



Research article

The Relationship between the Language Transition Policy Factors for the Education System and the Students' Performance in Universities in Rwanda

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Abstract

A variety policy related factors which elicit the learner's participation and motivation exist and should be identified and utilized to enhance quality learning. Education in Rwanda has been changing systematically after the country's accession to the East African Community. The changes call for the need to analyze the prevailing policies and how they affect the various aspects of education. The study tested how the language transition policy related to students' academic performance at the universities in the country. The students' attitude towards the language policy and the extent to which policy affected the students' performance due to existing language barrier was also assessed. The study employed an experimental design with a sample size of 242 students. The language policy factors were the independent variables while the students' academic performance was the dependent variable. Data was collected and analyzed using descriptive statistics. Regression analysis was used to test the relationship between the language policy factors and the students' performance at 95% confidence limit. The results showed that students had commitment and attached importance to English as a language of instruction. The regression analysis further indicated that the policy factors were significant in determining their academic performance but they still had a positive attitude despite the challenges they faced. **Copyright © WJER, all rights reserved.**

Key Words: Commitment, Policy, Performance, Motivation, Language Barriers



Introduction

1.1 Background

The language of instruction used is an important tool which facilitates the learning of content subjects. According to Kyeyune (2010), the importance of language for the teaching, learning, understanding and communication in any teaching and learning environment cannot be ignored. This is because teaching and learning can only be made meaningful through the use of a language that the students are able to communicate in for them to understand what is being taught. Furthermore, educational objectives require students to understand the concepts and to possess an ability to express their understanding of these concepts in written format and language is required for and engaged in bringing this knowledge into existence (Rogan, 2006). In the specific case of mathematics, students are required to possess competency both in everyday language and maths specific language. However, research by Lemke (2006) indicated that competency in the natural language does not necessarily contribute to competency in the maths-specific language because of the technical concepts involved in teaching and learning mathematics.

The current globalization phenomenon has pushed many nations to adopt English as the language of teaching and learning even in contexts where English is a second or foreign language to learners (Tamtam et al. 2010). Research by Webb (2004) reported that in principle, using English, when it is a second/foreign language, as a language of teaching and learning might not be an obstacle to the full development of learners' conceptual abilities, as long as they are fully conversant in it as a medium of instruction. Researchers such as Alidou and Brock-Utne (2011) and Kyeyune (2010) have reported that although the choice of English is most of the time supported by political, social and economic arguments most of the African learners are not proficient enough in English to be able to use it appropriately as the language of instruction. Research by Choi and Tam (2011) and Trudell (2010), further questioned the fairness and success of education conveyed through a language that is unfamiliar to both teachers and learners. Wolff (2011) confirmed this further by indicating that the language used for learning and teaching is crucial for learners' acquisition of knowledge and understanding and the development of their skills, and for their ability to demonstrate their acquired knowledge effectively in assignments and examinations. This implies that if learners do not know or are not conceptually conversant with the language used as the medium of instruction well enough, they will have problems to develop educationally.

Before 1994, all the teaching and learning in Rwanda was done in French. The system changed to bilingual approach during the years of 1995 to 2008 (Primary, Secondary, Tertiary) and examinations were prepared and done for both English and French speakers. From 2009, French was dropped and everything was taught in English and Kinyarwanda, French and Kiswahili being taught and examined as curriculum subjects in upper secondary. From 2013, the teaching for pre-primary and lower primary (Grades 1-3) is in Kinyarwanda while all the other levels they are taught in English and subjects are examined in English. Historically, higher education in Rwanda has been French based from her colonial model. According to the Constitution there are three official languages – Kinyarwanda, French and English. Previously, a trilingual policy was adopted meaning that there was a choice of medium of instruction based on the linguistic background and experience of the pupils. However, with Rwanda's membership of the East African Community (EAC) and the Commonwealth, and the increasing development of international partnerships, the use of English has become more prominent and the need for literacy in English greater. English in this case, has been seen as an important vehicle for trade and socioeconomic development and as a gateway to the global knowledge economy. It has also been expensive to maintain three languages of instruction in terms of learning materials and teacher education.

The Government of Rwanda is committed to the development of a more robust and accessible education that involves the private sector, development partners and other stakeholders. The Education Sector's vision is to provide the citizens of Rwanda with equal opportunities to a high quality education through world-class learning facilities and renowned learning institutions. This will involve various processes aimed at transforming the Rwandan citizen into skilled human capital for socio-economic development of the country by ensuring equitable access to quality education focusing on combating illiteracy, promotion of science and technology, critical thinking and positive values. The end result is expected to be reduced poverty levels and improved well-being of the Rwandan population according to IMF (2013) report. This calls for the need to harmonize the higher education system with that of the other partners including the changes in language policy for the education system. The more recently developed



African dimension to higher education through regional exchanges and collaboration that is supported through networks such as the Association of African Universities and the Inter University Council for East Africa also requires the integration of higher education including the teaching and learning methods.

1.2 Statement of the Problem

Numerous policy changes which have both advantages and disadvantages have been undertaken to meet the education objectives and address the quality problems. Among the policy initiatives include the change of official language of teaching learning from French to English and the Government's initiative to permit the recruitment of mature students for higher education. Currently, English remains the preferred medium of instruction among the students mainly due to the instrumental motivation associated with its use as an international language and the economic gains associated with it in terms of competitiveness. This is occurring against the backdrop of making efforts to improve the levels of English proficiency by both the teachers and the learners at all levels (Kagwesage 2012; Freedman et al, 2010).

Recent research by MINEDUC (2009) however, highlighted the mismatch between Rwandan learners' English language abilities and the cognitive academic requirements they need to meet in higher education. The MINEDUC survey report of 2009 indicated that the challenge for the education system is that the English language proficiency amongst teachers is low. The survey details indicated that 85% of primary teachers and 66% of secondary teachers only had beginner, elementary or pre-intermediate levels of English 6. The recommendation was therefore given that teachers need to develop their own language skills as well as learning to teach in English.

Pupils' own exposure to English was also limited, particularly in rural areas. There was a shortage of textbooks and readers in English and the language levels of some of the learning materials that are available are above the pupils' competence levels. The situation is complicated further by the fact that the majority of the people speak Kinyarwanda outside the classroom leading to disharmony between the language of instruction and the language of out-of-class communication. The changes have led to a new configuration of roles and relations amongst the three languages: Kinyarwanda as the bedrock of initial literacy and learning; English as the new medium of instruction; and French as an additional language. This occurred against the background of the new policy adopted in 2008 and implemented in 2009 to use English as the medium of instruction throughout the education system. This research therefore aimed to re-evaluate the English related challenges at the university level. The outcome would be used to reveal some of the aspects of teaching and learning especially the teaching methods and the related policy aspects that would be useful for the development of special approaches and mechanisms to ensure quality assurance. The research was also expected to provide the necessary feedback on the attitude of the students towards the language transition policy as it affected other aspects of teaching and learning such as the different entry levels of the students and their cognitive learning achievements.

