MAKERERE **UNIVERSITY**

COLLEGE OF EDUCATION AND EXTERNAL STUDIES

SCHOOL OF EDUCATION

DEPARTMENT OF SCIENCE, TECHINICAL AND VOCATIONAL EDUCATION DSTVE

THE PERCEPTION OF TEACHER TRAINEES FROM MAKERERE UNIVERSITY ON THE IMPLEMENTATION OF THE NEW LOWER SECONDARY SCHOOL CURRICULUM: A CASE STUDY OF RUBAGA, KAWEMPE AND CENTRAL DIVISIONS OF KAMPALA

BY

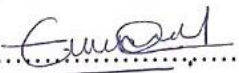| NAME	REGISTRATION NUMBER	STUDENT NUMBER
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A RESEARCH REPORT SUBMITTED TO THE DEPARTMENT OF SCIENCE, TECHNICAL AND VOCATIONAL EDUCATION, COLLEGE OF EDUCATION AND EXTERNAL STUDIES IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE AWARD OF BACHELOR'S DEGREE OF SCIENCE WITH EDUCATION

DECEMBER, 2022

DECLARATION

We Mugisa Robert Sanyu, Zinart Jonah, Oule Samuel and Odinya Solomon declare that this research report is our own original work and has not been submitted to any University or higher institution for any award.
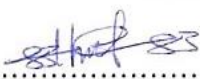
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APPROVAL

I hereby certify that this work has been submitted with my approval as a University supervisor, Makerere University, College of Education and External Studies.

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DEDICATION

We dedicate this work to our families for they have been of great support and motivation throughout the course of this study.

ACKNOWLEDGEMENTS

ACRONYMS

UPE;   Universal Primary Education

USE;   Universal Secondary Education

MoES;   Ministry of Education and Sports

NCDC;   National Curriculum Development Centre

ECD;   Early Childhood Development curriculum

UNESCO;   The United Nations Educational, Scientific and Cultural Organization

ESSPs;   The Education Sector Strategic Plans

CBC;   Competence-Based Curriculum

KBC;   Knowledge-Based Curriculum

PBA;   Performance-Based Assessment

AOI;   Activities of integration

ICT;   Information and communications technology

ABSTRACT

Introduction: Students can learn different disciplines effectively even before being exposed to formal school curriculum if basic key concepts are communicated to them early using activity oriented mostly called the Hands-on method of teaching. Most subject content are practical and activity oriented and can best be learnt through inquiry (Okebukola in Mandor, 2002) and through intelligent manipulation of objects and symbols (Ekwueme, 2007). The new lower curriculum is a hands on apporach that moves together with intergaration of ICT. The new lower secondary curriculum was implememted to produce individuals with critical thinking, creativity and problem solving skills to be able to create jobs rather than being job seekers. Over the past years, the rapid growth of ICT has become one of the most important topics discussed by the scholars in education due to the capability of ICT in providing a dynamic and proactive teaching and learning environment favoring discovery learning and critical thinking as well as equiping learners with computer knowledge.

The research aimed at finding out the perception of teacher trainees from Makerere University on the implementation of the new lower secondary school curriculum. In this, the extent to which the teacher trainees employed different teaching and learning methods such small group and open classroom discussions, project work and ICT integration as well as the methods of assessment was assessed.

Methods Used: The study involved a total of 120 respondents of which 64 were males and 56 were females distributed in different schools within Rubaga, Kawempe and Central divisions of Kampala and Research data was collected from the respondents through the use of questionniares and oral interviews.

Results: It was found out that 21% of the respondents used computers, 31% used cell phones, 26% used internet, 13% used laptops/tablets, and 9% used Audio-visual devices like overhead projectors, loud speakers etc.

The study showed that all teacher trainees used cooperative learning and direct instruction in the teaching and learning process, 70.8% used inquiry-based learning, 39.2% used role plays and simulations, 4.2% used portfolios/journals, while 12.5% used exhibitions and displays and no teacher used flipped classroom.

The study revealed that all the teacher trainees used the Activities of integration (AOI) and examinations (100%) in their evaluation process. 93.3% of the respondents used class assignments and homework, 50% used tests, 37.5% used instructor observation, 15% used quizzes, 90.8% used oral reports or presentations while 59.2% used performance-based (Authentic) assessment (PBA).

Conclusion: After meta-analysis of the research results, it was concluded that the teacher trainees had perceived the implementation of the new curriculum well and were therefore implementing the elements of the new curriculum as required by the ministry of education and sports. The teaching methods used, assessment methods, the format of notes acquisition by learners and project development, revealed that the conception of the implementation process of the new curriculum by the teacher trainees was a success. The study shows that there was a component of consistency in the application of the different aspects of the various paradigms of the new curriculum. Although the perception of the implementation process

was a Sucess, there is a deep need to indulge into the implementation process in order to smoothen the ongoing work of the educators, the teachers.

Recommendation: We recommend provision of enough ICT materials to schools such as computers, projectors etc since these are very limited in many schools and these can be sources of the students' research. In-service teacher taining to impart technical skills to the teachers so that they can operate ICT gadgets during teaching and learning with expertize knowledge and experience. Electricity installation in schools that lack electricity and also provide electricity in buildings that lack in some schools and Provision of enough textbooks especially the learners' guides since the numbers are big. This can enhance small group discussions.

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CHAPTER ONE:

INTRODUCTION

1.0 BACKGROUND OF THE STUDY

Education in its general sense is a form of learning in which the knowledge, skills, and habits of a group of people are transferred from one generation to the next through teaching, training and research (Thompson, 1992). Any experience that has a formative effect on the way one thinks, feels, or acts may be considered educational. Education from all perspective is viewed or aimed at preparing one for life and it is supposed to prepare one for a better living and this can be achieved when the kind of curriculum used favors creativity, employment of such individuals who have passed through such a curriculum. One must be certain on what they can achieve through it and from what discipline they can attain it. This thus ensures good grasp of all theories that influence the teaching-learning process. Since the quality of education that a teacher renders to students is highly dependent upon what teachers do in the classroom, thus preparing the students to become critical thinkers and creative individuals of tomorrow, teachers must play an important role as they are among the curriculum implementers and this goes back to how they perceive the new lower secondary curriculum.

A study by Ajaja in 2008 found out that poor performance in subjects arises from the poor and inefficient teaching methods teachers use in class, this has been a serious concern to educationists, business organizations and government at large (reference Ajaja , 2008). This problem has been due to a lot of factors which include the absence of incentives and motivation on teachers so as to increase their efficiency and effectiveness in order to bring about improved performance of students According to Osaki 2007, despite significant achievements in improving access to quality education over the past two decades in Uganda,

1

there is continuation of increased unemployment among graduates, secondary school drop outs and among others who pass through the education system, which raises concerns over whether or not the education system can supply graduates who possess the competencies required of them within the emerging technology advancements.

Teachers over the world are important as they contribute to the success of educational reforms (Smith and Desimone, 2003). The knowledge, beliefs and perception of teachers play an important role in understanding curriculum reforms (Haney et al., 2002). Therefore, teachers are not likely to accept the educational curriculum reforms without questions and criticisms. A lot of countries in the world are reforming their curricula. However, the majority of non-western countries adopted their curricular from western countries (Dagher and BouJaoude, 2011; Alshammari, 2013). Dagher and BouJaoude (2011) maintained that the development of the curriculum in many of the Arab states has been influenced by similar reforms taking place in western countries. The statement was supported by Bashshur (2009) who postulated that the development of education systems, educational curricula, and encouraging students to study and change the content for a secular population are just a photocopy of the western system. The current reform of the curriculum in Uganda is an example of the western influence on curricular development in a different part of the world as anecdotal evidence suggests that it contains foreign examples. In September 2019, the government of Uganda implemented a new lower secondary curriculum into the educational system. The new curriculum was aimed at addressing the loopholes in the old curriculum which included content overload, limitations of the objective-based curriculum, and the failure of the assessment system to provide enough data on which teaching and learning could be styled. Considering this, the new curriculum was purposely made to improve the

acquisition of reading, writing, arithmetic and creativity skills. The new curriculum is aimed at equipping the learners with employable practical skills.

According to the information documented in the independent newspaper (9th-June-2022), Sammy Bob Okino, the head teacher Lango College Secondary school says that implementing the new curriculum is more demanding in terms of learning space in classrooms and requirements for practical work. Okino says most schools also have the burden of training teachers especially those fresh from universities and colleges on how to conduct lessons using the new curriculum. In the same newspaper, Dick Chagan, the head teacher of Aculbanya secondary school in kole district said that most teachers are still struggling to access the learners using the new curriculum. Amidst the emerging challenges in the implementation process, how are the teachers and more especially the fresh teacher trainees from Makerere University implementing the curriculum; and this comes from the way in which they have perceived the implementation process. And therefore, the purpose of this study is to find out the perception of the teacher trainees from Makerere University on the implementation of the new lower secondary school curriculum.

1.1 PROBLEM STATEMENT

There are dramatic changes in the education system whenever curriculum reforms take place in any country and these have to be dealt with critically and analytically so as to have a successful implementation process. In Uganda, adjusting and changing to the new curriculum is challenging and demanding both on the policy makers (experts) and the direct implementers (teachers) who are not used to the new system. According to MacDonald and Healy (1999), teachers always develop a negative attitude towards new events introduced especially if it burdens their working in classroom. With the emphasis given in the new

curriculum on the importance of building skillful, critical thinking and creative learners through active learning, most of the teachers are not familiar with this context and the methodology that should be applied. For example, we don't know the extent to which teachers have encouraged individualized learning and discovery learning which should all arise from the way the teachers have perceived the implementation process of the new lower secondary curriculum; and according to Herzberg, (1962), since they were not involved during this new curriculum reform, it de-motivates them. Currently, there is a lack of understanding on how the new curriculum is being implemented and this basically depends on the way teachers have perceived the implementation process. So what is not clear is the perception of the teacher trainees on the implementation of the new curriculum as this is a critical step in the reform of any curriculum.

