

Relevance in Adult and Continuing Education in Sub-Saharan Africa in the Digital Age

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Abstract: The digital age features complex opportunities as well as challenges in adult and continuing education in Sub-Saharan Africa as it probably does in other disciplines. The digital age requires individuals and communities to function maximally and optimally in different aspects of life. It has also induced the prevalence of the knowledge economy that relies on the massive provision and utilization of skills, knowledge and values in the information and communication technologies. This study, therefore, attempts to explore ways in which the discipline of adult and continuing education can properly position itself for remaining relevant in terms of helping to meet the needs of the teeming populations of Africans would still need the services traditionally offered by its practitioners. To achieve that goal in an era of value for money requires that adult and continuing education practitioners must first address as to whether or not, their discipline is actually still relevant. It is only then we can come propose possible review of the kind of options the discipline can offer as it tries to re-establish itself.

Key words: Adult and continuing education, continuing education, digital age, knowledge, relevance, skills, values

INTRODUCTION

After decades of striving for relevance since Edward Lindeman opened a new debate in 1928 as to why adult and continuing education and its offshoots like literacy, continuing education and distance education should remain an academic discipline and profession, the digital age must now compel a much deeper and urgent interrogation of the provision of services to clients. A much deeper and urgent interrogation of the relevance of adult and continuing education has been become necessary because the digital age has particularly imposed, even on unwillingly development policy makers, the phenomenon called globalization together with its vigorous ancillaries, particularly competition.

The reality of the moment is that adult and continuing education must prove its relevance in national development. The discipline and profession of adult and continuing education must clearly demonstrate its relevance in the era of competition that is essentially driving the knowledge economy. Perhaps, understandingly, the knowledge economy has been largely defined, re-defined and driven by Europe and North America with a somewhat quick adoption and articulation by Asia and Latin America with the concomitant result that the phenomenon has become a key theme in the operations and reports of the World Bank and the Organization of Economic Co-operation and

Development (OECD) right from the beginning of the so-called third millennium (Chandra and Yokoyama, 2011; Anyanwu, 2012).

What we now know is that whether in Asia, Latin America or Africa, nations are now expected to move quickly away from being “product-based economies” to “knowledge-based economies”. And the truth remains that this expectation is insidious and no nation that seeks to make progress and promote the development and comfort of its people can afford to stand aloof anymore.

Relevance in this discourse clearly means also we cannot afford to paint on a global canvass and that is why Sub-Saharan Africa, remains our context. Sub-Saharan Africa is our context because it has been pointedly lagging behind in terms of globalization, the knowledge economy and rapid development in Information and Communication Technologies (ICTs) relative to other continents (Asongu, 2014; Oluwatobi *et al.*, 2014; Anyanwu, 2012; Jenny and Isaac, 2010; Ondiege, 2010). Moreover, growth in adult and continuing education has been lopsided to the effect that open and distance learning and continuing professional development to a very large extent and adult literacy and the somewhat careless and weak understanding and application of lifelong learning to a much less extent have continued to dominate the discourses in modern scholarship, policies and practices in region.

Yet, like every other discipline, economies of scale, efficiency, effectiveness, competition and relevance must dictate African policy makers on what and which areas African governments should invest rapidly dwindling national incomes. Sub-Saharan African economies are getting into an era of stagnation or even shrinking in size and so, every expenditure in education is copiously and urgently being expected to produce visible and meaningful returns. It is almost like African governments would demand adult and continuing education professionals and practitioners to either “float” (that is become demonstrably viable) or “sink” altogether.

CONCEPTUAL CLARIFICATION

Scholarship in adult and continuing education has moved beyond simplistic explanation of words and terminologies that are peculiar to it. Whether, this is true of Africa is yet to be properly determined unless we get on the street to ask the layman or laywoman what, we mean by adult and continuing education. It will be a surprise if they will not tell us it is all about teaching elderly persons how to read, write and count numbers in a given language to a good level of understanding. This might be the case whether we embark on such an inquiry in Ghana or Nigeria or Sierra-Leone or Kenya or South Africa or Zambia, for example.

