

REACTION OF TEACHERS AND LEARNERS TO THE CONSTRUCTIVISM BASED CURRICULUM

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Abstract

The researchers were intrigued about the learner centered curriculum which is now familiarly referred to as “The new curriculum” which the Ministry of Education and Sports in Uganda introduced in 2020. Much publicity was made about it and there were some reactions about this curriculum from the society, while authorities from the Ministry of Education and Sports were threatening to take punitive action against those teachers and other people who would interfere with the smooth application of this curriculum. The researchers wanted to find out the reaction of teachers and learners to this learner centered curriculum. The research was underpinned by Tyler’s curriculum planning model and by the constructivism theory of teaching and learning. This research was carried out in some secondary schools in Wakiso district and in Lubaga and Makindye divisions of Kampala, Uganda. The researchers used a descriptive survey design because it suited very well what the authors wanted to find out. Surprisingly, the researchers found out that teachers and learners reacted positively to this learner centered curriculum. Except the teachers pointed out three challenges namely, large number of learners in classrooms, clumsy furniture which is not ideal for group work in those classrooms and a great shortage of learners’ text books. It was concluded that since the teachers and learners reacted positively to this new curriculum, it has a good chance to succeed. The researchers recommended that the Ministry of Education and Sports should endeavor to produce enough text books for learners. The schools should divide up learners of one year into manageable numbers. Also progressively, administrators of the schools should provide furniture in classrooms which is ideal for group work and the Ministry of Education and Sports should appoint enough teachers to those secondary schools which have got very many learners.

Key words:

Jean Piaget, Jerome Bruner, Lev Vygotsky, constructivism theory of teaching and learning, Tyler’s curriculum planning model.

Introduction

Education systems the world over, change or adjust their curricula due to the following factors:

Historical consideration, needs of a country, sociological perspective, philosophical consideration, political issues and technological changes.

The Ministry of Education and Sports in Uganda has been engaged in changing its curriculum based on one or two of the above factors.

The most recent introduction of a new curriculum was launched in 2020 called the competence based curriculum based on the constructivism theory of teaching and learning. The name of this curriculum implies that historically the curriculum in Uganda has not been emphasizing the learner centeredness approach in teaching and learning and assessment in order to train and produce learners who should think for themselves to solve challenges which will face them in adult life.

This new curriculum has been in existence for three years now. There is need to find out the reaction to it by teachers and learners in Uganda, these being the main players in the implementation of this new curriculum.

Historical consideration

Traditionally in Uganda, teaching and learning and assessment in the classrooms have been teacher centered. The teacher has been telling the learners facts which they would learn and also copy those facts in their note books, expecting to cram them and throw them back in an examination. In a fashion of this nature, the learners do not contribute to the construction of what they learn. The learners are like containers which expect to be filled up by the teachers. One witty person said thus:

“The mind is not a vessel to be filled but a fire to be kindled”. Plutarch. Yet David Schwartz indicated as follows, “The ability to know how to get information is more important than using the mind as a garage of facts.” Yet Blaise Paisea thus said, “People are usually more convinced by reasons they discovered themselves than those found by others” (Senteza Kajubi (2019).

Theoretical consideration

This study has been underpinned by two academic considerations. One consideration is Tyler’s curriculum planning model. The second consideration is the constructivism theory of teaching and learning of Lev Vygotsky, Jean Piaget and Jerome Bruner.

Tyler’s curriculum planning model answers four fundamental questions namely,

- a) What educational purposes should the school curriculum seek to attain?
- b) What educational experiences can be provided which are likely to attain these purposes?
- c) How can these educational experiences be effectively organized?
- d) How can we determine whether these purposes are being attained?

The constructivism theory of teaching and learning, aims at making the learners to construct their own knowledge deducing it from the materials and scenarios which the teacher has purposely and selectively presented to them. The constructivism theory makes teachers guides to the learners in their efforts to construct the knowledge which they should learn.