1.3 Purpose of the Study

The general purpose of the study was to determine whether the language transition policy factors had measurable influence on the students' learning outcomes in terms of their academic performance at the university level.

1.4 Objectives of the Study

The objective of the study was to analyze the relationship between the language transition policy factors for the education system and the students' performance in universities in Rwanda

1.5 Research Hypothesis

H₀: There was no significant relationship between the language transition policy factors for the education system and the students' performance at 95% confidence limit.



1.6 Significance of the Study

Government of Rwanda has identified education as a major sector contributing to growth in its development agenda. As such, the Ministry of Education (MINEDUC) has committed to prioritize reforms that would enhance quality teaching and learning. The current transition from French to English as the language of instruction in schools has brought a challenge in grasping the concepts taught in English to both the teachers and the students as a result of the language barriers that are likely to arise. This means that more strategic approaches to teaching and learning that may unlock the performance, attitude and other policy related challenges may be required for reviewing and refining government education policies and regulations. This study was set out to analyze if there was any significant relationship between the language transition policy factors for the education system. The research results will also assist the government, the educators and the learners at all levels to make great strides in their efforts to reduce the variation in student achievement, close achievement gaps, and help all students to learn meaningfully for high quality professional development

2. Literature Review

2.1 Education Language Models

In multilingual societies, the choice of language of instruction and language policy in schools is critical for effective learning (EFA, 2005). In most developing countries, first language usually the mother tongue is always advanced alongside the principle of additional second language education. This is mostly done by treating mother tongue both as subjects from early stages of learning and later on, as an additional medium of learning and teaching. Several research reports by scholars such as Bamgbose, (2000a); Ouane, (2003); Wolff, (2004) have provided different language education policies and models in African settings, which move away from mother-tongue education towards international language of wider communication. The key issue at stake, and common across all situations, is the extent of the role of African languages in the suggested language models. The selection of one local language in preference to others has also been contested because of the belief that in the process of choosing a particular language, some interests get marginalized. Several models or a combination of models are currently being applied in different countries of the developing world. According to the classification by Ouane and Glanz (2011), the common ones currently being applied in Africa include the following:

2.1.1 Additive (Bilingual) Education – Strong Bilingual Models

The model targets two or more languages, the first and second language. The target is first language as medium of instruction throughout with the second language taught well as a subject or incorporating first language and second language as two (dual) languages of instruction to the end of school. The first language is never replaced as a medium. Therefore the target is high-level proficiency in the first language plus high-level proficiency in the second language.

2.1.2 Subtractive Models:

The objective of a subtractive model is to move the learners from the first language and into the second language as a medium of learning as early as possible. Sometimes this involves a straight-for-second language as medium of instruction from the first year in school. The bottom line is the use of second language mainly or only for teaching and learning. It is sometimes referred to as the submersion model which literally means that the child is submerged in the second language which leads to a 'survival of the fittest' or 'sink or swim' scenario.

2.1.3 Early-Exit/Transitional Model:

It is designed for fluency in a single target language for the learner by the end of school years. The target language in this case is the official/ foreign language but provision is given for learning of mother tongue at the initial stages of learning. The learners begin with the mother tongue and then gradually move to the official/foreign language as medium of instruction within one to four years. The objective of this model is the same as the subtractive model.



2.2 The History of Language Policy in Rwanda

Education plays a vital role in the development of human capital and is linked with an individual's well-being and opportunities for better living (Battle & Lewis, 2002). It ensures the acquisition of knowledge and skills that enable individuals to increase their productivity and improve their quality of life. This increase in productivity also leads to new sources of earning which enhances the economic growth of a country over a given period of time (Saxton, 2000). Rwanda has made reasonable progress in the area of sound socio-economic development over the last 19 years. However, imbalance in the supply and demand of skilled labor that is creating challenge of matching of skills and opportunities in the labor market still exists. In the process of addressing this challenge the country has identified education as one of the strategic priority areas which require capacity building. In its development plans such as vision 2020 and EDPRS ii, more strategic and focused approaches aimed at achieving national priorities in the education sector have been identified. This approach is justified by the fact that in this era of globalization and technological revolution, education is considered as a first step for every human activity.

The government is committed to the development of a more robust and accessible education that involves the private sector, development partners and other stakeholders. The education sector's vision is to provide the citizens of Rwanda with equal opportunities to a high quality education through world-class learning facilities and renowned learning institutions. This will involve various processes aimed at transforming the Rwandan citizen into skilled human capital for socio-economic development of the country by ensuring equitable access to quality education focusing on combating illiteracy, promotion of science and technology, critical thinking and positive values. The end result is expected to be reduced poverty levels and improved well-being of the Rwandan population according to vision 2020 and EDPRS.

One of the steps that Rwanda has taken towards improving the education system is the recognition of the importance of skills, knowledge and attitudes that the country needs to support the transition to a middle income country by the year 2020. It has therefore identified priority capacities, skills and competency that support the actualization of the vision. Some of the strategies that have been identified for improving the capacity and skills in the country involve collaboration with regional communities such as the east African community and international communities such as the European Union. Some of the strategies as indicated in the Economic Development and Poverty Reduction Strategy (EDPRS) II (2013 - 2018), which is the five year program for priority skills development involve international collaborations through work placements abroad to enable Rwandan staff to receive high quality training and ensuring they are used in priority sectors on return; attract international universities, schools and training centers to invest in Rwanda; hire qualified professors to come in Rwanda for a given time for teaching and mentoring local professionals in their institutions.

As a result of these development programmes, the country has embraced multilingualism in its education system. Prior to 2008, French which is spoken by about 9% of the population was more widely used among both ethnic groups in Rwanda as the official language of instruction in schools. However, the linguistic reforms of 2008, including the removal of French as one of three official languages, have reduced the dominance of French. Following the reforms, Kinyarwanda is used as a medium of instruction and English and French as curriculum subjects in lower primary schools (grades 1-3) both public and private. English which is spoken by about 4% of the population has become the official language of instruction from upper primary (grades 4-6) to tertiary levels of education since the year 2009 with French and Kinyarwanda being taught as curriculum subjects or unit to ensure that all the three languages are found throughout the education system. All their national examinations are taken in English (Samuelsson and freedman, 2010).the policy also applies in teacher training centers and technical and vocational schools.

Despite the efforts being made, challenges to the language policy still exist. Four years on, classroom observations and interviews with educators suggest that most teachers, though supportive of the policy, still face great difficulty communicating and teaching in English. The education sector policy (2003) expresses concern that the teaching of three languages from primary level onwards has created problems for teachers who have been in the system for many years and only speak one of the two international languages, and are still expected to teach in both languages at primary, secondary and tertiary levels of education. The country also lacks experts in linguistic disciplines. Out of the total educator population, only 15% of primary school teachers and 10% of secondary school teachers demonstrated an adequate level of proficiency to teach the language. Furthermore, the preparation of the teachers for



the language transition has not been adequate due to the abrupt implementation of the policy. In the first year of the policy all teachers were put through an intensive six-week English-language training programme, supported by the British council with ongoing language support intended to be provided by English-proficient mentor placed in every school. The capacity problem is worse for students and teachers from rural areas where English is hardly spoken outside the school environment. Researchers such as (Williams 2011) have already declared that Rwanda is an example' where the language policy will create small English-proficient elite in the society because of the limited access to the necessary resources for learning English.

