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Using Future Research Methods in Analysing Policies Relating to Open Distance Education in Africa

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Abstract

Many African countries have developed policies to reform their education system in order to widen participation in higher education. To achieve this, open, online and distance education based models have been advocated as the most viable delivery tools in expanding access to higher education. However, the policy analysis of Kenya, Rwanda and Zambia revealed that the integration of open, online and distance education in these countries' education systems is inadequate. The purpose of this study is to analyse policies in order to determine why policy goals are not achieved and how the present reality and the past knowledge impacts on the desired outcome. The future research methods of forecasting is used because it looks at policy interventions with the aim of assisting us to understand probable development in education that may have led to the weak implementation of the policies.

Keywords: Policies; Open Distance Education; Futures Research; ICT for Education; Forecasting

Introduction

National education policies play a critical role in advancing educational goals of the country because they emphasize the importance of anticipating the future. They are developed to provide a vision of what the education system should look like in future (Kozma, 2005; Pavlova, 2013). National education policies are strategic in nature because they provide a planetary vision of where the country wants to be or might be (Pavlova, 2013). Hence, they are considered desirable by the state because they tend to focus on the national social development goals and economic needs of the country (OECD, 2003). Without national policies, the education sector will not be able to determine what to prioritize in the face of many national priorities (Kozma, 2005). Therefore, education policies, unlike many other government policies are drawn up to support economic growth; promote social development; and advance educational reform (Kozma, 2005; Nasruddini, Bustemi & Inayatullah, 2012; OECD, 2003).

The nature of education is future-oriented because its role is to equip students with knowledge, skills, and attitude that it is hoped will be useful in future. Most education policy goals, therefore, tend to focus on the human resources development needs. The future of economic development depends on people who are equipped with competencies and skills that are needed for the knowledge economy (OECD, 2003; Rwamatwara, 2012). In an effort to facilitate the implementation of an education system that has the potential of increasing the much needed high level skills and capacity, national policies were developed to position education and training at the center of social economic development goals of the country (Kozma, 2005; OECD, 2003). To ensure the sustainability of economic growth, higher education institutions are expected to open up opportunities and provide education to large numbers of people (Altbach, Reisberg & Rumbley, 2009; GEM, 2016). The rationale for providing education at this scale is more critical in African countries where there is a huge need for skilled and trained workforce to enhance economic growth and global competitiveness (Rwamatwara, 2012).

If skills shortages are not addressed, many African countries will not realise the 2030 Sustainable Development Goal towards an inclusive and equitable quality education and lifelong learning for all. To reach this goal, distance and online education based models are considered the most efficient in expanding access to education.

Many countries in Africa are now considering this model as the feasible option to widen participation in higher education. The findings on education policies in developing countries points towards the use of technology enhanced distance education as important drivers in enabling access to higher education (Haddad & Demsky, 1995; UNESCO, 2013, 2016). High participation rates in higher education leads to sustainable economic development (Altbach et al., 2009; OECD, 2003; GEM, 2016). Hence, national education policies are developed to guide and respond to the national economic needs and social development goals of a country. Without national policies and frameworks, it is unlikely that resources will be made available to ensure the sustainability of education.

Educational institutions play a critical role in laying a foundation for economic productivity through providing training and development for high quality work-force (OECD, 2003). Most developed countries have benefited from high skilled workers. This shows that there is correlation between high-level skills and high economic development. Hence, policy makers draw from the social and economic needs to provide a set of goals, and a vision of how the education system might look like. Mannermaa, (1986) argues that a policy "that does not have any direct or indirect impact on the development of the society is totally useless" (p. 662). Current policies, and those that were developed in the 1960s after independence of many of the African countries, have alluded to the need for higher education to produce students with appropriate skills and capabilities to match national priorities (GEM, 2016). The role of policies in this regard is to respond to national economic needs and social development goals of a country (Kozma, 2005).

