

ASSESSING FREE BASIC EDUCATION AND LEARNING
OUTCOME OF 12 YEARS BASIC EDUCATION
SCHOOLS - A CASE OF BURERA DISTRICT (2015-2020)

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Abstract

The motivation behind this review was to Assessing free basic education and learning outcome of 12 years basic education schools. A case of Burera District (2015-2020). The study had four objectives. They were namely: To assess the effect of teaching approaches on learning outcomes in Burera Twelve Years Basic of Education schools, and To examine the effect of class size on learning outcomes in Burera Twelve Years Basic of Education schools. The researcher targeted all the 17 twelve years basic education schools from Burera district, 5 twelve years basic of education schools were selected systematic sampling techniques. The study population comprises 504 as total population. Those people were head teachers, directors in charge of studies, bursars and teachers from those schools. And final sample size were 103 people who were selected using sampling table. The review utilized correlational examination configuration to assemble data whereby talk with timetable and polls for respondents, chief accountable for study, head educators and instructors were the principle instruments. Dependability was guaranteed through a pilot study and by utilizing Cronbach's Alpha to gauge co-proficient of inward consistency which yielded great outcomes for endorsing study 85%. Legitimacy was guaranteed by counseling specialists. Information were investigated utilizing SPSS programming variant 21. The specialist used unmistakable examination. While information was introduced in type of recurrence tables, rates, standard deviation, mean and graphs. Findings of the study revealed that there is significant relationship between free basic education reforms and learning outcomes in Rwandan 12 years basic education schools. All the involved variables had significant relationship with dependent variables which were confirming that there is positive significance relationship between teaching approaches and learning outcomes ($r=.854$ and $p=0.002$) and positive significance relationship between class size and learning outcomes ($r=.985$ and $p=0.000$). And finally the research recommended the following: Government should make frequent school supervision on the implementation of free basic education reforms and make sure that sector education officers and head teachers have to internalize the program, the Government of Rwanda through the Ministry of Education should rationalize and equally distribute the few available teachers to all schools in the country, various twelve years schools in the study locale of Burera District, Rwanda. And I have suggested this for further studies the effect of free basic education reform and learning outcomes in Rwandan nine years basic education schools: a case of Burera district.

Keywords: learning outcomes, free basic education,

Education reform is an important activity which is always needed around the world because the world is dynamic as the world updates itself so that

FREE BASIC EDUCATION AND LEARNING OUTCOME

the community can innovate new things, this enforces world countries to change their education system so that they can harmonize with others. Nowadays, there is the reforms of globalization in which any new information spread across the world in few seconds so every nation has to change education which helps its citizens to have sufficient knowledge on these changes (Brittain, Maxine, Chris, & Jennifer, 2002). Education reforms and change has been change depending on different specific reason, but the most important reason was to overcome the community sickness, gender bias and class, another reason behind was mitigate socio-economic challenge which most of the people look that it has relationship with poor education within the country. In the beginning of 20th century community have tried to confess that little development in education system might have big effect health, wealth and well-living of people. For instance in Kalala, India subcontinent in 1950 rise of female health and wealthy has significant relationship with the rises of women literacy level. In country like Iran the rise of primary level have correlation with the increase of agriculture efficiency and returns.

The Ministry of Education is working to ensure attainment of The Government of Rwanda policy of universal primary education by 2010 and Education for all by 2015, as outlined in the MDGs and the Dakar agreements. The Government of Rwanda has implemented a policy of fee-free primary education in which school fees have been abolished and replaced by a capitation grant, which has increased to 2,500FRw (USD4.50) in 2006. Shortfalls in financing at the school level nevertheless persist, with parents typically being invited to contribute to finance this gap. Non-fee barriers to primary education also remain and are thought to have some effect on access to education (for example, the cost of school uniforms and learning materials). Unlike in the other countries where free schooling is restricted to primary level, Rwanda provides six years of primary education and three years of post-primary education, where students undertake a common-core syllabus, equivalent of junior secondary.

