

The Future of Education and Its Challenges in Africa.

Dr. Alfred Otara

Lecturer

Kigali Institute of Education

Po box 5039, Kigali

Rwanda

Abstract

Looks at the need for quality education that will propel the African continent into the future. The assesment of theory and industrial needs are addressed in the light of future demands. Change of current educational practices and forcasting on future trends of economic demands is emphasised.

Keywords: Education, Change, Future, Visioning

Introduction

Since Platos time the academy has shown remarkable improvement and durability. Through turbulent times it has survived, transformed, accommodated and absorbed new religions, evolving political systems, demographic pressures and technology (Buchen,2005). Unlike many corporations which have emerged and collapsed, most educational instutitions are still thriving in many parts of the world including Africa. Actually on the contrary except for a small number mostly sectarian, the number of institutions has increased. Indeed the dramatic period of growth in Africa has occurred during the age of liberarization when most governments resolved to open up and embrace other players. More significantly the church has played a dramatic role in accelerating the accessibility of education to the masses.

Buchen(2005) continues to argue that professional development gradually has transformed globally all education and training to the point where it not only has supplimented, competed with and even exceeded its parental versions of higher education, but also spawned two separate and distinct future-driven education alternative providers. The first are institutions which can be referred to as educational entrepreneurs. They operate as creative and experimental variations on the traditional accademic model. They are close to resemble conventional programmes but distinct enough to appear as alternative in their own right. The second is the emergence of corporate universities which function as intact and autonomous learning enterprises situated in their own corporate campuses . They are characterised by a corporate research capacity. These two alternatives provide a more personal and market driven needs.

As professional development seeks to keep pace with changing and greater workforce demands and threats of downsizing and outsourcing, professionals will seek and even be required to become permanent students. This means that our educational system will be transformed by emerging alternatives driven by workforce needs and professional aspiration. Essentially this kind of trend means constant development of innovative customized curriculum.

Problems and tasks of African education

Since independence African states have faced numerous problems in implementing an educational policy that would encourage economic and social development, curriculum and Pedagogical problems and economic and political problems intermixed. The difficulties confronting most governments, however, have been attributed to be basically political. (Scanlon and Moumouni 2012)Africa's problems have no single explanation and differ considerably from country to country Summers (2000). Most observers attribute the downward divergence of the continent in the past few decades to a number of factors, including: poor national economic policies; the prevalence of autocratic and corrupt governments; frequent civil and regional conflicts; and the challenges posed by the environment, which leaves Africa vulnerable to infectious disease and makes it more difficult to produce adequate food or trade with the global economy. In 1968 a conference held in Nairobi indicated that there was an alarming lack of progress in education and literacy in the context of growing populations.

Scanlon and Moumouni(2012) report that Increasing emphasis was placed on improving and expanding vocational-technical, adult, and nonformal programs of education. There was also insufficient liaison between educational policy makers and the planners of economic and social development. In short, an educational crisis developed and ripened in Africa. Africa's recovery and sustainable development will therefore depend on many important factors, including the expansion - both quantitative and qualitative - of the continent's stock of human capital through education (Kwapong 1988). A onetime President of the World Bank, Barber Conable, introduced a study on education by remarking that "Without education, development will not occur. Only an educated people can command the skills necessary for sustainable economic growth and for a better quality of life." Zuma (2011) commenting on education says that Schools do not provide the skills to enter the job market, leaving the incubation of business too late down the chain. Education in Africa is poor and far behind the rest of the world. Too many schools have not been reached with correct curriculum and those who have, do not have money for books or the technology to access the work. Much is said by government, but implementation and , action are way behind the needs of our youth. Zuma finally says ‘‘Success in education will determine the scope and extent of the country’s future growth and development’’.

Technology, Education and Development

The engineering, technical and vocational schools are still teaching 1960’s and 1970’s techniques and technologies. There is a complete mismatch between the knowledge and skills acquired by the graduates from these schools in Africa and those actually required by industry or for self employment. The result is a growing number of unemployable youth and job losses by technical artisans and slower economic growth because industry cannot find the qualified and the skilled employees they need. Those unemployed and unemployable are getting restless (Twinomugisha, 2009). Most of these unemployable people are the youth who constitute a political time bomb. The recent uprising and riots in many cities in Africa pose an alarming trend. Governments across Africa are seriously re-examining the technical education system. A research by Castells found little evidence of national 'pacts' around higher education and development in African countries, limited coordination between "weak" government departments on funding university projects, too many projects undertaken by academics for "individual advancement" rather than academic worth, and vice-chancellors struggling to juggle competing notions of the role of universities, among other things (as cited by MacGregor,2009)