1.2 JUSTIFICATION OF THE STUDY

The government of Uganda reviewed the curriculum and decided to make curricular reforms and hence introduced the new lower secondary school curriculum so as to produce competent individuals with vast knowledge and practical skills to meet the ever changing demands of the modern society. However, the implementation of the new lower curriculum is challenging many teachers including the teacher trainees from Makerere University and this is as a result of the different ways by which the teachers have perceived the implementation of the new curriculum. Due to the fact that for any curriculum to develop, the implementation process must be done in the proper manner by the concerned educators (teachers) so that the implementation process is achieved successfully. And since the start of the implementation process, little or no information has been provided about the way in which the curriculum is being implemented. Therefore, this research seeks to find out the perception of the teacher

trainees on the implementation of the new lower secondary school curriculum in the different schools in Uganda particularly in Kampala district.

1.3 AIM OF THE STUDY

To determine the perception of teacher trainees from Makerere University on the implementation of the new lower secondary school curriculum

1.4 GENERAL OBJECTIVE OF THE STUDY

The knowledge, beliefs and perception of teachers play an important role in the implementation of any curriculum reforms. The general objective of this research study is to find out the perception of the teacher trainees from Makerere University on the implementation of the new lower secondary school curriculum.

1.5 SPECIFIC OBJECTIVES OF THE STUDY

The research sought to determine; the extent to which the teacher trainees have actively engaged learners in meaningful discussions in the classroom (small groups), the methods of assessment being used by teacher trainees in the evaluation of learners in the new curriculum, the extent to which teacher trainees have incorporated ICT in the teaching and learning process, the challenges faced by teacher trainees in the effective implementation of the new curriculum especially ICT integration and classroom interaction, the extent to which the teacher trainees have made use of the available resources in the implementation of the new curriculum and the extent to which teacher trainees have developed research projects in their respective subjects of teaching.

1.6 RESEARCH QUESTIONS USED IN THE STUDY

   i.   To what extent has ICT been incorporated in the teaching and learning process?

   ii.   Which methods of teaching are being employed during classroom teaching and learning?

   iii.   Which methods of assessment are being employed in evaluation of students in the new curriculum?

   iv.   To what extent have learners been involved in developing their own projects in the respective subjects?

   v.   What challenges are faced by both students and teachers in executing the new o lovel curriculum

1.7 SIGNIFICANCE OF THE STUDY

To raise awareness to the government on the teacher's perception on the implementation of the new curriculum. Since the introduction of the new curriculum, the government has not had any national wide feedback as the new lower secondary curriculum has not yet been assessed but we believe prevention is better than cure thus the government has to find out how teachers have perceived the implementation of the curriculum since teacher's perception determines the implementation process. Teachers are the direct implementers of any curriculum and their perception of the implementation process matters a lot.

To make the education governing bodies aware of the challenges faced by teachers in the implementation process. Using the findings of this research, the ministry of education and sports (government) can be informed about the various challenges affecting teachers in the implementation of the new curriculum so as to address them before problems arise in future.

To make better reforms towards the implementation of the new curriculum. The data collected from this research can be used by the ministry of education to find better ways of improving the implementation process of the new lower curriculum.

1.8 SCOPE OF THE STUDY

This exploratory research study was focused on the perception of the teacher trainees on the implementation of the new secondary school curriculum. The respondents of this study were male and female teacher trainees of the ages (22-28) from Makerere University in the various schools in three divisions of Kampala district. These divisions included, Central, Kawempe and Rubaga division. Kawempe division is located in the northern part of Kampala bordering Wakiso district to the west, north and east, Nakawa division to the southeast, Kampala central division to the south and Lubaga division to the southwest. Central division, comprises the central business district of the largest city in Uganda and includes areas of Old Kampala, Nakasero and Kololo. It also includes areas of Kamwookya, Kisenyi, and Kampala's Industrial area. Rubaga division lies in the western part of the city bordering Wakiso district to the west and south of the division. The eastern boundary of the division is Kampala central division. Kawempe lies to the north of Rubaga division.

CHAPTER TWO:

LITERATURE REVIEW

2.0 INTRODUCTION

In any education system, the final product depends on the processing that the learners go through inside the system including; educational teaching methods, assessment methods and overall experiences. A study by Ajaja in 2008 found out that poor performance in school (subjects) arises from the poor and inefficient teaching methods teachers use in class, this has been a serious concern to educationists, business organizations and government at large (reference Ajaja , 2008). This problem has been due to a lot of factors which include the absence of incentives and motivation on teachers so as to increase their efficiency and effectiveness in order to bring about improved performance of students. According to Osaki 2007, despite significant achievements in improving access to quality education over the past two decades in Uganda, there is continuation of increased unemployment among graduates, secondary school drop outs among others who pass through the education system, which raises concerns over whether or not the education system can supply graduates who possess the competencies required of them within this postmodern society. Hence, this chapter covers the reviewed literatures of this study showing the curriculum reforms that have taken place since independence.

2.1 EDUCATION REVIEW AFTER INDEPENDENCE

In the post-independence period of 1960s, the education system of Uganda was considered as one of the best in the East and Central Africa. However, the enduring conflicts from the second half of the 1960s to the mid-1980s had a devastating impact on all aspects of Uganda's social, economic and political life, including its education system. By the end of

1980s, two education commissions were appointed to review the education system, and they both recommended the universalisation of education within the next decade as this was considered a prerequisite for achieving national unity and economic growth (Higgins and Rwanyange, 2005). Nevertheless, the government was slow to implement these recommendations and to commit adequate resources to the education sector. Stasavage (2005) argues that education was not high on the reconstruction agenda in the post-1986 period, and that even a decade later the government was reluctant to commit to a primary and secondary education strategy that would require significant increase of public expenditures. Instead, the government continued to favour prioritising road building and defence expenditure. Nonetheless, return to multi-candidate political competition in 1996 helped Musevini to promise abolishment of primary school fees. In response to public enthusiasm for the issue, the emphasis on Universal Primary Education (UPE) and Universal Secondary Education (USE) became more and more pronounced during the course of 1996 campaign. In the post-election period, it was soon understood that education would be one of the main areas by which government's performance would be evaluated by the public. Therefore, unlike some other governments who came to power with similar promises in African countries, the current government steadily increased public expenditures on education (Stasavage, 2004).

Uganda's old curriculum has been in existence since colonial times and has been criticized for being knowledge-based with little emphasis on skills and values. It has been found not to adequately address the issues faced by the learners of today and the social-economic needs of the country. This knowledge-based curriculum (teacher-centered curriculum) does not produce competent members of society as these are dependent on the teacher as the source of everything. The main study approaches in this curriculum were as shown in figure 1
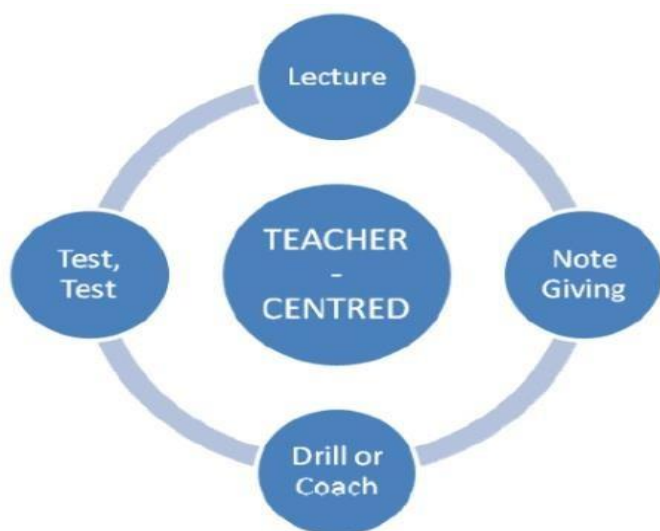
Figure 1: Main Study Approaches in this Curriculum

2.2 CURRICULUM REVIEW PROCESS

In order to address public concerns and in fulfilment of the recommendations of the Government White Paper (1992), the Ministry of Education and Sports (MoES) through the National Curriculum Development Centre (NCDC), embarked on the review of the curriculum at all levels. The genesis of the curriculum review process started with the Early Childhood Development curriculum (ECD) in 2005, where government developed a Curriculum Framework which was translated into 16 local languages and others which had approved orthographies. This was followed by the review of the primary curriculum; which was aligned to the ECD curriculum especially in the use of a familiar language at the early stages of learning. The curriculum at the Lower Primary level P.1 to P.3 was aligned with that of ECD to ensure that learning of concepts rotates around familiar themes and language to the learners. The review of the Upper Primary Curriculum followed, with the aim of having it follow a Competency Based approach and this was rolled out starting with P1 in 2007 up to P7 in 2013. After the review of the Upper Primary curriculum, it was necessary,

to align the lower secondary curriculum with the Primary Curriculum. The MoES undertook a study and came up with a report on the Lower Secondary Curriculum, Assessment and Examination in 2007, highlighting the gaps in the existing curriculum.

The Ministry of Education and Sports (MoES) embarked on the review of the lower secondary curriculum in 2008. The review was guided by the recommendations in the 1992 Government White Paper on Education, the Vision 2040, National Development Plans I and II, the Education Sector Strategic Plans (ESSPs) of 2004/05 – 2019/20, the NRM Manifesto 2016-2012, the East African Secondary School Harmonized Curriculum Framework, the Sustainable Development Goal number 4 and subsequent researches conducted by the MoES. In addition UNESCO, under its department for curriculum, emphasizes the need for countries to focus on the reform of their curricula if they are to achieve Sustainable Development Goal Number 4 which aims to "Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all".