2.3 Effect of Entry Behavior on Teaching and Learning

Entry behavior refers to the student's current knowledge and skill set that they bring at the start of the course. It's even more important for a tutor to make this initial assessment, in order to identify the key areas that need to be covered and the areas of knowledge the student already possess. Entry behavior includes the prerequisite knowledge, attitudes or skills which the student already possesses that are relevant to the learning task or subject matter and that the teacher may require students to demonstrate before a module. The determination of entry behavior involves assessing the student's current understanding of a topic, areas in which they are weak, their previous techniques for studying and the ways in which they can adapt the lessons to best suit their needs. Cognitive entry behaviors are a form of pre-learning that is needed by the students in order to learn a specific learning unit (Bloom 1998; Senemoglu, 2009). Research reports have indicated that pre-learning is a key variable regarding the level of learning and was reported to have had a positive and facilitating effect on learning level in 95% of studies (Dochy, Segers, & Buehl, 2009).

According to Bloom (1998), the variable of cognitive entry behaviors accounts for 50% of the variability in learning level. Cognitive entry behaviors are considered highly influential on learning level. However, research by Muhittin (2014) on entry behavior at the University reported the contrary but argued that the study was conducted at a university level course that was not highly sequential, and because the effect of cognitive entry behaviors might vary depending on the course and whether or not the course under examination exhibits a strong sequential nature. It has been reported that at the university level, cognitive entry behaviors.

A language of instruction is assumed to be an enabling tool which facilitates the learning of subject content (Kyeyune 2010, Webb 2004). This may have serious effects on both the cognitive and the affective behavior on the course unit being taught and in the logical sense, if language abilities do not match with the conceptual requirement, this would lead to frustration both to the teachers and the students. The current globalization phenomenon has pushed many nations to adopt English as the language of teaching and learning (Tamtam et al. 2010) even in contexts where English is a second or foreign language to learners. Research has shown that using English, when it is a foreign language, as a language of teaching and learning might be an obstacle to the full development of learners' conceptual abilities especially in cases where they are not fully conversant in it as the language of instruction (Webb 2004). However, with reference to the African context, extensive research shows that many African learners are not proficient enough in English to be able to use it appropriately as the language of instruction (Alidou and Brock-Utne 2011).

Rwanda as one African country is not an exception to the above-mentioned scenario. Recent researches have highlighted the mismatch between Rwandan learners' English language abilities and the cognitive academic requirements they meet in higher education (Anderson, Kagwesage and Rusanganwa (2012)). However, English remains the preferred medium of instruction among the students mainly due to the instrumental motivation associated with the use of English as an international language (Kagwesage 2012; Samuelson and Freedman 2010). Kagwesage (2012) in her studies to investigate the strategies that higher education students use in order to cope with their academic requirements conducted in English language. The reported indicated that conceptualization of what is taught in English is still a challenge to the majority of the students in the country which they are striving to cope with in their areas of study. The purpose of this study is to determine the effect of English entry behaviors and on learning and learning outcomes. This assessment will determine whether some of the students have English related circumstances or learning difficulties which are likely to affect their ability to study as relates to the Teaching



methods in order to identify the best method for the different situations based on their current level of confidence and motivation.

Based on the literature reviewed it can be concluded that this research is important because of conflicting reports that have been generated from previous studies in countries where language policies have been adopted. Research conducted by Senkoro (2004) in South Africa focused on the effects of language choice in education and the use of English in the school. According to the results, the conclusion drawn was that together with other factors such as the teachers' authority and their methods, the use of English as a medium of instruction hinders the full participation of the pupils because it does not seem to provide comprehensible input, it does not seem to work as a tool for constructing knowledge in the content subjects and it is an obstacle for the learner centeredness that is desired in a teaching learning environment. The difference in behaviour among the students and among the teachers, gave another hint that the official language does not facilitate the participation of the people but maintains a culture of silence among the student

3. Materials and Methods

3.1 Research Design

The study employed an experimental design. The experiment was designed to test the relationship between the language transition policy factors and the students' academic performance in the course unit of business statistics at the universities.

3.2 The Target Population

The study was conducted in Rwanda which is one of the east African community countries with eighteen (18) universities both public and private. The research was intended to investigate all the public and private universities in Rwanda. However, Mt. Kenya University and Jomo Kenyatta universities were purposively sampled for the experiment to represent all the 18 universities. This was because the two universities are centrally placed in Kigali city, have a wide variety of courses taught in English and a large student population. The masters' of business administration (MBA) students were the focus. The total population of MBA students at the two universities at any given semester is about 643 on average according to the most current registration information available.

3.3 Sample and Sampling Procedure

The sample size was determined based of the sampling recommendation given by Morgan and Robert (1970). The sampling of the classes taught for the research in each semester was done using purposive sampling technique by only selecting from the first year MBA business statistics classes taught by the researcher. Intact classes were used in the study to reduced unnecessary class interruptions. However, to ensure randomization and equalization of the number of students per class, the students from the three different classes picked for the experiment were reshuffled at the beginning of each semester by mixing the names of the students and randomly reassigning them to any of the three classes taught by the researcher. A total of 242 students were used for the research.

3.4 Research Instrument

In each of the three semesters used in the study, three classes made up of first year MBA students were purposively selected. The attitude related data was collected using a questionnaire modified from attitude questionnaires of other authors such as Baldwin (1980), Solomon (1975) and Pintrich *et al* (1991). This was done by selecting and redesigning some questions to fit the situation under which the research was done.



3.5 Data Collection

The attitude questionnaires were administered once to all the students at the end of each semester taught. External and internal validity was enhanced by ensuring that the class environment remained controlled in terms of same instructor, same textbook, same course content, same lesson duration, same syllabi and assignments, same examinations and same grading scale based on the university rules and regulations. The novelty and Hawthorne effects brought about by new activities introduced abruptly in the classroom was also reduced by giving the students other questionnaires not related to the study to fill at regular intervals prior to giving the research questionnaire at the end of the semester.

3.6 Tests for Validity and Reliability

3.6.1 Validity

The validity of the questionnaire was tested by subjecting the items to pre-testing through pilot study before embarking on the main study. The research supervisors in the School of Business and Economics, Mt. Kenya University, Kigali Campuses were approached to validate the research instrument. The respondents from the pilot study were asked to express the ease with which they interpret and understand the items in relation to each of the objectives in order to establish the relevance of the items to the proposed study. The items were then adjusted where necessary to improve their accuracy. Construct validity was ascertained by assuming that there was a causal relationship between the variables in the study. To achieve this, the constructs were developed in such a way that they reflected well on the variables to be measured based on extensive literature review before developing the data collection tools. The validity was also strengthened through the use of randomization of the students and reassigning them to new classes to ensure that there was no systematic bias in responses.