This means that anybody exiting school after the nine years will have acquired both academic and technical and life skills. The nine-year free basic education is to be implemented within the poverty reduction framework and seeks to expand access to basic education and training to all children. So far, there is a law that provides for free primary education. However, it is planned that the law will be enhanced so that it applies to all the nine years that make up the basic education program. Implementing the new program will also require the government to increase its education budget substantially. At least, education will then consume not less than 30 per cent of the national budget. More teachers will have to be employed and those in service re-trained so that they can offer the common-core syllabus. Besides, more funds will be required for procurement of the extra teaching and learning materials for the additional level. New textbooks as well as

FREE BASIC EDUCATION AND LEARNING OUTCOME

teaching aids will have to be designed and developed to cater for the three-year post-primary education. (MINEDUC report of 2003 implementing the new program puts Rwanda ahead of many countries in the UNESCO Nairobi Cluster and the African region at large. So far, many countries are implementing free primary education. Few, however, have put in place a programme for post-primary education, more so, skills training. Many pupils, therefore, cannot go beyond primary school because at that level, they have to pay high fees. Even for those who complete the primary school cycle, there are fewer places in the secondary school so that many qualifiers end up being locked out. Thus, Rwanda's case provides an excellent experiment of what countries can do to provide children with universal basic education. It fits within the new thinking in education where countries are being urged to provide basic education that goes beyond primary level.

Hypothesis

There is no effect of teaching approaches on learning outcomes in Burera Twelve Years Basic of Education schools and there is no effect of class size on learning outcomes in Burera Twelve Years Basic of Education schools.

Class size and learning outcomes

Many researchers do not have the same understanding on the impact of class size on learners' academic performance. Therefore some researches which were made confirmed small classes do favor learners' academic performance (Woessmann & West, 2006). while other researchers demonstrated the evidence of a significant effect (Krueger & Whitmore, 2001). Minimizing class size to improve learners' academic performance is a method which has been tried, discussed, and examined many years. The evidence appears logical: with little learners to educate, educators can achieve better academic outcomes for all learners. In spite of this prolonged discussion, there is fewer evidence to indicate that students taught in little classes do best in academic achievement than learners in bigger classes specifically in Africa especially in Kenya. According to (Hargreaves, Galton & Robinson, 1996) disclosed that small class give teachers an opportunity to make follow up and give sufficient time to each students with regards to discussing on the duty and providing constructive feedback on work.

According to Munoz and Portes, (2002) indicated that many research has been made on class size and they indicated that augmented that class size should reduce opportunity for personal instruction. The more learners an educator is in charge for, the little time they can give to the students. There are no research indicating the reforms when there are small number of students in class. The research do not specifically exclude the trigger effect of class size. The fact is that class size totally impact teaching style (Munoz & Portes, 2002) and this can affect academic achievement. Class size is treated as the most important factors in teaching and learning activities (Gakure, Mukuria, & Kithae, 2013). Different fact confirmed that drawback associated with class size can be seriously taken in consideration by teachers

and policy designers. According to Gakure, Mukuria and Kithae, (2013), the number of learners in room has crucial to influence learners' academic performance.

For instance, it can impact the capacity of social interaction which may lead to much or little noisy and abnormal behavior, which in turn can influence the different activities the educators are capable to promote. It can also affect how much time the educator is ready to emphasis on personal learners and their specific desire rather than on the team as whole. In fact, studies indicated that learners in small classes succeed better on all tasks when compare with those in bigger classes (Brühwiler& Blatchford, 2011). It is better to confirm that, some research examined learners' assessment outcomes in terms of individual learners' academic performance and others in terms of class size affect performance, which should hinder the differences between learners' academic performances. Some research indicated that the profits are not the same in all levels. Small classes manifest a great difference for early basic school learners. But for many secondary learners small classes do not demonstrate significant impact in learners' academic achievements. Finally, the positive impact of small class size is good in elementary school while it is less in upper classes (Kihoro& Amir, 2016). There is specific or common understanding in the educational research literature if rising number of class size can affect learners' academic performance. Some writes, researchers and scholars have disclosed that changing class size have an effect on learners standard performance scores. The tennessee students-teacher achievement ratio (STAR) research demonstrated a significant rise in learners' performance when class size were minimized (Word, 1990).