2.3 IMPLEMENTATION OF THE NEW CURRICULUM

In January 2018 a stakeholder's workshop with; Deans of Education and Science from various universities, regional executive members of the Association of Secondary School Head teachers of Uganda, members from the geography association of Uganda and members from the historical association of Uganda was held and as a result of the consultations, a curriculum menu of 21 subjects was proposed. In February 2020, the Ugandan government through the ministry of education and sports officially put in place the new thematic or the competency based lower secondary school curriculum (CBC) replacing the old knowledge-based curriculum (KBC). This was done to ensure that the curriculum is learner-centered, learners get more experiences and explore the society on their own (globalized learning in a

global world). That is to say in the new curriculum, the teachers follow the principles of student-centered learning as shown in figure 2.
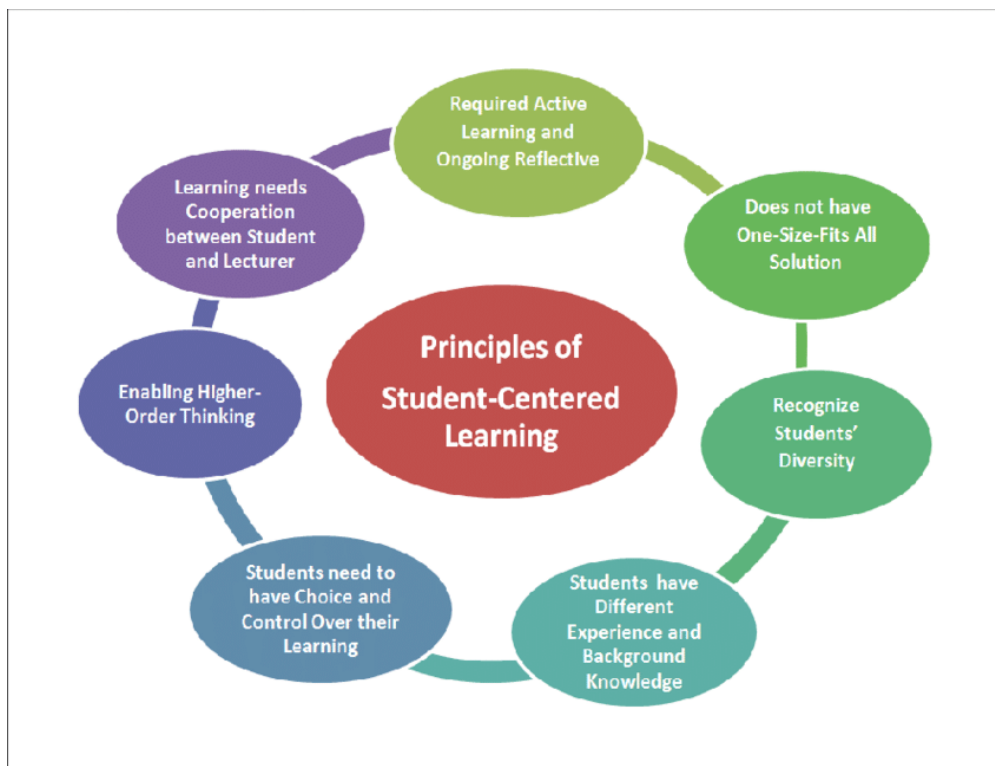
Figure 2: Principles of Student-Centered Learning

2.4 EMERGING GAPS FROM THE LITERATURES REVIEWED

Extensive research has been carried out and the literature shows the steps in curriculum development which have been followed since independence up to date. The review shows the curriculum developments in education after independence, the curriculum review processes involved and the implementation of the new lower secondary curriculum. So far there is no documented literature about the process of implementation and currently, there is a lack of understanding on how the new curriculum is being implemented and this basically sets the knowledge gap upon which our research was based. Hence our research sought to obtain information about the perception of the teacher trainees on the implementation of the new curriculum as this is a critical and crucial step in the reform of any curriculum.

CHAPTER THREE:

METHODOLOGY

3.0 INTRODUCTION

This chapter entails the methodological description of the study, highlighting and describing the research design, population of the study, the sample size and sample selection, data collection methods, data analysis, ethical considerations, and the challenges and limitations faced during the study.

3.1 RESEARCH DESIGN

The research took on a survey research study. A survey consists of a predetermined set of questions that is given to a sample. The questions are aimed at extracting specific data from particular groups (sample) of people. This sample acts as a representative of the larger population of interest.

A sample of teacher trainees in schools within three divisions of Kampala district namely Kawempe, Rubaga and Central were selected for the study and analysis of the results made with respect to the sampled schools, followed by generalization of the results to the entire Kampala district.

3.2 DESCRIPTION OF THE STUDY AREA

The study area was urban in nature. The study was conducted in Kampala district, which consists of five divisions namely; Central, Kawempe, Makindye, Nakawa and Rubaga. Of the five divisions, only three divisions of Kawempe, Rubaga and central were selected for the study.

Kawempe division is located in the northern part of Kampala bordering Wakiso district to the west, north and east, Nakawa division to the southeast, Kampala central division to the south and Lubaga division to the southwest. The coordinates of the division include; 00 23N, 32 33E (Latitude:0.3792; Longitude:32.5574). The neighborhoods in Kawempe division include; Kawempe, Kanyanya, Kazo, Mpererwe, Kisaasi, Kikaya, Kyebando, Bwaise, Komamboga, Mulago, Makerere and Wandegeya.

Central division, comprises the central business district of the largest city in Uganda and includes areas of Old Kampala, Nakasero and Kololo. It also includes areas of Kamwookya, Kisenyi, and Kampala's Industrial area. The coordinates of Central division are: $0^o 19'00.0"N$, $32^o 35'00.0"E$ (Latitude:0.316667; Longitude: 32.583333). The division comprises about 20 parishes and some of them include; Bukesa, Civic centre, industrial Area, Kagugube, Kamwokya I, Kamwokya II, Kisenyi I, Kisenyi II, Kisenyi III, Kololo, Mengo, Nakasero, Nakivubo, Old Kampala among others.

Rubaga division lies in the western part of the city bordering Wakiso district to the west and south of the division. The eastern boundary of the division is Kampala central division. Kawempe lies to the north of Rubaga division. The coordinates of Rubaga division are; 00 18N, 3233E (Latitude:0.3029; Longitude: 32. 5529). The neighborhoods in the division include Mutundwe, Nateete, Ndeeba, Lungujja, Busega, Lubaga, Mengo, Namungoona, Lubya, Lugala, Bukesa, Namirembe, Naakulabye, Kasubi and Kawaala. Schools in the respective divisions provided a good sample space for our fieldwork research.

Figure 3: Map Showing the Study Area

3.3 STUDY POPULATION

The population of study refers to those people from whom the required information to find answers to research questions is obtained (Kumar, 2011). This study targeted male and female teacher trainees from Makerere University, who were doing their final school practice from secondary schools within Kawempe, Rubaga and Central divisions of Kampala. All teacher trainees in a given school were engaged in the research and these were varying in number from one school to another. The schools which were sampled for the research are shown on table 1 below.

3.4 SAMPLE SIZE AND SAMPLE SELECTION

This research was "restricted" to the schools where third year teacher trainees from Makerere University were, and those were the only target individuals from which the information for this research was obtained. A total of 120 teacher trainees were selected for the study and the number of teacher trainees in each school was varying, ranging from 1 to 8 teachers. Hence the number of teacher trainees in each of the given schools provided the sample for the study. Also both male and female teacher trainees were selected for the study. The number of teacher trainees in each school who participated in this study is shown in the table below:

Table 1: Showing the Number of Teacher Trainees in the Schools that were selected for the Study

S/N	Name of school	Number of teacher trainees
1	Light Africa secondary school -Masanafu	3
2	St. Charles Lwanga High school-Lubya	3
3	Kasubi secondary school	8
4	Makerere College school	3
5	Mbogo Mixed secondary school	4
6	St Thomas Aqinas secondary school	3
7	Broadway High school	5
8	Happy Hours secondary school	4
9	Emmanuel's College-Kazo	6
10	Brilliant High School-Kawempe	5
11	Mbogo high school	3
12	Bilal Islamic schools-Bwaise	5
13	Kawempe Muslim secondary school	5
14	St John's High School –Kawempe	4
15	Kololo High school	2
16	Kinaawa High School-Kawempe	1
17	St Kizito Secondary school-Kabowa	3

18	Rubaga Girls Secondary school	2
19	Kampala Secondary school	2
20	Uganda Martyrs High school	3
21	Mbogo college school	2
22	Central college-Kawempe	2
23	Heritage secondary school	3
24	Old Kampala secondary school	5
25	Caltec Academy-Makerere	3
26	Kampala high school	4
27	Lubiri secondary school	3
28	Kawempe standard secondary school	5
29	Namungoona parents secondary school	2
30	Kawanda secondary school	1
31	St. Joseph secondary school-Kazo	4
32	Mulago high school	1
33	Midland high school	6
34	Excel High school-Kawempe	2
35	Kazo Hill College	3
TOTAL		120

3.5 DATA COLLECTION METHODS

The study used questionnaires and oral interviews to collect data from Makerere University teacher trainees in the sample schools.

3.5.1 Questionnaire

Self-administered questionnaires were used as an instrument for collecting primary data from the teacher trainees in the different secondary schools. The questionnaire was structured containing close ended questions. This was given to the teacher trainees because the instrument is appropriate as it allows collection of precise information.

