

FROM DATA AND RESEARCH TO EVIDENCE-BASED POLICY MAKING: ANALYSIS OF TWO EDUCATIONAL POLICIES FROM RWANDA

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ABSTRACT

The article attempted to critically examine the Policy of Adult Literacy (2008) and the Policy of Girls Education (2014) both from the Government of Rwanda. The critical examination was framed around six aspects of evaluation as suggested by UNESCO (2013), namely (1) the usage of information, (2) data, and evidence to develop the policy; (3) the types of user information; data collection methods and involved organizations; (4) data availability and accessibility; (5) validity and reliability of information and data sources; and finally (6) needed improvements for future programming. This country has been selected for such evaluation following the tremendous efforts and commitments it has set forth (especially after the 1994 Genocide against Tutsi) for the advancements undertaken in the education system. Satisfactorily, the policies have complied with the requirements as stipulated by UNESCO for an evidence-based policy. However, as discussed, there are needed improvements for effectively and technically well-elaborated policies.

Keywords: Data, Research, Evidence, Policy.

1.0 INTRODUCTION

The effective implementation of any national education instigation largely depends on the conceptualization and strategic design of the educational policies in place. As UNESCO (2013) has clearly put it, the development of national educational policies must be tailored to existing problems in the sector but also be technically established from conducted surveys and research.

To this end, the urgency and priorities attached to a certain educational reality and context must be reflected in measurable and quantifiable data, information, and evidence that justify the necessity and the need for the implementation of a program via the development of a related policy. This framework is supported by various literature and studies such as by Mmantsetsa and Richard (2007) and Oyedeji (2005).

The present article will attempt to critically examine the Policy of Adult Literacy (2008) and the Policy of Girls Education (2014) both from the Government of Rwanda. The examination will be framed around six aspects of evaluation namely (1) the usage of information, (2) data, and evidence to develop the policy; (3) the types of user information; data collection methods, and involved organizations; (4) data availability and accessibility; (5) validity and reliability of

information and data sources; and finally (6) needed improvements for future programming. This country has been selected for such evaluation following its tremendous efforts and commitments it has set forth (especially after the 1994 Genocide against Tutsi) for the advancements undertaken in the education system (see the development about this progress from the articles of John, Stu, & Mary (2009) as well as that of WENR (2019).

2.0 RESEARCH AND EVIDENCE-BASED POLICY DEVELOPMENT

What would be the *raison d'être* of a policy, if it does not stand on evidence and tangible data? The Adulty Literacy Policy in Rwanda, which has been established in 2014, has been inspired by a variety of information and research-based data as well as national frameworks. First and foremost, the development of the policy has been shaped by models and approaches of Functional Literacy (UNESCO,2017) as well as Adult Basic Education Principles (Maria, 2012). In addition, the policy was backed by national and global strategic directions such as Education for All Framework; Millennium Development Goals, and New Partnership for Africa's Development (NEPAD). Furthermore, the Adulty Literacy Policy was developed from research studies such as the study of Literacy Needs by various consultants both national and international and which was conducted by the Ministry of Education in 2005. The process consisted of a review of relevant documentation; meetings and consultation with various stakeholders; field visits to selected sites in various provinces and districts, in urban and rural areas; and a survey of adult literacy needs and desires and ongoing program experience, which was the main component of the study.

Correspondingly, Head (2010) has highly affirmed the necessity of rigorous evidence-based data in the processes of policy development, evaluation, and improvement. Rigorously collected data to inform the establishment of a policy surely boosts its reliability, efficiency, and effectiveness. Further still, the development of Adult Literacy has been compiled with regard to different national strategic agendas such as the Vision 2020 (MINECOFIN,2000), the Economic Development and Poverty Reduction Strategy 2; National Decentralization Policy (MINALOC, 2012), National Gender Policy (MIGEPROF,2010); Education Sector Policy (MINEDUC,2003); Education Sector Strategic Plan (MINEDUC, 2010); National Investment Strategy (MINECOFIN, 2017) and Rwanda Government Seven-Year Program (MINECOFIN, 2010).

In the same vein, the Girls Education Policy has been conceived with reference to different strategies as mentioned above plus different studies which have been conducted to support its development. At this level, studies like Baseline Study on Girls Basic Education (2002); Empowerment of Girls for Higher Education in Sciences by Bisanda (2005), and Gender inequalities in Primary Schooling of Rwanda (2008), among others.

However, the development of both policies lacks an extensive and thorough, and deep inclusion of statistical data of various forms (only percentages are presented in the most of cases), and there is a scarcity of educational theories and peer-reviewed research to support and back up the need and evidence to put in place such policies. The major development was mainly based on the thematic description.

For this reason, Gaby, Caterina, and Marta (2018) advise policymakers to rely on available data and information to effectively tackle existing problems and to develop policies that will strategically inform decision-makers.