1. Despite of the negative scenario there are indications that Collaboration with industry is growing and more importantly private industry is becoming more vocal on issues of education and employment. The link between technology, education and socio-economic development is getting clearer and African governments need take practical and urgent steps to address these issues. Otherwise, Africa risks negating recent progress made and being left further behind by the rest of the world. There is need therefore of entrepreneurial universities that create the capacity for people to directly relate research to what happens in society

Role of higher education

Higher education `in Africa is as old as the pyramids of Egypt, The obelisks of Ethiopia, and the Kingdom of Timbuktu (Teferra and Altbach, 2004). All other universities in Africa have adopted the western model of academic organization. While Africa can claim an ancient academic tradition the fact of the matter is that traditional centres of higher learning in Africa have disappeared. Concern about the quality of higher education is on the rise in Africa. It comes at a time of growing recognition of the potentially powerful role of tertiary education for growth, and it is a natural response to public perception that educational quality is being compromised in the effort to expand enrolment in recent years; growing complaints by employers that graduates are poorly prepared for the workplace; and increasing competition in the higher education market place as numerous private and transnational providers enter the scene.(Materu, 2007)As African countries look to tertiary education to make a significant contribution to economic growth and competitiveness, improvements in the quality of programs and institutions will be critical.

Education provides essential skilled manpower for both the formal and informal sectors of the economy, provides the means of developing the knowledge, skills, and productive capacities of the labour force, and acts as a catalyst in encouraging modern attitudes and aspirations. In the case of Africa, tertiary education plays a critical capacity building and professional training role in support of all the Millennium Development Goals (MDGs).

Recent research findings indicate that expanding tertiary education may promote faster technological catch-up and improve a country's ability to maximize its economic output (Bloom, Canning, and Chan 2006). A new range of competences will be needed and higher educational institutions are challenged to adjust their program structures, curricula, teaching and learning methods to adapt to these new demands. In recognition of this challenge, greater attention should be focused on quality assurance as a critical factor to ensuring educational relevance. *New Challenges for higher education* underscores the importance of establishing robust quality assurance systems as necessary instruments for addressing today's challenges (World Bank 2002).

Education for sustainable development

Education is critical for achieving environmental and ethical awareness, values and attitudes, skills and behavior consistent with sustainable development and for effective public participation in decision-making' (UNSECO, 1992). According to UNESCO, sustainable development is a culturally-directed search for a dynamic balance in the relationships between social, economic, and cultural systems, a balance that seeks to promote social equity (UNESCO-UNEVO, 2004c. p. 8). Although it has commonly been remarked that "In Africa, we are very good at drawing up strategies and plans But when it comes to implementation, there is always a difficulty." (a saying cited by African Union, 2007, p. 41). Education for Sustainable Development (ESD) is being regarded as the key component of implementing sustainable development. In particular, the Technical and Vocational Education Training (TVET) for entrepreneurs has been identified as a vehicle for the implementation of education for sustainable development.

Given that sustainable development is the emerging challenge of the 21st century, the United Nations Educational, Scientific and Cultural Organization asserted that Technical and Vocational Education and Training (TVET) programs need to play a pivotal role in developing a new generation of individuals who will face the challenge of achieving sustainable socio-economic development throughout the globe (UNESCO, 1999).

Science and Technology

Without a strong science and technology base no country can develop in this modern era. African countries are really handicapped in this field. New techniques and products are emerging in the information sciences, communications, biotechnology, space science and aeronautics, medicine and many other areas. (Sawyer, 2012) Our Universities and Research Institutes should take up the challenge. Universities in Africa should be more flexible by shedding off the excess baggage carried over from the colonial era and re-equip themselves with learner more efficient resources.

The 21st Century will therefore see many young people as youths and young adults demanding education, employment, basic services and other citizen's rights. The education sector must be ready to provide the necessary social, economic and technological skills for productive existence while at the same time offering the cultural and spiritual dimension necessary for an integrated and fulfilled life. Technical and vocational training provides personnel with knowledge and skills necessary for agricultural, industrial, commercial and economic development matching the supply of skilled labour with demand. It also provides the operatives, artisans, craftsmen, technicians and other middle-level technical personnel and prepares them for self employment.

Envisioning the future

Despite this good trend, it is time to take stock of our practices and look into the future. It is always significant to draw experiences from ancient civilization. The Romans were so immersed in their numbering system (i,ii,..iv..) such that they had no clue that it was preventing them from doing every rudimentary mathematics such as adding a column of numbers or simple multiplication or division because they were in form of equations. Indeed it actually prevented them from advancing in areas of science, astronomy and medicine. The author of megatrends, John Naisbitt, writes "education is now the number one economic priority in today's global economy." Indeed the future is likely to place an even higher demand on how our people are educated and the substance of this education. The future of human existence, therefore, depends on advancement in education.

