

CONTRIBUTION OF COMPETENCE BASED CURRICULUM
TO THE IMPROVEMENT OF LEARNING EFFECTIVENESS IN
RWANDAN SECONDARY SCHOOLS:
A CASE OF BURERA DISTRICT

Ndandu Marcel

Scholar, University of Kigali

Sikubwabo Cyprien

Lecturer, University of Kigali

ISSN 2277-7733

Volume 10 Issue 4,

March 2022

Abstract

This research entitles the " to investigate the contribution of competence based curriculum to the improvement of learning effectiveness in Rwandan secondary schools and was guided by the following specific objectives: to examine the contribution of teaching methods for Competence Based Teaching (CBT) to the improvement of learning effectiveness towards their learners in Rwandan secondary schools, to explore the contribution of Assessment procedures for CBT to the improvement of learning effectiveness towards their learners in Rwandan secondary schools. The study adopted a descriptive research design. The population under this study consisted of head teachers, director in charge of studies and teachers of Burera District. Totaling 870 while as sample of 274 was potential respondents which took randomly. Data were collected using structured questions with 5-point Likert scales and an interview guide together with records. Quantitative data were analyzed using frequencies, percentages, standard deviation, means, and regression analysis. The finding from study concluded that there significant effect of teaching methods for CBT to the improvement of learning effectiveness towards their learners in Rwandan secondary schools, Assessment procedures for CBT to the improvement of learning effectiveness towards their learners in Rwandan secondary schools. SPSS were used to calculate regression analysis of the study. The study recommend the following: Government should make frequent monitoring and evaluation on the implementation competence based curriculum in all secondary schools.

Keywords: *academic performance, competence based curriculum, secondary, learning effectiveness*

The purpose of education system is to improve individual competence and qualities together with knowledge and skills that one can apply in real world to change his own ways of living and maximize the achievement of society in general. Education system has a duty of put finish product which will be able to compete at the market as explained by Schleicher (n.d.) cited by Lopez, et al. (2017: "Today, schools need to prepare students for more rapid economic and social change than ever before, for jobs that have not yet been created, to use technologies that have not yet been invented, and to solve social problems that we do not yet know will arise."The historical background of competency-based curriculum had root in the early 1970 when competency based teaching started in United States of America (Richards & Rodgers, 2014). It was an academic evolution that indicate education purpose in terms of accurate of knowledge, behaviors, skills, attitudes and values learners had to manifest at the final end of his/her study.

Subsequently, the reforms spread directly into European countries like England and in Germany during years of 1980s (Wolf, 2001) while other countries all over the world started adopting the reforms because they were admired to introduction of competency based curriculum in their education because of high change of technology and global market which was at high speed of globalization. High demands on the improvement of 21 century and introduction of technology to day to day life of human being and as well as the new movement of globalization at the labor market have influenced the structure and meaning of teaching and learning activities. This pushed everybody to search for new competencies to one personal or to the needs of society (hunter, 2009). The evolution of historical development of any given society determine the types of education system they must undergo. Nowadays world is experiencing the efforts that are being made by Europeans, American and others authorities around the world to perform the strategies that can link the type of education with the world of technology that people are living in. the world is living in knowledge economy and knowledge society, means that knowledge economy is motivated or developed by creativity and innovation while knowledge society, schools must develop innovation, creativity, attitudes and values which can let them remain in Knowledge economy otherwise citizens and their countries can be left behind in this technological world (Hargreaves, 2003).

According to Andrés, J. B. (2012) asserted that the ideas of competency based approach has background from industrial and psychological revolution. In the previous year's 1930 USA best developed country in the world started competency based norm equation which was designed to answer the needs of training workforce who can contribute in job creation instead of keeping eyes on government. In the next decade, 1970, performance of competency-based teacher Education Program (P/CBTE) which has relationship with entrepreneurial world seek the efficacy through retraining (based on human capital theory and behaviorism). In 1980 vocational education was developed as new conducive environment in education for making strict development of previous evolution of competency-based approach. Globally, competency-based approach was a crucial approach in their respective countries apart from USA other competency approaches had new wave in 1990 National Vocational Qualification (NVQs). In country like England and wales started in 1986, in new Zealand started National Qualification Framework (NQF), IN Australia they launched National Training Board(NTB). (Kerka, 1998).

In developing countries, especially African countries Competency-based Curriculum was firstly introduced in South Africa 1998, it was done because there were inadequacy of professionals such as engineers, artisans and technicians. South Africa introduce competency based curriculum because she wanted to change mindset of South African and prepare them with attitudes and values to deal with competitive labor market which was at high speed of reforms in 21st century (Mkonongwa, 2018).The movement of competency based curriculum is

new in African countries compared to western countries which started the adoption of this reforms in 1970s like USA, however developing countries copied this from western developed countries which are always in front of others in term of global economy and market. After colonization African countries adopted education system of the colonial masters which was based on regionalism, ethnics, discrimination and stereotypes in all corners.

