

**EDUCATORS' ACCOUNTABILITY FOR LEARNING:  
A FRAMEWORK FOR EQUITY AND IMPROVED  
STUDENTS' ACHIEVEMENT IN WEST  
KENYA UNION CONFERENCE  
SECONDARY SCHOOLS**

A Doctoral Dissertation Submitted to the  
Department of Education  
School of Education, Humanities and Social Sciences  
University of Eastern Africa, Baraton

In Partial Fulfillment of the Requirements for the Degree of  
Doctor of Philosophy in Education  
(Curriculum and Teaching)

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## APPROVAL SHEET

This doctoral dissertation entitled *Educators accountability for learning: A framework for equity and improved students' achievement in West Kenya Union Conference secondary schools*, written and submitted by **Martin Audi Akoto**, in partial fulfillment of the requirements for the degree of Doctor of Philosophy in Education (Curriculum and Teaching), is hereby accepted and approved.



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## ABSTRACT

This research project focused on educators' accountability for learning seeking to develop a framework for equity and improved students' achievement in West Kenya Union Conference (WKUC) secondary schools. The Theoretical foundation of the study was based on Hilda Taba's Model of Curriculum Development, Information Construction Model, and Tomlinson's Differentiated Instruction Model. The study employed concurrent mixed methods design and data was gathered using questionnaires, semi-structured interviews, focus group discussions, observation of actual teaching, and analysis of school programs and documents. The total target population of the study was 3,067 consisting of 22 administrators, 157 teachers, and 2,888 students. A combination of purposive and stratified random sampling techniques was applied. The purposive sampling involved all of the 22 administrators, while the stratified random sampling involved a sample of 100 teachers, and 351 students, giving a total sample size of 473 individuals. Quantitative data were analyzed using descriptive statistics, t-test for independent samples, and Spearman rank-order correlation coefficient while qualitative data were subjected to both descriptive and content analyses. The study revealed that educators' accountability for learning was *average* in all the areas of classroom curriculum design, Pedagogy and students' assessment. This study recommended that educators in WKUC secondary schools should remodel their classroom curriculum, pedagogy and students' assessment within the framework proposed in this study to bring about educational equity and improved students' achievement.

Martin Audi Akoto

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## **DEDICATION**

To God Almighty my creator, my strong pillar, my source of inspiration, wisdom, knowledge and understanding. He has been the source of my strength throughout this program and on His wings only have I flown.

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## **ACRONYMS/ABBREVIATIONS**

AFL	Assessment for Learning
AOL	Assessment of Learning
AYP	Adequate Yearly Progress
CALD	Center for Analysis of Longitudinal Data
CBC	Competency Based Curriculum
DI	Differentiated Instruction
EFL	English as a Foreign Language
GIGO	Garbage-In-Garbage-Out
KCSE	Kenya Certificate of Secondary Education
KNEC	Kenya National Examination Council
LCL	Learner-Centered Learning
LRE	Least Restrictive Environment
MoEST	Ministry of Education Science and Technology
MTCs	Medical Training Centers
NAC	New Assessment Culture
NACOSTI	National Commission for Science, Technology, and Innovation
NCLB	No Child Left Behind Act (2001)
NLE	New Learning Environment
NYS	National Youth Service
OBE	Outcome-Based Education
OECD	Organization for Economic Cooperation and Development
PBL	Project Based Learning
QAOs	Quality Assurance Officers
RIP	Responsive Interviewing Protocol

SCL	Student-Centered Learning
SDA	Seventh-day Adventist
SNE	Special Needs Education
STS	Standardized Test Scores
T & L	Teaching and Learning
TRC	Teacher Research Collaboration
TSC	Teachers' Service Commission
TVET	Technical and Vocational Education and Training
UEAB	University of Eastern Africa, Baraton
VAK	Visual Auditory and Kinesthetic
VAP	Value Added Performance

# **CHAPTER ONE**

## **INTRODUCTION**

### **Background of the Study**

The concept of accountability and equity occupies center stage in every country's educational policy formulation. In more detailed manner, accountability has been defined as the answerability/responsibility of personnel in an organization to higher authorities regarding: the use of authority and responsibility; the need to take responsibility in case of failure, incompetence or infraction of rules (Arcagök & Erüz, 2006); the use of authority and resources in organizations in line with the law and in accordance with principles of productivity and efficiency; and the presentation of responsibility related to the achievement of specified goals and targets (Sözen & Algan, 2009).

However, according to Figlio and Loeb (2011), accountability in education is a broad concept that could be addressed in many ways such as: using political processes to assure democratic accountability, introducing market-based reforms to increase accountability to parents and children, or developing peer-based accountability systems to increase the professional accountability of teachers.

School accountability, which is defined as the process of evaluating school performance on the basis of student performance measures (Figlio & Loeb, 2011), is increasingly prevalent around the world. For example, more than a decade ago has seen a rapid growth in research and in policy as well as practitioner interest in school effectiveness and its potential as a catalyst for school improvement. Malena and McNeil (2010) observe that accountability and good governance are expected to go

hand in hand. They report that “accountability is the cornerstone of good governance; and that unless public officials can be held to account, critical benefits associated with good governance such as social justice, poverty reduction, and development remain elusive” (p.1).

Improving equity in education and reducing school failure should be a high priority in every educational policy agenda. Doing this pays off in the sense that the economic and social costs of school failure and dropout are high, whereas successful secondary education completion gives individuals better employment and healthier lifestyle prospects resulting in greater contributions to public budgets and investment. Therefore, investing in early, primary and secondary education for all, and in particular for children from disadvantaged backgrounds, is both fair and economically efficient (OECD, 2010). This contributes to economic growth and social development. This means that investing in high quality schooling and equal opportunities for all from the early years to at least the end of upper secondary is the most profitable educational policy.

Equity pedagogy is an approach to education in which teachers develop teaching strategies and cultivate classroom environments that better support all students, especially those who are disadvantaged in school and society. However, according to Struyf, Vandenberghe and Lens (2001), the integration of instruction, learning, and assessment remain a challenge for most teachers in many countries of the world including Kenya, and requires effective research-based interventions.

In the United States, accountability measures have become a centerpiece of both Democratic and Republican federal administrations’ education policies, following the movement by individual states to introduce accountability systems in the 1990<sup>s</sup>. During this period in history, governors figured out that excellent schools

were necessary to attract new business, so they started expecting schools to deliver great results. An education accountability system required three things, 1) a clearly defined set of standards, 2) valid and reliable tests that measure how well the standards are met, and 3) an effective plan to improve schools that fall short. Thus throughout the 1990<sup>s</sup> states strived to get these three things right; although the federal government was not involved (Figlio & Loeb, 2011).

However, the NCLB Act (2001) changed almost everything. Instead of no federal benchmark for student achievement, the new law set an almost ultimate national goal, that every student be proficient in Reading and Mathematics by 2014. And so, in order to hold schools accountable to that goal, every school was required to make Adequate Yearly Progress (AYP) or face serious punitive consequences; and Standardized Test Scores (STS) became the measure of accountability (Figlio & Loeb, 2011).

While some countries, such as Costa Rica, Cuba, Guatemala, and Panama, regularly test students and measure aggregate scores at the school level for internal purposes, others do it for the public, though in varied degrees to which they assess students. In Latin America, for instance, scores are publicly reported in Brazil, Chile, Colombia, and Mexico-in some regions. Nevertheless, according to Vegas & Petrow (2008), most governments in Latin America record school-level reports for internal purposes.

In the late 1990<sup>s</sup> the concept of accountability on educational outcomes was very critical for the South African context where social justice demanded equitable access to education and improved educational outcomes, particularly for the previously marginalized people of South Africa. Therefore, the first attempt at



curriculum reforms in the post-apartheid era was intended to get rid of racially divisive and offensive content from the curriculum (Jansen, 1998).

The second attempt brought in the practice of continuous assessment into the school system; and the third was the introduction of the controversial curriculum of 2005 which was based on the principles of Outcomes Based Education (OBE) (Jansen, 1998). The OBE learning objectives to be achieved in South Africa followed the thematic philosophies upon which the curriculum of 2005 was designed: outcomes-based, value oriented, learner centered, relevance, non-discriminatory, integration, acknowledgment of individual differences, and authentic and continuous assessment of learners. Nevertheless, the OBE-based curriculum in the context of South Africa did not go without criticisms.

In East-Central Africa Division of the SDA comprising eleven countries the story is somehow different. In Uganda, for example, church schools enjoy success quite unparalleled to the Kenyan situation. SDA schools in particular are the pride of the nation there. For example, in the Katikamu SDA school annual Observer Magazine (2006/2007), it is reported that according to the then Uganda University Admission for academic year 2005/06, Katikamu SDA secondary school was ranked top out of seven hundred Advanced Level (A-level) schools in Uganda (Katikamu Observer Magazine, 2006/2007). A-level schools are schools which offer Form Five and Six levels of education. An analysis of the Uganda National Examination Board (UNEB) results since 2000, which provided full list of Uganda Secondary schools in the order of high to low academic performance, revealed that most of the SDA Church and Church-related schools ranked among the high performing schools academically nationwide (New Vision, January 21, 2010). In Kenya, high performance in KCSE ranges from a mean score of 6.500 (Grade C+) and above;

average performance range from a mean score of 4.500-6.49 (Grade C- to C plain); and low performance is a mean score below 4.500 (Grade C-).

In East African countries, the issue of educational accountability and equity for learning, especially for learners with disabilities and special needs, has become a major concern. A good example is Kenya, where in her report on March 22, 2018 at the start of the East Africa Conference on Inclusive Education at the United States International University-Africa, the former Education Cabinet Secretary Amina Mohamed indicated that the education system in Kenya is still ill-equipped to support learners with disabilities and special needs (Kahongeh, 2018). Among the recommendations made by the report included the need to develop and implement policy on inclusive education to enhance access, retention and transition of children with disabilities and special needs.

The report further proposed the need to separate capitation for children with disabilities in schools with regard to the type and severity of their disability. It also called for the review of the curriculum to ensure that it meets the needs of learners with disabilities, enhance staff trained in special needs education in assessment centers and schools to facilitate quality service delivery (Kahongeh, 2018). However, most schools in Kenya are not performing to the expectations of many parents in their National examinations.

The Kenya Certificate of Secondary Education (KCSE) Examination results indicated that only 10 percent of the 611,952 students who sat the KCSE in 2017 attained university entry points of C+ and above; who, therefore, were qualified to take varied undergraduate degree courses. An analysis of the 2017 KCSE results as reported in the Daily Nation (Aduda & Ouma, 2017) showed that 135,550 candidates

scored grade D, 179,381 candidates grade D- and 35,536 candidates grade E. This means that 57 per cent of the candidates failed (Aduda & Ouma, 2017).

In Kenya, it is known that basic certificate training opportunities such as police or prison wardens admit students with at least D+. Many certificate courses have recently upgraded entry qualification to a minimum of C. Therefore, the candidates with lower grades do not have many options given the tight race for professional courses and employment. This means that more than 350,000 students who scored D and below were cut off from pursuing any professional course or securing gainful employment. Thus, the high number of candidates scoring low grades has caused concern among stakeholders of education in the country that the education system was becoming wasteful.