If we want to move Africa forward with confidence then we need to change our ways of educating and training our students. We cannot achieve this with our minds buried in tradition, custom and beliefs. We need to break new ground. Our priority must be to deliver quality education and training.

Our extricable bond therefore, must be established between our training infrastructure including the state of art technology, curricula and what actually happens in classrooms. Development occurs where appropriate investment has been made in the cultivation of talents, skills and knowledge. We must endeavour to seek opportunities in the unknown world by leaving the present behind. Envisioning is about applying our imaginations to the future and cutting for us niches from the opportunities available. This begins by decidedly endeavouring to educate, develop and train our people. We need to develop an educational curriculum that is designed specifically for transformation of our society and prepare it for the knowledge economy, (Tapisa,1999). The pace of development will be determined by the speed of various transactions. The decisions taken, the speed with which new ideas are created in laboratories, the rate at which ideas are brought to the market, the velocity of capital flows and above all the speed with which information pulses through the economic system. The pertinent question is, can our children be prepared for this transformation, (Toffler,1990).

We should empower our future generation with the ability to participate actively, creatively and comprehensively in the information economy where they will use pertinent information to create the knowledge surplus that is needed to transform society. Our first step towards that goal should be to change from overtly academic and theoretical orientations to workplace educational and training programmes. In achieving this our objectives should be :

- To bring education and work together.
- To equip students with job oriented competencies so that they become active and creative participants in the economy.
- Strengthen the relationship between education and employment by emphasising the application of skills in real work situations.

It is worth noting that in doing all these greater opportunity should be given to employers and other stake holders to influence and become involved in education .

Knowledge to skill based

We need to educate and train our young people for now, for the future and for change. What is required is a process which can produce a workforce which is actively involved in the business, as well as flexible and responsive enough, not only to recognize the need for change, but also to anticipate and contribute to the process with innovative and progressive ideas, (Kay, Nickie & Chris, 1992). There is an increasing need for learners to have a range of transferable academic and vocational skills in order to operate independently and autonomously. Discussion on the need to teach students how to learn have been going on for decades but the requirement to teach the subject-based national curriculum along with the traditional methods, mean it has so far not been achieved. The national imperative for a skilled world-class workforce, the IT revolution which is robbing teachers of their exclusive hold on knowledge alongside the wishes and needs of individuals mean this trend will inevitably gain momentum in the future.

In order to move forward, (Frey,2007) a futurist observes that, as a starting point, one question we should be asking is, “what systems do we employ today that are the equivalent of Roman numerals, preventing us from doing great things? This question is very revealing. It has a way of opening a Pandora box full of friction points, inefficiencies, and flow restrictors that we contend with every day in our educational systems. The pace of change dictates that we produce a faster, smarter, and better grade of human being. In realizing this future education system will be unleashed with the advent of a standardized rapid courseware-builder and a single point global distribution system. As a matter of fact only a small percentage of the information being developed today is being passed on to future generations in the form of classes or courseware meaning that, supply has clearly not kept up with demand.

Future Educational Challenges

Roy (1990) a futurist and president of the Institute for the Future cautioned that “anything you forecast is by definition uncertain” therefore our planning to shape better ways of life must be based on a blend of interpretations of projections as well as our aspirations. The question we need to ask ourselves is do we actually have the foresight needed to give us reasonably accurate images of tomorrow’s world,(Roy,1990). Some of the challenges that are likely to complicate educational planning in the next decade according to Harold, (1990) are as follows:

- Trends in population and shrinking job markets. The increasing youth population poses a special challenge to educators in providing self-sustaining skills in the light of decreasing job opportunities.
- Environmental problems. Hazards including deforestation, acid rain, misuse of energy resources, pollution and generally climate change. Learners need to understand that security of nations also depends on policies regarding the environment. There is need, therefore, for education systems to participate actively and intelligently in these issues.
- Family challenges. Change in family such as single-parent, endemic homelessness and working mothers. Schools may be left with responsibilities formerly assumed by the family such as providing day care and teaching important values and behaviors.
- Teen pregnancy, Alcohol consumption, and Drug abuse
- Technological developments. These developments are creating other challenges for education and society. They include the possibility for information overload with knowledge expected to increase fourfold and changes in the nature of knowledge and what we believe. Education must learn to deal with rapidly accumulating innovations such as laptop computers, interactive video technology and robots with artificial intelligence.
- Schooling in the home may find a place in the future. Distance learning creatively well designed will play a major role in educating people. Herold, (1990), therefore warns that we must remain diligent in dealing with changes for tomorrow and not be immobilized by trying to polish the aged mosaics of past practices.