Then, African countries adopted new curriculum reforms after the removal their traditional education system, most of those countries started contents and knowledge based curriculum but it did not satisfy their needs because its product were total academic in papers. Majority of the graduates did not have the skills and knowledge to apply to the workplace. Few African countries decided to adopt new education program with new philosophy of self-reliance but due to insufficient qualified teachers and inadequate instructional materials, the system terminated being inefficacy and lost its goals. This resulted into high school dropout and unemployment within the country. Nowadays, due to the technology and globalization the countries adopted competency based curriculum which equip the citizens with skills and knowledge which are responsive to the workplace.

Around 2016 the government of Rwanda moved from knowledge based curriculum to competency based curriculum (Rwanda Education Board, 2015b) apart from that, it was very grateful to adopt the change, difficulties and problems that teachers should face as they were the people to put into practice new implemented curriculum and as they are first curriculum implementers to the students. The philosophy of government was that learners must attain full potential in terms of having skills, knowledge, attitudes and values which could help them to fit themselves into the dynamic world and get high potential of competing unemployment with and out of the country (Rwanda Education Board, 2015b). This was done after revealing that there were a gap in employment opportunity, most of the graduates used to wait for working in government posts instead of creating their own job, this seems to be like trigger which pushed Rwandan government to introduce competency based curriculum.

Research questions

To examine the contribution of teaching methods for CBT to the improvement of learning effectiveness towards their learners in Rwandan secondary schools? And To explore the contribution of Assessment procedures for CBT to the improvement of learning effectiveness towards their learners in Rwandan secondary schools?

Theory of Multiple Intelligence in Learning

The theory of Multiple Learning in Learning, a theorist called Gardener (1983) in his theory entitled theory of theory of Multiple Learning in Learning indicated that students study different in different ways. According to him there are 8 intelligence in which a students can improve in order to gain a package of knowledge in their development like logical, mathematical, linguistic, kinesthetic, musical, spiritual, and interpersonal and intrapersonal intelligence (Gardner, 2008).

Weigel, Mulder and Collins (2007). Indicated that the “Crossman’s model theory of competence based education” gave an early opinion on the way practice enhance performance development. In addition to that the researcher further explained that when someone meets with challenges, there are many techniques that can be potentially utilized.

Thus, Crossman’s model qualifies as an example of a theory that proposes that practices leads to more As people put into practice the work, they might be monitoring of the impact that was found as results different strategies utilized. There are very important because it increased the implementation of activities and speed up impact. Crossman’s theory gives an account of influence of law of studying (Crossman, 1959), hence the researcher disclosed that teachers professional development is very important in developing achievement of educational and accuracy of competence based curriculum and this indicated that curriculum plays significant role in developing learners academic performance. But term competence is differs from skills, which is explained as the capability of accomplishing variety of acts with simple, precision and adaptability. Even if there is a relationship between the features and constraints of clear school situations and national education system (OECD, 2009). Teachers’ experience, qualification have a great powerful and impacts on students’ achievement (Rivkin, Hanushek & Kain, 2005).

The contribution of teaching methods for CBT in in improving teachers’ expectations towards their learners in Rwandan secondary schools.

A teacher is an important element in teaching and learning activities, because always respect the curriculum so that the scheme can be complete all across the years and planned knowledge become provided to the learners as planned. The main objective of teaching every all over world is to introduce significant change in the community and country in general (Tebabal & Kahssay, 2011). The common traditional teaching methods was teachers centered method where learners were treated as spectators who always are there for assisting the activities of teaching and learning. Students were passive no activities given to them but teachers always were there to deliver the contents (Tebabal & Kahssay, 2011). For rising teachers’ expectation in improving students teaching methods for CBC is very important in educational institutions. Learners-centered methods which is very efficient and effective are advised to be used in teaching and learning activities because it always improve the concept of innovation and creativity in learning (Brindley, 2015).

Majority of teachers currently use learners centered approach to develop the benefit, analytical research, critical thinking and happiness among the learners (Hesson& Shad, 2007). Delivering knowledge asks educators to utilize the right method and pedagogy that motivate learners and design the objectives and expected impact. Poor learning achievement by big part of learners in different subject areas is directly relate to the use of ineffective teaching methods by educators to deliver knowledge to students and finally educators have to be

familiar with various teaching methods (Adunola, 2011). Teaching is a vocation of people who transmit knowledge, skills, attitudes and values specifically in elementary and high schools or in higher institutions. According to Ayeni (2011) teaching can be explained as a systematic process of delivering knowledge and skills by respecting professional principle.

