratic power supply, poor internet connectivity over-crowded examination centres, dishonest invigilators and long distance to examination centres were considered major challenges. From these findings, practical implications and policy recommendations were further presented.*

**Keywords:** JAMB, Computer-Based Test, Mixed-Method Design.

## INTRODUCTION

Assessment and evaluation of students' learning have been a central feature of educational experiences in most societies of the world. These practices are often conducted to determine the degree to which predetermined educational objectives have been achieved and to establish the extent to which education is contributing to the overall societal development. It was against this background that Rebmani (2003) opined that assessments which are often done through examinations, assist in measuring the acquired knowledge, skillfulness, aptitude and competencies of students who have gone through the formal education programme. Contributing to this, Olafare and Boor (2018), opined that examinations provides the central process of obtaining information that informs decision taking about student learning, curriculum, programs, or education policy matters. The purpose of assessment among other things, include strengthening knowledge, skills, dispositions, and classroom practices. The major goal is to promote student's growth and learning while also inspiring great teachers to remain in the class. Kellaghan and Greaney (2001) further identified the roles of testing in education to include helping to describe student's learning outcome, assisting teachers to identify and diagnose student's learning problems, providing guidance for students, motivating students, giving judgments about the effectiveness of the school, and drawing conclusion about the adequacy of an educational system.

The above significance of testing has made it essential that schools and nations develop strategies and approaches that adequately assess the skills and knowledge of students based on what they have learnt and based on what they would learn. Thus various methods of evaluation have been proposed and adopted. For much of the history of formal education, the conventional method of assessment otherwise known as paper-pencil-test was the only available option for evaluation at all levels of education. This method was faulted due to the fact that it did not suit the learning styles of many students. Besides, it was characterized by numerous forms of examination malpractices ranging from the use of unauthorized materials, inscription on currency notes and identity cards, spying of other candidates in examination hall and swapping of answer sheets to changing examination scores or grades. It creates room for impersonation, obtaining question papers before the examination, conniving with supervisors, school authorities among others (Amadi & Opuiyo, 2018). As a result of these identified problems and the inclusion of information and communication technology (ICTs) in education, it is however important to reconsider the modification of this conventional method of examination. Thus the introduction of computer-based testing.

The introduction of the Computer-Based Test (CBT) by the Joint Admission and Matriculation Board (JAMB) for use in its flagship examination, the Unified Tertiary Matriculation Examination (UTME) and other examinations conducted by the assessment body in 2014 was greeted with both commendation and condemnation. While this introduction is the most widespread adoption of CBT by a national testing body in Nigeria, the use of CBT has had a fairly long history in Nigeria especially in the corporate sector where applicants are required to take personality, aptitude and intelligence test to determine their suitability for specific job roles (Adebayo & Abdulhamid, 2014). Also, the Educational Testing Service (ETS), the developer of the Test of English as a Foreign Language (TOFEL), had introduced CBT for its examinations as far back as 1998 (Guernsey, 1999). In addition, institutions such as the University of Illorin were among the pioneer tertiary institutions to adopt CBT as a mode of testing especially for the Post-Unified Tertiary Matriculation Examination (PUTME). Presently, most tertiary institutions in Nigeria, especially universities, have adopted the CBT form of examination for assessing students' aptitude, especially during the PUTME which is conducted as part of the admission requirement for their new students.

Computer-Based Test are assessments that are administered through, or with computers in either a stand-alone device, one linked to a network, or to the internet through the world-wide web (Oduntan, Ojuawo & Odunntan, 2015). Interest and adoption of CBT has been largely driven by many positive benefits of this approach to assessment including the more efficient administration of test, better preference for students, self-selection options for students, improved writing performance, built-in accommodations of diverse students' needs, immediate feedback on performance, efficient item development and analysis, increased authenticity, and improved utilization of assessment feedback for classroom instruction (Salend, 2009). One of the best advantages of CBT as outlined by Thurlow, Lazarus, Albus and Hodgson (2010) is that it provides test developers the opportunity to move beyond the traditional multiple choice assessment of intelligence and achievement to more innovative assessment approaches which allow students to manipulate data and engage in other creative activities.

One approach of CBT that has provided this innovative testing paradigm is the use of adaptive testing. This according to Alabi, Issa and Oyekunle (2012) occurs when candidates' performance in a test item presented using computer software is what determines the subsequent question the student is exposed to. This implies that when an examinee answers a question correctly, the next test item has a slightly higher level of difficulty. The difficulty of the questions presented to the examinee continues to increase until a question is answered incorrectly. Then a slightly easier question is presented. This indicates that in a computer adaptive test, each test-taker receives questions that are at the level of difficulty for his or her ability. After each question is answered, the computer uses the answer and all previous answers



to determine which question will be presented next. This means that different test takers, even in the same hail on the same day will receive different questions. With this approach, collusion, giraffing, and many other forms of examination malpractices will be eliminated using CBT technique.

As stated previously, the introduction of CBT in Nigeria was greeted with mixed feelings. This might not be unconnected to the fact that it is novel to the educational practice in Nigeria. The problem of novelty might have resulted in the initial resistance of the CBT by many stakeholders including students. While considerable effort has been expended to investigate the practice of CBT examination in Nigeria, there is still a dearth of empirical investigations on the challenges experienced by candidates during the CBT examinations. It was therefore against this background that the present study is being undertaken to critically examine the challenges of computer-based test from candidates' perspective, using a mixed method approach in order to empirically ground the findings.