Unfortunately, adult and continuing education has been around in Africa for over half a century and yet ignorance as to what it means abound. Whether, you are inquiring from the layman or laywoman, academic, they are most unlikely to tell you that adult and continuing education in particular, means more than literacy education (Akinpelu, 2002). That should imply that modern-day professionals and practitioners will forever engage in the business of removing from their discipline, profession or vocation all elements of ambiguity or obscurity and vagueness or common place obscurity and continue to strive towards achieving clear precision and agreement in the use of their concepts.

The departure point, therefore in specifying the relevance of adult and continuing education in the digital age must be located in subjecting present policies and ideas to what the late African adult and continuing education philosopher, Emeritus Professor Akinpelu (2002) has defined as the critical and rational analysis and evaluation processes. It is only these processes that will help us to refine adult and continuing education for the purpose of applying it in measurable terms to the knowledge economy as it is driven by the digital revolution in the present century.

This should be the proper thing to do because no knowledge in all its ramifications is allowed the measure of remaining static. No knowledge is relevant unless it becomes dynamic through a process of regular and rigorous criticism and refinement. Professionals in adult and continuing education must engage in critiquing and refining their discipline by exposing the weak points and strengths in the ideas governing it and their application to development policies, especially in the region. As a direct consequence, this discourse aims at exploring the relevance of our discipline in a continent that is expected to find its place in the knowledge economy driven by digital revolution.

Jarvis and Colin (2003) advances a concept that as the world is changing, new things come up and therefore there is a need for every human being to grow and develop in learning so as to continue surviving in this ever technological changing world and therefore, adults as human beings too have to keep on learning for the rest of their life spans.

Due to the changing world that demands human beings to be in a constant motion of education and learning, it is therefore, advocated in this study that education for adults as part of their learning to deal with necessary changes is critical to uphold the concept that adult and continuing education will always be needed to meet the technological development of the world. There are quite a good number of things in this technological age which are invented on daily basis (Johnson, 2011), hence a need for adult and continuing education practitioners to look out for the opportunities to remain relevant to other societal structures.

Relevant adult and continuing education practices therefore seems to revolve around the practitioner’s understanding the discipline content, dimensions organizational culture, people development, practices, consideration of life changes and methods of discipline content delivery in the digital age.

Objectives: Relevance in what we do as professionals and practitioners has come to the fore more sacrosanctly now than ever before. The days of liberal adult and continuing education in Sub-Saharan Africa are gone forever. The question as to what extent adult and continuing education is aimed at is now proper and demands an urgent answer. That is what, this conceptual and reflective paper is attempting to answer. It is not like this question has never been asked before. It must continually be asked as people, nations, regions and continents evolve over time.

Relevance as a focus and direction-giving idea seeks to remain prominent at a time the digital age is compelling economies to become more malleable and responsive.

RELEVANCE IN THE DIGITAL AGE

To properly address the objectives that guide this discourse requires that we state clearly how the discipline has been conceptualized. Over the years, many definitions and understanding have been proposed by scholars from different perspectives and contexts. The concept has actually evolved over time and now we have some what expanded meanings ascribed to it. For that reason, adult and continuing education has been viewed as a kind of education which is classified as lifelong education for every adult (Jarvis and Colin, 2003). In this context, there is an implication that adult and continuing education will always be relevant to the needs of the society regardless of the changing times.

More recently, adult and continuing education has been re-defined and generally accepted as the adult learning component in the lifelong learning continuum that now serves as the framework for defining and structuring national education systems all over the world. Lifelong learning is to be understood as the kind of learning that occurs throughout a person's life, regardless of the quality thereof (Holmes, 2003). Adult and continuing education, therefore, serves the purpose of extending the learning over the lifespan. However, in some instances, it reaches out to adult and out-of-school youth who had no opportunity of enrolling in and gaining from initial education and this is where the discipline differs significantly in its nature and focus from what might be the case in the Western world.

Of greater importance in this discourse is the articulation of how adult and continuing education in the region can possibly re-establish its relevance in the digital age. In other words, what can be the interface between adult and continuing education and increasing development in ICTs.

The adult and continuing education and digital age interface: The digital age has come with the urgent need to understand its main features of contextual intelligence and artificial intelligence. Africa and Africans now have to understand and embrace machine learning and not simply buy and use smart phones for the purpose of making calls or doing short messages or even surfing the Internet. Very few people if at all there is any such person can safely contend with the value and necessity of the ICTs. From that standpoint, what the practitioner should actually be asking is how relevant the discipline should be in what one may appropriately term the "robot revolution".