In this study, policies were considered for analysis because they are made up of predictive statements of desired outcomes, which provide a vision for how the education system should look like (Pavlova, 2013). The aim is to determine how the present reality and the past knowledge impact on the implementation of policies. In the absence of national open and distance learning policies in Kenya, Rwanda and Zambia, national education policies and other government documents that referred to open and distance learning and ICT in education were selected as units of analysis. Since the success of policies depends on its content and its implementation, according to Jallade, Radi and Cuenin (2001), this study will analyse the content of the policies in order to identify factors that may inhibit the successful implementation of the policies. This will be done through using futures research methods because it channels the thinking to new possibilities and gives organizations an opportunity to deal with perceived changes effectively (Malhotra, Das & Chariar, 2014). The objective of futures research "is not to know the future but to make better decisions today" for the future we hope for (Glenn, 1994, p. 4). Therefore, according to Mannermaa (1986) futures research "is not the study about the 'future' per se, but it is about the "present reality and the historical knowledge of the past" (p. 658). Knowledge about the future takes into account long-term trends, development, and dynamics of the social, economic and political settings of the country (Nasruddini et al., 2012; Anheier & Katz, 2009; Pavlova, 2013). This research was conducted to consider desirable features that are worth strengthening, threats that need to be eliminated and probable lines of development that are worth noting (Mannermaa, 1986).

Futures methods analysis

Although there are a variety of futures research methodologies that may be used, this study will use forecasting techniques because "it is concerned with approaches to determining what the future

holds" (Anheier & Katz, 2009, p. 238). This will be used to examine policy interventions on what the education landscape should look like in the future; what are the existing themes that are already forecasted into the future; and what information is needed to be gathered about the past and the current situation to make a prognosis of the future (Anheier & Katz, 2009; Dator, 2009). Forecasting assumes that the patterns that existed in the past are likely to continue into the future, hence this study will look at how past policies affected the current policy environment and how the present impacts the future (Anheier & Katz, 2009). Table 1 shows the list of policy and strategic documents that referred to open distance education and the use of technology in education. The selected documents in Table 1 are available on the public domain.

Table 1: List of analysed Policies and Strategic documents

Kenya	Rwanda	Zambia
Kenya Vision 2030 (GoK, 2007)	Rwanda Vision 2020 (RoR, 2012)	Vision 2030 (RoZ, 2006)
The Policy Framework for University Education in Kenya (MoE, 2012)	The Economic development and Poverty Reduction Strategy: 2013-2018 (MINECOFIN, 2013)	Educating our Future, National Policy on Education (GoZ, 1996)
National Information and Communication Technology (ICT) Strategy for Education and Training (MoE, 2006)	Higher Education Policy (MINEDUC, 2008)	Draft ICT Policy in Education (MCT, 2006)
	ICT in Education Policy (MINEDUC, 2016)	

To analyse these documents, forecasting techniques were utilized as a framework for making sense of the contents of the policies. Forecasting is based on the assumption that more timely information is necessary for policy makers to make better policy decisions (Anheier & Katz, 2009). The idea was to identify detailed overarching policy statements that made reference to open and distance learning and ICT in education. These documents were read and analysed according to the context of the country concerning the vision, the history, the present reality and the future it aspires to. Forecasting techniques seek to understand the complete social, economic, cultural, technological and political factors that may impact in the future of the country (Anheier & Katz, 2009; Dator, 2009). It looks at past patterns of the information and data and attempt to predict the future based on those patterns (Anheier & Katz, 2009; Malhotra et al., 2014). This type of analysis informs the thinking that occurs before strategic decisions are made. To identify patterns of meaning across the different documents, thematic analysis was used through a rigorous process of data familiarisation and theme development.

Country studies

The basis of the analysis was an extensive review of relevant documents and research papers which were accessible online. Below are concise summaries for each country presented in a narrative form.