Further, non-bureaucratic ideas about how to both stimulate and measure school improvement are still in their infancy. If urgent steps are not taken to strategically establish and support Adventist schools/education, there are high chances that the Church is going to face serious crises in church leadership, membership and spirituality of her constituency. An Adventist school or Education system plays a fundamental role in providing Holistic Christian Education. Without this education, church schools risk graduating students who are not well prepared socially, spiritually, morally, physically, economically, emotionally and intellectually integrated. This will eventually negatively impact on the overall future church leadership, membership and spirituality.

### **Statement of the Problem**

Educators' accountability for learning and equity has to do with many things beyond preparing students for a national examination at the close of every year: First, it has to do with knowing best teaching and learning practices, and using them.

Second, it entails intimate knowledge of the curriculum, national standards, and having the skills to deliver effective instructional pedagogy. Third, it has to do with knowing that what happens in the classroom is not about the teacher but about the secondary school student and his or her success, and that success is fluid, and should never be tied to one assessment given on one day, but rather should be based on a myriad of things that will gauge performance over an extended period of time (Meg, 2012). And, given that students have varied learning needs at different times, have different aptitudes, and enter classes with different experiences and background knowledge, there is need for an education program that can offer “customized instruction so that individual students can realize their full potential.” (p.1)

Educators in any school system striving for excellence in education are those who understand the complexity of their position, perform duties and responsibilities at a high level, and are able to multi-task, fitting all of the interconnected pieces of school life together for the good of their students. As Hargreaves and Shirley (2012) point out, teachers are the real change agents in education. They are not just implementers of change: they generate it. Within schools, teaching has the strongest impact on student achievement. And as Stevenson and Gilliland (2016) observe, teachers are not simply at the heart of public education, they are its heart. Thus, teachers play a very important role in coordinating the active learning practices as instructional leaders guiding in the process of learning; and therefore, they should be held accountable for the success of their students.

However, educators in the West Kenya Union Conference (WKUC) secondary schools seemed to be grappling with some overwhelming challenges: First, was the challenge of having to reform the practices that contributed to inequitable learning opportunities and achievement gaps.

Secondly, they seemed to be facing a challenge in differentiating classroom curriculum, Pedagogy and students' assessment based on students' readiness, interest, and learning profiles. These two challenges were gaps that needed to be addressed in the context of WKUC secondary schools.

Therefore, this study sought to provide educators with balanced/unbiased learner-centered accountability framework for improved learning and equity that embraces effective classroom curriculum design, Pedagogy and students' assessment techniques that will help all students within their jurisdiction to develop the attitude, the resourcefulness, and the skills necessary for them to become lifelong, strategic, and motivated learners.

### **Research Questions**

The main questions that guided this study included:

1. What are the demographic characteristics of the respondents in terms of age, gender, grade level and years of service, employment status, and level of education?
2. To what extent are educators in the West Kenya Union Conference secondary schools accountable for learning in the areas of:
  - a. Classroom Curriculum Design (CCD)?
  - b. Pedagogy (P)?
  - c. Students' Assessment (SA)?
3. Is there a significant difference between educators' accountability for learning in the high-performing and low-performing secondary schools based on:
  - i) Teachers' responses and ii) Students' responses in the areas of:
    - a. Classroom Curriculum Design (CCD)?

- b. Pedagogy (P)?
  - c. Students' Assessment (SA)?
4. Is there a significant difference between the male and female educators' perception on the accountability for learning in the areas of classroom curriculum design, pedagogy, and students' assessment?
  5. Is there significant relationship between educators' perception on the accountability for learning in the areas of Classroom Curriculum Design, Pedagogy, and Students' Assessment and age, level of education, and years of experience?
  6. What relationships exist between teachers' perceptions of accountability for learning in terms of:
    - a. Classroom Curriculum Design and Pedagogy?
    - b. Classroom Curriculum Design and Students' Assessment?
    - c. Pedagogy and Students' Assessment?
  7. How can accountability for learning practices be entrenched into the administration, teaching, and learning activities for improved students' achievement and equity in the West Kenya Union Conference secondary schools?
  8. What framework/model can be proposed to attain equity and improved students' achievement in West Kenya Union Conference secondary schools?

## **Hypotheses**

The study tested four null hypotheses:

1.  $H_{01}$ : There is no significant difference between educators' accountability for learning in the high-performing and low-performing secondary schools

based on i) teachers' responses and ii) students' responses in the following areas:

- a. Classroom Curriculum Design
  - b. Pedagogy
  - c. Students' Assessment
2.  $H_{02}$ : There is no significant difference between the male and female educators' perception on the accountability for learning in the areas of classroom curriculum design, Pedagogy, and students' assessment.
  3.  $H_{03}$ : There is no significant relationship between educators' perception on the accountability for learning in the areas of Classroom Curriculum Design, Pedagogy, and Students' Assessment and age, level of education, and years of experience.
  4.  $H_{04}$ : No relationships exist between teachers' perceptions of accountability for learning in terms of:
    - a. Classroom Curriculum Design and Pedagogy
    - b. Classroom Curriculum Design and Students' Assessment
    - c. Pedagogy and Students' Assessment

### **Significance of the Study**

The study is significant to:

#### **Stakeholders**

1. The findings of this study will be used to help secondary school stakeholders in WKUC take a critical look at the aspects of school success and attempt to initiate change with fruitful success. Moreover, as equity pedagogy is implanted in the schools, administrators, teachers, students, parents and community members will feel a sense of pride as everyone achieves academic

success and a sense of belonging radiating from the school environment. They will also discover acceptance when biases and prejudices are reduced, an inclusive classroom is developed, an environment that nurtures different perspectives is created and everyone celebrates the uniqueness that they bring to the school culture.

## **Educators**

2. Focusing on the classroom, the study outlined how educators can become leaders in accounting for equitable learning and improved students' achievement by using a four-step process of observation, reflection, synthesis, and replication of effective classroom curriculum design, effective Pedagogy, and effective students' assessment practices.

### **a. Administrators:**

At the school level, school leaders will use the findings of this study to identify areas of strength and weakness across the school, and to develop strategies for improvement. When the proposed framework in this study is embraced and effectively implemented by the school administrators then educational equity and improved students' achievement will be realized.

### **b. Teachers:**

4. This study addressed achievement gaps that existed among students and provided insights into steps towards achieving equity for all students. For example, the study proposed classroom curriculum programs for teacher-student interaction with more emphasis on improving teacher-student relationship to have more inputs from each other's insights on how to improve opportunities of involvement for all learners. The information gathered on assessments and evaluations will be used by teachers to shape their teaching



strategies for improvement at each level of the education system. For example, at the classroom level, teachers will use information gathered on students' understanding, and adjust teaching to meet identified learning needs.

## **Students**

5. Overall students' academic achievement will increase as all students participate in cooperative learning groups, learner-centered instruction, hands-on activities, teacher modeling strategies, Assessment for Learning (AFL) being used to drive instruction, and high expectations for all.

## **Researchers**

6. The study will advance knowledge in the field of study on accountability for learning and equity as may be applicable in developing new learner-centered accountability framework that will enrich curriculum and engage learners while significantly improving equity and student achievement even in the perennially low-performing schools in the WKUC territory.

## **Justification of the Study**

Although empirical evidence about some accountability reforms has grown in the past several years in the developed countries (Bruns, Filmer, Patrinos, & Harry, 2011), educators' knowledge of accountability for learning and equity, especially in Kenya, is still quite limited. A good follow-up study which would be necessary to describe what, based on the results, are the steps that would be taken to build a stronger overall evidence base in the context of WKUC secondary schools is, therefore, justified.

The Kenyan Competency based Curriculum (CBC) is a new system of education designed by the Kenya Institute of Curriculum Development (KICD) team and launched by the ministry of education in 2017. The CBC is designed to

emphasize the significance of developing skills and knowledge and also applying those competencies to real life situations (Nyakangi, 2018).

In effect, the Kenyan CBC is considered balanced since it is a curriculum that emphasizes what learners are expected to do rather than mainly focusing on what they are expected to know; and since in principle, such a curriculum is learner-centred and adaptive to the changing needs of students, teachers, and society. Although it received some resistance at its initial stages of implementation, it was later overwhelmingly accepted by the Kenya Secondary School Heads Association (KESSHA) during their Annual General meeting in Mombasa (Correspondent, 2019).

However, the only concern with the Kenyan CBC is in the interpretation and implementation. There is lack of flexibility in the way it should be implemented, and the educators at the grassroots also have not been given sufficient time to develop sufficient capacity in terms of funding, training and other related resources (Correspondent, 2019).

This study aimed at establishing educators' personalized accountability strategies as a first step in creating a tool which they would use in developing and evaluating their own educational accountability for learning and equity practices. Since it was also to provide information which would help educators design classroom curriculum, Pedagogy, and students' assessment that address the learning needs of all students, while focusing on preparing learners with the flexibility needed for change; and the fact that this study sought to explore alternative ways on how to build a learner-centered accountability framework that would specifically relate to three very important instructional areas namely: classroom curriculum design, Pedagogy, and students' assessment, this study was justifiable.

## **Basic Assumptions**

The researcher made the following assumptions:

1. That all participants were knowledgeable in the utilisation of the survey tools, and were willing to give honest responses;
2. That the Ministry of Education Science and Technology (MoEST) would accept and utilize results and recommendations from this study;
3. That the school management would accept and utilize the findings and recommendations from this study for improving equity and students' achievement;
4. That the educators at the schools would accept to adopt and make use of the recommendations emanating from this study for equity and improving students' achievement.

## **Theoretical Framework**

This study was guided by three theories (herein referred to as models) in relation to curriculum design, Pedagogy, and students' assessment. These are: Hilda Taba's Model of Curriculum Development, Information Construction (ICON) Model, and Tomlinson's Differentiated Instruction Model.

Each of these three models is connected to this study in the following ways: First, in the case of Taba's model, Taba advocated for teachers to design curriculum, rather than higher authorities dictating the curriculum to the teachers. She believed that teachers are aware of the students' needs hence they should be the ones to develop the curriculum. She also believed that curriculum was best designed inductively, starting with specifics and building up to a more general design. She talked of grassroots approach. In the same way, the idea of having educators at the

school level being actively involved in designing and developing classroom curriculum is the focus of this study.

Secondly, according to a study by Bhutto and Chhapra (2013), constructivists share a focus on the learner-centered approach and the density of the learner's cognitive course of action for their learning and support needs; and the value of providing learner's with opportunities to make meaning and be real dynamic contributors in the learning-teaching experience. This study also lays emphasis on the learner-centered approach to teaching, whereby learners are the focus when designing classroom, pedagogy, and students' assessment strategies.

Thirdly, this study borrows the concept of Information Construction (ICON) Model that considers differentiation as a unique method of addressing issues of diversity in academic abilities, learning styles, interests, culture, and motivation that many of our students encounter. To differentiate a lesson is to allow students various freedoms. For example, many teachers find that students learn best in environments that allow freedom of choice, open-ended exploration, freedom from judgment, validation of every student's experience, and belief in every student's ability.