## **STATEMENT OF THE PROBLEM**

With the almost universal adoption of Information and Communication Technology (ICT) in various sectors of the world, it has become imperative that students, especially those in secondary schools, understand the basics of using ICT tools for their daily lives. Sadly, most secondary schools in Nigeria do not have the needed facilities to equip this students with the skills, knowledge and competencies needed to excel in a digital world. With the introduction of Computer-Based Testing, most of the students might be having their first experiences with a computer system. Coupled with other systematic problems in Nigeria, the deployment and adoption of CBT as the choice method of assessment might have resulted in various problems that have significant negative impact on students' performance and prospect for higher education attainment. To be able to address the perceived problems of students' performance in CBT, it has become imperative for their opinions to be investigated. It is therefore the problem of this study to investigate challenges of computer-based testing from candidates' perspectives and proffer suggestions on how they can be helped.

## **PURPOSE OF THE STUDY**

The purpose of this study is to investigate the challenges of computer-based test among candidates taking the Unified Tertiary Matriculation Examination during the 2018/2019 academic session. The study adopted a mixed method design to critically explore the identified challenges and the strategies for helping candidates effectively to perform in the computer-based examination. The specific objectives of this study include:

1. To investigate candidates' perception towards computer-based test in the conduct of UTME examination in Rivers State.
2. To ascertain the challenges militating against the effective administration of computer- based examination among UTME candidates in Rivers State.
3. To explore strategies for effective administration of computer-based test among UTME in Rivers.

## **RESEARCH QUESTIONS**

The following research questions were developed to guide this study:

1. What is the perception of candidates towards computer-based test in the conduct of UTME examinations in Rivers State?
2. What are the challenges militating against the effective administration of computer- based examination among UTME candidates in Rivers State?
3. What are some strategies for promoting effective administration of computer-based test for the candidates in Rivers State?

## **LITERATURE REVIEW**

Ever since the introduction of computer-based testing in the educational setting in the 1950, there has been a steady expansion in the use of computer software and programmes for various educational purposes (Haigh, 2010). Summarizing the historical development of computer based testing between 1950 and 2000, Burkhardt and Peard (2003) offered the following:

- 1950s: Early computers offered games, puzzles and 'tests'; compilers were designed to identify errors of syntax, and later of style, in computer programs.



- 1960s: The creators of learning machines, in which assessment always plays a big part, recognised the value of computers for delivering learning programmes.
- 1970s: The huge growth of multiple-choice testing in US education enhanced the attractions of automatic marking, in a self-reinforcing cycle.
- 1980s: A huge variety of educational software was developed to support learning, with less emphasis on assessment.
- 1990s: Along with the continuing growth of multiple-choice testing integrated learning systems, a more sophisticated development of the learning machines of the 1960s, began to be taken more seriously.
- Since the 1990s, the explosive growth of the internet has begun to raise the possibility that testing online, on-demand might replace the traditional 'examination day' model, although many technical and educational challenges remain.

These developments were more common in the western world where there were less resistance to the use of computers for educational purposes. However, Haigh (2010) also reported that the increased adoption of computer-based testing also raised concerns about the dangers of allowing technology to dictate assessment practices, especially in the United States during the 1970s.

In the Nigerian case, while Computer-Based Testing has been a staple feature of the corporate training world, its evolution into the educational setting has had a fairly slow pace (Adebayo & Abdulhamid, 2014). According to Guernsey (1999), the earliest known and reported usage of computer-based test was in 1998 when the Educational Testing Service introduced it for the writing of the Test of English as a Foreign Language (TOFEL). This attempt was greeted with backlash due to complaints about lack of accessible roads and reliable electricity. This made the organization reversed the policy to paper-based testing.

With increased adoption of computer-based services in the educational sector, there become a corresponding increase in the utilization of computer-based testing especially in tertiary institution. Alabi, Issa, and Oyekunle (2012) reported that as early as 2008, the University of Illorin, Nigeria has started utilizing computer-based test for the conduct of the Post-UTME examination. Adebayo, Abduihamid and Fluck (2014) traced the development of computer-based testing in the Federal University of Technology Minna from 2010 when it was fully deployed for the conduct of computer-based test. For the case of the University of Port Harcourt, Umera-Okeke (2017) observed that the University of Port Harcourt implemented the Computer-Based Testing model for the conduct of its General Studies Examination in early 2012.

The greatest awareness of computer-based test in Nigeria came from its introduction by the Joint Admission and Matriculation Board (JAMB) in 2012. From the inception of the Board in 2011, the only type of examination given to candidates was paper/pencil tests (PPT). In 2012 two forms of computer based examinations were introduced for UTME candidates. They were the computer Based Tests (CBT) and Dual Based Tests (DBT). For the CBT form, each candidate was required to download the questions from internet and type the responses into the computer. For the DBT type, candidates were asked to download the questions from internet and respond with paper and pencil (Nkwocha, Akanwa, Ursula & Nkwocha, 2015). However, the Board restricted the conduct of the Unified Tertiary Matriculation Examination to the computer-based form in 2015.

The introduction of computer-based test was greeted with much fanfare and condemnation. This was attributed to inherent problems associated with paper and pencil test (PPT). The limitations associated with paper and pencil test were summarized by Alabi et al. (2012) to include:

1. Tedious processes as the examination was conducted at various and distant centres simultaneously and marking done manually.
2. High risks of accidents during travels by both the examination officials and the candidates for the paper examination.
3. Subjective scoring and plausible manipulation of results.
4. Late release of results and missing grades.
5. High cost of conduct of the examination on the part of the examination bodies including honoraria for invigilators, coordinators, markers, collators and other allied staff.
6. Bank draft method of payment by candidates was riddled by fraud, loss of money, stress and trauma.