Teachers are not expected to give facts to learners and notes but to guide the learners to find out those facts through working in groups and report those facts to the teacher and to the rest of the learners in the classroom and write their own notes on the chalkboard for future reference.

The role of the teacher is to walk from group to group listening to the way the learners are discussing and give assistance where it may be required.

At the time, when the individual groups are reporting their findings, the teacher should be attentive so that no wrong conclusions are made. The teacher is expected to amplify the findings of the learners. The learners write their own notes on the chalkboard which every learner writes in his/her note book. The teacher is not expected at the end of the learners' reporting to dictate his/her own version of notes, or to write on the chalkboard his/her own version of notes for the learners to copy (NCDC Ref. New Curriculum Teachers' Training 2020).

In the last analysis, the learners in a lesson are the ones who construct their own knowledge and their own notes. The teacher's talking and writing on the chalkboard are kept down to the minimum level.

The constructivism theory of teaching and learning aims at producing confident and critical independent thinkers, who collaborate with their colleagues and who accept views of other people which may be different from theirs.

In view of the exposition of Tyler's curriculum planning model and of the constructivism theory of teaching and learning; both complement each other. That is why the researchers chose both of them to underpin this study.

Contextual consideration

The modern global trend requires schools to train and produce learners who can think for themselves and be prepared to solve challenges which will face them in adult life. This justifies the introduction of the competence based curriculum in Uganda's education system by the Ministry of Education and Sports. Several other countries in Africa are also adjusting their curricula along that of the Ministry of Education in Uganda. (Ref. Curriculum Reviews Across Africa 2017 World Bank Washington DC 2010).

Conceptual consideration

When a new curriculum is introduced at any school level, it affects teachers' methods of teaching, learners and formative and summative assessment. It affects school administration in terms of classrooms, furniture in the classrooms, space of classrooms, time-tabling, textbooks, attitudes of both teachers and learners and some stake holders such as parents. It affects the number of teachers whether their numbers to be increased or to be decreased. It requires induction of already practicing teachers. It affects the training of teachers in teacher education institutions. It affects the nature of examination questions which UNEB has to set. **It also affects university teaching, the next stage where learners from secondary schools go and other tertiary institutions.** Therefore the competence based curriculum which the Ministry of Education and Sports introduced in 2020 is bound to affect many aspects of the education system of Uganda along the above lines.

In the final analysis, the Ministry of Education and Sports in Uganda needs to expect and be prepared for the above challenges while implementing the competence based curriculum which has been given the name of "the new curriculum".

Problem statement

In 2020, the Ministry of Education and Sports in Uganda launched the competence based curriculum which has been called "a new curriculum" in Uganda. Plenty of publicity has been made about it and it continues to be made, while also there were in society, some voices expressing misgivings about it. While on the other hand, there are some threats to teachers and head teachers who may show resistance to this curriculum. (Dr. J.C. Musingo. Bukedde, Tuesday 25.3.23).

It is now three years since this curriculum has been in operation. The researchers have been intrigued to find out how teachers and learners have reacted to this competence based curriculum in some secondary schools in Wakiso district, Lubaga Division and Makindye Division, Kampala – Uganda.

Purpose of the study

The researchers wanted to find out how some teachers and learners have reacted to the competence based curriculum which is intended to replace the teacher centered curriculum to which they were used.

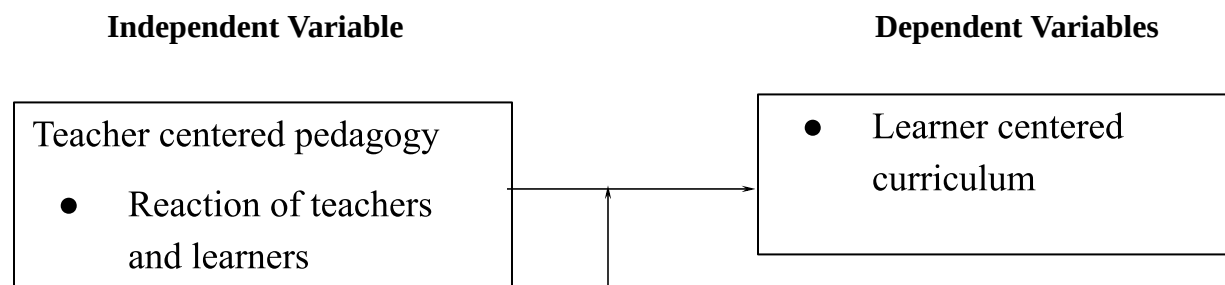
Objectives of the study

The study was guided by the following objectives;