3.5.2 Oral interviews

The researchers used oral interviews to collect primary data from the respondents. The interviews involved a face to face interaction with the teacher trainees in the field and this was made easy with the guidance of the research questions.

3.6 SOURCES OF THE DATA

The research made use of basically primary data. This data was obtained from teacher trainees through the questionnaires and oral interviews in the schools under sampling. More data was obtained from evidences of test scripts, examination scripts, notebooks, classroom arrangement, printed Google pictures/images and many other things being used in the new curriculum. The learners were also engaged where necessary to obtain some relevant and complementary information.

3.7 ETHICAL CONSIDERATIONS

Ethics refer to norms of conduct that distinguish between acceptable and unacceptable behaviour. Ethical considerations in research are important in that they promote the aims of research, such as knowledge, truth and avoidance of error; promote the values that are essential for collaborative work, hold researchers accountable to the public or people involved in the study (Resnik, 2015). The professional ethics were highly followed in that the researchers obtained the necessary permission from the heads of the schools to conduct the study in those respective schools.

3.8 DATA PRESENTATION AND ANALYSIS

Both quantitative and qualitative data was obtained in the study. The quantitative data is presented in tables with percentages, represented in graphs and pie charts to show the

relationship between the different aspects of the discovery. The qualitative data is presented

in a narrative format showing the different aspects discovered in the study.

PRESENTATION AND ANALYSIS OF RESULTS

4.1 RESPONDENT CHARACTERISTICS

The study included 120 teacher trainees of the age range between 22 and 28 years. The group constituted 53.3% male and 46.7% female. The teachers were teaching different subjects in the curriculum.

Table 2: Showing the number of respondents depending on gender

Gender	Number of respondents	Percentage (%)
Male	64	53.3
Female	56	46.7
Total	120	100

4.2 ICT INTEGRATION

It was found out that 21% of the respondents used computers, 31% used cell phones, 26% used internet, 13% used laptops/tablets, and 09% used Audio-visual devices like overhead projectors, loud speakers etc.

Table 3: Showing the number of teacher trainees using the different ICT materials in the new curriculum

ICT MATERIAL	Number of respondents
Computers	25
Cell phones	37
Internet	31
Laptops/tablets	16
Audio-visual devices e.g. overhead projectors, loud speakers	11
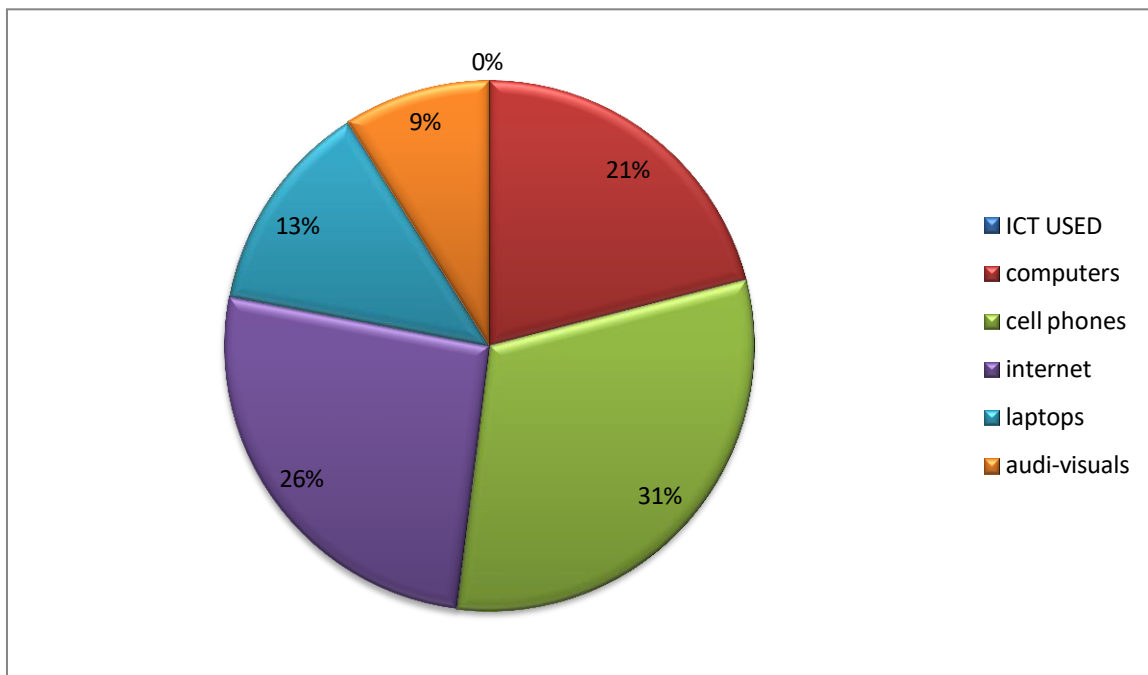
Figure 4: A pie chart showing the percentage of teacher trainees using the different ICT materials in the new curriculum

4.2.1 Frequency of Utilization of the different ICT equipment

The study revealed that teachers used the ICT equipment in varying degrees, some teachers used certain equipment very often, others often while others seldom but also, there were those equipment which were not used at all by some teachers.
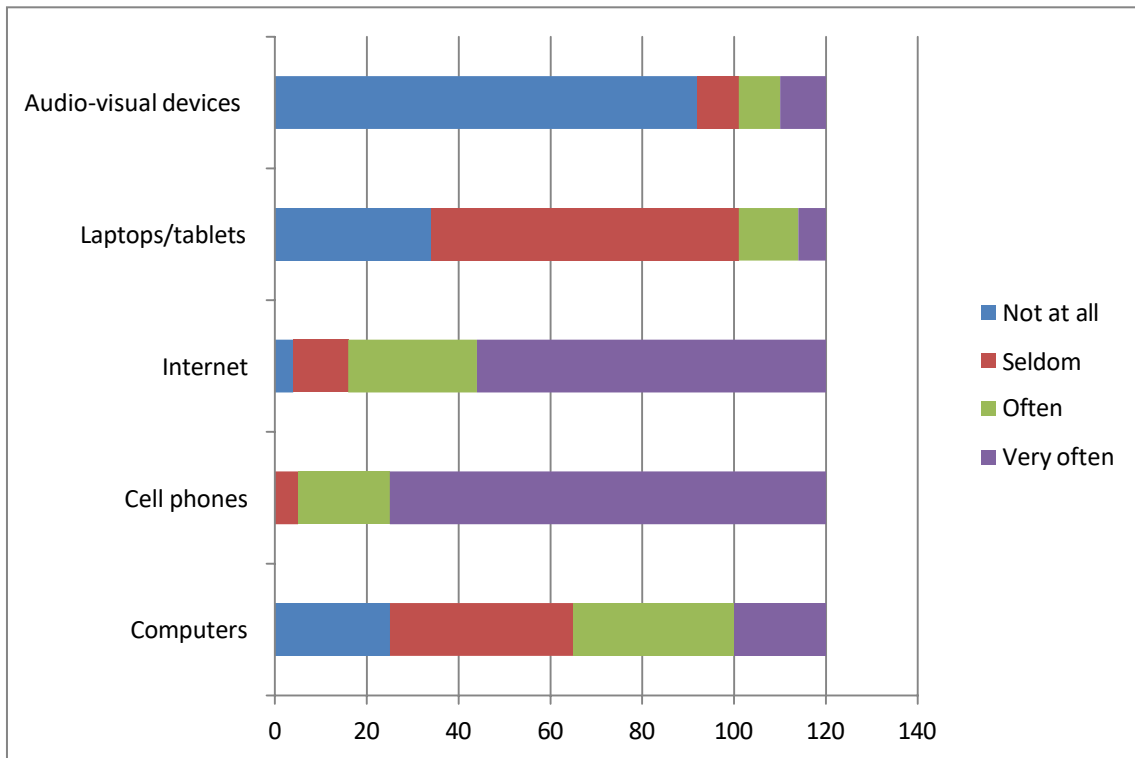
Figure 5: A graph showing the routine usage of the different ICT materials by the teacher trainees

4.3 TEACHING METHODS

The study showed that all teacher trainees used cooperative learning and direct instruction in the teaching and learning process (100%), 70.8% used inquiry-based learning, 39.2% used role plays and simulations, 4.2% used portfolios/journals, while 12.5% used exhibitions and displays and no teacher used flipped classroom.