### **Hilda Taba's Model of Curriculum Development**

First, the study was informed by the Taba's Model of Curriculum Development as presented by Ornstein & Hunkins (2009) in Figure 1.

Taba's idea of how to develop curriculum was that there must be a definite order to the creation of a curriculum. This approach is also based on a step by step plan, with specific goals and objectives as well as with activities that accompany them where outcomes are evaluated against the stated objectives. The main concept of this approach to curriculum development is that teachers must be involved in the

development of classroom curriculum, and the main idea to this approach is that the needs of the students are at the forefront to the curriculum.

Taba developed a process for determining what needs to be taught to students and included a guide on how to accomplish the outcomes from students (Costa & Loveall, 2002). She believed that there must be a process for evaluating student achievement of content after the content standards have been established and implemented. She also believed that the curriculum should be organized around generalized learning objectives which enable students to discover principles that will enable them to be successfully (Middaugh & Perlstein, 2005).

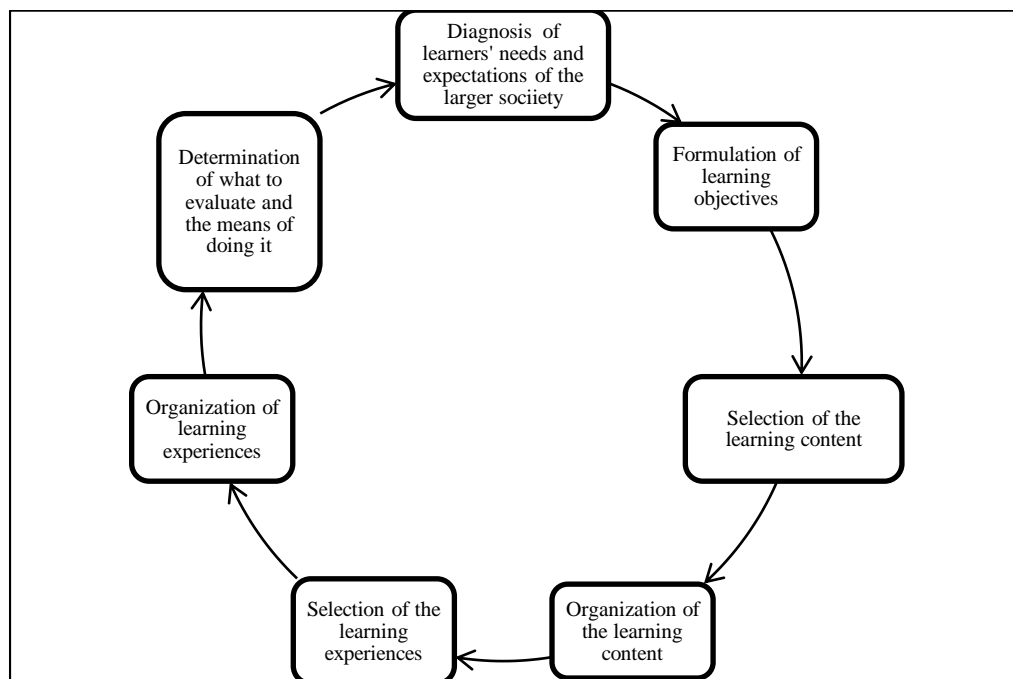


Figure 1. Taba's Model adopted from Ornstein and Hunkins (2009, pp. 181-206).

Taba's curriculum design process contained seven main steps: diagnosis of the learners' educational needs, formulating specific objectives, selection of content based on those objectives, organization of the content into appropriate levels and sequences, selection of learning experiences that help the students learn the content, organization of those learning experiences and evaluation of whether the objectives are met(Ornstein & Hunkins, 2009).

The development of curriculum based on the ideals of Taba is found in curriculums used in many schools today. Taba stated that there are three groupings of objectives: knowledge- what children need to understand; skills-children need to learn how to; and concepts-children need to be (Ornstein & Hunkins, 2009). She advocated for students' use of problem solving and inquiry discovery techniques.

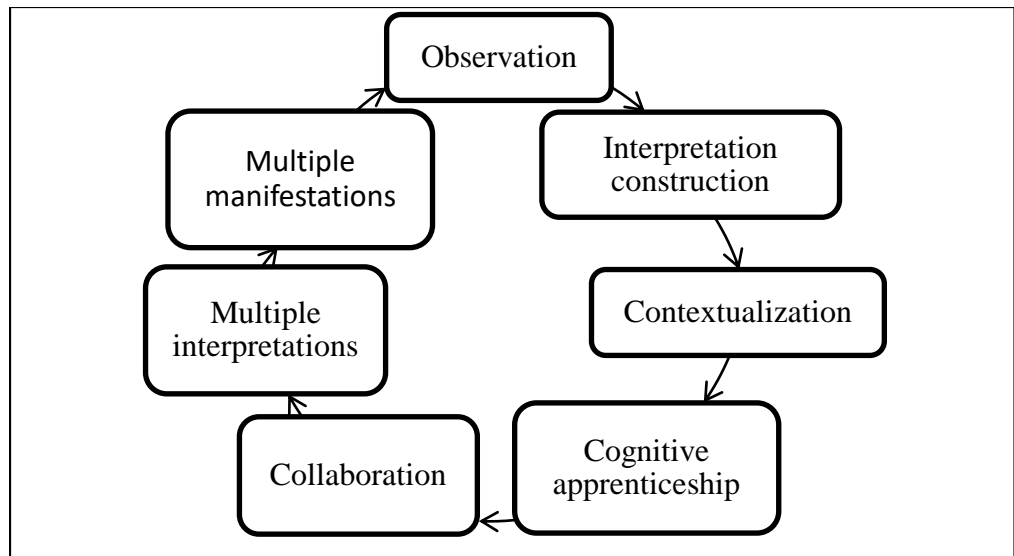
The use of Taba's ideals is relevant to WKUC secondary schools in the sense that they can be applied in the process of monitoring students' status in learning and placing students with similar learning experiences in diverse groupings, what in the context of this study is called co-operative or collaborative learning groups.

Hilda Taba described curriculum as a plan for learning. This definition still applies today, Hilda Taba taught that objectives establish a sense of purpose and provide a basis for deciding what to include or emphasize in developing a curriculum (Fraenkel, 1992). She also believed that teachers should teach facts that enhance understanding because coverage is impossible.

Taba noted the importance of using objectives to establish a sense of purpose for deciding what to include, exclude, and emphasize in a curriculum (Arterbury, 2011). She preferred sampling rather than covering. Many times students are expected to retain information which will be of no value past today. There is need to give them precepts that can build upon each other. High school teachers should build upon knowledge that students retain from elementary and middle schools.

### **Information Construction (ICON) Model**

Second, in order to develop pedagogy, this study borrowed constructivist ideas built on Information Construction (ICON) Model as interpreted by Black and McClintock (1995) in figure 2.



*Figure 2.* Information Construction (ICON) Model by Black and McClintock (1995, pp. 107–119) in B. Wilson (Ed.)

The framework is used to represent a continuing sequence of stages, tasks, or events in a circular flow; emphasizing the stages or steps rather than the connecting arrows or flow. The model lays emphasis: on students’ encounter with authentic issues in groups; on constructing interpretation by students in groups; on searching for information about the problem in groups; and facing different interpretations about the problem in groups. Thus, just like the Taba model, the ICON model has a group-based teaching and learning approach.

Research has found that self-regulated learning strategy in constructivist pedagogy improves achievement in Mathematics and the level of confidence for middle school students (Cekolin, 2001). As Kim (2005) revealed, students in the constructivist classroom had significantly higher learning skills in Mathematical computation. In such classrooms, students change their learning strategies and show upon motivation to learn academic task and have preference for a constructivist

classroom environment. In Kenya, classes from 6 to 9 are considered as middle school.

In a study by Kroesbergen and Van Luit (2005), constructivist instruction is found to be more effective than the direct instruction for achievers. According to a study by Bhutto and Chhapra (2013), constructivists share a focus on the learner-centered approach and the density of the learner's cognitive course of action for their learning and support needs and the value of providing learner's with opportunities to make meaning and be real dynamic contributors in the teaching-learning experience.

In spite of the dominance of constructivist theories in research, relatively few teachers are likely to have a close acquaintance with these ideas as a direct result of their initial training or professional development, so constructivist ideas have tended to spread in a relatively haphazard way. However, where these ideas have underpinned practice, the results have been successful (Van Kuyk, 2009).

Kim and Hannafin (2011) emphasize the importance of phased – or repeated – scaffolding in the form of problem-solving in the science classroom. They argue that problem-solving has ‘long been considered important for learning and understanding in science’. They define problem-solving during classroom scientific inquiry as: “Deliberate activities in which students pose, investigate, and solve meaningful scientific problems by inquiring through five interactive, non-sequential phases: problem identification, exploration, reconstruction, presentation and communication, and reflection and negotiation.” (Pp.255-256)

In preparation for the world of the 21st century, students need to be inspired. Peers, educators, parents, entrepreneurs, and civic leaders can all provide the human component necessary to encourage students to become intellectual risk-takers and creative problem solvers. We need to praise students for generating ideas and

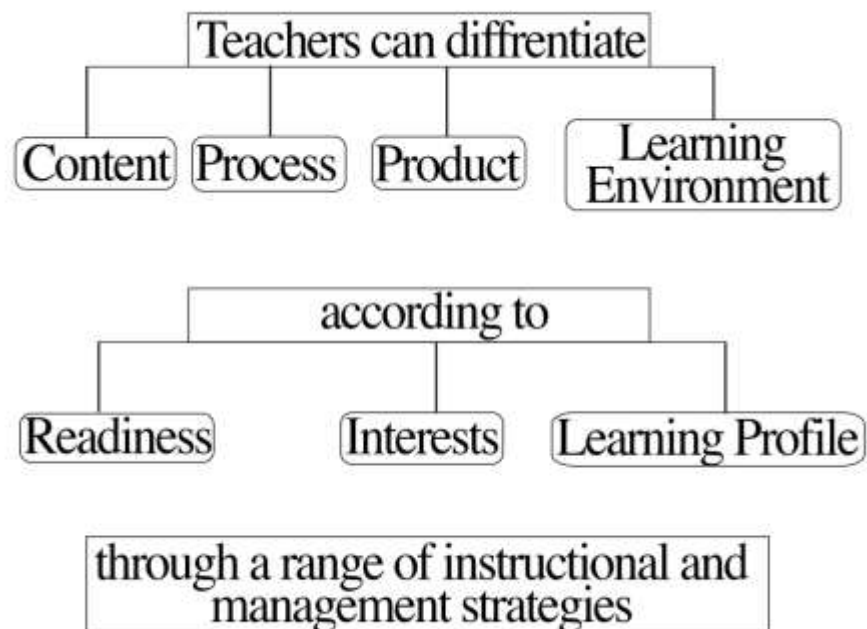


encourage innovative thinking, and we must challenge students to push further to refine their most unique ideas into high-quality projects.

### **Tomlinson’s Differentiated Instruction Model**

Third, in order to accommodate diverse students who may not succeed in normal classrooms, this study also made reference to Tomlinson’s Differentiated Instruction (DI) model (Tomlinson, 2001). This is represented by the framework shown in figure 3.