First of all, investors have been reported to be pouring in huge amounts of money in promoting the robot

revolution at this point in time. For example, Fritzpatrick (2016) has reported that in 2015 alone eager investors poured in a record US\$ 587 million into startup businesses in order to fast-track machine learning. Fritzpatrick (2016) also reported data from CB insights as indicating that machine learning, the software that provides robot with contextual intelligence is now helping to revolutionize robots to the point where it is now possible for Amazon's kiva robots to fill orders by bringing goods to human workers and that in medicine, the Aethon's Tug robot can now deliver supplies like medicines and fresh linens within hospitals just as in hospitality, there is now a new novelty hotel in Japan that is entirely staff by robots.

Martin ford, author of the 'the rise of the robots:

Technology and the Threat of a Jobless Future' has been quoted to have predicted that technology would get to the point where it was going to take over a lot of routine, predictable-type jobs in the economies of the developed world (Fritzpatrick, 2016). If that development extends to Sub-Saharan Africa, what would adult and continuing education do in terms of either providing the workforce the skills it needs to keep their jobs or find alternative jobs in the event they are retrenched when technology takes over. Scholars in the robot technology revolution have no doubts whatsoever in their minds as to whether that would happen. In actual fact, they are of the view that the question is not whether that would be possible but how quickly that situation arrives since robots are already active in checkout lines, tollbooths, parking lots and ticket counters. The main worry Sub-Saharan scholars of adult and continuing education should be addressing is how and in what effective ways they can help when even the white collar professions are already threatened very significantly by the fallouts of the combination of robots and artificial intelligence (Fritzpatrick, 2016). Perhaps, this threat may not be of much significance as far as the region is concerned since most of the economies are just developing and many of them stagnant. Even for the developed countries there could be some relief because of the 10 private robot firms with substantial venture capital in the last 5 years, most of them seem to have settled firmly in the augment-human-workers (not replace them) camp (Fritzpatrick, 2016). That could be some relief. But, scientist and technologists are not relenting as they search for better and cheaper ways of doing things as has been demonstrated in the surge in voice-assisted apps that run errands in homes and in this track are Cortana, Echo, Siri and Hound, a voice assistant app for a broad range of devices (Pullen, 2016). So then, the robot revolution is far from getting slowed down by any means.

Whilst Africa may not as yet be fully involved in the robot revolution, its political leaders have not shut their ears to the inevitability of technology as evidenced by the concerns raised by many of them at their annual World Economic Forum on Africa, held in Kigali, Rwanda in May, 2016 and the various programmes depicting their struggles to embrace technology as a way out of the huge challenges facing education in their nations. Which challenges in education?

First of all, only 56% of the Sub-Saharan population is literate, compared with the global average of 84% (Baker, 2016). Beyond this although, the population of children completing primary education has improved over time, it is alleged that the quality of schooling has not commensurately improved. So then, there is an apparent disconnect. Underfunding, equipped schools, not sufficiently motivated teachers have all been held accountable for this poor showing in educational achievements. Baker (2016) puts this disparage message this way: “teachers perform poorly, if they show up at all.”

The rather weak performance in education is further complicated by the fact that even if primary and secondary education were to improve as we would want them to do, there are not enough spaces to absorb all who would have wished to have university education in Sub-Saharan Africa. These are probably the major reasons why many nations in Africa are making recourse to technology as it relates to online education.

Interestingly, the Liberian Ministry of Education, for example has been reported to have outsourced the country’s failing primary education system to American education company called Bridge International Academies, a privately run education company (Baker, 2016). The point has been made that education challenge is so great that only digital platforms can effectively help to address the situation in terms of helping to reduce the time it takes to train teachers and giving people a basic level of education very quickly and inexpensively Temitope Ola quoted by Baker (2016).

Digital platforms in Africa are today being driven not just by UNISA, the North-West University, Nigeria’s Open University, Africa Virtual University among others but by the Swiss Institute of Technology’s Massive Open Online Courses (MOOCs). However, not everyone is enthusiastic about the possibilities offered by the digital platform. Be that as it may, it seems that for now the voices of those promoting the digital platforms as the major panacea for dealing with Africa’s education challenges seem to be loud enough to drown those of its critics. Whilst the debates about quality offer and the

value of face-to-face go on in political circles, adult and continuing education needs to establish its relevance even now.