3.0 EVIDENCE-BASED POLICY-MAKING: VARIETY AND DIVERSITY OF TYPES OF DATA

The variety and diversity of the data under a certain phenomenon reveal the technicality and effectiveness of the data collection instrument as well as the approaches and categories of respondents, which, in return, help in the analysis and interpretation of results and findings (Otmame& Mohammad, 2017). In the present case, both the Adult Literacy Policy and Girls Education Policy, have predominantly presented only a few types of data. Generally, the policies are more descriptive in nature, where narration, texts, wording, and thematic description were mainly used to develop the policies.

As far as data presentation is concerned only one table appeared specifically in the Policy of Adult Literacy, and quantitative data is mainly composed of percentages and numerical data in the form of numbers. For instance, it has been demonstrated that the mother's level of education plays a key role in the vaccination of children, whereby, 87% of children whose mothers have no education receive vaccination; while for mothers who have completed on primary education, it is around 90% and for those who have completed secondary education and higher, the vaccination of children goes up to 97% (NISR, 2010). Typically, for the approaches undertaken to collect data, in both policies, the review of secondary data and sources, are the ones which, in developing the policies, have occupied a major place for data collection approaches.

To illustrate this, Syed (2016) has elucidated the usefulness and significance of data collection (types and approaches) as the most important part of any kind of research as well as for policy formulation, execution, and evaluation. The approaches, methods, and types of collected data, determine the efficacy and power of the policy formulation. Similarly, Adriaan (2001) underlined the substantial magnitude of the instrument selection, validity, reliability, administration as well the training of enumerators and data analysts. The researcher reminds us how important are these steps during policy formulation, which, in return leads to the fruitfulness of the program or policy. Given the above, both policies have only presented the reference lists and in-text citation is an element, which is largely missing, and which constitutes a very big gap in the formulation of an evidence-based policy. As described, it is very clear that the selection of key informants, used approaches and the types of collected data are the cornerstone of strong and promising policies in general and educational policies.

4.0 PRODUCTION AND ANALYSIS OF DATA

The relevance and validity of a policy may be judged according to methods and approaches used for data presentation and analysis but also the profile of the organizations and agencies which were involved in the data provided as well as insights for further recommendations (Mimi, Norlisa, Chee, & Kahirol, 2015). In the present policies (Adult Literacy Policy and Girls

Education Policy), the main method which was used to collect data is predominantly the documentary analysis and revisiting of secondary data. When it comes to data presentation and analysis, thematic description, and presentation of data in the form of percentages are generally reflected throughout both policies.

The collection of data has been mainly performed across various global, national, and institutional systems, and frameworks and these include Global initiatives and agendas (Education for All; Millennium Development Goals; New Partnership for Africa's Development); Global organizations (World Bank, UNICEF, UNESCO, UN, UNDP, HDI); national strategic directions (Vision 2020, EDPRS 2, National Gender Policy, Education Sector Policy); Ministries (MINIJUST, MIGEPROF, MINEDUC, MINECOFIN, MINALOC); Consultancy reports, National Institute of Statistics of Rwanda and individual researchers such as Sticht and Armstrong (1996). As described above, it is noted that the main sources of information to formulate both policies largely come from Government systems, policies, and frameworks including some visionary and strategic developmental documents. An aspect of education borrowing from best practices is missing at this level.

As suggested by various scholars and researchers (Attride-Stirling, 2001; Johnson & Turner, 2003; Kabir, 2016; Morgan, 2019), a systematic and very well elaborated work (a policy in the present context) should closely and firmly follow rigid procedures as regard to data collection, selection of respondents, data analysis instruments, data collection instruments. These steps should be refined and improved by the assistance of peer reviewers, whose comments and suggested corrections are taken into consideration to produce a policy that will appropriately inform the decision-makers for clear, and well-pathed execution.

Undoubtedly, if there is no alarming problem in a certain sector of country life, there is no need to develop policies about the phenomenon that does not exist. On the contrary, if there is a need, evidence-based policies must be formulated with reference to statistics, data, information, and sources that clearly describe the necessity and relevance to devise a particular policy. Concretely, for example, in Rwanda, the historical gender inequality in leadership has led to a constitutional amendment and enacts a 30% of women representation in a leadership positions.

5.0 DATA ACCESSIBILITY, ANALYSIS, AND FUTURE PROGRAMMING

Both the Adult Literacy Policy and Girls Education Policy can be accessed from the Rwandan, Ministry of Education website. The access to the data presented in both policies has no restrictions, and there is no required permission or other obligations such as payment or access fee. Other documents from which used data has been fetched can be accessed from the archives and organizations' websites.

The analysis of the findings and realities of the situation (adults' literacy and girls' education) have yielded numerous initiatives, projects, interventions, and various national policies. For instance, the policy of adults' literacy has awakened the minds of non-profit organizations and different activities have been put in place to boost and upgrade the level of literacy among adults

especially those who did not access the normal schooling programs. Initiatives such as Ready for Reading (RfR); USAID Ejo Heza Program (a brighter future), parents evening platform by RWAMREC, among others, are the programs that aim at developing and improving the literacy of adults, as this has a huge impact in the development of the family and the national society at large. Reports demonstrate that such instigations have yielded positive outcomes, especially through the coordination of NIGOs platform in Rwanda.