Differentiation is a unique method of addressing issues of diversity in academic abilities. The frame shows that students’ readiness, interests, and learning profiles determine what teachers prepare. The arrow indicates how students’ engagements in terms of readiness, interests, and learning profile influence what teachers prepare in terms of curriculum content, process, and product (Tomlinson & Allan, 2000).



*Figure 3.* Differentiated Learning adopted from Tomlinson (2001, p.7).

According to Ernest, Heckaman, Thompson, Hull, and Carter (2011), content refers to materials used to support instructional subject matter. Examples of differentiated instruction strategies for content are: varying reading materials, reorganizing content (describing similarities, categorizing into groups, developing abstract thought), allowing proficient students to skip the acquisition phase and move to the application phase, and varying content according to student interest.

Process refers to the ways in which the students engage with the content. Examples of differentiating by process include: varying how much support provided to each child according to his/her need; using graphic organizers, concept maps or charts; using tiered activities centered around the same skills; using centers to allow multi-faceted (using multiple intelligence) learning of content; using student-specific task sheets (agendas) written both for the whole class and for individuals; using manipulatives and hands-on activities; presenting learning through different means and/or mediums (audio-visual, vary text size, color contrasts); and varying time and support for specific tasks (Ernest et al., 2011).

Product refers to the ways in which students demonstrate their understanding of the concepts being learned. Differentiating by product involves the teacher in designing a variety of assessments that allow for the wide range of student ability levels in the classroom. Examples are: allowing students to work alone or in small groups on different products; such as writing a paper, giving a speech, presenting a skit, designing a model, and creating a flyer; that would demonstrate the students' understanding of the concept being learned; encouraging the creation of individual products that contain aspects of the assignment; and providing expectations that allow for varying degrees of difficulty, meaning and procedures (Ernest et al., 2011).

According to Tomlinson (2001), differentiated classroom is a place where “the teacher proactively plans and carries out varied approaches to content, process, and product in anticipation of and response to student differences in readiness, interest, and learning needs” (P.7). When differentiating, teachers do not necessarily water down the curriculum for students, but they simply differentiate classroom elements such as content, process, product and learning environment according to student characteristics- readiness, interest and learning profile, through a range of instructional and management strategies.

In order to provide a more practical application of differentiated instruction, Tomlinson (2001) identified five guidelines for general education classroom teachers to attain. First, key concepts and generalizations should be focused and presented in such a way that all students have access to engage with, explore, and make meaning of the powerful foundational concepts of academic materials. Second, students should be assessed at the outset of a unit or along the way in the unit so that teachers can adjust their teaching based on the current understandings of the students. Third, critical and creative thinking are emphasized in lesson design so that students at all levels can apply the information to solve problems. Fourth, all students are engaged in a variety of learning tasks so that they can master basic information and use the information to solve problems. This means that tasks must be open-ended with multiple entry points. Fifth, there is a balance between teacher-assigned and student-selected tasks and working arrangements so that students are matched with tasks compatible with their individual learner profile.

Further, differentiated classroom is a classroom where teachers use assessment data to support modification of curriculum and instruction as a response to students’

entry points relative to a particular understanding or skill; students' affinity, curiosity, or passion for a particular topic or skill; and how students learn.

Engagement is the key to student learning. Using activities that are relevant and differentiated for 21st century students includes using activities that incorporate technology tools that are a part of their everyday digital lives. The integration of digital technologies into teaching practices requires teachers to acquire new strategies and activities for differentiating instruction for 21st century learners. Effective differentiation functions on the premise that every student can do remarkable things with appropriate guidance and support. DI is not a single strategy or practice but rather an approach that utilizes research-based instructional and organizational practices to accommodate students' differences in the classroom (Tomlinson, 2001).

### **Scope**

This study was restricted to examining educators' accountability for learning and equity in the eleven SDA church maintained secondary schools in WKUC. The parameters of investigation included views of secondary school teachers, administrators, and students regarding the extent to which educators were accountable for learning and equity in the areas of classroom curriculum design, Pedagogy, and students' assessment. The study was done in March, 2019, being first term of that academic year when the schools were in session.

The views were gathered through questionnaires for teachers and students as well as interviews and focus group discussions with teachers and administrators. More data was obtained through observation of actual classroom teaching, observation and analysis school programs and documents such as student enrolment records, teacher turnover analysis records, and KCSE results analyses for the last 5-10 years, as well as students' entry behaviors for the last 5-10 years.

## Operational Definition of Key Terms

*Accountability* as used in this study relates to the educators' responsibility for their students and his or her learning progress. It refers to a situation where school administrators and teachers accept ownership over their student's performance in and outside their classroom.

*Active learning* as used in this study means students' engagement with the material, participating in the class, and collaborating with each other.

*Assessment for learning* was operationally defined as the type of assessment which is ongoing, and requires deep involvement on the part of the learners in clarifying outcomes, monitoring on-going learning, collecting evidence and presenting evidence of learning to other learners.

*Classroom curriculum design* was used in this study to describe the purposeful, deliberate and systematic organization of curriculum-instructional blocks within a class. It is a way that teachers plan instruction in their classes. When teachers design classroom curriculum, they identify what will be done, who will do it, and when, with a purpose in mind- to improve student learning.

*Differentiated Instruction* as used in this study means building lessons, developing teaching materials, and varying instructional approaches so that all students, regardless of where they are starting from, can learn content effectively, according to their needs, backgrounds and experiences.

*Diversity* in education usually refers to the effects of gender and ethnicity on student performance (Chubin, May & Babco, 2005). As used in this study it refers to students' differences in respect to their needs, backgrounds, and experiences based on gender, ethnicity, and socio-economic status that influence students' learning and achievement.

***Educators*** was here used to refer to administrators and classroom teachers who normally engage in purposeful, deliberate and systematic development and organization of curriculum-instructional blocks- within a school or/and class.

***Educators' Accountability*** in the context of this study refers to teachers' and school administrators' responsibility for all students, regardless of the advantages or disadvantages they bring to school within a system which is built upon aligned components such as objectives, assessments, instruction, re-sources, and rewards or sanctions with the aim of meeting high standards as well as providing the vehicle for positive change.

***Equity*** as used in this study includes the following characteristics:

Balanced/unbiased outcomes for all students in classrooms as measured by multiple forms of assessment; classroom environments where students' differences and backgrounds are celebrated and respected, and where their unique gifts are cultivated; and teaching practices and organizational policies that promote equitable results that create inclusive, multicultural classrooms and school environments for learners and educators, equal access to qualified teachers, teaching-learning resources, and equal opportunities in class participation.

***Equity pedagogy*** as used in this study refers to an approach to education in which teachers develop teaching strategies and cultivate classroom environments that better support all students, especially those who have been disadvantaged in school and the outside society (Banks & Banks, 2013).

***High Performing Schools*** are those schools which usually obtain a mean grade of C+ and above in the KCSE National Examinations.

***Inclusive education*** in the context of this study refers to when all students, regardless of any challenges they may have, are placed in age-appropriate general

education classes that are in their own neighborhood schools to receive high-quality instruction, interventions, and supports that enable them to meet success in the core curriculum (Bui, Quirk, Almazan, & Valenti, 2010; Alquraini & Gut, 2012).

***Learner-centered*** is a system of instruction that places the student in its heart. It refers specifically to those teaching and learning methodologies that help learners develop the attitude, resourcefulness, and skills necessary for them to become lifelong, strategic, and motivated learners who are eager and able to learn outside the classroom; and who have the ability for independent inquiry and a sense of responsibility for their own learning (Tomlinson & Allan, 2000).

***Learning environment*** is the ‘climate’ of a classroom and includes the operation and tone of the classroom such as class rules, furniture arrangement, lighting, procedures and processes (Tomlinson & Allan, 2000).

***Learning*** in the context of this study refers to the process of acquiring new, or modifying existing knowledge, behaviors, skills, values, or preferences with the guidance of the educators.

***Low performing schools*** are those schools which are consistently obtaining a mean grade below C+ in the KCSE National Examinations.

***Participation in classroom*** refers to the acts of involvement in the class activities. In this research, the acts of involvement in class activities were operationally defined as active participation and passive participation. The act of active participation includes asking questions, give opinions and discuss about the related topic taught, as well as psychomotor activities such as.....while passive participation refers to the acts of writing notes, sit quietly, and listening to lectures.

***Pedagogy*** as used in this study refers to the “interactions between teachers, students, the learning environment and the learning tasks” (Murphy, 2008. p. 35). It

comprises not only what teachers do in the classroom, but also their ideas, knowledge and attitudes in relation to the learners, the teaching and learning process and the curriculum.

*Professional development* as used in this study is defined as activities that develop an individual's skills, knowledge, expertise and other characteristics as a teacher.

*School Accountability* as used in this study is the process of evaluating school performance on the basis of student performance measures (Figlio & Loeb, 2011).

*School climate* refers to the quality and character of school life which in the context of this study includes positive and democratic learning environment, safety, engagement, connectedness, support, and collaboration.

*School Connectedness* refers to an academic environment in which students believe that educators in the school care about their learning and about them as individuals (Blum, 2005).

*Student Achievement* as used in this study refers to the standard used to measure the amount of academic content a student learns in a determined amount of time.

*Students' Assessment* in the context of this study is an ongoing process, which requires deep involvement on the part of the learner in clarifying outcomes, monitoring on-going learning, collecting evidence and presenting evidence of learning to others (Davies, 2000).

*West Kenya Union Conference* in the context of this study refers to the Administrative unit of the Seventh-day Adventist Church in Kenya which covers the counties presented in Index K; and within which the schools covered by this study are found.



## **CHAPTER TWO**

### **REVIEW OF RELATED LITERATURE AND STUDIES**

The researcher's purpose for literature review was threefold namely: 1) to explain the theoretical underpinnings of the research study; 2) to assist in formulation of the research questions and selection of the study population; and 3) to stimulate new insights and concepts throughout the study.

Literature related to accountability for learning and equity for improved students' achievement was reviewed. These included internet sources, government publications, and print materials (articles, reports, and books) on educational accountability for learning and equity. The review also covered literature related to: students' diversity, classroom curriculum design for diverse students, Pedagogy for diverse students, and students' assessment.

#### **Historical Overview**

The concept of accountability is a recent focus of interest for researchers and numerous definitions have been provided for it. According to research, these definitions explain this concept in terms of providing information to an authority related to one's practices (Balcı, 2003; Sözen, 2005), holding a person or an organization responsible to an authority regarding the activities in question (Mulgan, 2000; Julnes, 2006; Peters, 2007), liability to provide answers and explanations (Baş, 2007), and a process for providing explanations to a specific authority about tasks and practices (Mulgan, 2000).

The term 'accountability', at its simplest, describes a relationship whereby one party – sometimes interpreted as an individual, sometimes an institution – has an

obligation to account for their actions or performance to another (Brundrett & Rhodes, 2011). This obligation assumes that whoever is giving account, and being held to account, has some responsibility for the actions or performance. Thus, accountability involves both responsibility and accounting, which may be evaluated against established or expected standards and action taken. Responsibility on the other hand is the more personal concept, with people feeling an intrinsic sense of responsibility, for individual students, for example. Giving an account is seen as a less personal, more systemic concept (Mongon & Chapman, 2012).