The contribution of Assessment procedures for CBT in improving teachers' expectations towards their learners in Rwandan secondary schools.

Assessment for studying or constructive evaluation is explained as the way used by educators and students during teaching and learning activities which give constructive feedback to adjust continuous teaching and learning to develop learners' academic performance of envisioned instructional objectives (Sadler, 1989). According to Mitchell and Popham, (2008) the assessment for studying is arranged activities in which the fact of learners' status is utilized by educators to change their ongoing instructional processes or utilized by learners to amend their present learning technics. Assessment for studying or for constructive aims is targeted to assist studying while instruction and studying are taking place. It is quite serious to fill the gap learners' present status and their proposed learning objectives (Heritage, 2012).

Assessment for learning is normally contrasted with summative assessment. Evaluation for taking in contrasts from summative appraisal in that the last is by and large worried about summarizing or summing up the accomplishment status of understudies, and is coordinated towards detailing understudies' status toward the finish of a course of study for reasons for affirmation It is additionally detailed that summative evaluation is intrinsically inactive and doesn't typically promptly affect learning in spite of the fact that it regularly impacts choices which might have significant instructive and individual ramifications for the understudies (Sadler, 1989). Summative evaluation role is enclosed to clarify whether a learner has attained a given rate of competence after specific time of learning, for instance a unit, academic year, or even twelve year time of schooling (NRC, 2001).

Methodology

Study target 786 teachers, 42 directors of studies and 42 headteachers, in total study population was 870 people. The sample size of this project was decided using the formula of Yamane (1967). As per Yamane, the formula of sample size decision was as follows:

$$n = \frac{N}{1 + N(e)^2}$$

For this formula N= population, N=sample size, e= sampling error which is equal to 0.05; Population (N) = 786+42+42=870

$$n = \frac{870}{1+870(0.05)^2} = 274$$

Findings

Descriptive Statistics for teaching methods for CBT on learning effectiveness

Statements	N	Min	Max	Mean	Std.
In this school, teachers use based learning	274	1.00	5.00	4.2080	.91215

COMPETENCE BASED CURRICULUM

In this school teachers use active methods	274	1.00	5.00	4.3066	.89001
In this school, teachers use group work	274	1.00	5.00	4.0803	1.08980
In this school, teachers apply bloom taxonomy	274	1.00	5.00	4.3686	.87239
In this school, teachers cooperative learning	274	1.00	5.00	4.4927	.76672
In this school teacher use participative learning	274	1.00	5.00	4.2153	.86929
In this school, teachers use role play methods	274	1.00	5.00	4.1971	.94026
In this school teacher use learners centered methods	274	1.00	5.00	3.9964	1.02888
In this school, teachers use drama in teaching and learning	274	1.00	5.00	4.1825	1.01432
In this school, question answer methods while teaching	274	1.00	5.00	4.1934	.95070
Overall	274			4.2240	0.93345

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 table, revealed that majority of the respondents approved the following factors affect learning effectiveness. They are namely: In this school, teachers use based learning(Mean=4.2080 and STD=.91215), In this school teachers use active methods(Mean=4.3066 and STD=.89001), In this school, teachers use group work(Mean=4.0803 and STD=1.08980), In this school, teachers apply bloom taxonomy(Mean=4.3686 and STD=.87239), In this school, teachers cooperative learning(Mean=4.4927 and STD=.76672), In this school teacher use participative learning(Mean=4.2153 and STD=.86929), In this school, teachers use role play methods(Mean=4.1971 and STD=.94026), In this school teacher use learners centered methods(Mean=3.9964 and STD=1.02888), In this school, teachers use drama in teaching and learning(Mean=4.1825 and STD=1.01432), In this school, question answer methods while teaching(Mean=4.1934 and STD=.95070). The overall Mean and standard deviation from the table are (Mean=4.2240 and STD=0.93345). Most of the respondents approved that Teaching methods for CBT affect learning effectiveness.