Table 4: Shows the number of teacher trainees who used the different teaching methods in the new curriculum

Teaching method	Number of respondents
Cooperative learning	120
Flipped classroom	0
Inquiry-based learning	85
Role plays and simulations	47
Portfolios /journals	05
Exhibitions and displays	15
Direct instruction	120
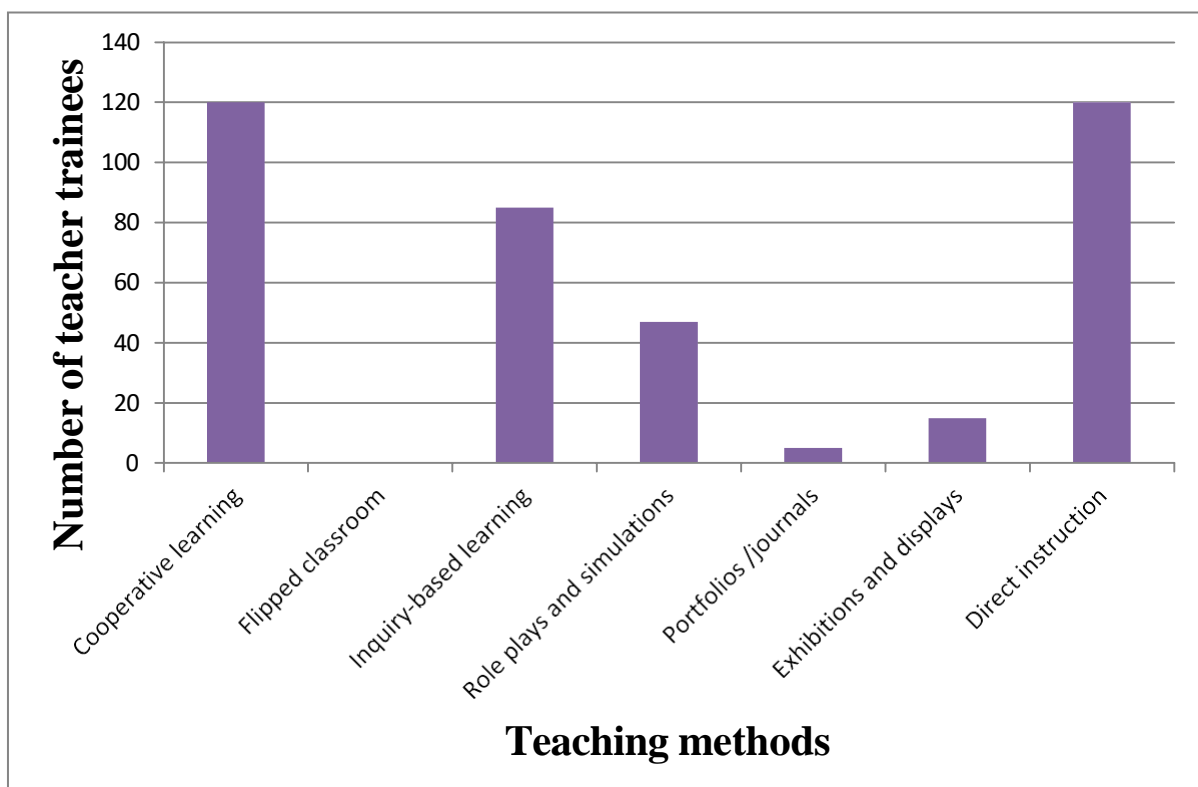
Figure 6: A bar graph showing the number of teacher trainees using the different teaching methods

4.3.1 Frequency of Utilization of the teaching methods

According to the study, different teaching methods were used by teachers in varying magnitude and extent. Some methods were used very often, others often while still others seldom and other methods were not used at all.
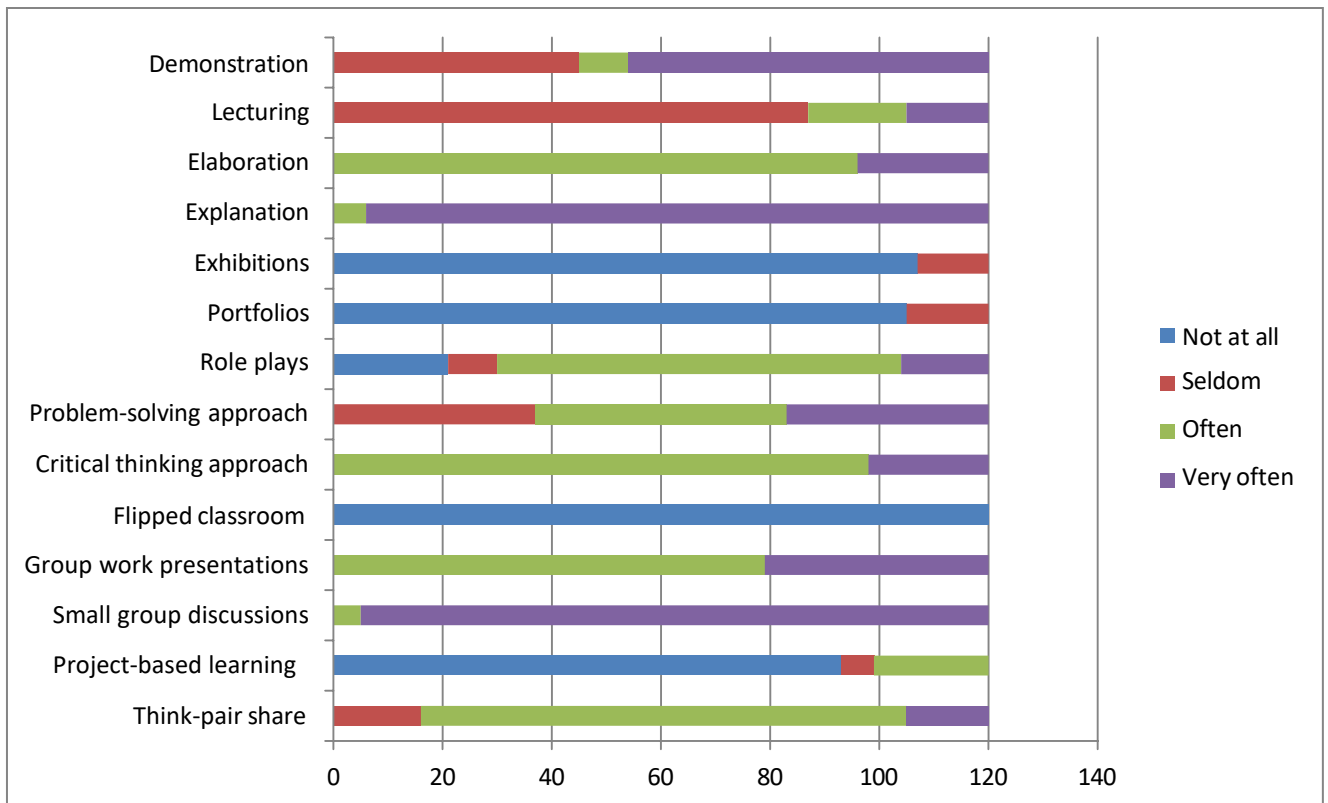
Figure 7: A graph showing the variation in the utilization of the teaching methods by teacher trainees in the new curriculum

4.3.2 Cooprative learning method

According to the study, it was found out that cooperative learning was one of the teaching methods used by all teacher trainees. It includes methods like Think-pair share method, project-based learning, small group discussions and group work presentations. These methods have also been utilized by the teachers in varying extent as shown in the graph below.
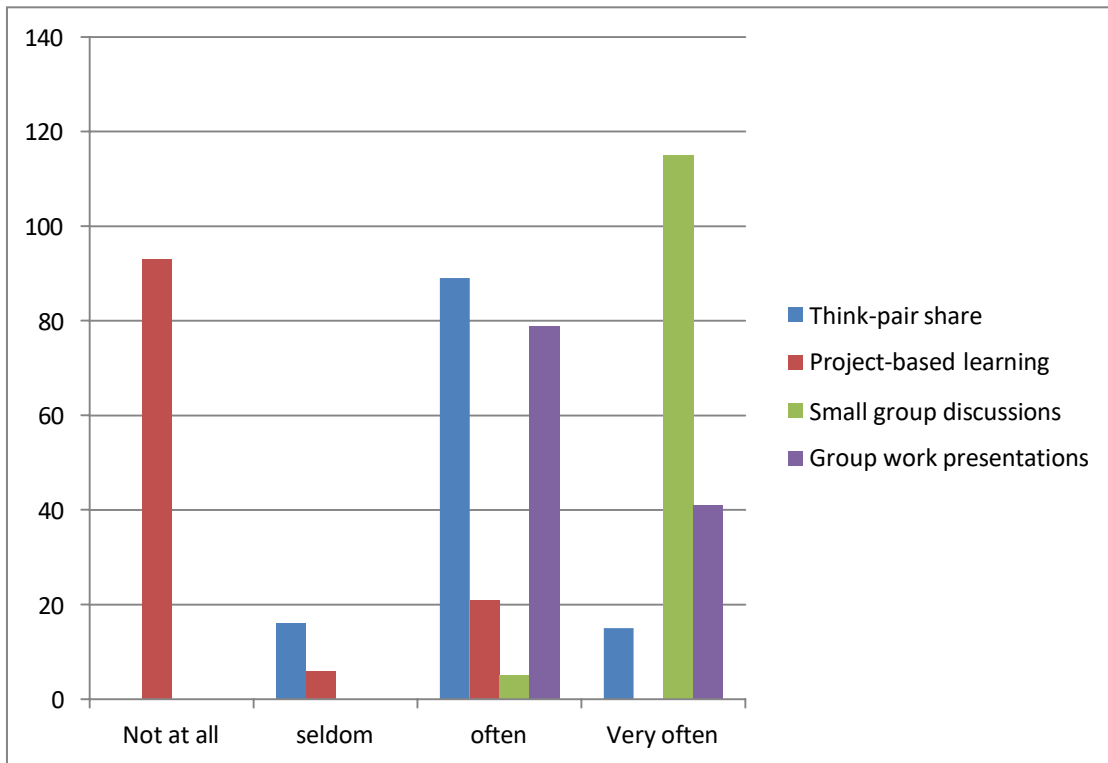
Figure 8: A bar graph showing the utilization of the different cooperative learning methods by the teacher trainees

