

Implications of Emerging Trends in Media Technology and Communication for Education Policy and Organizations in Nigeria: A Prognosis

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Abstract

The integration of ICTs into mass communication has reinvented and redefined the communication system and the society at large. This paper, therefore, investigates these new trends in ICTs-media communication relationship with a view to highlighting their implications for education policy in Nigeria. Analysis reveals that the digitalisation of communication modernised media practice in Nigeria; ushered in the practices of phonography, hacking, data manipulations, cyber fraud, impersonation, and the entrance of non-professional media public influencers vide the social media. It further reveals people's reliance on networks information, the prevalence of unethical behaviours, and in-appropriate ICTs skills on the part of media professionals to control these challenges. These have serious implications for education policy in Nigeria because ICTs hold the key to educational transformation. The new trends in media communication are manifest in the schools' sector also. Therefore, appropriated policies should drive compulsory ICTs education and skills for schools in areas of administration, employment, promotion, curriculum, teaching, learning and research in a manner that guarantee ethical principles in the sector.

Keywords: ICTs, trends, ethics, education policy, teaching, Learning, and research

1. Introduction

The adaptation of Information and Communication Technologies (ICTs) into media communication herein known as new media permanently altered the character, dynamics, and practice of communication with its attendant consequences. Damkor, Irinyang, and Haruna (2015:64) sharply but narrowly defined ICTs as "...electronic technologies used for information storage and retrieval." Wirsiy and Shafack (2002) defined ICTs as a broad-based term that encompasses the gathering (acquisition) organization (packaging), storage and retrieval (dissemination) of information that can be in textual or numerical (books, documents), pictorial and vocal forms (audio-visual) or a combination of all the above (multi-media), using a combination of computers and telecommunications telephony distance learning. ICTs cover activities and equipment such as tools,

Received (December 17, 2017), Review Result (March 7, 2018), Accepted (March 14, 2018)

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applications, and information that are amenable to the computer. It involves anything that stores, retrieves, manipulates, transmits and receives information electronically.

On the other hand, the new media refer to a wide range of changes in the systems of media production, storage, distribution, and use that are facilitated by technological changes or introduction of ICTs. The features of the new media are deviations from the old order in terms of the mode of gathering, processing, storing and dissemination of information or news. The pattern of relationships that exist between media organisations, government and non-governmental organs, private and public activities, and the dynamics of the entire socio-economic, political and cultural systems have equally changed (Pavlik, 2001). It has collapsed national and international boundaries, infiltrated into and disorganised ownership-control power in the media on contents. For this, Deuze (2008) argues that ICTs are disruptive and challenges the foundation of media communication. Meanwhile, Alum (2014) reveals that over 90% of activities of the media establishment are made possible through the use of ICTs. Alum also indicated that the use of ICTs in the media holds the following advantages: make information gathering to be cheaper, faster, and very efficient; make communication and information dissemination quicker and more convenient; and facilitate the production of quality audio and visual.

These changes created positive impact on the development and success of media communication, although they brought with them “all kinds of new threats and possibilities” (Deuze, 2008, p.10). They introduced a new culture into communication practice, and align socio-economic relations both among individuals and groups or institutions. First, it has changed the ways of doing things, and the values attached to the rules and processes of such ways. Second, it possesses serious challenge to prevailing visions that tend to derail the old order. For instance, the new media redefined the power relations between news producers and news consumers and broke the dividing wall between them. Put simply, it liberalised and democratised communication wherein all, professionals and non-professionals are engaged in the process of information gathering, storage and dissemination.

This paper explores these new trends and/or challenges with a view to examine their implications for policy development or change in Nigeria’s education sector/school system. Such policies are expected to support and provide the framework for educational transformation in the face of the challenges. Like the media, ICTs have greatly and undoubtedly altered the character and processes of teaching, learning, and research in Nigeria and the world in general. It tends to accelerate, motivate and engage students, and strengthen teaching and research (Davis and Tearle, 2010; Yusuf, 2011). ICTs have the potential to enhance teachers and students’ achievement, improve accessibility, increase their efficiencies and at reduce costs.