Simin and Heidari (2013) provided a detailed outline of the benefits and problems of using computer-based testing including administrative, pedagogical and other factors. These are presented below:

<b>Administrative</b>	
<b>Advantages</b>	<b>Disadvantages</b>
Computerized marking is not prone to human error.	Implementing a CBT can be costly and time-consuming especially when trying to integrate with an institution's Learning Management System.
Saves staff time in terms of supervising and marking (including double marking) assessments.	Staff who design and invigilate CBT need training in assessment principles and design, IT skills and examination management.
Reduction of printing costs, particularly when tests are updated or changed	A high level of collaboration between all those involved in designing and implementing CBT required.
Hardware and software are fully serviced so as to avoid disappointment during examinations.	Hardware and software used to deliver CBT needs to be robust in order to avoid failure at crucial times such as examinations.
<b>Pedagogical</b>	
Tutors can incorporate hints into test questions.	Unsupervised CBT sessions present a risk of plagiarism (it can be difficult to authenticate the identity of students).
Students can monitor their own progress and revise and rehearse at their own pace.	Students need to have sufficient IT skills and experience of the requirement of CB.
Tutors can monitor the progress of students through frequent use of assessment.	Most CBT are presented using the multiple choice format which only tests superficial levels of students' learning.
Detailed and specific feedback can be given to students during and immediately after a test.	The detailed and specific feed feedback do not get to students immediately after the test. It comes later.
<b>Others</b>	
It is easier to provide timely feedback	A high level of organization is required across all parties involved in assessment (academics, support, staff, computer services and administrators).
Increased choice or variety of assessment modes such as multimedia and interactivity	Hardware and software must be carefully monitored to avoid failure during examination, and students require adequate IT skills and experiences of the assessment type.

Time-saving; an assessment can be created using software tools adapted and reused as needed. They can be distributed and collected using a web-based system which saves development and distribution.	Construction of good objective tests require skills and practice and so is initially time consuming and because of this, testing of higher other skills is difficult.
Flexible and comfortable environment; on-line tests afford students the opportunity to take tests on their own terms.	Technical malfunctions; computer equipment may not always be available or in working order.
Diagnostic feedback can be provided very quickly to each students on those items answered incorrectly if that is the purpose of the test.	Diagnostic feedback is not provided immediately. Therefore, students do not get the correct answers immediately.

The above tabulated advantages and disadvantages of computer-based testing show that while a possible development in the educational sector, caution needs to be taken into consideration in the process. This position is premised on the observation that some scholars and researchers have recorded that there are some challenges which limit the effective performance of students in computer-based testing. Within the Nigerian context specifically, some factors have limited the full adoption of computer-based test as presented by Onyibe, Nwachi-Ikpor and Abdulhakim (2015:19-20) including:

- Inadequate ICT infrastructure including hardware, software and bandwidth accessibility. It was observed that much of the infrastructures for automated examinations are either obsolete or overstretched in terms of capacity, accessibility, reliability and security. Again, the absence of internet facilities in our rural areas require students travelling long distances to urban centres to have access to internet. Broadband penetration needs to be fast-tracked to reduce the cost of internet bandwidth access in Nigeria.
- Power supply: The challenge of erratic power supply in Nigeria has defied all attempts by various governments. Irregular and frequent interrupted power supply in Nigeria is a perennial problem affecting every aspect of the economy including education (Oye et al., 2011). Most rural communities are not connected to the national grid, the implication is that schools located there cannot undertake practicals effectively. During JAMB's online UTME, cases of power failure interrupt the examination abound.
- Students/candidates inadequate skills in ICT: Many school leavers in the country are not computer literate. Even many teachers in the primary and secondary schools cannot boot a computer not to talk of using any application. With these 'analogue' teachers to impart ICT skills to students, definitely the students cannot be adequately equipped for CBT. And this anxiety explains why there was resistance to JAMB's full use of CBT in 2015 UTME by students, parents and even teachers. Nigeria does not only lack ICT infrastructure, it also lacked the human skills and knowledge to fully integrate ICT into secondary school education (Ilesanmi & Lasisi, 2015).
- Integrity of examination managers: Outside tertiary institutions ICT centres, other CBT centres in Nigeria are privately owned cyber-café. One of the key reasons advanced for migrating from PPT to CBT is to curb the rampant cases of examination malpractices in the country, the integrity of these businessmen in adhering to the laid down procedure for biometric data capturing during registration and verification during examination cannot be guaranteed. Experience in SSCE examination has shown that most of the privately owned schools are for pure economic gains leading to all sorts of examination malpractices. These exam 'miracle' centres syndrome may be transferred to CBT centres if urgent measures are not taken.
- Software factors: Currently, there is no software or multimedia that has universal application as far as CBT is concerned. School curriculum and education standard differ from one country to the other. Fluck et al. (2009) observed that assessment of student knowledge and skills within a web browser window or delivered by bespoke assessment software (specifically crafted for a particular set of questions) provides a restricted environment which prevents the demonstration of abilities associated with the use of specialist software or a combination of applications. Again, a corrupt software or network failure can cause rescheduling of the examinations.

Beyond theorizing on the challenges, Nkwocha et al. (2015) investigated on the challenges encountered in the use of CBT by students in Owerri Zone, Nigeria. The result showed the major challenges included insufficient computers and computer centres, power failure, candidates' incompetence in the use of ICT, and posting of candidates far from their homes. Similarly, Olawale and Shafi'I (2014) revealed in their study of six Nigerian universities that systemic anomalies have affected the security, integrity and result of students who take e-exams. Furthermore, in their study of undergraduate students' performance in CBT in Olabisi Onabanjo University, Ogun State, Nigeria, Olafare and Boor (2018) obtained that CBT has a positive influence on the academic performance of students, although it is strongly limited by a lot of challenges