Whatever might be the arguments for or against, the digital age poses some challenges to adult and continuing adult educators in that there is a great divide between those that use Information and Communication Technologies (ICTs) for informal learning and those using the ICT for formal learning and that research has discovered that those who use ICT for informal learning are far more than those using it for formal learning.

The digital age and the opportunities it offers adult and continuing education: Selwyn *et al.* (2005) argue that the use of information and communication technologies will help adult learners to help in changing the world for the better. Merriam and Bierema (2014) say that technology is also changing how adults learn and that adult basic education programmes through continuing professional education are incorporating technology in both the design of curriculum and its delivery.

Regardless of changes in the knowledge economies, adult and continuing education has been presented opportunities for development in the digital age. The following opportunities are some:

- Institutional online learning programmes for adults
- Wide range of digitalized jobs for adults
- Post retirement learning opportunity
- Abroad school systems with blended learning
- General use of information and communication technology tools for the knowledge economy

Bullen highlights a challenge of the gap that needs to be reduced between those using ICT in developed world and those in developing world due to socio-economic barriers of accessibility to the ICTs. These challenges have an impact on how to quickly transform adult and continuing education in the digital age.

It is quite critical at this stage to note that there are a number of challenges that adult and continuing education is facing in the digital age. Some of them are:

- Lack of coherent technology assisted background
- Weak economy that denies adults to access the digital tools
- Fear of learning that which could have been acquired years before the digitalized needs
- Compromised ego to venture into digitalized projects
- General stigma

Needed transformation: As the world gets transformed, so should the discipline of adult and continuing

education because learning is central to human development (Foley, 2008). For this reason, transforming adult and continuing education may require the need to focus on the following:

- Content
- Organizational culture
- People development
- Life changes
- Content delivery

Content: Of dire need is the consideration of the content of adult and continuing education. The vocational content of the discipline would need reforms that are sufficient enough to accommodate digital adaptation and actual and practical acquisition needed skills in the technology industry and related ones that rely extensively or exclusively on technology for their operations (Materna, 2007).

Curriculum reforms would be needed as well in adult basic education. For, according to Jacobson (2012), adult basic education has been affected by new technologies and practitioners need to find ways to teach and learn in this digital age. In this context, it should be understood that what was basic yesterday, may not necessarily be basic today. This implies that if reading literacy was a challenge yesterday, reading literacy from the computer may be the challenge today. So, adult basic education content would need to include some forms of technology as it seeks to adapt to the change brought by the digital age.

The content of adult literacy education (language and numeracy) would need profound adjustment as well. The reason is that literacy and numeracy by themselves remain inadequate unless it is well integrated with technology. Brooks-Young (2007) puts it this way:

Technology integration requires systemic reform which must be supported by the entire school community. Most teachers and administrators need help to implement and change on this scale. Regardless of their current level of technology proficiency, digital-age literacy for Teachers will help teachers systematically re-examine their curriculum and classroom management to develop effective strategies for incorporating technology.

The point that needs to be made here is that if school teachers are now expected to undertake reforms in this way, facilitators of academic programmes for adult and out-of-school youths should be expected to do much more.

Non-credential based informal adult education would need curricular reforms as depicted by the use of Facebooks and blogs. Unfortunately, sometimes

Facebooks and blogs have threatened peace in families, workplaces and other areas of life. Despite that these technologies offer advantages for communication and learning purposes as people share ideas on WhatsApp walls.

Incidental education and learning provides space for the adaptation of digital technology. According to Foley (2008), incidental kind of learning is that type which a professional acquires while on duty performing a task. Commenting on the effect of incidental learning on adult and continuing education, Gravett (2008) argues that incidental learning can make learners resist the absorption of new knowledge as long as it is perceived to conflict the previous knowledge.

Organizational culture: According to Merriam and Bierema (2014), technology cannot be separated from globalization and the knowledge society and that there is still much to be done in order to address the basic needs of marginalized people and nations before all can benefit from participating in the digitalized, globalized, knowledge society of today. For this reason, practitioners should be tasked with responsibility for developing an organizational culture of using technology to deal with the challenges that face the people.