3.6.2 Reliability

Reliability was tested using the test-retest technique whereby a test was administered to the same group of students two times within an interval of two weeks. This involved subjecting the questionnaire items to pre-testing through pilot study using 12 students from other classes that were not going to be part of the study but were being taught the same course unit. The respondents from the pilot study were asked to express the ease with which they interpreted and understood the items in order to establish the relevance of the items to the proposed study. The items were then adjusted where necessary to improve their accuracy. To ascertain internal consistency of the items for each sub measurement, Cronbach's alpha scale was calculated for each objective's sub measurement based on equation 1 by Cronbach (1990):

$$\text{Cronbach Alpha} = \left(\frac{k}{k-1} \right) \left(1 - \frac{\sum \sigma_i^2}{\sigma_x^2} \right) \dots\dots\dots 1$$

Where: k = Number of items

σ_i^2 = Variance of individual items

σ_x^2 = Variance of total scores

3.7 Data Analysis

The data was processed and analyzed with the help of a statistician using descriptive statistics of mean and percentages calculations to determine trends of the language transition policy factors. Further analysis was done using regression analysis at 95% level of significance to determine the significant relationships between the language transition factors and the students' academic performance of the students.



4. Findings

4.1 Introduction

The purpose of the study was to determine whether the language policy factors had measurable influence on the students' learning outcomes in terms of academic performance. The assumption was that the students' academic performance was tied to some specific language policy factors that were also likely to have a significant effect.

4.2 Analysis of the Language Transition Policy Factors

The language transition policy factors were analyzed using descriptive statistics of frequencies and percentages to determine the general trend of the factors that may determine the effectiveness of the language transition policy in the country.

4.2.1 Students' Background of Mother Tongue

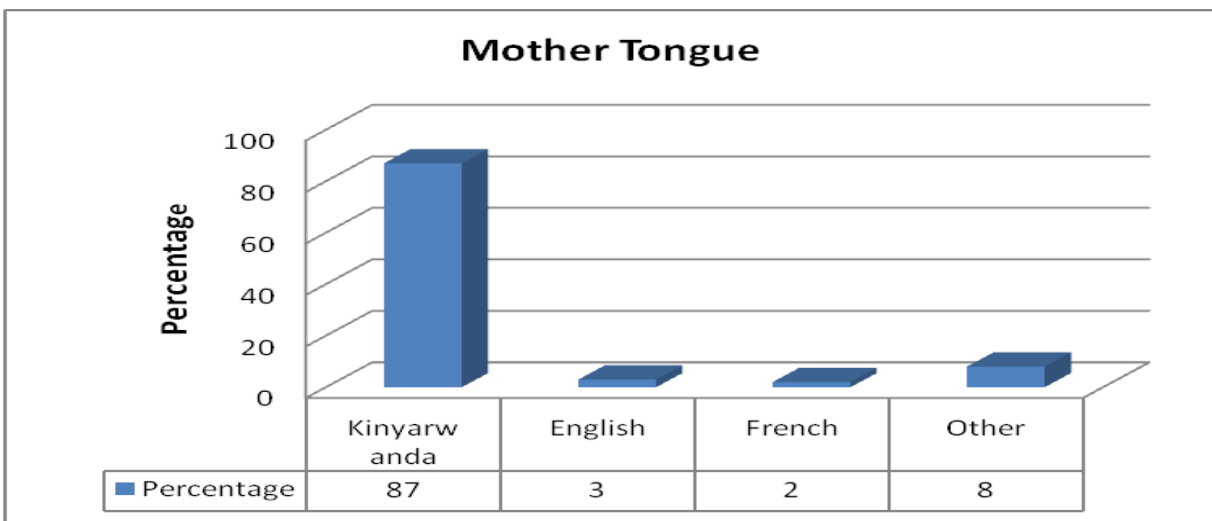


Figure 1: Mother tongues of the respondents
Source: Survey Data (2015)

The results in Figure 1 indicated that the majority of the respondents (87%) had Kinyarwanda as their mother tongue. Only a few (3%) indicated that English was their mother tongue while the rest who were mainly foreigners in the class had a variety of mother tongues making 8%. French mother tongue speakers made up only 2% of the students. This may have had an implication on the usage of English language in the classroom and within the university environment.

4.2.2 Primary School Setup and Secondary School Setup

The respondents were requested to indicate whether they attended their primary and secondary school education in either rural or urban areas. The results were as shown in Figure 2.

The responses in Figure 2 indicated that the majority of the students (65.4%) were in rural primary schools while only 34.6% were in urban primary schools. The pattern changed in secondary school where the majority (59.6%) was in urban schools while 40.4% were in rural secondary schools. This was an indication that slightly more than half of the student population lived their early lives in the rural areas and only migrated to urban setups afterwards in their schooling life. The situation aggravated by the fact that even before the ban on boarding primary schools there were only 34 boarding primary schools in the country; an indication that most of the students both in rural and urban



areas were in day primary and secondary schools. This may have an implication on the formative years of the students and the success of the language transition policy because of the limited exposure to English in the home environment especially in rural areas.

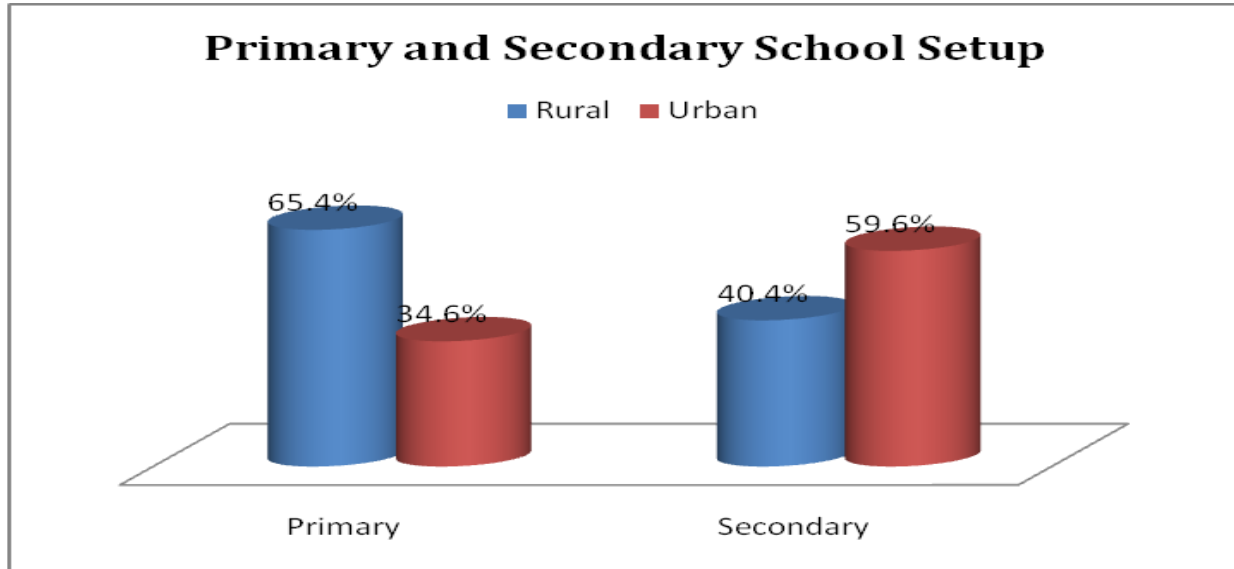


Figure 2: Primary and secondary school setup of the respondents
 Source: Survey Data (2015)