## METHODOLOGY

**Research Design:** The design for this study was a mixed method research design involving quantitative survey design and key informant interview method which is often used in qualitative research. Notably, a mixed method research involves the practice of quantitative and qualitative approaches for the comprehensive purpose of achieving context specific relationship between variables of interest for understanding and corroboration (Schoonenboom, & Johnson, 2017). This was found to be appropriate considering the need to provide an in-depth understanding of candidates' experiences in the conduct of the CBT as well as a better understanding of both the general and specific underpinnings of selected variables under consideration in the study. In essence, the mixed method research design used in this study accommodated key informant interview which is a component of the qualitative research paradigm and helped to further explored aspects of the study that were not captured by the quantitative method which involved the use of structured questionnaire. The population of the study comprised of all the 36,080 candidates in Rivers State who registered for the Unified Tertiary Matriculation Examination in 2019 (Aluko, 2019). A sample of 46 candidates obtained conveniently through a web-survey was used for the study. Data for the study were collected through a semi-structured questionnaire constructed using the modified four-point likert scale of Strongly Agreed, Agreed, Disagreed, and Strongly Disagreed scored on 4, 3, 2, and 1 point(s) respectively. Furthermore, qualitative data was obtained using the key informant interview schedule. Data obtained were subjected to statistical analysis of mean, standard deviation and rank order, as well as thematic content analysis. Results of analysis are presented in Tables

## RESULTS

The result of this study will be presented in Tables based on the research questions.

**Research Question One:** What is the perception of candidates towards computer-based test in the conduct of UTME examinations in Rivers State?

**Table 1:** Perception of candidates towards computer-based test in the conduct of UTME examinations in Rivers State.

S/N	Item	Mean	SD	Decision
1	CBT helps me perform better in examinations	3.12	0.83	Agreed
2	CBT has helped me to understand computers better	3.05	0.67	Agreed
3	Marking is more accurate in CBT than paper and pencil test	3.47	0.93	Agreed
4	I have more confidence on my grades online than the one marked by a person	3.61	0.75	Agreed
5	CBT favours some students more than the others	2.31	0.72	Disagreed
	Total	3.12	0.78	Agreed

As shown from the data analysis above, the result indicated that for item 1 (CBT helps me perform better in examinations), a mean rating of 3.12 (SD = 0.83) was obtained, for item 2 (CBT has helped me to understand computers better), a mean rating of 3.05 (SD = 0.67) was obtained, while for item 3 (Marking is more accurate in CBT than paper and pencil test), a mean rating of 3.47 (SD = 0.75) was obtained. Furthermore, it was also shown that item

4 (I have more confidence on my grades online than the one marked by a person) and item 5 (CBT favours some students more than the others) had mean ratings of 3.61 (SD = 0.75) and 231 (SD = 0.72) respectively. Cumulatively, a mean value of 3.12 was obtained which was greater than the criterion mean of the study (2.5). This result therefore indicates that the candidates have a positive perception towards CBT.

On the basis of further analysis, some candidates offered their opinion on their perception of CBT thus:  
*“When I prepare for BT examinations, I do have to read as wide as possible. This helps me to spend much time in reading, as I do not know where the questions would be drawn from. Reading wide enables me to learn better which I believe facilitated my performance in the examination”*

Another candidate stated that

*“I prefer the CBT examination to the ones I took during my secondary school. In my school we have to wait a long time before we get our results which has limited our ability to know our areas of strength and weakness. But with the CBT examination, I was able to see my results early and prepare for my Post-UTME early. Also, I believe that the result from CBT are more trustworthy and reliable than those from paper and pencil test”*

**Research Question Two:** What are the challenges of militating against the effective administration of computer-based examination among UTME candidates in Rivers State?

**Table 2:** Challenges militating against the effective administration of CBT in Rivers State

S/N	Item	Mean	SD	Rank	Decision
6	Difficulty processing my registration	2.93	0.91	1 <sup>st</sup>	Agreed
7	Long distance to CBT centres	2.84	0.74	2 <sup>nd</sup>	Agreed
8	Difficulty operating the computer system	2.33	0.69	5 <sup>th</sup>	Disagreed
9	The Computers available are too many for the students	2.78	0.78	3 <sup>rd</sup>	Agreed
10	Malfunctioning of the computers during examinations	2.34	0.77	4 <sup>th</sup>	Disagreed
	Total	2.64	0.78		Agreed

From the data analysis shown in Table 2, it is observed that item 6 (Difficulty processing my registration) had a mean value of 2.93 (SD = 0.91), item 6 (long distance to CBT centres) yielded a mean value of 2.84 (SD 0.74), with item 7 (difficulty operating the computer system) yielding a mean value of 2.33 (SD = 0.69). For item 9 (The computers available are too many for the students) and item 10 (malfunctioning of the computers during examinations) mean values of 2.78 (SD = 0.78) and 2.34 (SD = 0.77) were obtained. On the basis of this result, the most difficult challenges for candidates is the difficulty in registering the examination, while the least is difficulty operating system.

On the basis of the focused interview conducted, one respondent stated that

*“In doing my registration, I had serious difficulty doing the biometric registrations. The fact that I had to wait for days to be able to do the registrations at the approved registration centers was quite painful. At the point of registration the registration system (capturing device) was unable to capture my details. I had to return some days later which was very close to the deadline before I was able to do the registrations.”*

For another respondent, the problem was the long distance to the examination center. According to this respondent

*“In the whole of local government area there is no registration centre for the CBT examination. I had to travel to the state capital to do the registration. On the day of the registration, I spent over two hours trying to locate my centre. By the time I reached the venue, I was already tired and worried. This may have affected my performance in the examination. Though I was able to meet the minimum requirement for my course, I believe I would have done better if there was an examination centre close to me that I can easily identify.”*

**Research Question Three:** What are some strategies for promoting effective administration of computer-based test for the candidates in Rivers State?