1. To find out the reaction of teachers and learners to teaching and learning according to the learner centered approach to teaching and learning in selected secondary schools in Wakiso District, Makindye Division and Lubaga Division in Kampala, Uganda.
2. To find out whether the teachers and learners feel that learners learn anything under the competence based curriculum in selected secondary schools of Wakiso District in Lubaga Division and Makindye Division of Kampala District, Uganda.
3. To find out how teachers and learners are trying to accommodate themselves to teaching and learning under the learner centered approach in selected secondary schools in Wakiso District, in Lubaga division and Makindye division of Kampala District, Uganda.

CONCEPTUAL FRAMEWORK

Reactions of teachers and learners to the competence based curriculum



- Large numbers of learners.
- Narrow classrooms.
- Clumsy furniture in classrooms.
- Provision of teaching materials.
- Assessment of learners.
- Shortage of teachers.

Source: Constructed by the researchers

Explanation of the conceptual framework

The reaction of the teachers and learners is the independent variable while the learner centered curriculum is the dependent variable. The pedagogy of effecting the learner centered pedagogy, will meet large numbers of learners in classrooms, limited area in classrooms, furniture which is not easy to use for group work.

Inadequate number of teachers in secondary schools.

Assessment of individual learners who are very many and difficult to reach, all these will form extraneous variables.

LITERATURE REVIEW

Introduction

This chapter covers the theoretical review, real literature and the summary of literature review. The information covered in this chapter is got from both primary and secondary sources which is related to curriculum review.

The study was guided by Tyler's curriculum planning model and by the constructivism theory of teaching and learning of Vygotsky, Piaget and Bruner.

Tyler's curriculum planning model seeks to answer four fundamental questions namely, the purposes which the school curriculum seeks to attain, the experiences which can be provided to attain the above purposes, how to organize the experiences effectively, and the way we can determine whether the purposes are being attained.

The constructivism theory of teaching and learning aims at making the learners to construct their own knowledge deducing it from the materials and scenarios which the teacher has presented to them. The teacher takes the role of a guide but not that of announcing facts to the learners.

Reaction of teachers and learners to the learner centered curriculum

The competence based curriculum was introduced in Uganda after realizing that the teacher centered curriculum which was in existence could no longer satisfy the society's needs by its methodology and assessment approaches.

(Curriculum framework by NCDC of the Ministry of Education and Sports 2020 and curriculum reviews across Africa, World Bank Washington DC 2010).

The competence based curriculum presents entirely different pedagogical and assessment approaches from those of the teacher centered approaches (Ssekamwa J.C. 2020 General Methods of Teaching Model, on Nkumba University website).

For example, according to the constructivism teaching and learning theory, learners learn by actively constructing their own knowledge through active learning, collaborating learning and problem based learning. This approach is quite different from when the teachers' role was by announcing facts to the learners and giving them notes to copy in their note books.

Regarding assessment, learners are required to assess themselves through self assessment, called assessment for learning instead of testing only knowledge by the teacher. (Curriculum framework NDC document 2020).

How teachers and learners accommodate themselves to the new curriculum changes.

When changes are introduced in a curriculum, it finds many already practicing teachers and learners who are used to the phasing out curriculum in terms of content, pedagogy and assessment.

One expects some kind of reaction from the practicing teachers and from learners who have been used to the phasing out curriculum.