Atta et al (2011) discovered that class size of secondary schools where class has below 20 students, there significant impact on students' performance, and (Brühwiler and Blatchford, 2011). Made the final research and concluded that one learners deducted in classroom resulted into a half point in learners score point mean at both primary and secondary schools. But other researches have indicated that deduction in class size had less to no effect on learners' performance.

Corak and Lauzon (2009) found that grades of Canadian 15 years old students in the program for international learners' assessment. They discovered that class size does not have consistent effect on students' performance. Owoye and Yara, (2011), and Wyss, Tai and Sadler (2007) stated that there is no statistical differences in students results between big and small classes at high school level. The study on the effect of class size on students' performance is still being in discussion and inconclusive.

Teaching approaches and learning outcomes

Education is the most important agents of social and individual change that grant positively impact to the learners. The specific objective of teaching at any level of educational institutions is to deliver fundamental reform in the

FREE BASIC EDUCATION AND LEARNING OUTCOME

students through using variety of teaching and learning approaches (Bojinova& Oigara, 2011). Effectiveness and efficiency of this teaching and learning process is highly relies on choice of the educator teaching approach. Brandon, Hollweck, Donlevyand Whalen (2018). Indicated that the effectiveness of teaching method is manifested in the results of teaching and learning process in term of average scores, grades and classroom points. Teaching approaches are classified into two approaches which are teacher centered approaches and learners centered approaches (Bojinova&Oigara, 2011). Teacher centered approaches consist lecturing method, questioning. In this type of teaching, learning exist when teachers deliver content and later assess taught matter by providing exercises related to the content granted during or after delivering the lesson. This is done to analyze if the students memorized what they are taught in the class. Language is an important key element in the activities of teaching as well as evaluating or analyzing so as to to find out the weakness of the learners or areas they did not master during the activity of lesson delivering (Brad Spiller et al, 2000).

Learners centered approaches is the approach which attract learners to build their own understanding of the matter and bring their personal knowledge about studied concepts (Thorburn and Collins, 2003). This clarify that learners centered approach orient much emphasis on enquiry and problem based studying by considering students as the key main element of teaching and learning activities. This methods of learner centered approaches consist of question, response, group discussion, demonstration, role paly etc.... the impact of this kind of method is that students contribute hundred per cent in content delivery, materials selection and choosing conducive environment. The model of learner centered method focus on learner as main element of teaching and learning process in educational institution. An educator form platforms and place for learners to study independently and from one another and give constructive facilitation to the students as they are learning. The effectiveness of this teaching and learning activity precisely relies on the teacher teaching strategies.

The activity of learning is directed by many factors which are categorized into external and internal factors, the internal factors are the one which are related to the inner motivation of an individual who is studying, such as psychological, physical factors while external factors are those ones which are related with environment means are beyond an individual control on her/himself like family influence, school influence, and society factors (Santosa, Retnowati& Slameto,2020). Many researchers found out the factors which lead to academic achievement, they are namely teaching methods, learning methods which are considered as the key factors which contribute in improving teaching and learning process. Through perfect method which is expected to develop the activity of teaching and learning.

FREE BASIC EDUCATION AND LEARNING OUTCOME

The world has many different teaching method which even can be utilized by any one depending on his/her choice but with teaching method learning cannot be effective. This means that in order to have better academic performance, world should have better teaching methods which give time the clients to discover new things on their own.

Research methodology

This research used quantitative and qualitative approaches in examining the effect of free basic education reforms on learning outcomes in Rwandan 12 years basic of education. Burera district. According to Orodho (2005) descriptive research design is a technique of gathering information by administering a questionnaire to a sampled people. This design was considered suitable for this research due to its capability of elicit various range of baseline information. It can contribute speedy data collection with less of expense of money, time and efforts. Descriptive research design can even influence the development of techniques which can be used to bring important solution to the problems (Kombo& Tromp, 2006). This study was quantitative, means that the researcher utilized the data which was quantifiable.