4.2.3 The Year First Introduced to English Language

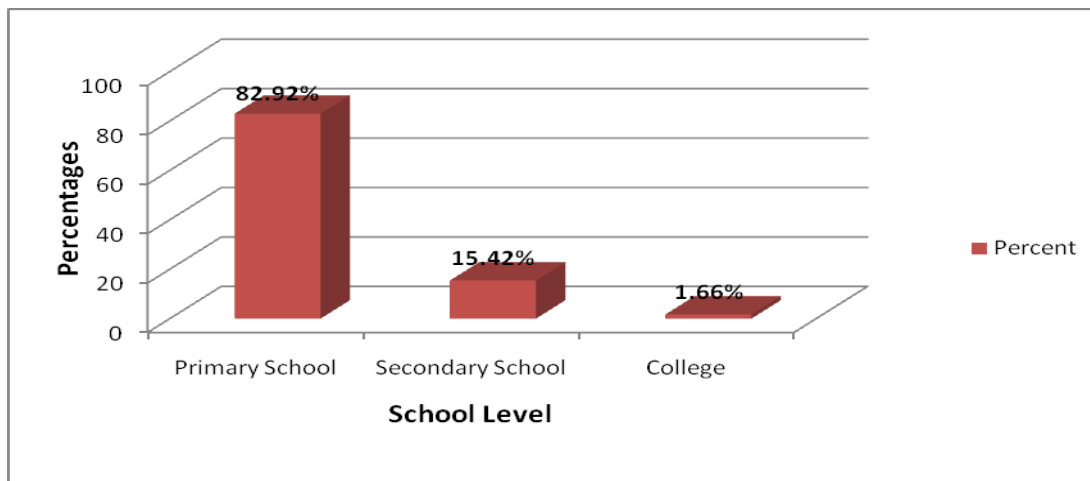


Figure 3: School level introduced to English
 Source: Survey Data (2015)

The results in Figure 3 showed that 82.92% of the students were introduced to English early enough when they were in primary schools. However, based on their major age ranges, the majority of the students experienced being introduced to English before 2008 when English was still part of the trilingual language policy. This implied that the language was not taken as seriously as it became after the official enforcement of the policy in 2008 resulting in low impact at the earlier stages of their school life and even later in some cases.



4.2.4 The General English Language Proficiency Trends

The general English proficiency trend was determined by requesting the respondents to evaluate their abilities by indicating their level of fluency in spoken, written listening and reading English. The evaluation was done in a Likert scale ranging from poor to excellent represented by the figures of 1 to 5 on the scale. The Likert scale approach was preferred to other form of proficiency testing because the main aim was to measure the student’s attitudes or opinions on English language.



Figure 4: The Language proficiency trend
 Source: Survey Data (2015)

The results in Figure 4 indicated that the majority of the students reported being good and fair in all aspects of English proficiency within the range of 30.8% to 40.0%. This was an indication that about one third of the class were fair in all aspects of English or had positive attitudes and aspiration to excel in English while another one third of the students was good in all aspects of English. From this observation, it can be concluded that between 69.1% and 73.8% were fairly conversant with English language and could easily understand and use English language as a medium of instruction in the classroom.

4.3 Students Attitude towards the Language Transition Policy

The general position of the students towards the language transition policy was analyzed using constructs that determine attitude differences. The analysis was done using responses to statements that related to the students’ position in a Likert scale of 1-5 (Strongly Disagree; Disagree; Uncertain; Agree; Strongly Agree). The results indicated that the majority of the respondents either agreed or strongly agreed with the constructs used to determine their attitude towards the language policy. The observation meant that the community has not embraced English at the local level and most people only meet English in the offices and schools but hardly practice English in their everyday life activities. The overall conclusion is that the responses was a sign of commitment to the importance attached to English as a language of instruction despite the challenges that the students were likely to be facing; hence indicating their positive attitude towards the language policy.

4.4 The Relationship between the Students’ Attitude towards the Language Transition Policy and the Students’ Performance

Multiple linear regression analysis was done to determine the extent to which the English language transition policy factors influenced the performance of the students in class assessments done in English language. Regression analysis was done to determine the proportion of students’ performance that was contributed by each of the four language transition policy factors analyzed.



The regression analysis was based on the following model:

$$Y = \beta_0 + \beta_1SSS + \beta_2PSS + \beta_3YFIE + B_4 MT + \varepsilon$$

Where:

Y = Students' Performance

$B_0 - B_i$ = Coefficient of the parameters measured

SSS = Secondary School Setup

PSS = Primary School Setup

YFIE = Year of First Introduction to English

MT = Mother Tongue

ε = Error Term

The results showed that the model was significant ($p < 0.05$) which indicated that there was a positive significant relationship between the language policy and the students' performance. The regression R-Square value was 0.152 and F-value = 2.380. This indicated that the independent variables of the model accounted for 15.2% of the variations in the dependent variable (student performance). The results of regression analysis suggested that the students were aware of the new language transition policy and were fairly positive about it despite its challenges. However, it affected their performance to a small extent.

Further analysis of the individual policy factors other than attitude towards the language policy was done to determine their contribution to students' performance. The results indicated that the most important contributing factor was secondary school setup at 38.1% followed by primary school setup at 31.9%, year of introduction to English at 16.8% and mother tongue contributed 10.1% of the variations. As a result, the hypothesized moderating model was drawn as:

$$Y = 3.612 + .381SSS + .319PSS + .168YFIE + .101MT + \varepsilon$$

From this observation and based on the fact that the majority of the students were in rural areas for their primary education and urban set up for their secondary schools, it can be concluded that the majority of the students had a means of improving their English proficiency early enough in the classroom. This was also indicated by the students' English proficiency trends as observed in Figure 4.6.

4.5 Summary of the Findings

In the case of Rwanda, the revision of the language policy was beneficial from the functionalist perspective, especially for students who were already competent in English language. This was shown by their very high positive attitude towards the introduction of the English language policy in the education system. This occurred despite the fact that 87% of the students had Kinyarwanda as their mother tongue with limited exposure to English in the home environment especially in rural areas. The majority of the students including those who took their primary and secondary school education in the rural areas have struggled to improve their English proficiency inside and outside the classroom.