Kenya

> *Vision 2030: "Transform Kenya into a newly industrializing middle-income country providing a high-quality life to all its citizens in a safe and secure environment" (GoK 2007).*

At the heart of this vision is the transformation of the education system that supported the agrarian industrial based economic system to a knowledge-based economic system. The idea is to shift the emphasis from knowledge reproduction to knowledge production (MoE, 2012; Nyangau, 2014). The goal is to develop a repertoire of skills and competencies necessary to achieve the objectives and goals embodied in the Constitution 2010 and Kenya Vision 2030 (GoK, 2007). In this vision, there is a clear link between education and labour market (MoE, 2012). To address this issue, the policy proposes the use of distance education and ICT to promote teaching, learning, and research in education and training (MoE, 2012). The challenge facing the Government of Kenya is to increase the number of students in higher education; to harness the skills and competencies that are presently being lost and to provide an education system, which meets the aspirations of Vision 2030 (Nyangau, 2014; Odhiambo, 2011).

Since Kenya's independence, many policies were drawn to transform the education system to include more vocational courses with the aim of orientating youth towards self-employment (Wanjohi, 2011). However, the demand for higher education continues to grow; public funded universities are overcrowded, the curriculum remained unresponsive to present day and future needs of the labour market (Nyangau, 2014; Wanjohi, 2011). Most public higher education institutions in Kenya produce graduates who are ill equipped to compete effectively in the global economy (Odhiambo, 2011; Simiyu, 2001; Wanjohi, 2011).

Kenya is acutely aware that if they continue to use the existing traditional face-to-face education system, they may not be able to fulfill the promise of education for all (MoE, 2012). It was in search for alternative implementation strategies that Open and Distance Learning (ODL) models were explored. This form of delivery is not new in Kenya. In fact, it was used shortly after independence (Wanjohi, 2011), especially for in-service teacher education. In 2006, Kenya also adopted the *ICT Strategy for Education and Training*, which recognizes "ICT literate workforce as a foundation on which Kenya can acquire the status of a knowledge economy by 2030" (MoE, 2006). The analysis of these documents brought to the fore the need for mainstreaming ODL into the education sector. To achieve this, the 2005 education policy referred to the need to establish the National Open University (Nyerere, Gravenir & Mse, 2012). The policy framework further recommended the fast tracking of this process (MoE, 2012). To this day, there is still no open university in Kenya. Nyerere et al. (2012) indicate that unless there are concerted efforts and resources made available to develop the ODL sector, Kenya may not realize its Vision 2030. To reach the 2030 goal, Nyangau (2014) argues that "fundamental reforms are needed for the system to play a catalytic role in transitioning Kenya from a subsistence economy to a knowledge economy" (p. 12-13).

Rwanda

> **Vision 2020: To transform Rwanda's economy into a middle-income country** – (RoR, 2012).

Prior to 1994, very few students in Rwanda were able to access higher education (MINEDUC, 2010). To address this challenge, the government developed two strategic documents, the Vision 2020 and the Economic Development and Poverty Reduction Strategy aimed at creating an educated workforce with technological skills (MINECOFIN, 2013). In Vision 2020, higher education is expected to meet the needs of the nation, which suits well with the "fit for purpose" notion of quality, which in the case of Rwanda is linked with employability of graduates (Mbabazi, 2013; MINEDUC, 2010). Many graduates lack the competence and lifelong learning skills that fit the knowledge economy employers' needs (Mbabazi, 2013).

The education system in Rwanda, as a former colony of Belgium was also affected by the colonial rule that provided formal education until its independence in 1962 (Hilker, 2011; Mbabazi, 2013). However, the continuation of imported education practices of poor teacher training, marginalization of national culture and the strict selection system acted as further barriers to education (Hilker, 2011). In the 1970s, the government instituted a policy reform to encourage young people in rural areas to access educational and employment opportunities through the introduction of vocational courses (Mbabazi, 2013). These efforts came to a naught when the school system was damaged by the civil war and the genocide that left scores of people dead, wounded both emotionally and physically and displaced (Hilker, 2011; Mbabazi, 2013). Following the cessation of the civil war, the government of Rwanda was faced with a mammoth task of rebuilding the nation and developing the much-needed skills.