Looking back over the history of accountability, one would realize that the approach to designing accountability systems has quite changed over time. For several decades, most education systems have been built on standardizing the way we teach and test. Although this worked well when most students would progress from school to an industrial job, today, students are expected to perform more complex tasks in today's workplace; and yet most of the current education systems, especially in the developing countries do not adequately prepare students for success in career and life.

The question of values in education, the purposes of schooling, the quality of students' educational experiences and of what constitutes a 'good school' still remain the subject of much argument and are unlikely to be resolved easily (White & Barber, 1997); even though research reveals that the approach to designing accountability systems has quite changed over time. For example, the Council of Chief State School Officers (2008), reported that the field of education in the U.S then had moved from financial accountability and accountability based on inputs to standards-based accountability systems based on outputs. Then results were generalized to the full population, and the movement has been towards assessing every student and evaluating every teacher and school.

As a result, Students' Assessment for educational accountability has moved from matrix sampling to whole system. That is, in the past schools, teachers or students were matrix sampled so that only a sample was given tests or other instruments to measure the desired outcomes. Consequently, there is considerable variation on the surface of reform initiatives across educational authorities in developed countries including changes in curriculum, student testing, school governance, funding formulae, roles and relationships of principals, as well as trustee power.

Over a decade ago, authors appeared to differ primarily in the level of detail provided and in the component of focus. For example, while some authors focus on guiding questions, others on developing a set of accountability standards or core elements; yet others concentrate on the technical aspects of various indicators, while still others focus on the goals and consequences of a system. For example, in the 1990<sup>s</sup>, Kirst (1990) reviewed six broad approaches to accountability, which included: (1) accountability through performance reporting; (2) accountability through monitoring and compliance with standards/regulations, (3) accountability through incentive systems; (4) accountability through reliance on the market; (5) accountability through changing the locus of authority or control of schools; and (6) accountability through changing professional roles.

Stecher and Hanser (1992) elaborated an educational accountability model with four major components namely: goals, measure, a feedback loop and systemic change mechanism, arguing that for any accountability system to be effective, it must include each of these components. The question of values in education, the purposes of schooling, the quality of students' educational experiences and of what constitutes a

'good school' rightly remain the subject of much argument and are unlikely to be resolved easily (White & Barber, 1997).

But in recent studies, it is argued that local governments should use several of these approaches simultaneously. For instance, Raudenbush (2004) argues that accountability systems must include measures of processes, such as information on organizational and instructional practice, in addition to measures of outcomes if the goal is to help improve schools.

Baker, Linn, Herman, & Koretz (2002) created a set of 22 standards for educational accountability that they grouped into five key categories namely: system components, testing, risks, public reporting, and evaluation. Hanusheck and Raymond (2002) stated that the “basic skeleton” of accountability systems includes: goals, content standards, measurement, consequences, and reporting.

Reeves (2004) explained how to transform accountability from destructive and demoralizing accounting drills into a constructive decision-making process that improves teaching, learning, and students' achievement. He encourages educators to become proactive in developing student-centered accountability systems. Reeves further shows how educators can create accountability systems that enhance teacher effectiveness and lead to significant improvements in student achievement and equity, even in traditionally low-performing schools. These systems capture the many aspects of teaching that test scores do not reveal.

The recent changes in educational accountability, therefore, have resulted in some government systems that have become overloaded in trying to serve too many purposes simultaneously, failing to serve any of them well. In addition, expectations have increased. Stakeholders, for example, expect to see immediate improvements and evidence that student learning has increased, leading to quick fixes or short-term

strategies. The changes, however, have discouraged a thoughtful approach to the entire educational accountability system focused on the goals.

Other than the changes that have occurred in the type of accountability measures, other changes are occurring in terms of who is accountable. Today, especially in the case of Kenyan education, more consequences are being attached to students' academic performance, including public reporting and tangible forms of recognition. Poor academic performance is now likely to result in sanctions such as Education Ministry's intervention, visits by technical advisory teams, and reconstitution of the affected schools. More consequences are being attached to student performance, including public reporting and tangible forms of recognition. As a result, Students' Assessment for educational accountability has moved from matrix sampling to whole system.

However, despite efforts by many governments to provide high quality education, significant disparities in educational outcomes continue to exist. For example, despite the Kenya's government efforts towards the realization of Education For All (EFA), it continues to experience a number of challenges. These include: gender disparities, high poverty levels, Teacher supply and quality, HIV/AIDS Pandemic and Inadequate financial resources. Moreover, a large number of students fail to obtain a minimum level of education, jeopardizing their own future and the progress of their society (Wanjohi, 2013).

### **Accountability for Learning**

In a study by Levitt, Janta, and Wegrich (2008), accountability has been cited as one of the factors associated with positive outcomes in public services. In education, accountability is associated with improved school performance. For this improvement to materialize there must be a well-established accountability

framework, relationships, and arrangements. However, the outcomes of accountability are not always positive and if they are not well-planned, accountability dysfunction may occur. Thus, in most cases, accountability dysfunction primarily results from a lack of supportive structures within the education system and accountability overload, that is, having too many overlapping evaluation criteria and/or too many stakeholders and supervisors, each with his or her own requirements for reporting purposes with which the actor is expected to comply (Levitt et al., 2008).

Recent publications (Benner, Sutphen, Leonard, & Day, 2010; McLaughlin, Roth, Glatt, Gharkholonarehe, Davidson, Griffin, & Mumper, 2014) reaffirmed that educators need to change how they have approached teaching. Thus, every educator is challenged to implement strategies that will engage students in their learning. Changing teaching style requires a paradigm shift in how teachers approach learning to one that invites students to work collaboratively to learn not only the required knowledge but also the skills that will assist them when coping with complex clinical issues encountered in clinical practice.

Meeting the challenge with success requires preparation on the part of the faculty, as well as the student, and calls for support from those in administrative positions not only relative to teaching strategies but also to the provision of new resources, such as technology and flexible facilities. Success is enhanced when faculty, as a whole, endorse the use of student-centered learning activities. Hawks (2014) suggested that preparing students for a different type of learning experience, one that requires students to be actively engaged in their learning, can be helpful in proactively addressing potential resistance to change.

## **Accountability for Students' Success**

In order for students' success to adequately take place, it demands that educators employ effective Student-Centered Learning (SCL) approaches. According to Lea, Stephenson, and Troy (2003), SCL refers to the following: reliance on active rather than passive learning; increased responsibility and accountability on the part of the student; an increased sense of autonomy in the learner; an interdependence between student and lecturer; mutual respect within the learner lecturer relationship; and reflective approach to the teaching and learning process on the part of both the teacher and student. SCL approach encourages and stimulates learners to have a deep approach to learning where they can enrich higher order thinking skills. It is basically related to the constructivist view of learning in the importance it places on activity, discovery and independent learning (Carlile & Jordan, 2005). SCL is based on the philosophy that the student is at the heart of the learning process (Machemer & Crawford, 2007).

In SCL students should be in a position to receive constructive timely feedback and clear explanation of their mistakes from the instructors so as to realize and rectify those mistakes in future (Hattie & Timperley, 2007). According to Harden and Laidlaw (2013), teachers using SCL should therefore, provide appropriate feedback to the student, and the learning should be individualized to the personal requirements of the student. The courses can be designed with well-defined learning outcomes on entry to their classes, learning styles and engaging them in collaborative problem based learning perhaps with team members or independently.

Mclean and Gibbs (2010) observes that it is also important to include students at all levels of curriculum design, implementation and evaluation; and as clients, they need to be part of the process of developing a learner-centered curriculum. They

submit that a clear admission policy, with appropriate support structures, should be developed. Furthermore, the school should support student diversity and individual learning needs, the psychological and social aspects of student diversity, develop students' self-learning skills, allow time for independent learning and pursuing areas of interest, regularly review the core curriculum content, recognize that their education continues beyond graduation, provide ample opportunity for student professional development and not pay lip service to learner-centeredness (McClean & Gibbs, 2010).

Study by Çubukçu (2012) reports that vital characteristics of the student-centered teaching (SCT) program include: emphasizing tasks that attract students' interests; organizing content and activities around subjects that are meaningful to the students; determining clear opportunities that let all students develop their own learning, skills and progress to the next level of learning; organizing activities that help students understand and improve their own viewpoints; developing global, interdisciplinary, and complementary activities; supporting challenging learning activities even if the learners find them difficult; and emphasizing activities that encourage students to work with other students in cooperation.

According to research, there are seven levels of accountability for student success namely: state, school system, school, principal, teachers, parents, and students according to Ordu and Ordu (2012). However, only four of these are discussed below in the context of this study. These are school, principal, teachers, and students' levels.

### **School-level Factors**

At the school level, school failure can be defined as the incapacity of a school to provide fair and inclusive education and an adequate learning environment for students to achieve the outcomes worthy of their effort and ability. From a systemic perspective, school failure occurs when an education system fails to provide fair and



inclusive education services that lead to enriching student learning. From an individual perspective, school failure can be defined as the failure of a student to obtain a minimum level of knowledge and skills, which can at the extreme lead to dropping out of school (Field, Kuczera, & Pont, 2007).

At the school level, parents expect school districts and state to invest in classroom resources and support teachers by setting clear expectations, helping teachers develop their craft, providing meaningful support which is tailored to the teacher's needs, and then providing a fair, multi-faceted review of how well teachers are serving the educational needs of our students. They should also drive improvements in schools that fall short year after year (Field et al., 2007).

Ladd (2001) views accountability at the school level as preferable both because it promotes collaboration among teachers and because schools have more opportunities than do individual teachers to enact the types of changes in resource allocation and practices that may be needed to raise student achievement. School accountability systems have the potential benefits of aligning effort with stakeholders' goals and providing information for improvement; however, they are limited by the fact that they can only measure a small number of the dimensions valued by stakeholders.

Rothstein, Jacobson, and Wilder (2008) demonstrate that educational stakeholders value a wide range of outcomes including not just academic performance and educational attainment but also areas such as citizenship, work ethic, and critical thinking. But school accountability systems generally do not cover even the full set of valued academic outcomes, instead often focusing solely on reading and mathematics performance, and the non-test measures like graduation rates or attendance rates are also crude proxies for the behavioral and attainment outcomes that stakeholders value.

By focusing attention on the set of outcomes that are easily measurable, school accountability systems may lead some valued outcomes to be treated as more important than other valued outcomes (Ladd, 2001).

### **Principal-level Factors**

Research suggests that school leadership is second only to classroom teaching in influencing learning (Barber & Mourshed, 2007). As evidenced in the literature, (Blase, Blase, & Phillips, 2010; Taylor, 2010), strong leadership:

- facilitates school cultures that support opportunities for student learning, teachers leadership, and staff professional growth;
- includes teachers in decision-making about instruction, the allocation of resources, and ongoing professional learning;
- provides guidance in the use of Students' Assessment data for classroom programming and school improvement;
- promotes change that will result in instructional improvement;
- models integrity, fairness and ethical conduct;
- advances the success of all students by collaborating with parents and community members;
- leads the effective implementation of curriculum, instruction and assessment.