This study was done in five twelve years basic education schools which was located in Burera District which was sampled from 17 twelve years basic of education from Burera District. These include: GS Bungwe, GS Gahunga, GS Kigeyo, GS Mucaca and GS Rusekera. The decision of selecting of those schools was done keeping in mind that that were a good number to represent seventeen 12 years of education operating in Burera District. The five schools were chosen using systematic sampling techniques whereby the schools were arranged alphabetically, and later the interval of four numbers was utilized to choose the best to be considered in the study.

The target population of this research consisted of 145 from which a sample of 103 respondents was chosen using the sampling table as elaborated by Krejcie and Morgan (1970). In addition, stratified (probability) sampling technique was used in choosing the respondents depending to the responsibility. By this technique, the researcher stratified the population into sub-groups having the same characteristic in common, and then from each group a particular sample is randomly chosen (Creswell, 2012).

Findings

This section involved presentation, interpretation and analysis of the findings of involved variables by using descriptive statistics of variables. For analysis researcher used maximum, minimum, mean and standard deviation.

Descriptive Statistics on Teaching approaches on learning outcomes

Statements	N	Min	Max	Mean	Std.
In this school, teachers use active teaching methods	103	1.00	5.00	4.2136	.84772
In this school, learning outcomes is affected by Teacher-Centered approaches	103	1.00	5.00	4.2233	.79128
In this school, learning outcomes is affected by Student-Centered / Constructivist Approach	103	1.00	5.00	4.2427	.82207

FREE BASIC EDUCATION AND LEARNING OUTCOME

In this school, learning outcomes is affected by Project-Based Learning	103	1.00	5.00	4.2136	.96660
In this school, learning outcomes is affected by lecturing methods.	103	1.00	5.00	4.3398	.78657
In this school, learning outcomes is affected by Inquiry-Based Learning	103	1.00	5.00	4.2039	.78415
In this school, learning outcomes is affected by Flipped Classroom	103	1.00	5.00	4.2913	1.05376
In this school, learning outcomes is affected by Cooperative Learning	103	1.00	5.00	4.2913	.81205
In this school, learning outcomes is affected by Personalized Education	103	1.00	5.00	4.3592	.79031
In this school, learning outcomes is affected by role play approaches	103	1.00	5.00	4.2718	.85399
Overall mean	103				

Note: Strongly Disagree = [1]= Very Low mean; Disagree= [1-2]=Low mean; Neutral= [2-3]=moderated mean; Agree= [3-4]=High mean; Strongly Agree= [4-5]= Very High mean

The results from the table 10, showed that the majority of respondents strongly agreed that the following factors influence learners’ academic performance. they are namely: In this school, teachers use active teaching methods($\mu=4.2136$ and $STD=0.84772$), In this school, learning outcomes is affected by Teacher-Centered approaches($\mu=4.2233$ and $STD=0.79128$), In this school, learning outcomes is affected by Student-Centered/ Constructivist Approach($\mu=4.2427$ and $STD=0.82207$), In this school, learning outcomes is affected by Project-Based Learning($\mu=4.2136$ and $STD=.96660$), In this school, learning outcomes is affected by lecturing methods($\mu=4.3398$ and $STD=0.78657$), In this school, learning outcomes is affected by Inquiry-Based Learning($\mu=4.2039$ and $STD=0.78415$), In this school, learning outcomes is affected by Flipped Classroom($\mu=4.2913$ and $STD=1.05376$), In this school, learning outcomes is affected by Cooperative Learning($\mu=4.2913$ and $STD=0.81205$), In this school, learning outcomes is affected by Personalized Education($\mu=4.3592$ and $STD=0.79031$), In this school, learning outcomes is affected by role play approaches($\mu=4.2718$ and $STD=0.85399$). Overall, results approved that most of the respondents strongly agreed that teaching approaches have significant relationship with learning outcomes in Rwandan 12 years basic education schools.