Policy as used here refers to “strategic statements that provide a broader context for change and articulate a vision that motivates people to change and coordinates otherwise disparate efforts within the system and across sectors.” (Kozma, 2010:6). Generally, it is an action plan, programme, and/or projects through which resources are mobilised to implement a given vision. Generally, its processes have four major phases, namely: initiation phase, implementation phase, a scaling-up phase, and institutionalization (CERI, 2009a, 2009b; Fullan, 2007).

In all, policy promotes, facilitates, and brings about change (Kozma, 2003) except where such(national) policies are symbolically meant to display concern and attract political gains on the part of their makers. In such case, the rudiments of the policies do not provide the framework, resources, and programmes for their actualisation (Elmore, 2004). Any form of programme or project that accompanies the policy is always superficial and abandoned. In addition to this, practitioners’ (in this case, teachers and students) resistance to change, inability of policies to address the prevailing challenges, lack of policy link to instructional practice, and lack of programmes and resources with

which to pursue the policies are factors that militate against their success (Balanskat, 2007; Cohen and Hill, 2001).

Appreciating the roles or contributions of ICTs to educational development and the power of policy in fostering change, the Federal Government of Nigeria introduced ICTs related National policy on education (Federal Republic of Nigeria, 2010). According to the policy, the government have to provide relevant infrastructure, training at the primary school level, and introduce computer education as a pre-vocational elective in secondary school (Damkor, Irinyang, and Haruna, 2015; Aduwa-Ogiegbaen and Iyamu, 2008). According to Federal Republic of Nigeria (2010), the core objectives of the policy are:

- i. To ensure that ICT resources are readily available to promote efficient national development;
- ii. To guarantee that the country benefits maximally, and contributes meaningfully, by providing the global solutions to the challenges of the Information Age;
- iii. To empower Nigerians to participate in software and ICT development;
- iv. To encourage local production and manufacture of ICT components in a competitive manner;
- v. To establish and develop ICT infrastructure and maximise its use nationwide;
- vi. To empower the youth with ICT skills and prepare them for global competitiveness;
- vii. To integrate ICT into the mainstream of education and training;
- viii. To create ICT awareness and ensure universal access in promoting ICT diffusion in all sectors of national life;
- ix. To create an enabling environment and facilitate private sector (national and multinational) investment in the ICT sector;
- x. To encourage government and private sector joint venture collaboration;
- xi. To develop human capital with an emphasis on creating and supporting a knowledge-based society; and
- xii. To build a mass pool of ICT literate manpower using the NYSC, NDE, and other platforms as a train-the-trainer scheme for capacity-building.

In pursuit of these objectives, the Federal Ministry of Education launched an ICT-driven project know as School Net with the goals of equipping schools with computers and communications technologies and connect them to the internet. These technologies include radio and television sets, phones and fax machines, communication equipment, scanners, digital cameras, and copiers, among other things. The Ministry of Education established a mobile Internet unit (MIU), which is administered by the Nigerian National Information Technology Development Agency (NITDA) to provide mobile training and cyber centre for schools.

However, the number of buses provided for this project was so small and highly limited to cover a reasonable number of schools even within the federal capital territory. As a result, the ICT revolution in the Nigerian education sector is yet to register its presence in schools. However, individuals through private efforts have acquired their preferred skills, knowledge and are using same to satisfy their desires. In this lies the manifestation of various ethical challenges facing ICTs use in the education sector. Majority of Nigerian tertiary institutions such as universities, polytechnics, institutes of technology, schools of nursing and midwifery, and colleges of education as well as most

of the high schools lack ICT infrastructure, training, and education (Damkor, Irinyang, and Haruna, 2015). Thus, e-learning programme in Nigeria is still a mirage. Therefore, the education policy project lived in the pages of paper only. Nevertheless, an analysis of this policy reveals that it failed to address the synthetic overture of ICTs integration in the education system. This makes a case for this paper to consider the implications of the new trends in ICT moderated media communication for the type of policies schools should pursue in Nigeria.