Louis, Dretzkea, and Wahlstrom (2010) published a detailed sequel to probe school leadership in depth. They reaffirmed their earlier conclusion, declaring that: “In developing a starting point for this six-year study, they claimed, based on a preliminary review of research, that leadership is second only to classroom instruction as an influence on student learning” (Louis et al., 2010, p. 9). They also found that “although school leadership does not make its impact directly, its indirect workings have a statistically significant effect on student achievement” (p. 37).

Research has also argued much about the link between quality leadership and school performance for many years. The conclusion reached was the belief that no school can be greater than their leaders and that a school is as good as its leadership (Yusuf, 2012). A recently published Wallace Perspective report that takes a look back at the foundation's research and field experiences reports that five practices in particular seem central to effective school leadership (Wallace Foundation, 2012). These include: 1) shaping a vision of academic success for all students, one based on high standards; 2) creating a climate hospitable to education in order that safety, a cooperative spirit, and other foundations of fruitful interaction prevail; 3) cultivating leadership in others so that teachers and other adults assume their part in realizing the school vision; 4) improving instruction to enable teachers to teach at their best and students to learn at their utmost; and 5) managing people, data and processes to foster school improvement. When principals put each of these elements in place and in harmony, they stand a better chance of making a real difference for students.

From the report, the following points clearly come out: that leaders of successful secondary schools usually strengthen their skills and involve the entire school in plans to raise student achievement; that the best school leaders establish an environment of continuous progress in which teachers and leaders work together to upgrade curriculum and instruction, examine data to identify weaknesses in school and classroom practices, and develop and implement plans to increase the vitality of school reform; that successful school leaders promote teacher collegiality and higher student performance through use of the Key Practices and technical assistance; and that successful school leaders use classroom visits, coaching and mentoring, and other professional development to prepare teachers to focus on greater student achievement.

A study by Hitt and Tucker (2016), found out that principal practices influence student achievement, and identifying those that specifically influence student achievement guides principal development and decision-making. School principal and teachers, therefore, need to agree on a clear mission to help all students succeed. They must be willing to participate wholeheartedly in focus groups, small learning communities and professional development activities to acquire and use more effective ways to prepare students for college and careers.

### **Teacher-level Factors**

Teacher-level factors are primarily under the control of individual teachers. Research so far has shown that a teacher's effectiveness has an influence on the students' academic attainment (Afe, 2001). Some researchers have found evidence indicating that performance incentives for teachers can be beneficial for student outcomes (Lavy, 2007; Figlio & Kenny, 2007). In fact, for several years teachers have been regarded as the essential catalysts for school and school student performance improvement. They are the driving force and main resource in the development and academic growth of students as they are sources of knowledge and agents of change (Wallace Foundation, 2012). Thus, teacher effectiveness has been the interest of policy makers, educators and parents. Teachers' effectiveness is measured by students' academic performance in both internal and external examinations. It is a general feeling that students who fail the examinations are taught by ineffective teachers; on the other hand, those who excel are taught by the very effective teachers.

Findings by Marzano (2003) indicate that "ineffective teachers might actually impede the learning of their students" (p. 75). He emphasized that the impact of individual teachers could have a greater impact on student achievement than all school-level factors. He summarized teacher-level factors as: collegiality,

professionalism, instructional strategies, and classroom curriculum design and classroom management as highlighted below:

**Collegiality or collaboration.** Marzano (2003) defined collegiality as the manner in which staff members in a school interact with each other and that collegial behaviors include: openly sharing failures and mistakes, demonstrating respect for each other, and constructively analyzing and criticizing practices and procedures. Collaborative teams that share this common purpose are normally characterized by the following common behaviors: they employ collective inquiry as they question the status quo; they seek new methods; they test those methods and reflect on results (Marzano, 2007). Thus, energized in their willingness to work together, the organizational framework is renewed and refreshed.

Redding (2006) states that the purpose of collegial learning is realized when all its members are engaged in learning. Simultaneously, individual teachers are at work in their classrooms and teams collaborate toward cumulative plans. Collegial Learning happens when a school ensures the quality time that allows teams of teachers to work together.

As Carter (2007) observes, districts and schools that provide opportunities for collaborative work with appropriate professional development, support, resources and leadership will help teachers and students to be successful. Effective teachers devise activities or assignments that provide students with opportunities to practice a skill or apply content (Walberg, 2011). During the planning stage, effective teachers consider a variety of techniques that involve individual, small group and whole class instruction based on the needs of students (Stronge, 2007). The planning to align curriculum and instruction to standards and assessments engages the creativity of the teaching skill.

**Professionalism.** According to Marzano (2003), professionalism refers to the extent to which staff members in a school approach their work as professionals.

Marzano made the following conclusion about professionalism:

Professionalism, then, includes a certain level of knowledge about one's subject area, but perhaps more important it involves pedagogical knowledge of how best to teach that subject-matter content. While subject-matter knowledge in itself might not be consistently associated with student achievement, pedagogical knowledge is. (p. 64)

**Instructional strategies.** Diversifying opportunities in the classroom in meaningful assignments and activities increases the opportunities for time and learning. For example, games are an excellent way to address even difficult content in an entertaining way. Designed for instruction, games have been associated with a 20 percentile point gain in student achievement when used purposefully and thoughtfully (Marzano, 2010).

Small group instruction is successful when there is high expectation for all ability groups that are not static, and they are engaged in meaningful instruction and conversation. Cooperative learning promotes strong benefits in groups of two to four students. While each group member is held accountable for accomplishing the activity: their motivation, task engagement, ability to work with individuals different from themselves, and verbal processing of subject matter is enhanced (Walberg, 2011).

Technology in the classroom is no longer a novelty but a major tool to assist in ensuring effective instruction. Evertson (2006) confirms that availability of technology within the classroom greatly varies from school to school, but with strong

management and recordkeeping even a one-computer classroom can be highly effective.

Homework is an additional means to address the learning needs of the broad range of students in the classroom. The completion of homework allows students to practice, prepare or elaborate classroom instruction. The teacher that gives feedback to student homework that is timely and informative increases the effectiveness, (Stronge, 2007). Personalizing or differentiating homework that is based on the needs of each student helps ensure that quality.

In a comprehensive review of research studies on the influence of various time effects on academic learning, 88% showed positive correlations between time and learning, (Walberg, 2011). Outside of the classroom students independently engage in constructive tasks. Parents may be involved and are greater informed of the content of curriculum and instruction. Students spend additional time practicing material without school distractions as homework is a viable alternative to electronic entertainment.

### **Student-level Factors**

It is a known fact that the core business of schools is teaching and learning in order to give students' quality education. This is confirmed by what Kimani, Kara, and Njagi (2013) said that "one of the indicators of quality education being provided is cognitive achievement of learners" (p. 2).

Although it is also true that school leaders, teachers and parents have a critical role in providing quality education for students, it is also very true that that for quality education to prevail, all education stakeholders should take part in the translation, interpretation and implementation of policies regarding achievement of high standards of education, including students. However, much is said about how to help students achieve their academic performance yet little is mentioned about how the students

themselves have impact on their own achievements. It is noteworthy that whatever effort that teachers exert to enhance students learning, the honors lay with the students. There is evidence from research that shows that students can play a critical role in improving academic performance (Nicholas & Sutton, 2013).

Research findings by Blum (2002) indicate that educators and school health professionals have increasingly pointed to school connectedness as an important factor that, when present, reduces the likelihood that adolescents will engage in health-compromising behaviors and increases the likelihood of academic success.

The Wingspread Declaration on School Connections represents a synthesis of key research on the topic and provides a set of core principles—such as avoiding tracking, setting high academic standards, creating small learning environments, and identifying student advisors—to help schools become more connected places for their students (Blum, 2005). He reported that students who are connected to school, that is, if they feel safe, perceive themselves to be treated fairly by adults, are happy to be in school, feel they are a part of the school community, and feel close to people at school, normally experience less distress and engage in fewer risk-taking behaviors. Blum further reports that students who have enriching school experiences will be more likely to stay in education and successfully transfer to the labor market. Those who struggle at early stages but receive adequate, timely support and guidance have higher probabilities of finishing, despite any difficulties in their family or social background.

According to the U.S. Department of Education (2001), students who attend schools with a positive, respectful climate are able to focus on learning and realize their academic, interpersonal and athletic potential. It was reported that such schools have clearly, explicitly communicated policies and procedures that set clear



boundaries for respectful, nonviolent treatment of school community members and support an environment that is free of negative and harmful physical, social, emotional and intellectual language and actions. The report indicated that when students perceive they have a stake in their school community, negative anti-social and risky behaviors tend to decrease and participation in school community programs and projects, including academic activities, tends to increase.

### **Equity in Education**

According to Field, Kuczera and Pont (2007), equity in education can be seen through two dimensions: fairness and inclusion. Equitable education systems are fair and inclusive and support their students to reach their learning potential without either formally or informally pre-setting barriers or lowering expectations. Equity as fairness implies that personal or socio-economic circumstances, such as gender, ethnic origin or family background are not obstacles to educational success. Equity as inclusion means ensuring that all students reach at least a basic minimum level of skills.

An equitable education system can redress the effect of broader social and economic inequalities. In the context of learning, it allows individuals to take full advantage of education and training irrespective of their background. Equity, as the foundation for multicultural learning, means ensuring that every student has access to the curriculum, pedagogy, assessment, as well as the challenge he or she needs based on the recognition and response to individual differences and the sociopolitical context of teaching and learning (Field et al., 2007).

### **Implementing Equity Pedagogy**

Equity goal is to create a school-based climate and culture that demands and supports systemic equity and improved student achievement for each student while narrowing the current and predictable tribal achievement gap by: improving

conference capacity to design and deliver equity-centered professional development for instructional staff; improving equity-centered school instructional leadership and support; implementing equity-centered curriculum, instruction, and assessment practices by teachers in an anti-bias environment. Educators can achieve equity goal through differentiated instruction (Banks & Banks, 2013).

Equity pedagogy can be applied through steps such as: fostering a cooperative learning environment that is proven to benefit students from diverse racial/ethnic backgrounds, developing teaching strategies that help girls better understand advanced science classes, modifying the curriculum to enable students to learn more effectively (Banks & Banks, 2004). In so doing, curriculum and pedagogy become culturally relevant and equitable, so students from diverse backgrounds, especially those who have been socio-economically, linguistically, and culturally marginalized, can succeed in school as well as the outside society.

Equity Pedagogy also involves teaching conceptually, especially in mathematics. This helps students learn at a deeper level. "It reveals to the students that they can create their own knowledge as they go through the inquiry process" (Moreno, 2015. When students are taught conceptually, they make connections to the philosophy and the mathematical concept behind it. This can be done by creating "math buddies" to learn multiplication facts (p.153). For example, students are paired up and study together in preparation for an individual test. Once the student feels that he/she is ready to test, they come forward with their buddy. While the buddy watches silently, the student tests orally, hence creating a team environment where students are encouraged to help one another learn.