In rebuilding the country, the government of Rwanda recognizes "ODL and ICT as a technology that will enable fast tracking capacity development of Rwandan citizens into skilled human capital who, in turn, can accelerate the socio-economic development of the country" (Mukama, 2016). To fast track this process, Rwanda launched an ICT for Education policy in 2016 (MINEDUC, 2016). The use of ICTs and distance education are meant to enable programs that are aimed at providing on-the-job training and in-service training to as many students as possible. Despite the need to accelerate skills development, the provision of technology-enhanced teaching and learning in Rwanda has not made a meaningful impact (Mukama, 2016). Part of the reason may be that there is no serious investment in Open Distance and eLearning (ODeL) despite the government targets of offering at least 50% of courses using ODeL by 2017 (Mukama, 2016). To effect the sustainable implementation of ODeL, Mukama (2016) suggest that there is a need to establish a national open university devoted to providing ODeL programs. Real practices that open up higher education in this setting have been lacking, and existing policies seem not to have been developed to encourage ODL practices.

Zambia

Vision 2030: A prosperous middle-income nation (RoZ, 2006).

By 2030, Zambia aspires to be a nation that has an economy that is competitive, self-sustaining, dynamic and peaceful and is free from donor dependence (RoZ, 2006). In light of Zambia's development context and vision, the expansion of higher education and Technical and Vocational Education and training (TEVET) systems is a rational policy choice both from economic and equity points of view (MESVTEE, 2014; RoZ, 2006). Zambia's strong commitment to alleviating poverty, achieving sustained economic growth, and creating employment through educational development, is clear and its dedication to ensuring that international trends, such as the Millennium Development Goals (MDGs) and currently, the Sustainable Development Goals (SDGs), are reflected in their strategic education plans and in their policies (RoZ, 2006; UNESCO, 2016).

Since Zambia's independence in 1964, there has been a proliferation of education policy reforms to mitigate against years of colonial neglect (Mukwena, 2001). The post-colonial government policies committed to providing free education for all up to tertiary level (UNESCO, 2016). To achieve this, early policies recognized the need to provide education to a large number of people using distance education methods (Beyani, 2013; Mukwena, 2001; Siaciwena & Lubinda, 2008). In fact, the history of distance education in Zambia dates back to the colonial era where few people who could afford studied through private correspondence colleges that had links to Britain, their colonial masters (Mukwena, 2001). To address the acute shortage of educated and trained people post-independence,

distance education was seen as a vehicle that has a potential to enable access to higher education to those students who could not study full-time (Siaciwena & Lubinda, 2008). Even when the University of Zambia was established in 1966, distance education formed part of the development of higher education in the country. It was their hope at the time that the university will reach many people with little additional resources (Beyani, 2013; Mukwena, 2001). However, this did not happen as planned. In 1996, Zambia developed another National Policy on *Educating Our Future* that recognized the role of distance education and the policy went as far as suggesting the establishment of a *Directorate of Open and Distance Education* (DODE) within the Ministry of Education (Siaciwena & Lubinda, 2008). This department was strategically positioned to promote open and distance learning practices in Zambia (Siaciwena & Lubinda, 2008). Zambia is one of the few countries in the continent that has a privately owned open university.

Despite the recognition as espoused in the Vision 2030 and the 1996 policies, Zambia has yet to reach educational standards that might be seen to lead to sustainable development (Beyani, 2013). The challenges that were identified in the current policies are similar to those that were outlined in earlier policies. The problem of low participation rates in higher education, the curriculum that is not responsive to national and global needs, increasing pressure on education infrastructure, inadequate funding and high levels of brain drain of skilled workers remains (Beyani, 2013; RoZ, 2006). Despite these limitations, the country still needs to intensify the development of human resources for the knowledge economy.