**Table 3:** Strategies for promoting effective administration of CBT in Rivers State.

S/N	Item	Mean	SD	Rank	Decision
11	Make registration possible in every LGA	3.51	0.74	2 <sup>nd</sup>	Agreed
12	Provide better computer centres for examinations	3.22	0.91	5 <sup>th</sup>	Agreed
13	Allow candidates decide the date to take the exams.	3.67	1.02	1 <sup>st</sup>	Agreed
14	Provide practice opportunities for people to practice the skills of responding to online tests.	3.43	0.72	3 <sup>rd</sup>	Agreed
15	Encourage schools to start using ICT for internal assessments	3.28	0.68	4 <sup>th</sup>	Agreed
	Total	3.42	0.81		Agreed

This result from the study revealed that the most important strategy for increasing the effectiveness of CBT administration is by allowing candidates decide on the date they can write the examination, which was closely followed by the suggestions that registration centres should be made available at every local government area. Furthermore, it was also agreed by the respondents that CBT examinations should have a practice pack for candidates to be able to practice how to respond to online test items. It was also recommended that schools should start adopting CBT for their internal examinations in order to encourage increased use, while effort should be increased aimed at providing better computer testing centres for candidates.

## DISCUSSION

From the result obtained and presented, it was shown that students have positive perception towards the use of CBT in examinations. This result implies that the respondents do not see anything wrong with the conduct of online assessment in the UTME. This result might have been obtained because the CBT has existed for about three years with many of the students already used to the system of assessment. In addition, many students today are digital natives who understand the process involved in computer operations and the use of ICT devices. The result of this study is in agreement with Tella and Bashorun (2012) who found out that there is a positive attitude towards computer based test among undergraduate students at the University of Port Harcourt

From research question two, it was revealed that the major challenges militating against the effective administration of computer-based test was difficulty in processing registration. This difficulty might be attributed to the dearth of registration centres especially with the current policy of using only established university centres for biometric capturing. This finding, along with the problem of long distance to CBT centres is likely to limit some students from preparing for the examination which in turn affects students' performance. Similar findings were obtained by Olafare and Boor (2018) who obtained that lack of sufficient computers was a significant challenge affecting undergraduate students' performance in Olabisi Onabanjo University, Nigeria.

## RECOMMENDATIONS

1. For a successful CBT administration in any institution, good infrastructural facilities are essential. Private organizations and agencies should assist in equipping CBT centers in institutions.
2. Effort should be made to avoid questions leakage. In views of this, data bank where examinations questions are stored should be well secured using strong password.

3. Orientation and tutorials should be organized to familiarize students with the testing environment prior to the commencement of the examination. This will help reduce their nervousness.
4. Government policy on computer education at the primary and secondary school levels should be reinforced to make all students computer-literate.
5. Technical challenges or breakdown of computers are imminent with CBT. Therefore, all gadgets to be used should be overhauled before the commencement of CBT examination.

**Bio-Data**

Anekwe, Ikechukwu Marcel is a retired teacher with over 35 years of teaching experience in Nigeria. With both B.S and M.A from the State University of New York, Mr. Anekwe has shown considerable zeal towards academic research. Following his retirement, he has been consistently passionate about educational development of youths by working with Ezeani Dike Foundation for Youth Empowerment in Nigeria. He has actively published and participated in academic conferences globally.



## References

- Adeboye, S., Abdulhamid, S. & Fluck, A. (2014). *The prospect of e-Examinations in Nigeria and Australia*. Retrieved from [https://www.researchgate.net/publication/260062240\\_E-Exams\\_System\\_for\\_Nigerian\\_Universities\\_with\\_Emphasis\\_on\\_Security\\_and\\_Result\\_Integrity](https://www.researchgate.net/publication/260062240_E-Exams_System_for_Nigerian_Universities_with_Emphasis_on_Security_and_Result_Integrity).
- Alabi, A. T., Issa, A.O & Oyekunle, R. A. (2012). The use of computer-based testing method for the conduct of examination at the University of Illorin. *International Journal of Learning and Development*, 2 (3), 68-80.
- Aluko, O. (2019). JAMB registers 869,709 candidates, suspends nine centres for malpractice. The Punch. Retrieved from <https://punchng.com/jamb-registers-869709-candidates-suspends-nine-centres-for-malpractice/>
- Amadi, E, C & Opuiyo, A R (2018) Forms and causes of examination malpractice among university students: A case of Rivers State University, Port Harcourt. *International Journal of Innovative Education Research*, 6(1), 37-41
- Burkhardt, H. & Pead, D. (2003). Computer-based assessment: a platform for better tests? *Whither Assessment*, 133—148. London: Qualifications and Curriculum Authority.
- Fluck, A., Pullen, D., & Harper, C. (2009). Case Study of a Computer Based examination system. *Australian Journal of Educational Technology*, 25(4): 509-523
- Guernsey, L. (1999). Bowing to Criticism, ETS Suspends Computerized Tests in 20 African Nations. Retrieved from <https://www.chronicle.com/article/Bowing-to-Criticism-ETS/112650>
- Haigh, H. (2010). Why use computer-based assessment in education? A literature review. *Research Matters*, 10, 33-39.
- Ilesanmi, O. A., & Lasisi, F. A. (2015). Nexus of Change Management on Organizational Performance and Survival in Nigerian Universities: A Case Study of University of Ilorin. *International Journal of Business and Management Review*, 3(4): 66-81
- Kellaghan, I. & Greaney, V. (2001). *Using assessment to improve the quality of education*. Paris: International Institute for Educational Planning.
- Nkwocha, P. C., Akanwa, U. & Nkwocha, N. C. (2015), Challenges encountered using CBT by 2015 UTME candidates in Owerri Zone One, Nigeria: Test validity and implications. *Journal of Research and Methods in Education*, 5 (1), 28-35
- Oduntan, O.E, Ojuawo O.O. & Odutan E.A (2015). A comparative analysis of students performance in paper/pencil test (PPT) and computer based test (CBT) Examination system. *Research Journal of Education Studies and Review*, 1, 24-29.
- Olafare, O. F. & Boor, C. M. (2018). Computer-based test: panacea to undergraduate students' performance in Olabisi Onabanjo University, Ogun State, Nigeria. *Educational Research*, 9(3), 50-57.
- Olawale, M. A. & Shafi'I, M. A. (2014). E-exams system for Nigerian universities with emphasis on security and result integrity. *International Journal of the Computer, the Internet and Management*, 18(2), 1-12
- Onyibe, C. O., Nwachi-Ikpor, J. O. & Abdulhakim, A. A. (2015). Computer based testing techniques in Nigeria: Prospect and Challenges. *Journal of Information Engineering and Applications*, 5 (10), 17-21.
- Oye, N. D., Mazleena, S., & Iahad, N. A. (2011). Challenges of E-learning in Nigerian University Education Based on the Experience of Developed Countries. *International Journal of Managing Information Technology*, 3(2): 39-48
- Rehmani, A. (2003). Impact of public examination system on teaching and learning in Pakistan. *International Biannual Newsletter ANTRIEP*, 8, 3-6.
- Schoonenboom, J., & Johnson, R. B. (2017). How to construct a mixed methods research design. *Kolner Zeitschrift für Soziologie und Sozialpsychologie*, 69(Suppl 2), 107-131.
- Simin, S. & Heidari, A. (2013). Computer-based assessment: pros and cons. *Elixir Educational Technology*, 55, 12732-12734.
- Tella, A. & Bashorun, M. T. (2012). Attitude of undergraduate students towards computer-based test: A case study of the University of Illorin, Nigeria. *International Journal of Information and Communication Technology Education*, 8 (2), 3 3-45.
- Umera-Okeke, N. (2017). Computer-based language testing for GES 100 (Communication Skills in English) in UNIPORT: Is it appropriate and effective? *ETL Voices – International Journal for Teachers of English*, 7 (1), 32-40.