Further, equity pedagogy includes Project Based Learning (PBL) which allows teachers to tailor student's learning experiences in ways that are significantly

motivating to them. It also allows teachers to insert curriculum into the student's world and provide opportunities for students to create projects based on their specific needs and desires (Cavilla, 2014). When Equity Pedagogy is applied to any subject, classroom becomes a place for growth and affirmation for all diverse students. Teachers can everyday make changes to their lessons to meet the needs of their students by having abundance of strategies that can easily be implemented into existing lesson plans, and the needs of all students can be addressed and meaningful learning can take place.

### **Inclusiveness and Equity**

Inclusive education is an approach that challenges exclusionary policies and practices so as to address learning needs of all learners in regular schools and classrooms. It means including all children who are left out or excluded from school and can be catered for in both formal and informal setting. Inclusive education is when all students, regardless of any challenges they may have, are placed in age-appropriate general education classes that are in their own neighborhood schools to receive high-quality instruction, interventions, and supports that enable them to meet success in the core curriculum (Bui, Quirk, Almazan, & Valenti, 2010; Alquraini & Gut, 2012).

Under inclusive education, the school and classroom operate on the premise that students with disabilities are as fundamentally competent as students without disabilities. Therefore, all students can be full participants in their classrooms and in the local school community. Much of the movement is related to legislation that students receive their education in the least restrictive environment (LRE). This means they are with their peers without disabilities to the maximum degree possible, with general education the placement of first choice for all students (Alquraini & Gut,

2012). Thus, successful inclusive education happens primarily through accepting, understanding, and attending to student differences and diversity, which can include physical, cognitive, academic, social, and emotional. The driving principle is to make all students feel welcomed, appropriately challenged, and supported in their efforts. It's also critically important that the adults are supported, too. This includes the regular education teacher and the special education teacher, as well as all other staff and faculty who are key stakeholders including parents.

Kenya, being a partner in the international conventions on education, has placed various instruments into the Constitution as well as in various policy and legal frameworks in order to realize inclusive education as stipulated in the Inclusive Education Policy of 2007. As highlighted in this policy, if inclusive education is conceived as a way of democratizing opportunities for life-long learning, then it is seen as a system that allows a smooth transition of learners from: Early Childhood Education (ECE) to primary school, Non Formal Education (NFE) to formal/regular system and primary to secondary as well as a different curricula providing diverse foundation for lifelong learning. However, in Kenya, large class sizes, inadequate funding, limited teacher training, cultural perceptions, and lack of disability awareness makes implementation difficult.

Studies show that when teachers have a positive attitude towards their students, they are more socially responsive and attentive, they more often tailor their instruction to particular student needs, and they are more successful at drawing on students' experiences to make lessons meaningful and contextually relevant (Westbrook, Durrani, Brown, Orr, Pryor, Boddy, & Salvi, 2013).

On the other hand, students from disadvantaged social groups, such as females, minorities, or the disabled often suffer from teacher prejudices, which

translate into low expectations of these students' capacities. Similarly, teachers who have low expectations of their students make less of an effort to help them learn, in addition to discouraging them in other subtle ways, with the final result that these students often achieve lower academic performance (McKown & Weinstein; 2008, Lane, Carter, Common, & Jordan, 2012).

Nevertheless, learning process can be activated with children of very different abilities by: designing curriculum that is all inclusive and addresses learners with special needs, developing varied teaching methods to suit different learners, fast tracking learners of higher age enhancing quality control through the work of Quality Assurance and Standards, preparing teachers adequately, identifying and meeting the varied needs of the learners.

### **Curriculum Planning and Development**

Curriculum development provides an opportunity for institutionalizing a systemic approach to learning. It aims at integrating the recognition of the needs for learning, the ways in which learning is organized and delivered, and the ways in which learning is monitored and evaluated within a particular context of location, values and beliefs. If curriculum development is carried out efficiently and effectively, the learning needs of learners will be met, teachers will teach more effectively, using suitable, relevant pedagogy and materials, a good service will be delivered; satisfying the demands of different stakeholders, as well as the goals and aims of the education will be achieved.

Several studies have been conducted on the issue of curriculum development and evaluation in varied contexts. These have provided variations into the field. The main focus of curriculum development according to Richards (2001) is on deciding which knowledge, skills and values to be taught, how to reach the intended outcomes,

and the learning and teaching processes philosophical, theoretical and practical constructions give shape to the curriculum development; That is, science, society, moral doctrine, knowledge, and the learner are the sources of the curriculum (Ornstein & Hunkins, 2009).

According to Wiggins and McTighe (2006), curriculum refers to the specific blueprint for learning that is derived from desired results—that is, content and performance standards -be they state-determined or locally developed. Curriculum takes content, from external standards and local goals, and shapes it into a plan for how to conduct effective teaching and learning.

Null (2011) sees curriculum as a map of how to achieve the outputs of desired student performance, in which appropriate learning activities and assessments are suggested to make it more likely that students achieve the desired results. According to him, curriculum contains many questions within itself and lists the questions that curriculum holds within itself as:

“What should be taught, to whom, under what circumstances, how, and with what end in mind? Put more concretely, what should be taught to these students, in this school, at this time, how, and to what end? What process should we use to decide what our curriculum ought to be within a particular school, college, or university context?” (p. 5)

The Kenya Institute of Curriculum Development (KICD) new curriculum design aims at improving competence in other areas of study; languages, technology, psychomotor, creative arts, mathematics, environment, business, and religious education. The new curriculum describes the basic education into three phases that include; Early Years Education, Middle School Education, and Senior School. KICD

new curriculum syllabus encourages the use of ICT to instruct students, allowing them to experiment and explore more.

Early years of education takes five years incorporating two years in Pre-primary and 3 years in Lower primary. Secondary education classifies into two levels lower and senior school. Lower secondary encompasses grade 7 to 9 where learners expose to a broad curriculum to help them pursue their potential. The curriculum expects learners to undergo intense career training to enable them to make informed choices ahead of senior school. The senior school takes three years before completion. It lays a strong foundation for tertiary training. At the end of this level, learners are expected to become empowered, ethical and engaged citizens.

Literature provides some approaches to designing the curriculum. For example, Brown, Smith, and Stein (1995) give Systematic Approach to Designing and Maintaining Language Curriculum with components as shown in Figure 4 below.

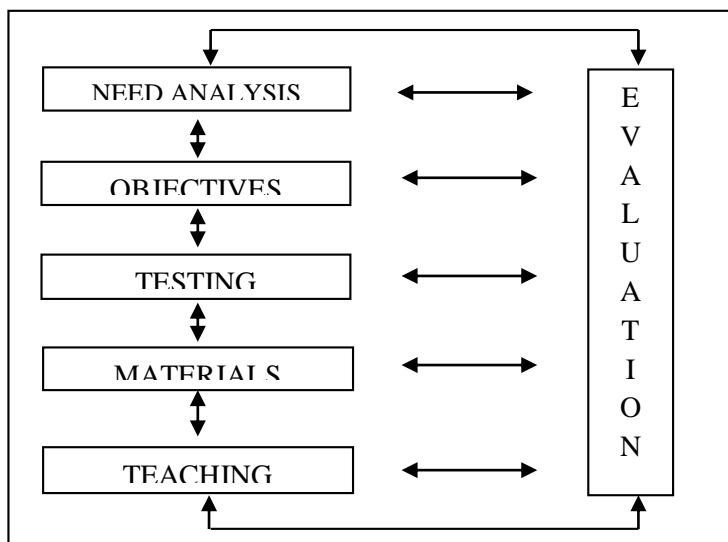


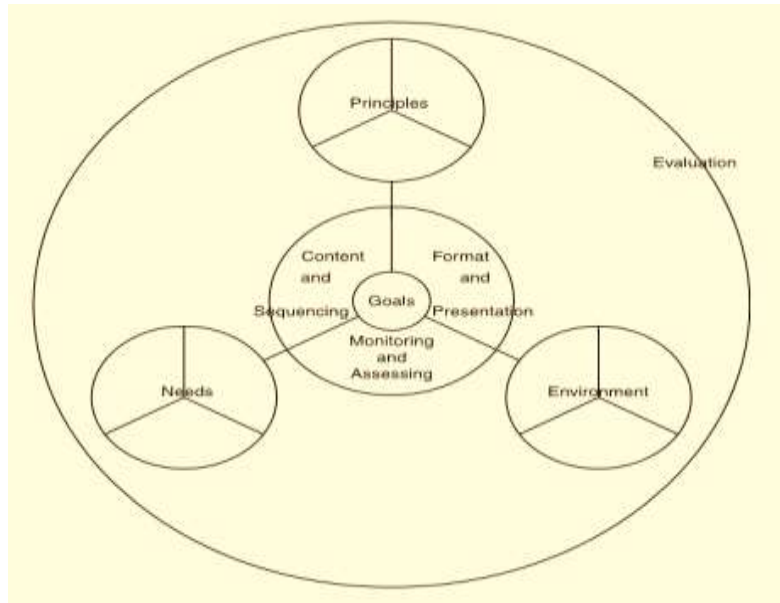
Figure 4. Systematic Approach to designing and maintaining language curriculum (Brown et al., 1995, p. 20).

As shown in Figure 4, the first step is needs analysis, the concept which focuses on the learners and concerns with the language structures which are likely to be needed (Brown et al, 1995).

The purpose of needs analysis in language curriculum development is that it helps in: (1) providing a systematic approach for the selection of the input, constructing the content of the program by taking the opinions of members of designing process; (2) specifying the language needs, (3) providing a base for the assessment of the present program (Richards, 2001).

There is a distinction between goals and objectives. Goal is a more general term defining what should we do to meet the expectations of the learners and objective is a more specific term related to the structures that learners should know to reach a specific goal (Brown et al., 1995); and according to Richards (2001), the objectives can be behavior, content, proficiency or skill based In the second step, goals and objectives ring the need for the third step language testing. Thus, in a language program, tests can be applied in the need for placement of the students, identifying the levels of the students through diagnostic tests, or testing the achievements of the learners. Then it comes to the last step before the classroom implementation of the language curriculum, material design. But there is a more recent model of curriculum design proposed by Macalister and Nation (2011) illustrated in Figure 5.





*Figure 5. A Model of the parts of the curriculum design process (Macalister & Nation, 2011, p. 2).*

The model is built with three outer and one inner circle, which is also divided into three sub-circles. Beginning from the inner circle, the model puts the goals into the center of the curriculum design in order to emphasize their crucial role in a course and here the sequence and content represent what and in which order to teach, the part, format and presentation, generally deals with how to present the language structures to the learners, the part the lesson is planned; which includes the techniques and activities and the last component of the inner circle is monitoring and assessing in which we check the outcomes and evaluate the learning activity and the success of the teaching . The outer circles and what they stand for all have sub-factors. For example, environment analysis can reveal the factors related to the “learners, teachers and teaching-learning situations’, needs analysis has tree sub-factors ,lacks, wants and necessities’ and the last one, principles, is divided into content and sequencing, format and presentation, and monitoring and assessment.” (pp. 3-4)

The last component of the model is evaluation, which encircles the whole model, and it can provide detailed information about every piece and component of the model and can show the lacks and necessities or the parts to be developed, and generally this component is neglected in curriculum development.