5. Discussion of the Results

5.1 Introduction

This chapter presents the discussions of the study findings. The discussions were based on the objective of the study, the available in literature review and the findings for the objectives. Research objective sought to determine the effect of the language transition policy factors on the students' performance at the university level in Rwanda. The language transition policy was treated as the independent variable and the students' performance was treated as the dependent variable. The language transition policy factors were analyzed in terms of the prevailing mother tongues of the students, the year of school first introduces to English language, the primary school set up, the secondary school set up, the students English proficiency and the students' attitude towards the language policy. The analysis was done in two steps which included: the use of descriptive statistics of frequencies and percentages to determine the general trends of the language policy factors and multiple linear regressions to establish the proportion of students' performance that was caused by the different language transition policy.



5.2 Discussions

The results of regression analysis for students' performance as affected by the language policy factors showed that the model was significant ($p < 0.05$) which indicated that there was a positive significant relationship between the language policy and the students' performance. The regression R-Square value was 0.152 and a F-value = 2.380. This indicated that the independent variable of the model accounted for 15.2% of the variations in the dependent variable (student performance). Further analysis of the individual policy factors to determine their contribution to students' performance indicated that the most important contributing factor was secondary school setup at 38.1% followed by primary school setup at 31.9%, year of introduction to English at 16.8% and mother tongue contributed 10.1% of the variations.

Education plays a vital role in the development of human capital and is linked with an individual's well-being and opportunities for better living (Battle & Lewis, 2002). It ensures the acquisition of knowledge and skills that enable individuals to increase their productivity and improve their quality of life. This increase in productivity also leads to new sources of earning which enhances the economic growth of a country (Saxton, 2000). Within a country's educational system, the relevant institutions and policies include the ways in which a society finances and manages its schools, how a society assesses student performance, and who is empowered to make basic educational decisions, such as which curricula to follow, which teachers to hire, and what textbooks to purchase. If resources are to be used effectively, policies must create incentives that encourage school personnel to behave in ways that do not necessarily further their own interests. For instance, without the right incentives, teachers and students may only go for what is convenient to them for their own personal interests.

The language composition inside and outside the classroom is an important factor in teaching and learning for both the students and the teachers. Educational language policy can be defined as the mechanism used to create effective language practices in educational institutes, especially in centralized educational system (Shohamy, 2006). It is these policies, especially in a centralized system, that represent a language manipulation on what kind of language or languages should be used as a medium of instruction and to what degree that usage is acceptable. The choice of language policy may affect the relevance to the successful learning for learners. However, in most cases, the educational system works as agents of implementing these policies without questioning the quality or appropriateness.

Research conducted in South Africa and Namibia by Brock-Utne (2003) indicated that when taught in a different language, learners are also forced to grapple with utilizing different types of languages each day. The casual and informal verbal communication at home or within personal social circles are unlike the instructional language that happens between teachers and peers in the classroom. The language of science, mathematics and statistics is another context in which learners are challenged to use specialized language to communicate various content and process skills (England, et al., 2007).

In the course of moving from informal to instructional or scientific language, learners are continually engaged in language 'border crossing' (Yore & Treagust, 2006). The three-language problem and border crossing exists for most science language learners, but the problem is often magnified for learners who are taught in a language, which is not their mother tongue (England, et al., 2007). To reinforce this the research in the South African case reported that in the Eastern Cape, isiXhosa is the widely spoken indigenous language and home language to 83.8% of the population, yet the official medium of instruction in the majority of schools from the beginning of grade 4 (ages 9-10) to grade 12 is English (Probyn, 2004). This places learners who have very little or no exposure to English at a serious disadvantage when one considers that these learners have minimal opportunity to speak, read or write in a second language. Furthermore, researchers such as (Zimmerman, et al., 2008) stress the relationship between under-achievement and having being taught and assessed in a second or additional language.

Progress at school depends to some extent on the basic literacy skills. Research by Villanueva (2010) in South Africa reported that the majority of black South African children, who generally come from disadvantaged homes, are further handicapped by the practices prevalent in their classrooms. Other research has shown that learners' level of language competence in black schools is so poor that they are unable to read the learning material provided for them, and that the tasks and exercises they are given are often conceptually too difficult and beyond



their competency (Taylor & Vinjevd, 1999). This leads to a heavy reliance on rote learning, the memorizing of fact as opposed to understanding them, and makes the learners dependent on the teachers for everything they learn (Rodseth, 1995; Setati, 1998). In the case of Rwanda the high percentage of students (65.4%) in primary schools and 46.4% in secondary schools who had taken their education in the rural areas may be affected significantly by the language policy. Further analysis of the English proficiency trends gave an indication that about one third of the class were fair in all aspects of English while another one third was good in all aspects of English. It can therefore be concluded that it is important to identify students who might need extra attention based on level of prior competencies upon admission to courses where English language is used as the language of instruction. Such students may need to be provided with extra assistance. In this study, such students form 46.4% of the population.

This study objective was to determine whether the education policy on its usage to make English language as a mandatory medium of instruction affected the attitude of the students in any significant way. The observation made that the language policy did not affect the attitude of the students. The same was also reported in other researchers such as Hanushek (2003) who showed that the empirical evidence is not conclusive about the effectiveness of educational policies on student performance. The research explained further that the main reasons why it is difficult to equate the two include the fact that the results are highly sensitive to many other variables considered and unconsidered hence involving the use of complicated econometric method implemented and the fact that policy effectiveness depends on local particularities especially in terms of legislation, administration, implementation processes. Similar research was done by Brock-Utne (2004) in Tanzania, and reported that English policy chose English as an official language has been quite problematic, especially when considering the background language context in the country. Quorro (2004) asserts that the key to success in English is not in using it as a medium of instruction but rather in improving the teaching of English as a subject. His reasoning being that the students will learn neither of the two languages in a proper way due to the divided attention between learning the language and using it in the process.

The specific concerns that were raised by the two; Brock-Utne (2004) and Quorro (2004) in applying English as a language of instruction included the disadvantages such as code-switching, translation of what is not comprehensible in one language, rote learning, memorization and cheating at exams. She claims that the pace of learning a subject matter is slowed down by the fact that both students and teachers have to go roundabouts to produce comprehensible input. These problems could also be linked to the reality in other countries such as Rwanda and Namibia which are in the process of establishing English as the language of instruction in schools. Between 1998 and 2008 French and English enjoyed equal status as subjects being taught in schools at all levels. However, this came to an end in late 2008 when Rwanda announced that French would no longer be an official and instituted an immediate move to English as the sole medium of instruction through the Ministry of Education then announced (Gahigi 2008). This saw English being used in all national examinations at all levels starting from Secondary school entrance exams.