## ORGANIZATIONAL DEVELOPMENT IN CHILE TOWARDS A "UBERIZATION OF THE ECONOMY"

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*The current world society is advancing by leaps and bounds to advanced expressions of capitalism (Srniczek, 2017), popularly called "Gig Economy", "Uberization of the economy" (Scholz, 2017), "collaborative economy" (Eckhardt, 2015), etc.*

*Chile has not been exempt from this influence of global economic configuration, which questions in multiple ways how organizations will adapt to this change. Can the Organizational Development discipline have some resources, principles, techniques and interventions (Cummings & Worley, 2014) that could be useful to face this in our country? We will see from the current practice of DO in Chile (Lay, 2019, Lay 2012, 2016, 2019, Ramos, 2009) which projection fits this question.*

**Bibliographic References**

- Cummings, T. G., & Worley, C. G. (2014). *Organization development & change*. Stamford, CT: Cengage Learning.
- Eckhardt, G. M. B., Fleura. (2015). The Sharing Economy Isn't About Sharing at All. *Harvard Business Review*.
- Lay, N., Parra, M. (2019). Igualdad y Equidad de Género en el ámbito organizacional. In M. Martinez (Ed.), *Sexualidad y Relaciones contemporáneas* (Vol. 1). Bogotá, Colombia: s. f. .
- Lay , N. C., Zamora. (2012). *Formación en Desarrollo Organizacional*. Paper presented at the I Congreso en Psicología Organizacional.
- Lay , N. C., Zamora. (2016). *Implementación del Desarrollo Organizacional en el sector público chileno desde los documentos normativos de Servicio Civil*. Paper presented at the III Congreso de Psicología Organizacional y del Trabajo.
- Lay , N. C., Zamora. (2019). *Intervención Organizacional en Chile: Experiencias iniciales de Formación en Psicología*.
- Ramos, C. (2009). *La transformación de la empresa chile: Una modernización desbalanceada* (Vol. 1). Santiago: Ediciones Universidad Alberto Hurtado.
- Scholz, T. (2017). *Uberworked and underpaid : how workers are disrupting the digital economy*.
- Srnicek, N. (2017). *Platform Capitalism*. Cambridge: Polity Press.

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# THE SALIENCE OF TEACHING PRACTICE IN EDUCATIONAL OUTCOMES COMPARATIVE ANALYSIS OF TEACHERS IN PUBLIC AND PRIVATE SECONDARY SCHOOLS IN NIGERIA

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*This research evaluates the impact of teaching practice on teachers output in public and private secondary schools in Nigeria. The paper reviews literature on teacher education and comprehensively conceptualises the term teaching practice. The study discovered that although teaching practice exercise is supposed to build proper confidence and competence in lesson preparation, develop the skills and attitude of a teacher during the exercise, help trainee teachers to learn how to keep records of assignment and also participate in school activities, the reality of public school teacher incompetence made mockery of all these advantages. There are a myriad of problems which made teaching practice non effective as an instrument of ensuring teaching efficiency. These challenges had to do with inadequate personnel and logistics during the teaching practice exercise on one hand and in the course of the teaching career. Although teachers in public schools are mostly exposed to teaching practice and are more professionally qualified to teach than many teachers in private schools, the results of their students in WAEC is usually woeful as compared to the result of private secondary school students. It was recommended that government via the Ministry of Education should ensure that teaching practice should span a longer period like six months and that the teaching practice programme should not just an ordinary educational hurdle for the myriad of incompetent candidates studying to be teachers but must be used as an instrument for selecting “teacher material” since not everyone has the aptitude or attitude to be teachers.*