In this respect, Kelly A.V (2018) points out as follows:

“Teachers and head teachers have been trained in certain ways to teach certain subjects or by certain methods, so that there is a strong temptation for them not to want these changes to a degree which will requires them to start again from scratch, to learn new techniques of working within a subject or a set of techniques with which they are not at home.” Kelly A.V. (2018).

The competence based curriculum requires the teachers and learners to accommodate two things namely pedagogy and assessment. In terms of pedagogy the competence based curriculum requires a shift from knowledge transmission approach to a more active learning approach in which learners are challenged to think for themselves, draw conclusions, solve problems and making their own judgment. (Curriculum Framework NCDC Uganda 2020). One teacher who was interviewed said, “The new curriculum demands much of a teacher in preparing study materials and assessing the learners within a lesson.”

The role of the teacher is to build on the learners’ existing knowledge and experiences by posing problems to the learners to solve.

This makes the learners to think about their own ideas. This approach makes much demands on the teacher because he/she has to provide constantly different study materials and different scenarios especially where the text books from the Ministry of Education and Sports may not be available or may not be adequate. (Kelly A.V. 2018).

As regards the learners, they want the teacher to tell them instead of requiring them to find out the knowledge which they are supposed to learn. This is called active learning. This combines with collaborative learning based on problem solving. In one lesson which the researcers

attended, the learners cried out to the teacher: “Tell us, since you know it, instead for us to look for it”.

In terms of assessment, the teacher is required to carry out formative assessment to provide feedback to learners on their learning so that the learners identify their strengths and weaknesses there and then, while the summative assessment at the end of a topic helps him/her to measure learners’ learning at the end of a unit. (Tyler’s curriculum planning model (2018).

The teacher will also carry out portfolio assessment to track learners’ progress and assess their skills and knowledge in a variety of areas.

Then there will be assessing the projects of learners to assess learning through hands-on activities.

The teacher may look at what all the above demands on them as too much. One teacher was heard saying; “To fulfill the requirements of the new curriculum, the teacher must be resourceful”. All the above demands are entailed in the Ministry of Education and Sports 2020 document. It also appears in the training manual entitled “New Lower School Secondary Curriculum” by Rutahenda Deus R., Trainer of NCDC 2022 and in the document called New curriculum Teachers’ Training 2020 of NCDC.

METHODOLOGY

Research design

This study used the descriptive survey design, specifically the descriptive correlation strategies. Descriptive studies are non-experimental researches that describe the characteristics of a particular individual, or of a group. It dealt with the relationship between variables, testing of hypotheses and development of generalizations and use of theories that have universal validity. It was also involved in events that have already taken place and was related to present conditions (Kothari, 2004). Further, descriptive surveys were used to discover casual relationships (descriptive correlation) to provide precise qualitative description and to observe behavior (Amin, 2005).

3.2 Research Population

The target population included a total of 900 learners and 17 teachers of the selected schools in Lubaga, Makindye in Kampala district and Wakiso district in Uganda.

3.2.1 Sample Size

This research utilized the Krejcie and Morgan's table in determining Sample Size for Research Activities. The table suggested that a sample size of 286 was appropriate.

Table 3.1: The selected sample size;

Category	Target population	Sample size	Sampling technique
Teachers	17	17	Purposive sampling
Learners	900	269	Simple random
Total	917	286	

Source: Primary source

3.4 Sampling technique

The sampling technique utilized in this study was simple random sampling whereby each respondent was given an equal chance of being selected to participate in this study. Still, simple random sampling was used to get the specific respondents to be interviewed from each of the respondents until the required population was achieved.

3.5 Research instruments

The data collection instruments were self-administered questionnaires and an interview guide. Both structured and unstructured questionnaires were used to collect data. A structured questionnaire was used as it contains a list of possible alternatives from which respondents could select an answer that best suited their situation. Unstructured questionnaires (open ended) were also used as it provided freedom for respondents to express their feelings because they permitted depth response.

3.6 Validity and reliability of the instruments

3.6.1 Testing the validity of the research instruments

By definition, validity of an instrument means that the instrument measures what it is meant to measure.