4.3.3 Direct instruction method

The study also revealed that the teacher trainees employed different teaching methods under direct instruction which included; Explanantion, elaboration, lecturing and demonstration. The method to be used in class depended on the subject and the concept to be taught. The utilization of these methods in the teaching process also varied among the teachers as shown in the graph below.
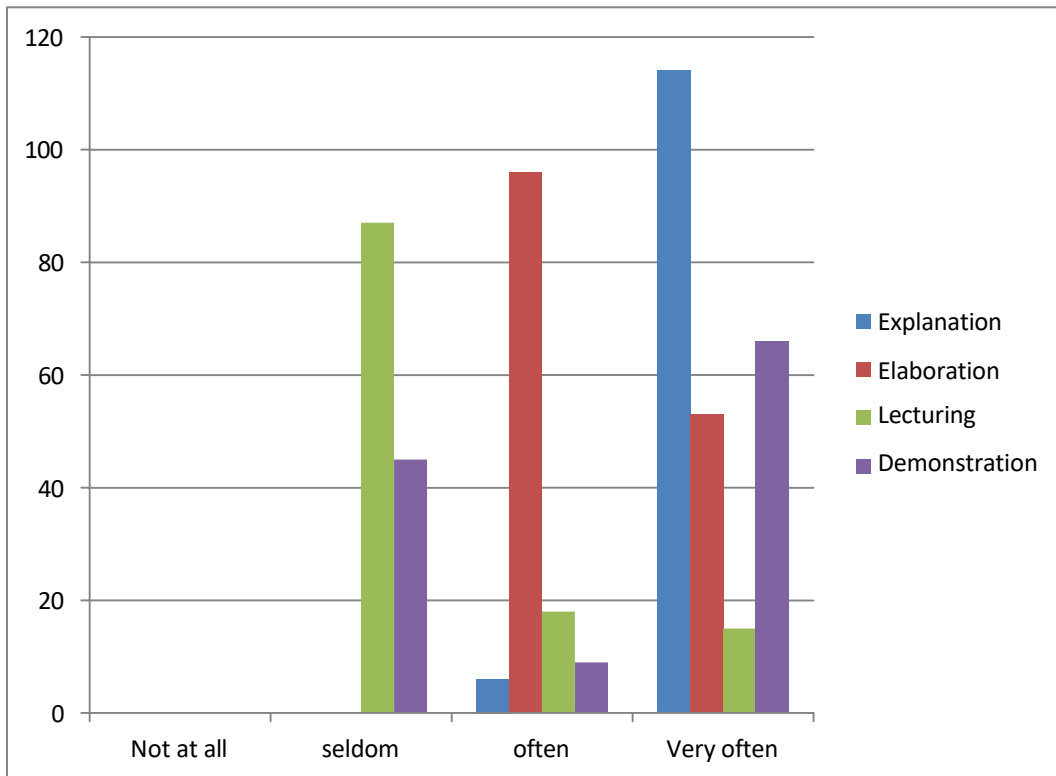
Figure 9: A bar graph showing the variation in the utilization of the different direct instruction methods by the teacher trainees

4.4 ASSESSMENT METHODS

The study showed that all the teacher trainees used the Activities of integration (AOI) and examinations (100%) in their evaluation process. 93.3% of the respondents used class assignments and homework, 50% used tests, 37.5% used instructor observation, 15% used quizzes, 90.8% used oral reports or presentations while 59.2% used performance-based (Authentic) assessment (PBA). The number of teacher trainees using the assessment tools is shown below.

Table 5: Showing the number of teacher trainees using the different assessment methods in the new curriculum

Assessment method	Number of respondents(X/120)
AOI	120
Class assignments and homework	112
Tests	60
Instructor observation	45
Quizzes	18
Examinations	120
Oral reports or presentations	109
Authentic assessment	71
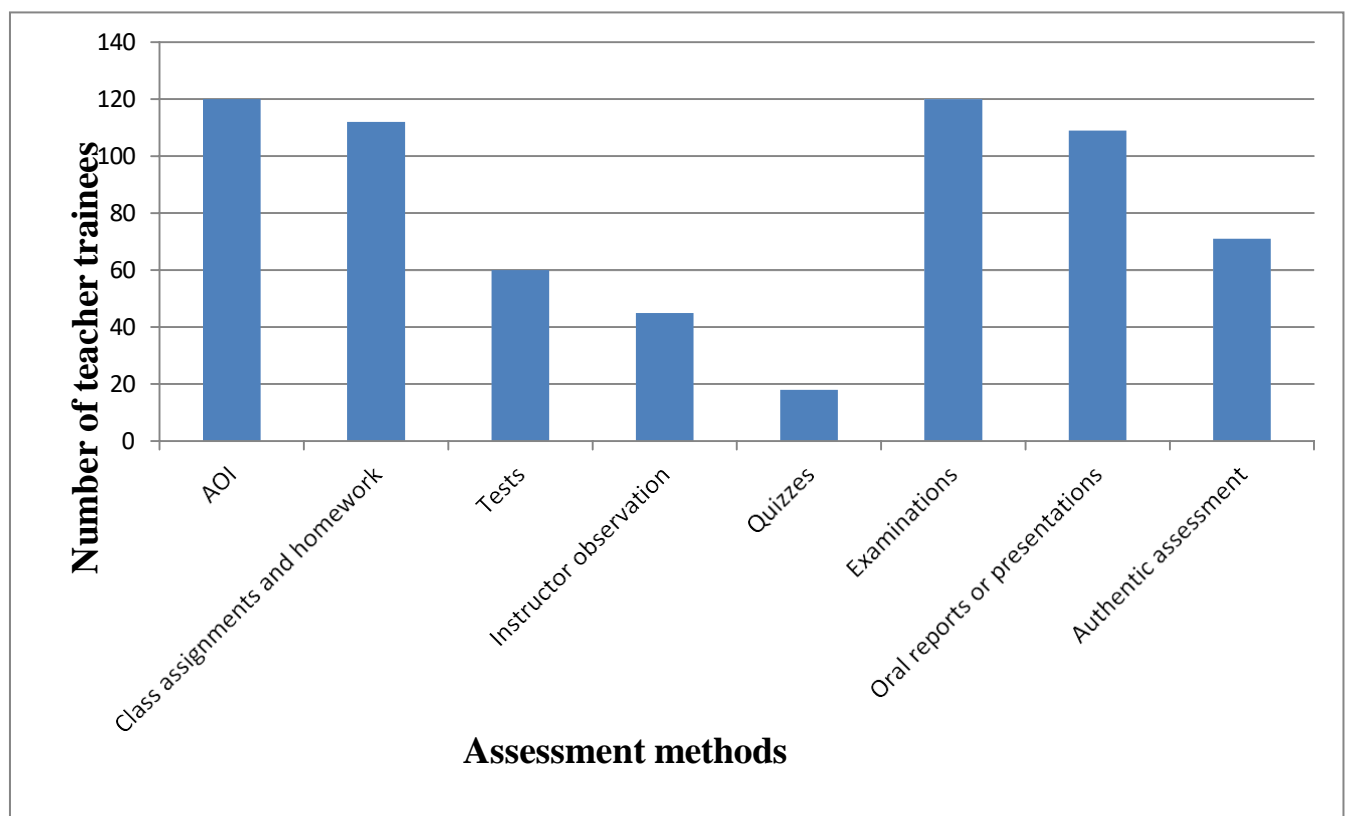
Figure 10: A bar graph showing the number of teacher trainees using the different assessment methods in the new curriculum

4.4.1 Frequency of Utilization of the different assessment methods

It was discovered that the teacher trainees utilized the assessment methods at varying frequency in their teaching process with some methods used very often, others often while other methods seldom and some methods were not used at all by certain teachers as shown in the graph below.
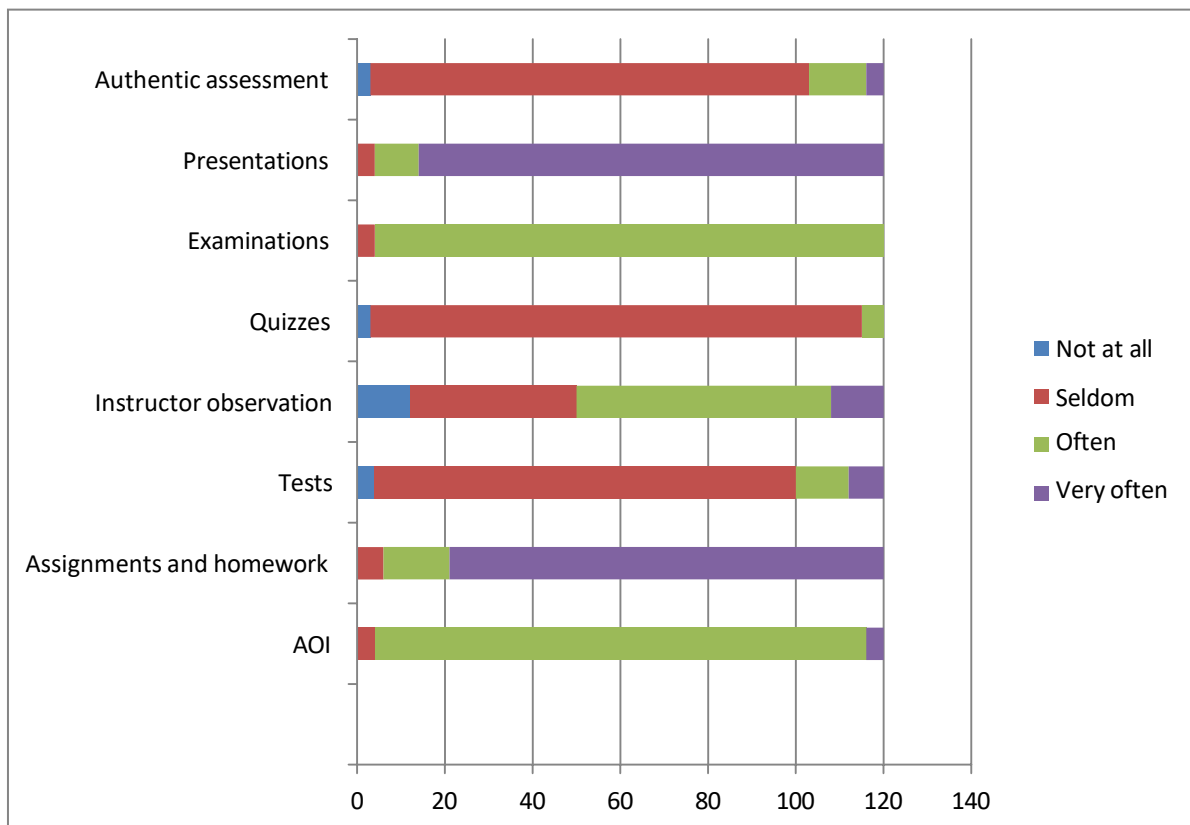
Figure 11: A graph showing the variation in the utilization of the assessment methods by teacher trainees in the new curriculum

4.5 ACQUISITION OF NOTES BY LEARNERS IN THE NEW CURRICULUM

It was found out that 19.2% of the teacher trainees generated notes with the learners while in class, 29.2% of them always gave notes directly to the learners, 16.7% of them didn't give notes to the learners while 35% of the teacher trainees gave learners notes sometimes.