**Keywords:** Teaching Practice, Teacher, Secondary School, Public, Private, Nigeria, Performance.

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## MULTIPLE SEXUAL PARTNERS AND ASSOCIATED RISKS AMONG ADOLESCENT FEMALES REARED IN STEP- PARENTING HOUSEHOLDS IN THE EASTERN CAPE, SOUTH AFRICA

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### ABSTRACT

*Previous quantitative studies conducted in Nigeria, Zimbabwe and Kenya, investigated food insecurity as a casual factor for single mothers to be in multiple sexual partners, and there is paucity of qualitative studies exploring sexual behaviour of adolescent females whose single mothers or divorced parents, remarried. In sub-Saharan countries, step-parenting households remain one of the fast growing types of family household structures, which often account for risky sexual behaviour amongst adolescent females. Literature reveals that to emotional void, adolescent females tend to engage multiple sexual partnerships, drug experimentation and alcohol abuse as a form of coping. These trajectories have been documented to be responsible for negative implications on the adolescents' psychological well-being such as impairment in the sense of autonomy, personal growth and self-acceptance. In particular, unwanted teenage pregnancies, sexually transmitted infections and intergenerational relationships among South African adolescent females from step-parenting households it is a major public health concern. Grounded in Emmerson's social exchange theory and Lazarus and Folkman's coping theory, this study was aimed at determining what leads adolescent females from step-parenting households to have multiple sexual partners. This qualitative study was designed from an interpretivist perspective. Fourteen adolescent females, aged 15-18, from one high school in the rural areas of the Eastern Cape Province, South Africa, were recruited by means of snowball sampling. The school principal and legal guardians of the adolescent females gave a consent for the study to be conducted. Data was gathered by means of focus groups interviews using a semi-structured questionnaire. Privacy and confidentiality were maintained by using pseudonyms. For data analysis, the researchers employed an open, axial and selective coding, prior identifying the themes. To ensure the rigor of the study, Lincoln and Guba's principles were opted, namely; credibility, confirmability, transferability and dependability. Findings show that adolescent females from step-parenting households have history of sexual abuse, thus, they have multiple sexual partners. Furthermore, gender-based violence, psychological distress, abortions and STIs were reported although their sexual partners financially support them to buy clothes, food and afford transport to go to school. In this regard, a collaborative approach which includes police, social workers, psychologists and community is recommended since the adolescent females' well-being is depleted.*

**Keywords:** Abuse, Adolescent Females, Money, Multiple Sexual Partners, Pregnancy.

## “PROFICIENCY ARABIC LANGUAGE TEST” - PALT

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### ABSTRACT

*Arabic language, like most languages, has a standard form. This standard, known as ‘Modern Standard Arabic’ MSA or (Al- ‘arabiya al-fuṣḥa), is used in all forms of writing and religious sermons and texts, and is only spoken by news presenters or by heads of state in political addresses or debates.*

*For more than a century, the MSA has been endangered, intentionally or accidentally, by external threats as well as internal disregard and neglect. In Lebanon for example, although Arabic Language is mentioned in the constitution as the official language of the nation, almost no one use it in daily conversations, instead they use English, French or even dialects to communicate.*

*Today, unfortunately, we see the mix language between Arabic, English and French that was regarded positively in the past as reflecting Lebanon’s diversity, it has become a threat to the mother tongue. Most schools in Lebanon teach three languages from an early age, and many parents prefers to send their children to French- or American-curriculum schools where Arabic comes second or third. In fact, many parents are proud that their offspring don’t speak MSA and mothers sometimes berate their children to speak Arabic in public as they have a prestige complex. They associate to the Arabic language a low class image and uncivilized past and they take pride in speaking foreign languages instead of Arabic.*

*Adding to that, the Lebanese education system, which is supposedly in Modern Standard Arabic, use in the classroom a mix language between MSA and colloquial spoken Lebanese dialect. As a result, many young Lebanese found themselves in confused state of linguistic limbo and they start to struggle with basic Arabic reading and writing skills. The mass media is contributing also to its downfall, it has become very common for young people, particularly when using Facebook and text messages, to write Arabic using Latin characters. The usage of this non-standard romanization of Arabic has led to a decline in Arabic literacy in Lebanon. Many young people have forgotten how to read and write Arabic.*

*In response to the problem of Arabic Language regression in the Arab world and particularly in Lebanon, the idea of “**Bil-Arabiya**” came and a website in 2016 was launched. The idea behind **Bil-Arabiya** is to create a platform dedicated to the Arabic language, to write through a team of experts the best texts of all kinds, in order to avoid linguistic errors and stylistic, within 24 hours.*

*The website also offers a range of services, including but not limited to grammar and linguistic check service, translation, training organization to master the Arabic language, Assistance in media coverage and teaching Arabic in classrooms or online via internet.*

*The website also has a bar displaying **Bil-Arabiya Academy** and its training sessions for different ages, icons offering grammar lessons, words and their origin and explanations, profiles of key Arab authors and contemporary writers, linguistic errors committed by public figures like politicians and journalists and everyday quotes.*

*In addition to a that, through **Bil-Arabiya** website you can practice and book a seat in an Arabic language test we named it “**Proficiency test in Arabic**”. The test is similar to the internationally recognized language test. It assess the candidate’ ability of handling Arabic language through 4 different skills: Writing, Speaking, Listening and Reading. Our main purpose of this test is to establish a unified base to evaluate and assess the level of Arabic Language in each candidate. It mainly targets Arab and foreigner university and college students in certain majors,*

*and professionals in different working field. The test was approved in 2018 by the ministry of Education in Lebanon under the decree number 2018/m/810.*