Discussion on the Findings

Probable futures

The desired outcomes in this study are clearly stipulated in the vision 2030 for Kenya and Zambia and 2020 for Rwanda. They all aspire to be "middle-income countries" that are prosperous and peaceful. The desire to develop the country by growing the economy and improving the social conditions of its citizens is often used to justify the investment in education reforms (Kozma, 2005). In the policy statements of all three countries, there is an urgent need to develop high level skills and competencies that will catapult these countries forward (Rwamatwara, 2012). Academic and skills training has great importance and relevance in developing countries of Africa where there is a huge need for skilled and trained workforce to enhance productivity and remain competitive in the global economy (OECD, 2013). To achieve this goal, there is a need to transform education systems in order to support the vision of these countries. A vision statement is meant to give a sense of what might be achievable (Freestone, 2012). Kozma (2005) found that policies that had a clear vision on "how the availability of new technologies could increase productivity, improve the quality of life and enrich culture" were more successful than those that did not have a clear goal (p.149). But this was not the case with the three countries. Their vision of what they want the education system to look like in 2030 is clear, however, they have not been successful in achieving their goals because they did not consider factors that were found to inhibit the implementation of the policy. These factors may include human and financial resources needed for the implementation, the measurable goals and the monitoring and evaluation plans (Freestone, 2012).

Inayatullah (2008) argues that "the vision must link to day to day realities; our day-to-day measures must reflect the vision" (p. 6). Many visions fail because there is no alignment between the vision, the strategy, the day-to-day life and the alternative futures (Inayatullah, 2008). Many of the developing countries tend to follow visions and development strategies of other countries. Strategies that worked in other contexts may lead to unattainable goals as is the case of "many African countries who

believed that once decolonization was complete, peace and plenty were sure to follow" (Glenn, 1994, p. 2). Haddad & Demsky (1995) argue that these policies may have failed because the "external influence can be a means in which international communities impose their fads and fashions upon less developed countries," (p. 80). The weak policy implementation in all these countries, did not only compromise the vision of the countries, but it also affected the policy implementation at both strategic and operational level (UNESCO, 2016). Therefore, there is a need for policy makers in Africa to clearly articulate what will contribute to the successful implementation of the policy. The futures studies allow policy makers to examine social systems to derive implementation strategies (Malhotra et al., 2014).

Current Situation

Since the purpose of the futures research is to identify likely issues that may influence the implementation of the policy, it is important that the environment be scanned in relation to the current education landscape. The education sector in these three countries is faced with challenges of responding to the increased demand of higher education; insufficient public funding, lack of infrastructure (poorly equipped laboratories and libraries); rigid management structures and curricula that is not responsive to present day needs of the labour market (Beyani, 2013; Nyangau, 2014; Odhiambo, 2011). Most public higher education institutions from these countries produce graduates who are ill-equipped to compete effectively in the global economy because they do not have the necessary knowledge, skills and capacity to perform in the knowledge economy (Odhiambo, 2011; UNESCO, 2016). All governments agree that quality higher education is a critical driver to economic growth (Nyangau, 2014).

That is why the national education policy goals of these countries recognized open and distance education models as a feasible way of increasing the number of people studying in higher education sector. Although many countries have not used this delivery method optimally, distance education is not new in Africa. In fact, one of the oldest and the largest distance institution in the world, the University of South Africa (UNISA), has been successful in providing much needed high-level skills and knowledge to those who could not access full-time education. Following on this model, four other countries in Africa -Nigeria, Zimbabwe, Tanzania and Sudan- have established publicly funded open universities. For those countries that are lagging behind, it seems there is a general lack of understanding about the fundamental roles of open and distance education systems at political level (Beyane, 2013; Mukama, 2016; Nyangau, 2014). As a result, open and distance education systems have not been embraced as systems of education. Castaño, Redecker, Vuorikari and Punie (2013) argue that policy-makers need to develop an educational framework rooted in open education principles of flexibility, accessibility and cost effectiveness so that people have a better understanding of this education system. Furthermore, technology enhanced distance education can only be sustainable if providers take advantage of an abundance of open education resources (OER); move easily from one educational setting to another based on their interests and needs; and enable student centeredness that is a strong personalisation of the learning processes (Castaño et al., 2013). These are the critical ingredients for opening up higher education.