Table 6: Showing the number of teacher trainees using different methods to give learners notes

Acquisition of notes by learners	Number of respondents
Generated notes with learners in class	23
Always gave learners notes	35
Never gave notes at all	20
Sometimes gave notes to learners	42
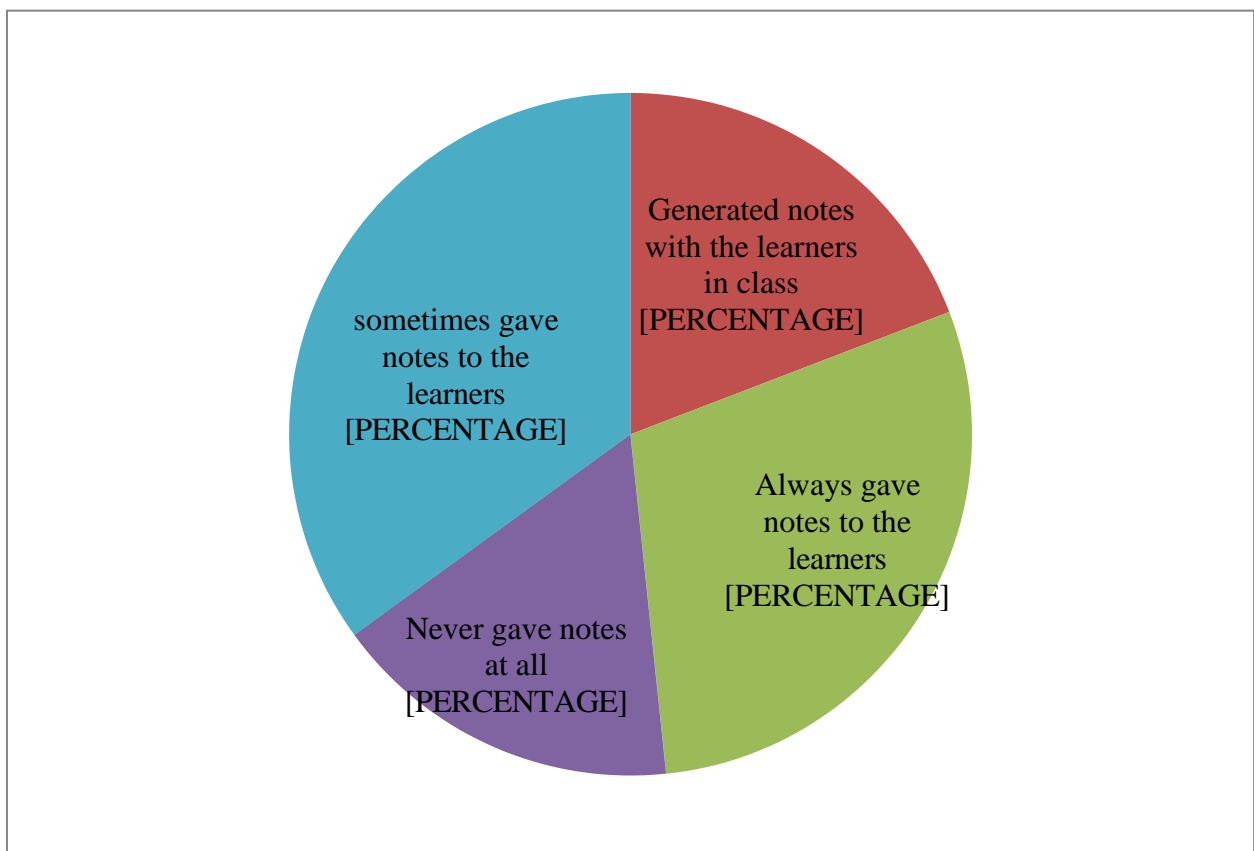
Figure 12: A pie chart showing the percentage of teachers and their methods of delivering notes to learners

CHAPTER FIVE:

DISCUSSION OF RESULTS

5.1 ICT INTEGRATION

In line with the current digital era, teachers are required to integrate ICT in their daily teaching and replace their traditional methods with modern tools and facilities. The teacher trainees we interviewed used a variety of ICT materials in their teaching process that included computers, cell phones, internet, laptops/tablets and audio-visual devices like the projectors, loud speakers. The utilisation of a given ICT equipment depended on the topic and concept to be taught. It was found out that 21% of the respondents used computers, 31% used cell phones, 26% used internet, 13% used laptops/tablets, and 09% used Audio-visual devices like overhead projectors, loud speakers etc.

Cell phones and internet were used to a large extent because; teachers would find it more convinient to use notes in soft copy or download notes from the internet. It was also much easier to pick new ideas through research in class using the phones and internet. Images and videos could easily be downloaded using cell phones and shown to learners so as to facilitate learning. There was limited use of computers and laptops by the learners for research since these were mostly restricted for use in the laboratories only and they are also expensive for teachers to purchase and use in class. According to Narh, Boateng, Afful-Dadzie and Owusu(2019), they found out that most students have poor computer skills and self-efficacy and inadequate knowledge of computer/internet handling therefore this gives the reason for restricting the students' learning and research using computers to be in the computer laboratories where they can be assisted and guided by the laboratory technicians. Overhead projectors were mostly used by science teachers as these allowed them to show virtual

experiments to learners to facilitate understanding of abstract concepts. These projectors and other ICT materials had the limited usage in schools because they are inadequate in numbers and in addition to other factors, these are the barriers to effective implementation of the ICT usage in schools(Toprakci, 2006). Loud spearkers were used mostly by language teachers as these easily enabled learners to understand the right articulation and pronunciation of words. Research links would also be given to learners by the English teachers to research on certain concepts. However, there were challenges faced during incorporation of ICT in the teaching process.

5.1.1 Challenges Faced By Teacher Trainees During Ict Integration

Large classroom sizes made it less efficient for usage of a single cell phone, as the majority of the learners couldn't take a view of any information being reserached. Shortage of ICT resources like computers, projectors many schools was a great hinderance for ICT integration in the teaching and learning process. High data charges caused limited use of internet for research as the schools offered no internt access to the teachers nor did they have active wifi at school to facilitate teachers teaching expeirneces. A lack of expertise /skills in operating some of these ICT materials like projectors was a great obstaclke fot their usage.

5.2 TEACHING METHODS

Klafki defined teaching methods as the methods and procedures for the planned and organised formation of the processes of science and therefore methods of organising and implementing teaching and learning (Ahmed,2005). While Danilov defined teaching methods as a system of conscious and purposeful actions in order to regulate the cognitive and practical activity of the student and secure his own acquisition of eductational content. In

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otherwards, teaching methods require continuous mutual influence between the teacher and the student (Ahmed, 2005).

Among the teaching methods used by the teacher trainees included the following, cooperative learning methods, flipped classroom method, inquiry-based learning, role plays and simulations, portfolios/journals, exhibitions and displays and direct instruction methods.

According to the research, it was discovered that all the teacher trainees used the cooperative learning(100%) and direct instruction methods(100%) of teaching. Under cooperative learning methods, small group discussions were used very often followed by think-pair share and then group work presentations and the least used method was project-based learning method. most of the teacher trainees engaged learners in small groups of 5-7 for the discussions in class where the teacher moves around in the groups giving guidance and also getting their views in a plenary. In most schools, the sitting arrangement of the students changed so that they formed groups in their sitting positions. This enabled them to discuss in groups of about 10 members and that method worked in schools having large numbers of about (70-100). After learners generating points from their dicussions, the teacher could use group work presentation method where a student(s) goes infront and discusses the points to the whole class on behalf of the small group.

Think-pair share method was used mostly after brainstorming such that learners share their ideas before presenting them to the whole class.

Few teacher trainees engaged in project work hence less project-based learning was used in the teaching process.

Under direct instruction method, explanation, elaboration, lecturing and demonstration were used. Explanation had the highest frequency of utilization followed by elaboration, then lecturing method and lastly demonstration.

Teacher trainees used to explain certain concepts which became difficult for learners to grasp. Teachers also explain in the deductive introduction of topics mostly complicated concepts. Teachers could also elaborate concepts which learners have failed to integrate and understand in their small groups. Its mostly science teachers who use demonstrationn method very often to illustrate given concepts since the specimen or reagents may not be enough for the whole class to engage in an experiment. Lecturing method is a method of teaching that depends on the teacher merely presenting the information verbally to the learners without allowing them to ask during delivery, but after completing it, and they are satisfied with merely receiving the information in one go,they note down summaries of the material and its ideas (Noor Center, 2011). This method was used mostly during introduction of topics and also the teachers would go an extra mile to deliver information using this method to the learners especially for the complex topics.

Flipped classroom method was not used by any teacher trainees during their teaching process.