The questionnaire was given to experienced researchers to judge the validity of questions according to the objectives. After the assessment of the questionnaire, the necessary adjustments were made bearing in mind the objectives of the study. Then a content validity index (CVI) was obtained using the following formula,

$$\text{C.V.I} = \frac{\text{No. of questions declared valid}}{\text{Total no. of questions in the questionnaire}}$$

3.7 Reliability of the Instrument

By definition, reliability of an instrument is the consistency at whatever time it is used and it gives the same result.

One of the most popular reliability statistics in use was Cronbach's alpha (Cronbach, 1951). Cronbach's alpha determines the internal consistency or average correlation of the items in the survey. The alpha coefficient ranges between 0 and 1 and may be used to describe the reliability of factors extracted from dichotomous (that is questions with two possible answers and/or multipoint formatted questionnaires).

Cronbach's alpha was used to test the reliability of the instruments using SPSS package. The higher the alpha, the more reliable the assessment in the scales. Nunnally (1978) and Grayson (2004) recommend a cut-off coefficient point of 0.7 to be an acceptable reliability coefficient.

3.8 Data analysis

The frequency and percentage distributions were used to determine the demographic characteristics of the respondents. The means and standard deviations were applied in order to

assess the reaction of teachers and learners towards the methods used in the competence based curriculum.

The following mean ranges and descriptions were used to interpret responses:

For the Reaction of teachers and learners to the competence based curriculum.

Mean Range	Response Mode	Interpretation
3.26-4.00	Strongly agree	Very Good
2.51-3.25	Agree	Good
1.76-2.50	Disagree	Poor
1.00-1.75	Strongly disagree	Very Poor

Source: Primary source

The researchers used Pearson’s Linear Correlation Coefficient (PLCC) and linear regression model to analyze the reaction of teachers and learners towards the methods used in the competence based curriculum.

3.9 Ethical considerations

To ensure utmost confidentiality for the respondents and the data, the researchers ensured that participants’ rights, including the right to be informed about the study, the right to freely decide whether to participate in the study, and the right to withdraw at any time without penalty were considered. The participants were requested to sign an informed consent form assuring them that all data collected was coded to protect their identity and privacy.

PRESENTATION OF RESULTS AND INTERPRETATION

4.3 Background information of respondents.

Data on background information of respondents was collected because it had influence on respondents’ responses to the responses on the reaction of teachers and learners to the methods used in the competence based curriculum.

(a)Gender

The study sought participation from respondents without gender bias and so it was important to

The results are presented in the

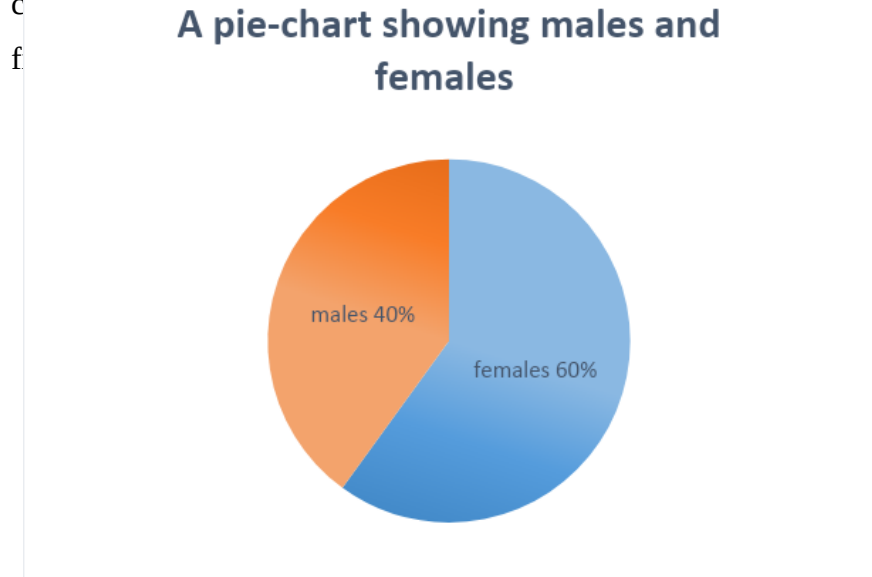


figure 4.1 shows a Pie-chart of males and females

Female – 60%

Male – 40%

Source: Primary Source.