Researchers such as Samuelson and Freedman (2010) have reported that up to today, it is still the Rwandan elites who have learned some English; hence, the language remains largely the domain of the elite and powerful Anglophones, mostly returnees from English speaking countries. Specifically, Primary school teachers at French-dominant schools must now take night and weekend classes in English, as they simultaneously try to pass their new skills on to their students during the day. The same is mandatory in public universities but in most cases the private ones such as Jomo Kenyatta University of Agriculture and Technology and Mt. Kenya Universities have also taken the same initiative.

While human capital is considered one of the main factors in sustaining the economic growth and prosperity of any nation, the wave of policy-making that involves students' language proficiency, especially their English language standard has been considered by many countries including Hong Kong, Ethiopia, China and South Africa among others (Education Bureau, 2009). The main objective in most of the cases has been to nurture students to be bi-literate and tri-lingual for better global competitiveness. In the case of Rwanda, the buy-in from the populace is reportedly due to the promised economic benefits especially based on the fact that the Kagame government has done much to develop Rwanda's economy and improve the lives of many citizens, Prunier (2009b). This means that the motivation to embrace the policy is independent of performance as it is a must do activity. The motivation factors



may emanate from one's self or from the environment in which one interacts. Examples of such environments include the need to learn a second language for various reasons.

All these lead to the conclusion that Rwanda with 87% of its student population speaking in Kinyarwanda is a kind of environment that is a threat to the development of English language. This occurs because in such a setup, the students would always be tempted to speak and hold discussions in mother tongue wherever they form the majority instead of practicing and using to use English as the official language. The problem is taken to a more complicated point by the fact that the home and community environment favors speaking mother tongue (Samuelson and Freedman, 2010). In the case of Rwanda, the revision of the language policy was beneficial from the functionalist perspective, especially for students who were already competent in English language. However, the whole process can also be considered in perspective that language policy can be seen as a means of sustaining the existing institutions and creating more divide along the line of those who know and those who do not. Accordingly, it is recommended that the government should consider the fact that the policy has a relationship with very many aspects of individual lives based on the alternative hypothesis that the language policy has a significant relationship with the students' academic performance at the university level and by implication, the better part of their entire life.

6. Conclusions

The conclusion made based on the findings of the study was that the students were aware of the new language transition policy and were fairly positive about it despite the challenges identified. The research results also indicated that the factors such as mother tongue, primary school setup, secondary school setup, and year first introduce to English and the attitude towards the language policy in general and a whole range of other possible factors also came to play in teaching and learning with significant contributions towards the students' performance. The students' responses were interpreted as a sign of commitment to the importance attached to English as a language of instruction despite the challenges and an indication of their positive attitude towards the language policy. This extends and has strong implications on the better part of their entire life because the choice of language policy directly affects the relevance to their successful learning in terms of perceived and real benefits.

7. Recommendations

Based on the results of the study, the following recommendations were made:

7.1 General Recommendations

1. The governments should consider the fact that the policy has a relationship with very many aspects of individual lives hence the need to consult and plan widely before making policy statements that would have large positive and negative impacts in the society as a whole.
2. The Ministry of Education should review the curriculum to make it relevant and flexible to the diverse needs of different regions and background of the students especially when comparing rural and urban setups
3. The positive responses of the students towards the language transition policy across teaching methods demonstrated that the new techniques were more effective means of reinforcing the learning process, particularly for those learners who were not able to benefit from the traditional modes of delivery.

7.2 Recommendations for Further Research

1. Conduct research to investigate the effect of additional collaborative policies to the quality of education especially in a large class environment.



2. Undertake a countrywide socio economic impact study of the effect of the language transition policy in order to assess the direction it is taking the country in terms of its original objectives.
3. Undertake the same study in a survey mode to cover all institutions of higher learning in Rwanda in order to get the real picture on the ground.

Acknowledgements

My special thanks go to my supervisor, Dr. Michael Ng'umbi for the constructive criticisms, helpful suggestions and the encouragement he offered during the work. I am also grateful to Dr Mary Kitula and Dr Asanteli Makundi the former and the present Co-coordinators respectively, School of Post Graduate Studies, Open University of Tanzania; Rwanda branch for her valuable inputs, academic advice and encouragement. I will not forget to thank Prof. Issa Mcholo Omari the Course unit lecturer and my classmates who encouraged me and gave material and spiritual support which enabled me to finish this work. I wish to also recognize the contribution of all the lecturers of Jomo Kenyatta University of Agriculture and technology and Mt. Kenya University, Rwanda who gave in valuable criticisms and provided the necessary guidance.

References

- [1] Alidou, H. & Brock-Utne, B. (2011). Teaching practices - teaching in a familiar language. In Ouane, A. & Glanz, C. (Eds.). *Optimizing learning, education and publish in Africa: the language factor. A review and analysis of theory and practice in mother tongue and bilingual education in sub-Saharan Africa.* 159-186. UIL/ADEA.
- [2] Bamgbose, Ayo. 2000a. *Language and Exclusion: The Consequences of Language Policies in Africa.* Münster, Hamburg, London: LIT
- [3] Battle, J., & Lewis, M. (2002). The increasing significance of class: The relative effects of race and socioeconomic status on academic achievement. *Journal of Poverty*, 6(2),pp. 21-35.
- [4] Brock-Utne, Birgit & Halla B. Holmarsdottir. (2001). The Choice of English as medium of instruction and its effects on the African languages in Namibia. *International review of education*, Vol. 47(3-4): 293-322.
- [5] Brock-Utne, an Birgit, A. (2004). English as the language of instruction or destruction – how do teachers and students in Tanzania cope?. In Brock-Utne, Birgit, Zubeida Desai & Martha Quorro (eds). *Researching the language of instruction in Tanzania and South Africa.* Cape Town: African Minds.
- [6] Brock-Utne. (2005). *Learning through a Familiar Language versus Learning through a Foreign Language – a Look into some Secondary School Classrooms in Tanzania.* Paper presented at the Annual Meeting of the Comparative International Education Society, Stanford University, California USA, 22- 25 March 2005.
- [7] Choi, A. and Tam, F. (2011). Does the switch of the medium of instruction facilitate the language learning of students? A case study of Hong Kong from a teachers' perspective. *Language and Education*. 25 (5), 399-417.
- [8] Cummins, J. (1991), "Interdependence of first- and second-language proficiency in bilin- gual children" in Bialystok, E. (ed.), *Language Processing in Bilingual Children.* Cam- bridge: Cambridge University Press.
- [9] Cronbach L.J. (1990). *Essentials of Psychological Testing*, 5th Ed. New York
- [10] Education Bureau. (2009). *Fine-tuning the medium of instruction for secondary schools.* LC Paper No. CB(2)623/08-09(01). Available at: <http://www.edb.gov.hk/index.aspx?langno=1&nodeID=7128>.
- [11] Education for All (2005). *The Quality Imperative: EFA Goal Monitoring Report.* UNESCO Publication. Paris.