In a like manner, the girls' education policy has given rise to colorful and interesting projects in the favor of girls' education. For example, positive discrimination and affirmative action are, as defined by Flavia (2008); Ivan and Angelina (2014), programs that target giving chance to girls in case of the similar performance to boys but also other opportunities and advantages aiming at promoting girls' development of their full potentials. Such dynamism has enabled many girls to have access to education and to enjoy different learning programs that were initially thought as of boys. Having it in common, specialized schools have been established like those of the Forum for African Women Educationalists (FAWE) which is a pan-African non-governmental organization founded in 1992 by five women ministers of education to promote girls' and women's education in sub-Saharan Africa by making sure they have access to schools and are able to complete their studies and fulfill their potentials.

Specifically, researchers like Faye, Aarti, and Sirinda (2006); Flavia (2008); Pippa (2001) have extensively demonstrated the role of positive discrimination and affirmative action in enabling more representation of girls and women in schools, the labor force, leadership roles, and decision-making platforms. Therefore, the institutionalization of policies promoting both girls and women is a backbone of countries (especially developing ones such as East Africa Countries) that are positioning themselves with long-term and visionary goals and aspirations.

Putting in place an adult literacy policy has sufficient foundational reasons. For instance, the research which was jointly conducted by the Institute of Policy Analysis and Research (IPAR)-Rwanda, the University of Rwanda's College of Education, and the University of Aberdeen with the support of the Scottish government in 2019, revealed that on 14% of adults who had joined literacy courses are the only ones who can demonstrate progress and improvement in the reading capabilities while 33% of them do not have literacy skills at all. The survey was conducted on a sample of 2,391 respondents with over 300 respondents from each district of Western Province.

6.0 VALIDITY AND RELIABILITY OF INFORMATION AND DATA SOURCES

The validity of a research instrument assesses the extent to which the instrument measures what it is designed to measure (Robson, 2011). It is the degree to which the results are truthful. So that it requires a research instrument (questionnaire) to correctly measure the concepts under the study (Pallant, 2011), while reliability refers to how consistently a method measures something. If the same result can be consistently achieved by using the same methods under the same circumstances, the measurement is considered reliable.

Data collection approaches and the effective design of data collection tools play a significant role in the validity and reliability of collected information (Hamed, 2016). In the same vein, the data presented in both evaluated policies (Adult Literacy Policy and Girls Education Policy) comply with validity and reliability requirements and collection, presentation, analysis, and interpretation processes. This is confirmed considering the nature, identity, and profile of selected agencies, organizations, and respondents. Different ways have been utilized to collect data, to relate it to the policies under formulation, and justify its acceptability and confidence in terms of validity and reliability.

With this in mind, looking at the institutions, agencies, and organizations such as Ministries, publications from UNESCO, UNICEF, and UNDP, which provided supporting data to support the formulation of the policies; it stipulates a sufficient and higher indicator that available data, information, statistics, and data sources represent and measure what they are supposed to measure while replicated studies and surveys confirmed the reliability and consistency of expressed data and findings to inform the elaboration of policies.

However, as the policies have been initiated some years back (Girls Education Policy in 2008) and (Adult Literacy Policy in 2014), there is a strong need to review these policies in terms of validity and reliability as to relate them to numerous and tremendous achievements that occurred for both policies in the last decade and to link it to the updated figures.

7.0 EVIDENCE-BASED POLICY MAKING-NEEDED ACTIONS FOR IMPROVEMENT

The following bullets will highlight the needed improvement for evidence-based policies:

- To come up with an effectively designed evidence-based policy; different well-established tools, instruments, approaches, methods, and strategies are highly recommended.
- This goes also to the involved respondents and participants who are deemed to act in a special way to make sure provided data is reliable, valid, and consistent vis-à-vis the overall objective of the policy under formulation (Thomas, 2007). Henceforth, it is advised for future improvement to collect data, opinions, and data from agencies, developmental organizations, teachers, school leaders, faith-based organizations, stakeholders, partners, and governmental organs which have a high reputation for recording consistent data through reliable data collection methods and approaches such as surveys, in-depth research, key informants' interviews, focus group discussions. The latter must be very structured and designed in a way that responds to the goals of the policy formulation.
- It is advised to show the role of partners (Mel, 2013) in addressing the *raison d' être* of the policies. This would be very fruitful by putting in place platforms and committees to monitor the progress towards set standards and to reach as many organizations as possible to collect and have the opportunity to variety and diversity of collected data.
- Another important aspect in the improvement of the policy is to ensure the methodology to follow in the design is very well structured and developed in a way that facilitate the

smooth and successful development and execution of the policy via very well collected data.

- Head (2010) has advised possessing political knowledge, scientific rigorous knowledge, professional and managerial knowledge, client and stakeholder knowledge, political culture as well as mass media knowledge to come up with a well-thought policy.

8.0 CONCLUSION

The article has elaborated a critical analysis of the Adult Literacy Policy and the Girls Education Policy in Rwanda, and the framework was tailored to the questions developed by UNESCO (2013). Satisfactorily, the policies have complied with the requirements as stipulated by UNESCO for an evidence-based policy. However, as discussed, there are needed improvements for effectively and technically well-elaborated policies.

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