2. Framework of Analysis

This paper adopts the theory of mediamorphosis as its framework for exploring the evolving media trends in the ICTs regime. This theory tends to explain the nature of the transition from traditional or analogue media communication to ICT prone or digitalised media journalism, and the characteristics of the new media. The founding protagonist of the concept and theory of mediamorphosis, Kurt Blaukopt, applied it to explain the evolutionary role of music *visa-viz* the dominant role of the electronic media in contemporary music life (Blaukopt, 1992; Sperlich, 2006). It was Roger Fidler who applied it to explain the ensuing changes in the communication industry *i.e.*, from traditional media to new media due to innovative technologies *visa-viz* other factors like competition, political pressure, and divergent needs *etc.*, (Fidler, 1997).

According to Findler (1997), the theory has six fundamental principles, namely:

- i. Coevolution and coexistence: The old order *i.e.*, traditional media must co-exist with the new order as part and parcel of the communication system;
- ii. Metamorphosis: The new media is not aligned with the old order but emerges from it.
- iii. Propagation: The new media propagates the dominant features of the old media;
- iv. Survival instinct: The two eras must adapt to changes as they evolve in order to survive;
- v. Opportunity and Need: The new media is programmed to meet the needs and challenges of the people and society of the era in order to survive; and
- vi. Delayed adoption: As an innovation, the new media is expected to be accepted gradually and time is needed for its commercial success.

This theory enables the paper to seek for and explain expected delay in the adoption of ICTs in the education system, the conflict of interest and synergy between the old and new order defined by ICT integration, and to explore how ICTs are serving the current needs of the people and the emergence of new trends therefrom. The implication of these for policy formulation or change, which is the trust of this paper, makes the theory applicable and relevant.

3. ICTS in Nigeria Media: New Trends and Practices

The integration of ICTs into media communication led to the emergence of new trends and practices that negate the old era in the Nigeria media landscape. These trends are characterised by “ubiquitous news, global information access, instantaneous reporting, interactivity, multimedia content, and extreme content customization” (Pavlik, 2001, p. xi). This trend is called participatory era in information gathering and dissemination. Scholars like Asekun-Olarinmoye, Sanusi, Johnson and Oloyede (2014), and Bowman and Willis (2003) conceptualised it differently as Collaborative Citizen Journalism (CCJ), personal publishing, grassroots media, networked journalism, open source journalism,

citizen media and participatory journalism. In this era, the audience has become news consumers, news generators, and news broadcasters/disseminators.

The ICTs prone communication era has, however, undermined qualitative information generation and dissemination due to untrained professional's unrestricted access to internet enhanced devices. Many are churning out anything within their reach in the name of information while consumers are left with a barrage of garbage information as news. The consequence is the emergence of pseudo-journalism/journalist because these users generate their own news or information contents without professional training and regard to ethics. They tend to devalue journalism and consequently render it less professional.

On the contrary, others argue that it has created boundless opportunities in information generation, analysis, and transmission at cheaper, easier, and more flexible rate. With the processing of information gathering, transformation and dissemination on mobile systems through portable gadgets, a journalist can record, process, edit and transmit news materials from the field as though he is working from the office. The era, therefore, ushered in mobile media communication.

The mobility of communication in the era erased the existing demarcations among journalists and in journalism. Unlike the old era where journalists are categorised in terms of where they work i.e. television, radio, or newspaper; and publishers and producers are distinguished from consumers; it is evident in the new media that publishers, producers, and consumers seem to be the same people without distinction (Deuze, 2008). The system is democratised, both divides operate on the same platform, and they tend to consume the same information on the same blog and/or website. This scenario is facilitated by the hypertext and interactivity character of the era, which provides a network of links within, outside, above and beyond one's area (Lister, *et al.*, 2009). The consequence of this is the impunity that non-media professionals and some professionals too neglect, violate, and disregard professional codes, ethics, values and standards. This neglect possesses direct threat to mainstream media organisations (Knight, 2013).