Inquiry-based learning method was used which included methods like the critical thinking approach where teachers would ask logical questions in class or during group discussions that would stimulate critical thinking, creative and logical reasoning, and also the problem solving approach where the teachers give learners some questions and challenging problems to solve such that as the learners solve the problem, learning takes place. Role plays and simulations were used mostly by teachers of english and literature where they engage learners to simulate scenes and dramatize scenes and certain concepts in English like telephone

conversations during studying about communication and drama acting in literature. Portfolios/journals were used by very few teacher trainees where they would tell learners to write about given topics convered as a record of assessment and to show that they grasped the concept. Exhibitions and displays were used mostly by teachers of music, agriculture where the leaners make a show of their achievements in the given topics and other areas of study.

5.2.1 Challenges Faced While Using The Above Methods Of Teaching In The New Curriculum

During small group discussions, some learners couldn't contribute to the discussion and these discussions were dominated by other stduents. Limited resources like new curriculum textbooks for the learners to use during the discussions in the small groups. Shallow/ narrowed content in the learners books that gave a narrow field of view to the leaarners during their discussions. Limited work in the textbooks of the new curriculum makes it difficult for students to read, search and get good ideas on their own. Students with low self esteem and confidence couldn't interact and participate freely with others hence woud be left out many a times. Difficulty in assessment of different aspects like discipline, intellectual capacity, moral values among others

5.3 ASSESSMENT METHODS

It was found out that Activities of integration(AOI) and examinations were used by all the teacher trainees during the assessment in teaching. AOIs were given after every topic and examinations were given at the end of the terms. Some schools could have beginning of term, mid-term and end of term examinations and in each case, the questions were applications to situations or scenarios. Majority of the teacher trainees also used class assignments and homework where they would give learners questions to attempt in class or take home such

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that they can research from different sources in order to attempt the questions. But also many of them used oral reports or presentations to assess their learners for example in French, the learners would be told to present a given concept in French such that the teacher could assess their reading skills, understanding of the meaning and articulation of the words(pronunciation) in French. Presentations in class were used by teachers to assess the communication skills of the learners and their ability to convey meaningful information. It was discovered that Authentic assessment was mainly used by teachers of physical education and computer studies, where they assessed learners depending on the performance of particular skills and techniques. Some teachers used tests to assess their learners as well as quizzes. They admitted that they used these methods so as to get quick results from learners about the understanding of a given concept. Some teachers used instructor observation to assess observable traits of learners like discipline, collaboration and communication skills plus moral values.

5.3.1 Challenges Faced When Using The Above Assessment Methods

It was very expensive to run the assessment process such as printing examinations involving colored pictures and other materials required in the new curriculum. Large numbers of students which is hard for a hollistic assessment of every learner.

5.4 ACQUISITION OF NOTES

It was found out that 19.2% of the teacher trainees generated notes with the learners while in class, 29.2% of them always gave notes to the learners, 16.7% of them didn't give notes to the learners while 35% of the teacher trainees gave learners notes sometimes.

All practicing teachers develop some sort of self-supporting practical knowledge that enables them to prepare and conduct their classes (Feiman-Nemser & Floden, 1986). The teachers that we interviewed and observed, 35% of which were giving notes to their learners

sometimes described that notes given by teacher are filtered notes that have necessary information that's is specifically required of the students to know, also they describe that giving a chance to learners to have their discovery learning takes a lot of time of which they might fail to cover up the whole syllabus required. The 19.2% of teacher trainees who generated notes with their learners in classrooms described that before a lesson ends, they give research work to students to go and read such that they can have notes of their own which are then harmonized in the next lesson when they meet again. Learners are guided in a way that they make their own notes, then discuss them during class the teaching and learning process, teachers harmonize learners' researched notes, by eliminating any wrong information learners might have researched about, also teachers allow learners to carry out peer group discussions so as to make their own notes. After discussions on certain points, the teacher coalesces the information into notes that are written down by the learners but also provide other notes to learners so as to enrich them of the information they might not have got exposed to during their discovery learning. Thus we can say that teachers in the lower secondary curriculum are incorporating both the new curriculum and the old curriculum in the lower secondary education seen with the 35% of teachers who sometimes give notes and sometimes allow their learners to have discovery learning.

5.4.1 Challenges Faced During Acquisition of Notes

Limited gadgets for research such as the computers, laptops among others. Some concepts were difficult for learners to understand on their own through discovery learning hence teachers would be forced to directly give notes. Shortage of textbooks for use during research since the new curriculum books had shallow information. Difficulty in scrutinizing correct information from the diverse information from research sources like internet on the side of the learners.

5.5 DEVELOPMENT OF PROJECTS

Learners are given projects to accomplish and after they accomplish such projects, they are awarded marks basing how they present their projects. Projects are hands-on experiences in which students actively participate. These projects include yoghurt making, door mart making, recycling of bottles among others. Students are actively engaged in critical thinking to know the areas in the environment where they need to apply their knowledge, so as to solve some challenges in society. According to the research findings, 90% of the teacher trainees are not yet actively engaged in project development. About only 10% are actively involved in project work.

5.5.1 Challenges Faced During Project Development

Project work is very expensive and demanding in terms of resources like materials and funds and its time demanding. Students utilise a lot of time in project completion which time would have been used to cover subject matter.

CHAPTER SIX:

CONCLUSION AND RECOMMENDATIONS

6.1 CONCLUSION

This survey research study was aimed at finding out the perception of the teacher trainees from Makerere University on the implementation of the new lower curriculum. After meta-analysis of the research results, it was concluded that the teacher trainees had perceived the implementation of the new curriculum well and were therefore implementing the elements of the new curriculum as required by the ministry of education and sports. The teaching methods used, assessment methods, the format of notes acquisition by learners and project development, revealed that the conception of the implementation process of the new curriculum by the teacher trainees was a success. The study shows that there was a component of consistency in the application of the different aspects of the various paradigms of the new curriculum. Although the perception of the implementation process was a Sucess, there is a deep need to indulge into the implementation process in order to smoothen the ongoing work of the educators, the teachers.

6.2 RECOMMENDATIONS

The following recommendations are aimed at improving the implementation process of the new curriculum;

1. ICT integration; provision of enough ICT materials to schools such as computers, projectors etc since these are very limited in many schools. These can be sources of the students' research.

2. In-service teacher taining to impart technical skills to the teachers so that they can operate ICT gadgets during teaching and learning with expertize knowledge and experience.

3. Electricity installation in schools that lack electricity and also provide electricity in buildings that lack in some schools.

4. Provision of enough textbooks especially the learners' guides since the numbers are big. This can enhance small group discussions. The sketchy new curriculum books should be enriched with some conceptual notes so that learners can have the birth of knowledge from the textbooks during small group discussions from which they can build on their ideas.

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APPENDIX 1: QUESTIONAIRE

MAKERERE UNIVERSITY

COLLEGE OF EDUCATION AND EXTERNAL STUDIES

SCHOOL OF EDUCATION

DEPARTMENT OF SCIENCE, TECHNICAL AND VOCATIONAL EDUCATION

Title; THE PERCEPTION OF TEACHER TRAINEES FROM MAKERERE UNIVERSITY ON THE IMPLEMENTATION OF THE NEW LOWER SECONDARY CURRICULUM.

This study aims at finding out the perception of teacher trainees from Makerere University on the new curriculum. You are kindly requested to fill in this questionnaire to enable the researcher get the information necessary for the study. Please answer the questions with utmost appropriateness. All information is useful and confidential.

Thank you.

Please tick or write where applicable.

School- class- - - - - - - - - - ---Teaching subjects: 1……..………………………….. 2…………………………..Sex------- --------Age: ……………………

Which forms of ICT equipment have you used in the teaching and learning process?

ICT equipment	Tick all materials used
Computers	
Cell phones	
Internet	
Laptops/tablets	
Audio-visual devices (Overhead projectors, loud speakers etc.)	

The extent to which the ICT equipments have been used.

EQUIPMENT	USAGE (tick appropriately)			
	Not used at all	Seldom	Often	Very often
Computers				
Cell phones				
Internet				
Laptops/tablets				
Audio-visual devices (Overhead projectors, loud speakers etc.)				

Which forms of assessment have you used in evaluating the performance of your learners?

(Tick Appropriately).

Assessment method	Tick if used
AOI	
Class assignments and homework	
Tests	
Instructor observation	
Quizzes	
Examinations	
Oral reports or presentations	
Performance-based (authentic) assessment.	

Assessment tool	USAGE (tick appropriately)			
	Not used at all	Seldom	Often	Very often
AOI				
Class assignments and homework				
Tests				
Instructor observation				
Quizzes				
Examinations				
Oral reports or presentations				
Performance-based (authentic) assessment				

METHODS OF TEACHING

Which methods of teaching have you used in the teaching and learning process?

Teaching method	Tick if used
Cooperative learning	
Flipped classroom	
Inquiry-based learning	
Role plays and simulations	
Portfolios /journals	
Exhibitions and displays	
Direct instruction	

Teaching method		USAGE (tick appropriately)			
		Not used at all	Seldom	Often	Very often
Cooperative learning	Think-pair share				
	Small group discussions				
	Project-based learning				
	Group work presentations				
Flipped classroom					
Inquiry-based learning	Critical-thinking approach				
	Problem-solving approach				
Role plays and simulations					
Portfolios/journals					
Exhibitions and displays					
Direct	Explanation				

instruction	Elaboration	47			
	Lecturing				
	Demonstration				

APPENDIX 2: INTERVIEW GUIDE QUESTIONS

1. When do you use ICT equipment during conduction of your lessons?

2. What guides the choice of teaching method you employ during your lessons?

3. How do your students make their notes?

4. What challenges do you face in conducting your lessons following the new curriculum format?