Organizational learning: Most universities in South Africa for example, now engage with communication by E-mail. Sometimes academics may conduct meetings through digital methods while members of staff are in different geographical locations. Communication via email can guarantee to extension of learning to adults who have acquired some form education in the event that they wish to continue learning for different reasons. When fully used, geographical distance and space may not remain an obstacle to more and more engagement in knowledge and skills acquisition in the region.

People development: As the digital age advances daily challenges, it is critical for those engaged in adult and continuing education to be insightful and proactive in terms of seeking new ways to accelerate people development. Towards this end, Brooks-Young (2007) has proposed that there is need to have staff development as technology advances into the future. Facilitators in the discipline need to be equipped with skills for using advanced technologies to reach out to their clients. This is especially so, technology seeks to make their teaching easier.

Life changes: AONTAS (2016) has argued that adult and continuing education has a lot of benefits to offer the

world in this digital age. In particular, attention is drawn to some of the ways listed hereunder as follows:

- Make our economy grow and develop
- Ensure that their children develop a love of learning and take full advantage of education
- Actively participate in their own communities and civil society
- Support and respect people with different cultural beliefs and abilities
- Respect and protect the environment for future generations
- Nurture creativity and imagination
- Live healthy and fulfilled lives

If that be the case it should make much more sense to continue to invest in adult and continuing education for individuals, families and communities in the sub-region. Brown (2016) proposes an idea that learning has an impact on social change and the saying goes as: “learning is a remarkably social process. In truth, it occurs not as a response to teaching but rather as a result of a social framework that fosters learning. To succeed in our struggle to build technology and new media to support learning, we must move far beyond the traditional view of teaching as delivery of information”. This reflects the idea that transforming an educational system is quite a challenge in this digital age, thus costs are unavoidable.

Delivery of content: Practitioners need to use methods that are productive in order to deliver content to the intended consumers. For this to happen, there is need to pay special attention to programming andragogical approaches to teaching adults, understanding the learning patterns of adults and the assessment procedures which are supported by digital age technologies.

Practitioners need to have content that addresses people’s challenges as indicated by their needs relating to how technology may help them either learn or practice what they have learned so that they may have their lives made easy in this digital age.

The 21st century has become quite complex in terms of teaching and learning mechanisms. Therefore, practitioners now need to consider the delivery of service using whiteboards, the Internet and open broadcasts wherever applicable in the sub-region. The use of technology in the learning processes and giving of instructions in adult and continuing education has become fashionable (Merriam and Bierema, 2014) and this will become widespread and remain a requirement in most parts of the sub-region.

Assessment: Shefrin *et al.* (2000) wrote an article that was highlighting the assessment tools for adult and continuing education and that they advocate that training needs to be given whenever new assessment tools are in place. The digital age requires that adult and continuing education, especially Open Distance Learning and Electronics (ODLE) have teachers of the discipline subjected to the language of marking tools exposed to them. This will help the teaching and learning processes to be manageable in the digital age.

CONCLUSION

It has been argued in this study that the challenges induced and seemingly imposed by evolution and advancement in the digital technology on Sub-Saharan Africa requires a very close interrogation of the conceptualization, planning and implementation of adult and continuing education. This goal can only be achieved by critically analyzing and evaluating the concept of adult and continuing education. It was proposed that digital technology drives the knowledge economy into which Africa must fit in order to make progress in terms of national and individual development. However, several other disciplines make inputs into effective and efficient participation in the knowledge economy driven by digital technology. Within this ambient, adult and continuing education must carve for itself the relevant niche and approach that is measurable contexts and processes that can be applied the said participation.

Seeking to explore the relevance of adult and continuing education in the digital age almost automatically implies that we closely evaluate the roles its components play in this process. That was why it became expectedly normal to review and evaluate the said components in this study. All things remaining equal, it is proposed that adult and continuing education must remain on top of the agenda for development in Africa at a time the digital age is fast becoming an inescapable mode of national policy making, implementation, review and refinement.

It was rightly argued that it is critically important to embrace the fact that adult and continuing education needs transformation but it is equally important to accept the assumption that as long as technology is developing so is the relevance of adult and continuing education in the digital age. What practitioners need to do is to regularly and urgently explore existing and future opportunities to get involved in issues of individual, community and national development.

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