Further, the patronage for and consumption of hard copy media prints such as newspapers and magazines, and analogue media productions are geometrically decreasing (Abati, 2016; Dare, 2010/2011). In a country of over 250 million people, only about 300,000 people patronise and/or read newspaper in hard copies daily in Nigeria. This scenario is a negation of Nigeria's experience between 1975 and 1999 (Ariyibi-Oke, 2011; Popoola, 2010). Majority of Nigerians prefer to read these News Dailies online. This has led to a high rate of media mortality in Nigeria. Owolabi and O'neill (2013) observed that out of 39 newspapers established in Nigeria between 1937 and 1960, only the Tribune survived till date. Similarly, out of 168 newspapers and 48 magazines established between 1960 and 2008, "only 43 (28.5%) newspapers and 15 magazines (31%) are still operating" till today (p.250). Further, the total number of newspapers and magazines circulation in Nigeria "has been on a steady decline, hovering around half a million in a country of nearly 140 million" (Dare, 2010/2011, p.11). Dugo (2008) states that ICTs have changed the world in every aspects of human life including education; reduced manual operations in all sectors; speedily facilitated the growth of the media; and combated the distance and time-related challenges by bringing news sources nearer to the news gatherers, reporters and editors. According to Mugo (2006), telephone technology has closed the time gap between the reporter and the news source, reporter and editor, which in turn has saved costs of travelling to gather the news. Liu (2006) states that ICT improves the reporting of news; makes exchange of ideas between communicators and receivers trouble-free; helps to reduce the social distance between communicators and receivers, and teachers and learners; and helps foster a more pragmatic exchange of ideals. Garrison (2000) noted that the large quantity of online contents and facilities in news reporting has led to more productivity and efficiency at a reduced cost by using computers and computer networks in the newsroom for news processing. Garrison (2001) argued that ICTs are usually employed in newsroom in the following ways: internet

telephony; bulletin board systems, push technology, audio streaming, audio and video conferencing and electronic mail.

4. The Implications of New Trends in the Media for School Policy in Nigeria

The core implications of the new trends in the media communication for schools' policy in Nigeria centre on recruitment, infrastructural development, administration, and admission policies in the education sector. Specifically, the use of ICT in the school system can enhance educational efficiency, ensures effectiveness and efficiency in administrative functions, promotes individualized research and learning, changes current pedagogical practices, improves teaching and research techniques, and propagates e-learning or technology-enhanced learning (TEL) programmes (Aduwa-Ogiegbaen and Iyamu, 2005). Examples of e-learning programmes include computer-based training (CBT), Internet-based training (IBT), web-based training (WBT), virtual education, digital educational collaboration, and/or distance/open education. Therefore, schools must devise vision-achievement policies that will usher in these ICT effects in the face of emerging trends.

For instance, the adaption of ICTs in the school system has led to the emergence of pseudo experiences in research, teaching and learning. Many researchers engage in acts of plagiarism such as cut and paste syndrome in research and publication, most teachers print and sale internet materials as lecture notes, while students print and submit internet materials as class assignments. This practice does not engage the individual actor's mind, analysis, and input. Such mind is therefore not impacted on or influence. The new trend poses a direct threat to reading culture among teachers and students. Like the media, the consequence of these trends as suggested by some empirical research findings is a prevalence of low standard of research and quality of education in Nigeria.

A study of 31 Less Developing Countries (LDCs) including Nigeria by Fuchs and Woessmann(2004) reveals that ICTs integration into the school system has a negative impact on educational development. That is, it does not enhance the quality of teaching, learning and research in schools. This observation corroborated earlier findings by other researchers such as Angrist and Lavy(2001) and Pelgrum and Plomp(2002).This emerged as a trend in the use of ICTs in schools because original experience revealed a positive and developmental impact of ICTs on education or school system (Hepp, *et al.*, 2004). Consequently, policy-makers should evolve an adequate policy to solve the problem of plagiarism in its entirety among researchers, teachers, and students.

The integration of ICTs into the education system has equally created boundless opportunities for researchers, teachers and students to access, store, and distributed materials cheaper or at no cost with ease across disciplines. This has led to a high preference for and use of electronic materials and the internet as against hard copies of publications and analogue libraries. Students and their teachers are given to reading, copying, and using patches of publications as can be found on their personal computers, phones, iPod etc in exchange for detailed study. This has a direct threat to the publication, storage and use of books in hard copies. Secondly, it threatens the survival of analogue libraries as they are being dominantly replaced by digital libraries, which in most cases are more difficult and costlier to access. An urgent national policy is needed to arrest the steady decline in the use of books and libraries by students and teachers.