- [12] England, V., Huber, R., Nesbit, C., Rogers, C., & Webb, P. (2007). *Scientific Literacy: A New Synthesis*. Port Elizabeth: Bay Books.
- [13] Friedlan, J. M. (2005). The effects of different teaching approaches on students' perceptions of the skills needed for success in accounting courses and by practicing accountants. *Issues in Accounting Education*, 10(1), 47-63.
- [14] Freedman, S. W., Weinstein, H., Murphy, K., & Longman, T. (2010). Teaching history after identity- based conflicts: The Rwanda experience. *Comparative Education Review*, 52 (4), 663–690.
- [15] Gahigi, M. (2008). Rwanda: English language teaching kicks off. AllAfrica.com Retrieved January 9, 2009, from <http://allafrica.com/stories/200812010940.html>.
- [16] Gee, J. (2003). Opportunity to learn: A language-based perspective on assessment.
- [17] Haimowitz, M. L. (1989). *Human Development*. New York: Thomas Y. Crowwell. Kenya National Examination Council, (2008). KCSE. Examination Candidate.
- [18] Hanushek, E.A. Kain, J.F., Markman, J. M. and Rivkin, S.G. (2003). Does Peer Ability Affect Student Achievement? *J. Appl. Econ.* 18 : 527 – 544.
- [19] Heugh, K. (2000). *The case against bilingual and multilingual education in South Africa: Laying bare the myths*. Cape Town: Praesa UCT.
- [20] IMF (2013). *Vision 2020 and the Economic Development and Poverty Reduction Strategy (EDPRS)*. <https://www.imf.org/external/pubs/ft/scr/2013/cr13360.pdf>. Last viewed on 5th September 2015.
- [21] Kagwesage, A. M. (2012). Higher education students' reflections on learning in times of academic language shift. *International Journal for the Scholarship of Teaching and Learning*. 6 (2), 1-15.
- [22] Kyeyune, R. (2010). Challenges of using English as a medium of instruction in multilingual contexts: A view from Ugandan classrooms. *Language, Culture and Curriculum*. 16 (2), 173-18.
- [23] Lemke, J. L. (1990). *Talking Science: Language, Learning and Values*. Norwood, NJ: Ablex. MINEDUC Survey Report (2009). Kigali.
- [24] Ouane, A., and Glanz, C. (2010). *Why and how Africa should invest in African languages and multilingual education (Policy Brief)*. Hamburg: UNESCO.
- [25] Ouane, A. (2003) Introduction: The View from Inside the Linguistic Jail. In: *Towards a Multilingual Culture of Education*, ed. by Adama Ouane, 1-22. Hamburg: UNESCO Institute for Education.
- [26] Probyn, E. (2004). *Teaching bodies: affects in the classroom*. London and New York: Routledge
- [27] Prunier, G. (2009b). *From genocide to continental war: The 'Congolese' conflict and the crisis of contemporary Africa*. London: Hurst
- [28] Ramsden P (1992) *Learning to Teach in Higher Education* London: Routledge: <http://www.learningandteaching.info/learning/referenc.htm#ixzz3rNkzmNEW> Under Creative Commons License: Attribution Non-Commercial No Derivatives
- [29] Rodseth, L. (1995). *Distributive Models of Culture: A Sapirian alternative to essentialism*.
- [30] Rogan, J. (2006). The influence of second language teaching on undergraduate mathematics performance. *Mathematics Education Research Journal*, 17(3), 3-21.



- [31] Rosendal, T. (2009). Linguistic markets in Rwanda: Language use in advertisements and on signs. *Journal of Multilingual and Multicultural Development*, 30(1), 19-39.
- [32] Samuelson, B. L. and Freedman, S. W. (2010). "Language policy, multilingual education, and power in Rwanda." *Lang Policy* 9.pp. 191-215.
- [33] Saxton, J. (2000). Investment in education: Private and public returns. Retrieved from <http://www.house.gov/jec/educ.pdf>. Retrieved on 20th May 2014
- Siegfried, J., & Fels, R. (1979). Research on teaching college economics: A Survey. *Journal of Economic Literature*, 17(3), 923 – 939.
- [34] Setati, M. (1998). Code switching in a senior primary class of second language learners. *For the Learning of Mathematics*, 18(1), 34-40.
- [35] Shohamy, M. (2006). *The myth of scientific literacy*. New Brunswick, NJ: Rutgers University Press.
- [36] Tamtam, A., Gallagher, F., Naher, S., and Olabi, A. G. (2010). EMI for engineering education in Arab world and twenty first century challenges. 3rd International Symposium for Engineering Education. Ireland : University College Cork.
- [37] Tao, P.K. (2001). Confronting students with multiple solutions to qualitative physics problems. *Physics Education*, 36(2), pp. 135-139.
- [38] Trudell, B. (2010). When "prof" speaks, who listens? The African elite and the use of African languages for education and development in African communities. *Language and education*. 24 (4), 337-352.
- [39] Taylor, N., & Vinjevold, P. (1999). *Getting Learning Right*. Johannesburg: Joint Education Trust.
- [40] Villanueva, M., & Webb, P. (2008). Scientific investigations: The effect of the science notebooks approach in grade 6 classrooms in Port Elizabeth, South Africa. *African Journal of Research in Mathematics, Science and Technology Education*, 12(2), 5-18.
- [41] Webb, V. (2004). African languages as media of instruction in South Africa: Stating the case. *Language Problems and Language Planning*. 28 (2), 147-173.
- [42] Williams, E. (2011). 'Language policy, politics and development in Africa'. In: Coleman, H. ed. *Dreams and Realities: Developing Countries and the English Language*. London: British Council, pp. 39-56.
- [43] Wolff, E. (2011). Language politics and planning. In Ouane, A. & Glanz, C. (Eds.) *Optimising learning, education and publishing in Africa: the language factor. A review and analysis of theory and practice in mother tongue and bilingual education in sub-Saharan Africa*. 49-104. IUL/A
- [44] Wolff, E. H. (2004). Marketing Multilingual Education in Africa: With Special Reference to Bilingual Approaches to Basic Education in Niger (Francophone Africa). In: *Making Multilingual Education a Reality for All. Operationalizing Good Intentions. Proceedings of the joint Third International Conference of the Association for the Development of African Languages in Education, Science and Technology (ADALEST) and the Fifth Malawian National Language Symposium held at Mangochi, Malawi, 30 August – 3 September 2004*, ed. by Joachim F. Pfaffe, 117-158.
- [45] Yore, L., & Treagust, D. (2006). Current realities and future possibilities: Language and science literacy-empowering research and informing instruction. *International Journal of Science Education*, 28(2-3), 291-314.
- [46] Zimmerman, L., Howie, S., & du Toit, C. (2009). Comprehending the macro through the lens of the micro: Investigating South African grade 4 teachers' reading literacy instruction practices. *Teacher Education Research and Development Programme (TEP) Conference 2008* (pp. 31-44).