Descriptive Statistics for Assessment procedures for CBT on learning effectiveness

Statements	N	Min	Max	Mean	Std.
In this school, teacher provide feedback on time	274	1.00	5.00	4.2409	.87727
In this school, teachers given formative assessment regular	274	1.00	5.00	4.3066	1.03819
In this school, teachers provide summative assessment well	274	1.00	5.00	4.2445	.95045
In this school, teachers record mark for home works	274	1.00	5.00	4.3540	.88674
In this school, teachers provide short quizzes	274	1.00	5.00	4.2701	.91390
In this school, teachers check the books of learners	274	1.00	5.00	4.2628	.97793
In this school, teachers appreciate work done of the students	274	1.00	5.00	4.0839	1.04666
In this schools, learners are given sufficient time for asking questions	274	1.00	5.00	4.2409	.93390
In this school, teachers have quizzes notebooks	274	1.00	5.00	4.3869	.93172
In this school, are given external tests	274	1.00	5.00	4.0949	1.04045
Overall	274			4.2485	0.95972

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 table, showed that majority of respondents strongly agreed that the following factors influence learning process as they follow: In this school, teacher provide feedback on time(Mean=4.2409 and STD=.87727), In this

school, teachers given formative assessment regular (Mean=4.3066 and STD=1.03819), In this school, teachers provide summative assessment well (Mean=4.2445 and STD=.95045), In this school, teachers record mark for home works (Mean=4.3540 and STD=.88674), In this school, teachers provide short quizzes (Mean=4.2701 and STD=.91390), In this school, teachers check the books of learners (Mean=4.2628 and STD=.97793), In this school, teachers appreciate work done of the students (Mean=4.0839 and STD=1.04666), In this schools, learners are given sufficient time for asking questions (Mean=4.2409 and STD=.93390), In this school, teachers have quizzes notebooks (Mean=4.3869 and STD=.93172), In this school, learners are given external tests (Mean=4.0949 and STD=1.04045). The overall mean and standard deviation approved that assessment procedures for CBT affect learning effectiveness (Mean=4.2485 and STD=0.95972).

Discussion

The findings from the objective number one which is examine the contribution of teaching methods for CBT in improving learning effectiveness in Rwandan secondary schools. The results indicated that there is positive and significant effect of the teaching methods for CBT in improving learning effectiveness in Rwandan secondary schools (B=0.858, P value >0.05). Means that null of hypotheses was rejected and alternative hypotheses were accepted.

The findings from the objective number two which is to explore the contribution of Assessment procedures for CBT in improving learning effectiveness in Rwandan secondary schools. The results indicated that there is positive and significant effect of the Assessment procedures for CBT in improving learning effectiveness in Rwandan secondary schools (B=0.909, P value >0.05). Means that null of hypotheses was rejected and alternative hypotheses were accepted.

Conclusion

Basing on the findings of the study, as the study wanted to investigate the contribution of competence based curriculum to the in improving learning effectiveness in Rwandan secondary while analyzing specific objectives which were teaching methods for CBT, assessment procedures for CBT none have shown negative results in the study. Means that all of the objectives have significance relationship with learning effectiveness in Rwandan secondary schools, since none of hypothesis tested negative this means that alternative objectives were accepted while null were rejected. The researcher concluded that there significant effect of competence based curriculum to the improvement of learning effectiveness in Rwandan secondary schools.

References

- Adunola, O. M. O. T. E. R. E. (2011). An analysis of the relationship between class size and academic performance of students. *Nigeria: Ego Booster Books.*
- Ayeni, A. J. (2011). Teachers' Professional Development and Quality Assurance in Nigerian Secondary Schools. *World journal of Education, 1*(1), 143-149.

COMPETENCE BASED CURRICULUM

- Brindley, S. (2015). *A critical investigation of the role of teacher research and its relationship to teacher professionalism, knowledge and identity* (Doctoral dissertation, UCL Institute of Education).
- Gardner, H. (2008). The five minds for the future. *Schools*, 5(1/2), 17-24.
- Hargreaves, A. (2003). *Teaching in the knowledge society: Education in the age of insecurity*. Teachers College Press.
- Heritage, J. (2012). Epistemics in action: Action formation and territories of knowledge. *Research on language & social interaction*, 45(1), 1-29.
- Hunter, G. E. (2009). Utilizing Social Networking as a Business Marketing Tool for NGOs. *Law Technology*, 42(4), 1.
- Mkonongwa, L. M. (2018). Competency-based teaching and learning approach towards quality education. *Dar es salaam University College of Education (DUCE)*.
- Rivkin, S. G., Hanushek, E. A., & Kain, J. F. (2005). Teachers, schools, and academic achievement. *Econometrica*, 73(2), 417-458.
- Sadler, D. R. (1989). Formative assessment and the design of instructional systems. *Instructional science*, 18(2), 119-144.
- Weigel, T., Mulder, M., & Collins, K. (2007). The concept of competence in the development of vocational education and training in selected EU member states. *Journal of Vocational Education & Training*, 59(1), 53-66
- Wolf, A. (2001). Competence based assessments. *The British Journal of General Practice*, 55(515), 461-467.
- Yamane, T. (1967). *Statistics, an introductory Analysis* (2nd ed.) New York: Harper and Row.