The constant use of the internet by students and teachers is also sacrosanct with its use for other activities. These school users are vulnerable to their unintended misuses, especially through social connections and entertainments websites. More than 90% of college teachers and students use social networks (Aduwa-Ogiegbaen and Iyamu, 2005) and are easily addicted to phonography, gaming, music, and dating. This tends to derail student's academic pursuit and use of ICTs for research, teaching and learning. Like in

many Middle East countries, there is a need for a national policy to regulate and control this trend, particularly in the school's system.

Further, the integration of ICTs in the educational system has equally led to deep-seated frustration on the part of many teachers because they lack adequate knowledge and skills on the use or application of computer mechanism, the internet, social media mechanism, and education software. This experience is obtainable in primary schools, secondary schools and higher institutions of learning. There is a need for a policy that makes the acquisition of such knowledge and skills one of the prerequisites for employment and promotion in the school sector. This signals the importance of re-introducing the policy of in-service training for education staff. Similarly, the democratised access to teaching, study and research materials via the internet, and their unedited or applied use by students and teachers has led to students' indifference or disregard for classroom activities. Most of them play truancy. It has led to people's preference for online and distant learning or study, and some schools' adoption of such programmes. Some project supervisors have equally adopted the use of e-mail activities, which makes it impossible for supervisees to meet them for instructions, guide, and clarifications. This has serious implication for school's policy in terms of mandatory attendance to classroom activities.

Secondary education has the function of equipping the learners with skills and competencies to succeed in the world and office work. Hamilton-Ekeke (2008) opined that the most important agents for accomplishing these functions are principals. When technologies are changing, the school heads and their teachers need to be abreast with the use of these new technologies to enable them to teach the right thing at the right time. To keep principals and teachers abreast, they need to be re-trained. Re-training of principals and teachers will lead to professional improvement. Emerging technologies are works of creativity, secondary school principal and teachers of these technologies need to be creative and inquisitive as such they need re-training to meet the modern trend in their field of profession. According to Hamilton-Ekeke (2011), secondary school heads and their teachers can enhance their improvement by extending their knowledge to the general public. The re-training of teachers and principals can come in the form of workshops and seminars. Retraining deals with receiving an in-service education. It implies subjecting, or exposing an individual to further teaching, and practice after the initial training. It may also be taken as improving the principals. The purpose of retraining secondary school principals and teachers is to improve their qualities, expertise or competence, efficiency and effectiveness. The human society is dynamic, our needs, values, aspirations and expectations change with time. Knowledge, skills, and methodologies also change as a result of research, since the fastest tool for socialization and propagation of culture and teachers are tools used to implement the teaching-learning process, all education teachers should be retrained on a regular basis. Thus, school administrators need to be retrained to keep abreast of technological changes in the instructional delivery required of their teachers. The avenue for retraining secondary principals and teachers pointed out by Ezeh (2016) include;

- Attending and actively participating in seminars, workshops and conferences.
- Attending in-house seminars, workshops, and conferences with senior colleagues available to help others improve on their lots.
- Belonging to some other professional associations or organizations where teachers and principals meet with highly experienced colleagues to share ideas and talks about recent happenings and development in teaching and learning.
- Higher training through part-time programmes, sandwich and full-time study leave with pay.

5. Technological Changes and Challenges in Education on Instructional Delivery

Technology, according to Oye, Alahad and Abraham (2010), is seen as the application of the scientific method to solving problems in our daily life. Put in the perspective of education, however, technology is the application of scientific method to solving problems regarding impartation of skills to learners to meet the changing needs and demands of the society. In the field of education, there existed in the past technology in a crude form but there has been a dramatic and significant change in the methods that can be used by secondary school principals to address the changing needs of the society. Ani (2012) opined that technology is a many-faceted phenomenon in materials created and advanced by man to free himself from endearment by nature, but which, when undisciplined, enslaves its own creator. By this definition, technology helps to advance man's course in his environment but moderation and control should be exercised to direct its use to solve problems of man if not, may be misleading in itself. The technological changes in education are basically from the perspective of information and communication technology (ICT). The society generally is ICT-driven and in order to keep abreast of these changes, frequent training and retraining of secondary school principals become paramount in order to ensure effective instructional delivery in their schools to help the teachers to equip students with skills necessary for securing and sustaining employment upon graduation. Electronic office (e-office) is one of the phenomena of the 21st century which is a paperless office approach in which every office work is done with the use of a computer. It is based on this that most education departments across Nigeria's tertiary institutions are building ICT centres, improved computer laboratories as well as offering professional courses in computer studies to produce students/graduates that can easily adapt in their ever-changing environment. The use of typewriter has almost gone into extinct as the computer has fast taken over. Though, acquiring basic keys in typewriter will go a long way helping students during keyboarding classes.