Figure 4.1 Results here

indicate that the majority 60% of respondents were females. This showed that there were more female respondents in the secondary schools that participated in the study compared to male respondents.

Age bracket

Age can be determined by the quality of responses from study participants. Hence it was important to collect data on age characteristics of the study participants.

Table 4.4 Showing age characteristics of Teachers and Learners.

Age	Frequency	Percentage	Valid
10 – 13 years	12	16	16
13 – 16 years	25	33	33
16 – 18 years	18	24	24
18 – 26 years	11	15	15
25 and above	09	12	12
Total	75	100	100

Source: Primary source.

Total 4.4 Age bracket characteristics of Teachers and learners.

Results showed that 30% of the respondents were in the bracket of 13 – 16 years, 24% were in the bracket of 16 – 18 years, 16% were below 10 years and 12% were above 26 years.

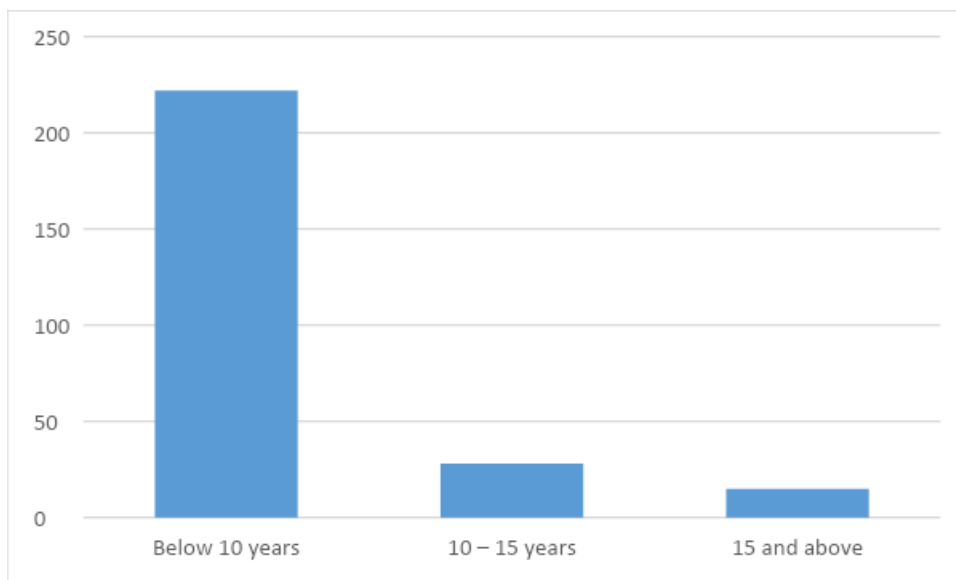
4.4.4 Years spent in school.

Here researchers wanted to find out how long respondents had stayed in respective secondary schools. Respondents with a long working experience have a good knowledge of the subject matter.

Below 10 years	222
10 – 15 years	28
15 and above	15

Source: Primary data 2023

Fig. 4.3. A graph showing years spent in school



Source: Primary source

4.5 Presentation of findings

This section presents a description on the reaction of teachers and learners in Lubaga and Makindye in Kampala District and Wakiso district

4.5.1 The kind of teaching and assessment methods which teachers were using before the introduction of the competence based curriculum in selected secondary schools.

Objective one of the study sought to find out the reactions of teachers and learners to the learner centered approach to learning.

On whether teachers have adopted the new teaching method, 100% of the respondents answered positively. This implied that teachers in Lubaga division, Makindye division and Wakiso district have positively responded to the changes in the curriculum by adopting to the new teaching methods.

4.6 Identify the difference of learning and assessment methods of the competence based curriculum from those the teachers were using before what they are using.