Descriptive Statistics on Class Size and learning outcomes

Statements	N	Min	Max	Mean	Std
In this school, Classrooms has high number of students.	103	1.00	5.00	4.3107	.86352
In this school, big number of students can prevent them to hear from teacher in class.	103	1.00	5.00	4.3786	.80582
In this school, number of students in one group is high.	103	1.00	5.00	4.2621	.91781
In this school, big number of students affect students to perform poorly	103	1.00	5.00	4.3786	.76845
In this school, number of students who supposed to be taught by one teacher is high.	103	1.00	5.00	4.3204	.78232
In this school, the instructional materials match with class size	103	1.00	5.00	4.5534	.80108
In this school, number of students who sit on chair is high.	103	1.00	5.00	4.3592	.79031
In this school, teacher-pupil ration is high.	103	1.00	5.00	3.8058	1.07611
In this school, every learner can get feedback from teacher for assigned tasks.	103	1.00	5.00	4.0388	.93853

FREE BASIC EDUCATION AND LEARNING OUTCOME

This school has adequate classes for accommodating, the number of learners you have.	103	1.00	5.00	4.0583	1.05557
Overall mean	103				

Note: Strongly Disagree = [1]= Very Low mean; Disagree= [1-2]=Low mean; Neutral= [2-3]=moderated mean; Agree= [3-4]=High mean; Strongly Agree= [4-5]= Very High mean

The results from the table 11, showed that the majority of respondents strongly agreed that the following factors influence learners' academic performance. they are namely: In this school, Classrooms has high number of students($\mu=4.3107$ and $STD=0.86352$), In this school, big number of students can prevent them to hear from teacher in class($\mu=4.3786$ and $STD=.80582$), In this school, number of students in one group is high($\mu=4.2621$ and $STD=0.91781$), In this school, big number of students affect students to perform poorly($\mu=4.3786$ and $STD=0.76845$), In this school, number of students who supposed to be taught by one teacher is high($\mu=4.3204$ and $STD=0.78232$), In this school, the instructional materials match with class size($\mu=4.5534$ and $STD=0.80108$), In this school, number of students who sit on chair is high($\mu=4.3592$ and $STD=.79031$), In this school, every learner can get feedback from teacher for assigned tasks($\mu=4.0388$ and $STD=.93853$), This school has adequate classes for accommodating number of learners you have($\mu=4.0583$ and $STD=1.05557$), In this school, teacher-pupil ration is high($\mu=3.8058$ and $STD=1.07611$). Overall, results approved that most of the respondents strongly agreed that class size has significant relationship with learning outcomes in Rwandan 12 years basic education schools.

Descriptive Statistics on learning outcomes

Statements	N	Min	Max	Mean	Std.
Marks of learners increased in last five years	103	1.00	5.00	4.2136	.91449
The number of learners who get rewards because of performance increased	103	1.00	5.00	4.3495	.72367
The numbers of learners who double in same years reduced in last five years	103	1.00	5.00	4.3204	.94156
In last five years, academic performance increased in national examination	103	1.00	5.00	4.4078	.80971
The number of unclassified learners in national examination reduced	103	1.00	5.00	4.4660	.69755
In last five years learners repetition reduced	103	1.00	5.00	4.3495	.73709
In last five years performance in school based exams increased	103	1.00	5.00	4.4466	.89364
In last year's learners who get letter for boarding schools increased	103	1.00	5.00	4.0388	.91740
Learners performance raised in district test in last five years	103	1.00	5.00	4.3981	.85566
The number of learners who get admission for undergraduate studies increased in last five years	103	1.00	5.00	4.2039	.79655
Valid N (listwise)	103				

Note: Strongly Disagree = [1]= Very Low mean; Disagree= [1-2]=Low mean; Neutral= [2-3]=moderated mean; Agree= [3-4]=High mean; Strongly Agree= [4-5]= Very High mean

The results from the table 12, showed that the majority of respondents strongly agreed that the following factors influence learners' academic performance. they are namely: Marks of learners increased in last five years($\mu=4.2136$ and $STD=.91449$), The number of learners who get rewards because of performance increased($\mu=4.3495$ and $STD=.72367$),