*In my proposed presentation, I will discuss the Arabic language situation in its land of origin. I will explain in more details the factors led to its decline. I address ethical concerns behind various approaches to teaching this language, and I share instructional strategies to overcome this problem. I will also present “**Bil-Arabiya**” project and explain its utility in enhancing Arabic language image and level. I will present statistical analysis post the project implementation. I will show the impact it has and its application in different field. I will also discuss the “**Proficiency test in Arabic**” and demonstrate the role it plays in retrieve the basic roots of Modern Standard Arabic Language, improve the four skills level and minimize grammar, articulation and linguistic errors.*



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## DIGITAL INITIATIVES FOR ACCESS AND QUALITY IN HIGHER EDUCATION: AN OVERVIEW

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### ABSTRACT

Higher education plays a pivotal role in the overall growth and development of an individual and a nation. It is to develop good and creative individuals and viewed as a powerful means to build knowledge based society. Higher education is an important tool for empowerment to seek both engagement and employment in the society. The role of higher education is considered very important for both individual and country. Presently, the biggest challenge before the Indian higher education system is to address the concerns of enhancing access and improving quality. To address these issues, the Government of India has started digital initiatives in academics, research and governance in Higher Education Institutions (HEIs).

Digital transformation is bringing in rapid changes in the very nature of higher education landscape. It is expected that digital initiatives have a possibility to revolutionize the Indian higher education scenario in near future. It provides a number of opportunities to educational learners and make teachers aware of their new roles and responsibilities in teaching and learning process. Digital initiatives in higher education can play a very significant role to meet the changing dynamics of youths requirement with regards to access (to provide the opportunity of learning) and quality (to equip its students with required skills and knowledge). In the present days of fast expanding information technology services, the emerging technical expertise can be leveraged to address the concerns of enhancing access and improving quality in higher education. The delivery of academic programmes through digital mission holds promisable future with greater ability to meet the changing requirements of higher education. The launch of these digital initiatives has necessitated to evolve strategy for effective adoption and utilization in HEIs. A proper mechanism along with the required ICT infrastructure is must at each institution level to achieve the anticipated benefits and outcomes for sustainable change of these digital initiatives.

This paper attempts to present an overview on the digital initiatives launched by the government for enhancing access and improving quality in higher education. Also, it makes few suggestions for the effective adoption and utilisation to achieve the benefits of these digital initiatives in HEIs.

**Keywords:** Access, Digital Initiatives, Digital Transformation, Growth, Higher Education and Quality.

**About Author:**

Dr. Shakeel Ahmad obtained double Post-graduate degrees (Master of Commerce and Master in Public Personnel Management) and Doctorate degree in the area of Human Resource Development in the University System. Presently he is serving as Joint Secretary in the University Grants Commission, New Delhi, India.

Dr. Ahmad has acquired 30 years experience which include academic administration, teaching and research. He has served on various senior positions such as Registrar, Director (Human Resource Development Centre), Pro-Vice-Chancellor in Indian higher educational institutions. He served as Professor at School of Commerce and Management Studies and taught at M.Com and MBA levels in a Central University. He was Head of the Department and also Chairman of the Board of Studies.

Dr. Ahmad has published two books and 61 papers. He has presented papers at national and international conferences/seminars. He delivered lectures and talks on various aspects of quality, management and financing of higher education. He is Member on various academic, governing and financial bodies of universities and colleges and also Member on Editorial Board of Journals and other professional bodies. Dr. Ahmad has visited United States of America and United Kingdom for academic purpose.

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## SCHOOL PRINCIPALS' ROLES TOWARD TEACHING AND LEARNING IN RWANDA: PRACTICES AND CHALLENGES IN FOUR BASIC EDUCATION SCHOOLS

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### ABSTRACT

*School principal leadership has proven to be one of the most important drivers in turning around students' learning outcomes. While standardized assessments results continue to show achievement gaps among schools in Rwanda, this study sought to explore school principal's role toward improving teaching and learning outcomes in Rwanda focusing on basic education schools. Two main questions guided the study:*

- 1. What practices do principals engage in to improve classroom teaching and learning?*
- 2. What challenges if any, hinder charter school principals as they seek to fulfil the role of instructional leader?*

*Previous research has indicated that school principals improve teaching and learning through setting school directions, coordinating curricular activities, promoting staff's professional development and improving school working conditions. Further, challenges related to staffing and budgeting, multifaceted nature of principal's job were highlighted as barriers towards desired outcomes in teaching and learning. However, a consensus among researchers suggests that these practices and challenges vary across contexts.*

*This study conducted a qualitative inquiry that included four basic education schools with a focus on lower secondary. The researcher considered lower secondary standardized test results for the academic years of 2016, 2017 and 2018 to sample schools whose principals, representative of and outstanding teachers were interview participants. The researcher first generated a list of eight high ranked school in the tests results, then consulted with perceptions of District Education Officer whose authorization was needed to carryout fieldwork. These four schools are known to have been achieving students' pass rates of above 90% over the three years. Contracts of performance, schemes of work and records of workshops and pedagogical meetings at school were school documents checked to confirm with interview responses. Moreover, each school principal was overshadowed during a full school day to observe how they balance between different duties and teaching and learning focus. Data collection process took place between May 23 to June 12, 2019.*

*While thematic analysis was used to analyze interview data, the principal task typology developed by Spillane, Camburn, and Stitzel Pareja (2007) was used to analyze observation data. Results of the study indicated that principals of selected schools utilized contracts of performance with teachers, engaged in coordination of curricular activities, promoted positive school climate, worked with parents and wider community and maintained positive relationships with and among staff to positively influence teaching and learning whereas overcrowded classrooms and shortage of teaching and learning support material resources emerged as main challenges. The study did not only add to knowledge base about school leadership roles in teaching and learning in Rwanda but also has it recommended that best practices be shared among principals of similar schools.*

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