Although these three countries have recognised the benefits of ICT in education in enabling access to the marginalised communities, they have not been successful in implementing these systems of education. Part of the reason may be that many of the ICT for education policies and frameworks that were developed to guide the implementation focused mainly on the infrastructure and the technical aspects. In the process, they neglected the pedagogical and the educational purpose of using ICTs. This finding corroborates with Kozma's (2005) study, which found that ICT based education policies

do not achieve what they are set out to do because they do not have a clear vision on how new technologies could increase access to higher education. Another major hindrance is that many of the African countries do not have infrastructure to support these systems (UNESCO, 2016). High costs of connectivity and lack of electricity in other parts of the continent continue to be a challenge (GEM, 2016). However, this should not stop African countries to use other technologies such as mobile phones that are readily available and accessible to the majority of people. Mobile phones have been successfully used in other sectors such as agriculture, health and banking. However, the education sector has not optimised the potential of mobile learning in delivering education to a large number of people.

Past Policies

Following the independence of Kenya, Rwanda and Zambia in the 1960s, these countries developed policies specifically to address the backlog of social and economic development. Hence, the first generation of post-colonial policies focused mainly on addressing the problem of an irrelevant and low-quality education system that did not address the needs of the newly independent countries (Simiyu. 2001). The vision of the policies then was to promote national unity (Kenya); provide free education to all citizens (Zambia); provide access to educational opportunities to all (Rwanda). The aim was to build economically independent countries free from the colonial ties. However, none of the early policies or strategies were able to provide a direction on what a relevant education system should entail. As a result, many of these policies were criticized for encouraging elitism and individualistic attitudes amongst learners, something that was considered incompatible to the African socialist milieu (Simiyu, 2001).

The second problem with early policies is that they prioritized Universal primary education at the expense of other education systems (OECD, 2003). Although this investment in primary education was seen as an important policy goal of increasing the number of children entering the schooling systems, it placed severe limitation on other educational systems such as secondary, vocational and higher education (Rwamatwara, 2012; UNESCO 2016). At the moment, most developing countries in Africa are faced with the challenge of providing quality education in these sectors. The 2016 UNESCO study found that the status of vocational training in the Southern African Development Community (SADC) region is inadequate. What is apparent for almost all SADC countries is that what they committed to do in their policy documents has not been translated into effective higher education systems that are relevant to the labour market (OECD, 2003; UNESCO, 2016).

The failure of the past policies may be attributed to poor accountability mechanisms, inadequate funding and weak institutional capacity to monitor and evaluate the implementation process (Mukwena, 2001; UNESCO, 2016). When the outcome is not what is expected, policy makers need to engage stakeholders such as the academics, researchers, industry, prospective employers, the government, Non-Governmental Organisations (NGOs) and students, to avoid these types of occurrences in future. It is therefore incumbent on policy makers of these countries to develop policies based on home-grown solutions. Futures research would have been useful in identifying some of the problems that impacted on the implementation of these policies. Forecasting is also useful for planning and aiding "the process of policy making for the future" (Malhotra et al., 2014, p. 126).

Conclusion

Drawing on the images of the future, it is important to look at the past and the present realities. The futures research methodology enabled us to see the present concerning the decision made in the past to make input and improve future planning. By so doing, we were able to consider features of

education that need strengthening and inhibiting factors that need eliminating (Mannermaa, 1986). "Any institution (country) that takes care of the present while planning for the future is more resilient to meet the needs of the society, both in present and the future" (Malhotra et al., 2014, p. 121).

These policies recognized the need for ICT in education and open and distance learning in enabling access into higher education. However, they did not adequately provide for the integration of these systems into the national education system of the countries. Unless this model of delivery is integrated into the education system, these countries may not be able to attain their goal for sustainable development and economic growth. The implementation of the national education policy in education is critical to enhancing the country's social economic development through supporting education that is relevant to the country's needs. To attain this, policies should consider the resources needed to support the cultural, economic and developmental aspirations of the country.

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