FREE BASIC EDUCATION AND LEARNING OUTCOME

The numbers of learners who double in same years reduced in last five years ($\mu=4.3204$ and $STD=.94156$), In last five years, academic performance increased in national examination ($\mu=4.4078$ and $STD=.80971$), The number of unclassified learners in national examination reduced ($\mu=4.4078$ and $STD=.69755$), In last five years learners repetition reduced ($\mu=4.3495$ and $STD=.73709$), In last five years performance in school based exams increased ($\mu=4.4466$ and $STD=.89364$), In last year's learners who get letter for boarding schools increased ($\mu=4.0388$ and $STD=.91740$), Learners performance raised in district test in last five years ($\mu=4.3981$ and $STD=.85566$), The number of learners who get admission for undergraduate studies increased in last five years ($\mu=4.2039$ and $STD=.79655$). Overall results indicated that the majority of respondents strongly agreed that learning outcome has increased since the time free basic education reforms were introduced.

Discussion

According to the objective number one study indicated that there is positive significance relationship between teaching approaches and learning outcomes ($r=.854$ and $p\text{-value}=0.002$). This implies that null hypothesis is rejected and alternative is confirmed that there is relationship between teaching approaches and learning outcomes. Many researchers indicated that Brandon, Hollweck, Donlevy and Whalen (2018). Indicated that the effectiveness of teaching method is manifested in the results of teaching and learning process in term of average scores, grades and classroom points. Teaching approaches are classified into two approaches which are teacher centered approaches and learners centered approaches (Bojinova & Oigara, 2011). Teacher centered approaches consist lecturing method, questioning. In this type of teaching, learning exist when teachers deliver content and later assess taught matter by providing exercises related to the content granted during or after delivering the lesson.

According to the objective number two study indicated that there is positive significance relationship between class size and learning outcomes ($r=.985$ and $p\text{-value}=0.000$). This implies that null hypothesis is rejected and alternative is confirmed that there is relationship between class size and learning outcomes. Many researchers do not have the same understanding on the impact of class size on learners' academic performance. Therefore some researches which were made confirmed small classes do favor learners' academic performance (Woessmann & West, 2006). while other researchers demonstrated the evidence of a significant effect (Krueger & Whitmore, 2001). Minimizing class size to improve learners' academic performance is a method which has been tried, discussed, and examined many years. The evidence appears logical: with little learners to educate, educators can achieve better academic outcomes for all learners. In spite of this prolonged discussion, there is fewer evidence to indicate that students taught in little classes do best in academic achievement than learners in

FREE BASIC EDUCATION AND LEARNING OUTCOME

bigger classes specifically in Africa especially in Kenya. According to (Hargreaves, Galton & Robinson,1996) disclosed that small class give teachers an opportunity to make follow up and give sufficient time to each students with regards to discussing on the duty and providing constructive feedback on work.

Conclusion

This study named: the relationship between free basic education reform and learning outcomes in Rwandan 12 years basic education schools: a case of Burera district. This an important topic which should be discussed by many organs, government, non-governmental organization and other partners who have direct relationship with education system. Teaching approaches another which manifested very strong correlation with learning outcomes since free basic education is well managed and monitored by head teachers in collaboration with teachers. Class size influence also the effective results of learning outcomes as they provide necessities required to develop learning outcomes in 12 years basic of education. Multiple correlation which was done in the study using Statistical Package for Social Science (SPSS) indicated that there is very strong correlation between the relationship between free basic education reform and learning outcomes in Rwandan 12 years basic education schools. Means that free basic education reform brought great change in education as stated by most of the respondents the program contribute to the increase of learning outcomes in Rwandan 12 year's basic education schools.

Recommendation

Government should make frequent school supervision on the implementation of free basic education reforms and make sure that sector education officers and head teachers have to internalize the program. The Government of Rwanda through the Ministry of Education should rationalize and equally distribute the few available teachers to all schools in the country.

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