The teachers and learners answered that there was a great difference This implies that the teaching methods used now are more appropriate as compared to those that were being used in the old teacher centered curriculum and learners found learning more enjoyable. Some learners said thus, “Learning now is fun and we don’t get bored.”

Some teachers said thus, “This approach to learning makes it easy as it helps the teacher to use the competences in the curriculum to determine the best approach to learning hence making learning easy and interesting.”

4.7 To find out how teachers and learners were trying to accommodate themselves to the competence based curriculum and assessment methods.

The majority of teachers accepted the method of assessment but their concern was about the large numbers of learners in a classroom. The learners however, were not aware that they were always being assessed in each lesson.

On whether the books were provided, 75% of the respondents said that the books were not enough for all learners, and they suggested the need for the Ministry of Education and Sports to provide enough text books for the learners' use.

The teachers on the issue of books said thus, "The text books from the Ministry of Education and Sports can hardly be adequate especially in classrooms where over 100 learners are involved. This makes a teacher to provide alternative sources which learners have to use in a lesson. "The teachers have got to be quite resourceful and its takes much time of the teacher's time".

DISCUSSION, CONCLUSION AND RECOMMENDATION

5.1 Introduction

Chapter five presents the discussion, summary of the findings, conclusions and recommendations in line with the objectives of the study.

5.2 Discussion of findings

From the results of the study, it was observed that there is a significant relationship between the new teaching and assessment methods and teachers and learner's reaction to the curriculum.

Findings showed that teachers and learners responded positively to the changes brought about by the new curriculum.

5.2.3 Difference of teaching and assessment methods of the competence based curriculum.

The study findings showed that there is a significant correlation between the methods of teaching and assessment used in the new curriculum with those of the old curriculum and the learners have reacted positively to the new curriculum.

5.2.3 Teachers and learners' reaction to the CBC teaching and assessment methods.

From the findings of the study, both teachers and learners showed that they positively responded and adjusted to the changes brought about by the competence based curriculum. Except the teachers expressed uneasiness where the number of learners in a lesson exceed forty learners. One teacher said thus,” A history class of 2b in my school has 115 learners. I can hardly move in the room to talk to them, yet I am supposed to reach each learner and exploit his/her ability. Honestly, it is difficult to handle and manage a class of this nature.”

Conclusions

The researchers concluded that teachers have adopted the teaching and assessment methods required by the competence based curriculum and this has had a positive impact on the teaching and learning in the divisions of Makindye and Lubaga and in Wakiso district.

5.5 Recommendations.

Based on the findings of the study, the following recommendations were made.

1. Workshops should regularly be organized for teachers to consolidate the necessary required skills to teach the new school curriculum effectively.
2. Enough teaching materials should be provided for learners to ease the problem of teachers to provide source of teaching materials.
3. The National Examinations Board should provide a sample of the national examinations. This will enable teachers and learners to adjust well to the assessment of learners.
4. Schools should divide up learners into groups which are easy to handle by a teacher in a lesson. Learners who exceed one hundred in a single classroom with clumsy furniture are difficult to give attention.
5. Schools should progressively provide furniture in the classrooms which is easy for group work.

6. Time tabling needs also to be reconsidered. Teaching and learning in a single lesson does not give adequate time for the learners' discussion, reporting, teachers' amplification on the contribution of the learners.
7. This research applied to a few schools in Wakiso district, Lubaga division and Makindye division of Kampala, Uganda. This area is nearly urban. It is therefore necessary for this kind of research to be carried out in different districts away from Kampala capital city of Uganda.
8. The Ministry of Education needs to appoint an adequate number of teachers in secondary schools to reduce the very large number of learners a teacher has to handle in one classroom.
9. Universities and other tertiary institutions need to be aware that their future clients have been educated differently from a teacher centered curriculum to a learner centered curriculum. This may require them to reflect on their way of teaching.

The above recommendations mirror the old adage of putting new wine into old bags. The learner centered curriculum is using the structures of the teacher centered curriculum. This is the heart of the matter.

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