There is a nexus between the employability skills and education curriculum design and implementation as curriculum attempts to provide the best possible learning opportunities. The retraining of secondary school principals to adapt to these changes in technology will consequently strengthen instructional delivery thereby leading to the effective job performance of students upon graduation. The school principals serve as one of the inputs in any instructional process, which the resultant output is the students. Consequently, if the principals together with the teachers are not retrained on the use of modern technological equipment, the quest for effective instructional delivery will be truncated thereby leading to the production of obsolete output (students). It is common knowledge that no one gives what he/she does not have. As a result, obsolete input (teacher) invariably leads to obsolete output. Curriculum as a planned programme of learning experience which seeks to develop the abilities of a learner under the supervisory role of the principals has a laudable contribution to effective instructional delivery in secondary education. According to Ezeh (2016), three aspects of the curriculum determine the achievement of objectives, namely; Input, Process and Output. These three stages highlight the role of human and material resources needed for implementation of the curriculum, methods and techniques recommended by the principals to be used by their teachers and the learners and the quality of change that has taken place in them from the interaction. These three factors are continuously assessed in the system in order to ensure effective instructional delivery.

According to Moreno (2006), educational reforms all over the world are increasingly curriculum-based as mounting pressures and demands for change tend to target and focus on both the structures and very content of the school curricula. As a result of the constant change in the society and in the world over, it becomes absolutely necessary that the

content of the curriculum be adjusted to suit the inevitable changes. This change brought about the introduction of modern technologies in education which secondary education has a fair share of these changes. Modern education curriculum provides the introduction of ICT in the form of ICT literacy, Application of ICT, Infusing of ICT skills and ICT specialization. These reforms have added good quality to secondary education curriculum content which is geared towards meeting the demands of the society. In the area of instruction, modern technologies which revolve around the use of Internet and resources have emerged that are aimed at improving productivity (Tiwari and Tiwari, 2010). Typical examples of internet teaching and learning media that facilitate teaching and learning in education include Projectors, E-mail, Smartboards, Starboards, Teleconferencing, Video Conferencing, E-book Reader and Streaming Videos. In addition to the use of the Internet in the classroom, the principal can enhance learning by learning and introducing Computer-Assisted Instruction (CAI). According to Oduma (2013), CAI assumes that all people learn different materials in different ways at different rates of speed and thus promotes individualized instruction.

6. Summary and Conclusion

This paper is an assessment of emerging trends in Nigerian media communication due to ICTs integration with a view to identifying their policy implications for the development of the school system in Nigeria. The assessment reveals gradual but radical changes in the frameworks, processes, and rules governing information gathering, processing, storage, and dissemination. These, which are now democratised, orchestrated the decline of analogue and print media communication, the emergence of pseudo-journalism that is bereft of qualitative information. It enhanced impunity and activities fraught with ethical challenges and weak or absence of control of media activities. These have serious policy implications for the development of the education sector in Nigeria.

This is because ICTs hold the key to educational transformation, development and growth in Nigeria, and tend to replicate its impacts on media communication in the education sector. The new trends in both sectors are very similar. Further, the newsroom is presumed to be ahead of the classroom. Consequently, education policies should address the use of media information as data for teaching, learning and research, and the emerging trends in the education sector that challenge existing ethics and rules of conduct. The inability to do these will undermine the impact of ICTs in the development of Nigerian educational system. It is therefore correct to infer that the relationship between policy and change in the education sector is determined by the link between policy and school structures, environment, programmes and classroom practices. Education policies must be systematically aligned with national needs and priorities, and with the emerging trends in the sector due to digitalisation.

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