Virtual schools will develop whereby students could still meet in person for social and athletic events. At the same time physical plants would shrink as would administrative and ancillary jobs, (Kas, Margret & Czeslaw, 2000). Learners would buy whatever instruction they want on line. Teachers and students can live anywhere in the world and only meet on line. This means that it will prove difficult or impossible to preserve many contemporary institutions in the future. In addition Fray, (2007) foresees some school buildings transitioning into learning centers that are open 24 hours a day, accommodating both child and adult learners, providing support staff to assist people who struggle with the system or specific topic. Teachers on the other hand will become event planners, guides and coaches and some who are entrepreneurial-minded may choose to become full-time course producers.

Conclusion

Future education and its practical application is key to the future of Africa. Future education will continue to change as education has always changed to meet the needs of business and industries. A strong economy depends on our educational system's ability to provide a workforce to sustain our current and future economy. It is evident that certain amount of forecasting or predicting of future educational needs will become more important with increased population and decreased renewable resources. The preparedness for this challenge is significant for Africa.

References

- African Union, (January 2007). “Strategy to Revitalize Technical and Vocational Education and Training (TVET) in Africa.” Meeting of the Bureau of the Conference of Ministers of Education of the African Union (COMEDAF II +) 29-31 , May 2007, Addis Ababa, Ethiopia.
- Bloom, D., Canning, and Chan,K.(2006). “Higher Education and Economic Development in Africa. ” *Africa Region Human Development Working Paper Series No. 102*. Washington, D.C.: The World Bank.
- Buchen, I.(2005),Thefuture of higher education and professional training . *Foresight* ,7(4), 13-21
- Frey,T. (2007). The Future of Education. Retrieved from www.futuristspeaker.com/2007/03/the-future-of-education
- Herold, S.(1990). Improving education for the twenty-first century. *Educational Horizons*, 69(1), 11-15
- Kas, M.,Magret,A & Czeslaw, M.(2000). *Education in A Global Society*. Boston: Allyn and. Bacon
- Kay,c.,Nickie,F & Chris,H .(1992). Growing an innovative workforce: a new approach to education and training. *Education + Training*, 40(6/7), 267-275
- Kwapong, A. K. (1988). *The challenge of education in Africa; Discussions of the Inaugural Programme of the Africa Leadership Forum*, Nigeria24 October to 1 November 1988
- MacGregor, K.(October 2009) Africa: Higher education and development. *University world news*. Issue No:96
- Peter Materu. (2007). *Higher education quality assurance in sub-sahara AfricaStatus, challenges, opportunities and promising practices*. Washington,D.C :The World Bank.
- Roy,A.(1990). *The second Decade* .Menlo park,CA: Institute for the future
- Sawyerr,H.(2012). Issues of educational development in Africa towards the 21st century <http://home.hiroshima-u.ac.jp/cice/sawyerr2-2.pdf> RETRIEVED March
- Scanlon, D.G.& Moumouni, A. (2012). Problems and tasks of African education in the late 20th century. Retrieved from www.britannica.com/EBchecked/topic/179408/education/47722/Problems-and-tasks-of-African-education-in-the-late-20th-century .March
- Summers, L (2000)Education will help to solve African’s problems retrieved from www.independent.co.uk/opinion/commentators/education
- Teferra, D. &Altbach, P.(2004). African Higher Education: Challenges for the 21st Century. *Higher Education*. 47(1)23
- Thapisa,A. (1999) Training for the real working world in ana information economy. *Library management*, 20(2)84-90
- Toffler,A.(1990) Toffler’s next shock. *World Monitor*, pp.34-44 <http://www.iftf.org/roy-amara-fund>
- Twinomugisha, A. (2009). Technology, Education and Development-why Africa is being left behind. Retrieved from <http://www.africabusinesssource.com/articles/technology-education-and-development-why-africa-is-being-left-behind/>. December
- UNESCO-UNEVOC (2004) International Centre for Technical and Vocational Education and Training.
- UNSECO. (April 1999). *Second International Congress on Technical and Vocational Education.Final Report*.Seoul, Republic of Korea, 26-30.
- UNESCO (1992) *United Nations Conference on Environment and Development: Agenda 21*. UNESCO, Switzerland.
- World Bank(2002). *Constructing Knowledge Societies: New Challenges for Tertiary Education*. Washington, D.C.
- Zuma,J. (2011).Africa’s future education. Retrieved from www.africanidea.org/education.pdf.