Shawer, Gilmore, and Banks-Joseph (2009) carried a study on the effect of learner-driven motives on the development and implementation of the curriculum, designation of a curriculum with art based medium for kindergarten level in Puerto Rico; and most currently, Korotchenko, Matveenko, Strelnikova, and Phillips, (2015) the analysis of backward design process in foreign language curriculum.

Banks and Banks (2004) observe that valuing the classroom as a center of societal change makes teachers change their methods to help students from diverse backgrounds to excel in the classroom and bring positive changes to their communities. Their study evidence shows that equity can go hand-in-hand with quality; and that reducing school failure strengthens individuals' and societies' capacities to respond to recession and contribute to economic growth and social wellbeing.

## **Designing Classroom Curriculum**

According to Tomlinson and Allan (2000), designing a good classroom curriculum requires a good start and effective teachers. It involves differentiating at least four classroom elements namely: content and access to content, process, product, and learning environment. Content, process, and product are what teachers address all the time during lesson planning and instruction.

**Curriculum Content.** Content consists of the knowledge, concepts, and skills that students need to learn based on the curriculum. Differentiating content means that teachers can vary the level of complexity (Barbara, 2015; Dirksen, 2010).

According to Tomlinson and Allan (2000), differentiating content involves several activities which include: 1) pre-assessment to determine where students need to begin, then match students with appropriate activities; 2) using hands on activities for some learners to help them understand a new idea; 3) using texts or novels at more than one reading level; 4) presenting information through both whole-to-part and part-to-whole; 5) using a variety of reading-buddy arrangements to support and challenge students when working with different texts; 6) re-teaching students who need further demonstration or exempt students who already demonstrate mastery from reading a chapter or sitting through a re-teaching lesson; 7) using texts, computer programs, tape recordings and videos as a way of conveying key concepts to varied learners; and 8) using Bloom's Taxonomy to encourage thinking about content at several levels.

**Curriculum process.** Process refers to how students make sense or understands the information, ideas and skills being studied and reflects student learning styles and preferences. It includes activities in which the student engages in order to make sense of or master the content (Tomlinson & Allan, 2000).

Differentiating process means that teachers can vary the learning activities based on the students' interests or learning styles (Kingore, 2004; Levy, 2008; Barbara, 2015). It involves: providing varied options at different levels of difficulty or based on differing student interests; offering different amounts of teacher and student support for a task; giving choices about how students express their understanding; and varying the learning process depending upon how students learn (Tomlinson and Allan, 2000)

**Curriculum product.** Differentiating product means that students have a choice in how they demonstrate what they have learned ((Pham, 2012; Barbara, 2015). It includes culminating projects that ask the student to rehearse, apply, and

extend what he or she has learned in a unit. At the elementary level differentiating products also includes the following: 1) giving students options of how to express required learning (e.g. creating a puppet show, writing a letter, or developing a mural with labels); 2) using rubrics that match and extend students' varied skills levels; allowing students to work alone or in small groups on their products; and 3) encouraging students to create their own product assignments as long as the assignments contain required elements.

To differentiate product educators can: allow students to help design products around learning intentions/goals; encourage students to express what they have learned in varied ways; allow for varied working arrangements – alone, with a group; provide or encourage the use of varied types of resources in preparing products; provide product assignments at varying degrees of difficulty to match student readiness; use a wide variety of assessments; work with students to develop rubrics that match and extend students' varied skill levels; use a continuum - simple to complex, less independent to more independent, or clearly defined to 'fuzzy' problems (Tomlinson & Allan, 2000).

**Curriculum evaluation.** After designing the curriculum, conducting the needs analysis and the actual implementation of the designed curriculum, comes curriculum evaluation. According to Nation and Macalister (2010, pp. 123-124) there are nine steps of evaluation:

1. Specify the audience of the evaluation and what they expect from this,
2. Specify the field in which the findings will be used,
3. Decide whether there is really a need for the evaluation,
4. Find out the time span and sources necessary for conducting the evaluation, specify the aspects to be evaluated in the program,

5. Specify the aspects to be evaluated in the program,
6. Create connections to get the help of the people in the system,
7. Specify the participants and data gathering tools,
8. Decide on how to report the evaluation results,
9. Check whether a follow up evaluation is appointed.

## **Pedagogy**

In a broad sense, pedagogy refers to the “interactions between teachers, students, and the learning environment and the learning tasks” (Murphy, 2008. p. 35). This comprises not only what teachers do in the classroom, but also their ideas, knowledge and attitudes in relation to the learners, the teaching and learning process as well as the curriculum. Pedagogical approaches are often placed on a spectrum from teacher-centered to learner-centered pedagogy; though these two approaches may seem contradictory, they can often complement each other in the realization of educational goals. For instance, a teacher-centered approach may be useful to introduce a new theme, while a learner-centered approach may be necessary to allow students to explore these ideas and develop a deeper understanding. Quite often pedagogical effectiveness depends on ensuring that the approach is appropriate for specific school and national contexts. For example, certain learner-centered techniques that are effective in classrooms with fewer students may be difficult to accomplish in crowded or under-resourced classrooms.

Nevertheless, there are strategies that have been shown to be more effective than others in a broadly-applicable sense. Some of these include the following: strong grasp of pedagogical approaches specific to the subject matter and age of the learners; appropriate use of whole-class, small group, and pair work; meaningful incorporation of teaching and learning materials in addition to the textbook; frequent opportunities

for students to answer and expand upon responses to questions; helpful use of local terms and languages; varied lesson activities; and a positive attitude towards students and belief in their capacity to learn (Westbrook et al., 2013).

There are studies with valuable information on how educators can be effective in differentiating classroom instruction to cater for learners with varied abilities and profiles. These include the following:

**Personalized or Differentiated Learning.** There is an increasing body of research showing positive results for full implementation of differentiated learning in mixed-ability classrooms, including effectiveness for keeping high-ability students challenged, and optimistic results for students with mild or severe learning disabilities. This body of research validates the following practices with differentiated learning: Promotes effective classroom management procedures; encourages student engagement and motivation; assesses student readiness; responds to learning styles; flags student groupings for instruction; and teaches to the student's proximal development, (Huebner, 2010). Thus, differentiated learning helps to maximize each student's growth and individual achievement in classrooms that include students of differing abilities.

**Differentiated Learning Environment.** Learning environment is the climate of a classroom and includes the operation and tone of the classroom, which includes class rules, furniture arrangement, lighting, procedures and processes. It is the way the classroom works and feels. Teachers, or teachers and students collaboratively, that invest the time to establish clear rules and procedures for work within the classroom, transitions in and away from the classroom, and the use of materials and equipment shared in the classroom ensure the cohesiveness necessary to accomplish the work in that classroom community (Tomlinson & Allan, 2000).

As Stronge (2007) observes, well-practiced procedures become routine, and routines ensure that everyday tasks establish the environment for greater achievement gains. A positive learning environment invites positive relationships, and all students, especially those at-risk, are benefited.

Tomlinson and Imbeau (2010) stated that differentiating the learning environment involves: considering the look and feel of the classroom; providing a safe and positive environment for learning; allowing for individual work preferences; and managing the learning space. They observed that “The goal of planning the physical environment of a classroom is to maximize opportunities for teaching and learning” (p.92).

**Differentiated Instruction Based on Readiness.** In most classrooms, whatever the learning intention or goal, it is likely to be too demanding for some students and too easy for others unless the teacher addresses readiness differences in some way. Tomlinson and Imbeau (2010) define readiness as “a student’s current proximity to specified knowledge, understanding, and skills” (p. 16). According to them the goal of readiness differentiation is to make the work a little too difficult for students at a given point in their growth, and then to provide the support they need to succeed at the new level of challenge.

Differentiating for readiness involves constructing tasks and providing learning choices at different levels of difficulty. This means that the teacher should perform varied but specific tasks which include the following: adjusting the degree of difficulty of a task to provide an appropriate level of challenge; adding or removing teacher or peer coaching, use ‘hands-on’ tasks, presence or absence of models for a task (scaffolding); making the task more or less familiar based on the proficiency of the learners’ experiences or skills for the task; varying direct instruction by small

group need; using text sets (collections of texts on same topic/concept, different levels of difficulty); providing reading support for difficult texts; providing graphic organizers to support note-taking; and adding student-specific goals to checklists for success (Tomlinson, 2006). It is, therefore, most important to attend to readiness when students work towards the same learning intention or goal.

**Differentiating Instruction Based on Interests.** Interest is defined as “that which engages the attention, curiosity, and involvement of a student” (Tomlinson & Imbeau, 2010, p. 16). Tomlinson (2006), when talking about differentiating for student interests, stated that it involves: showing students how the subjects taught connect with their particular interests; helping students discover new interests by providing an engaging curriculum; aligning key skills and material for understanding with topics or pursuits that interest students. For example, a student can learn much about a culture or time period by carefully analyzing its music.

The goal of interest differentiation is to help students engage with new information, understanding, and skills by making connections with things they already find appealing, intriguing, relevant, and worthwhile. These things, according Tomlinson and Imbeau, are “typically linked to a student’s strengths, cultural context, personal experiences, questions, or sense of need” (p. 17). When people are interested in something, their motivation to learn about it increases, enhancing learning outcomes as a result. Thus, when students are interested in what they are learning, the act of learning is satisfying. Interest and motivation are closely linked.

To differentiate for student interests educators should, therefore, apply the following techniques: use adults or peers with prior knowledge to serve as mentors in an area of shared interest; provide a variety of avenues for student exploration of a topic or expression of learning; provide broad access to a wide range of materials and



technologies; offer a choice of tasks and products, including student-designed options; encourage investigation or application of key concepts and principles in student interest areas; connect content with students' cultures, experiences, and talents; use interest centers, interest groups, specialty groups/expert groups; use jigsaw groups; offer choice in topics for reading materials; and offer sub-topic choices within an area of study or topic (Tomlinson, 2006).

### **Differentiated Instruction According to Learning Profiles.**

Tomlinson and Imbeau (2010) observe that learning profile is shaped by at least four overlapping factors: learning style, gender, culture, and intelligence preference. A student's *learning profile* is “a preference for taking in, exploring, or expressing content”, and differentiating for learning profiles involves: uncovering student learning profiles; balancing presentations and learning experiences according to learning profiles, offering choice in learning experiences and ways to demonstrate learning (p. 17).

According to Tomlinson and Imbeau (2010), there are four factors that help form a learning profile. These include gender, culture, learning style, and intelligence preference. The goal of learning profile differentiation is to teach in the ways students learn best, and to extend ways in which they can learn effectively. Effective teachers wisely ask their students questions and pay attention to what their students say and do, as well as talk to the students' parents to help them know their students as learners. Doing this helps teachers to get to know their students as learners.

To differentiate for learning profiles educators should: create a learning environment with flexible spaces and learning options; present information through visual, auditory, and kinesthetic (VAK) modes; encourage students to explore information and ideas through VAK modes; allow students to work alone or with

peers; ensure a choice of competitive, cooperative and independent learning experiences; balance varied perspectives on an issue or topic; provide authentic learning opportunities in various intelligence or talent areas; show part-to-whole and whole-to-part relationships; and create assessments that respond to different learning modes (Tomlinson, 2006).

## **Guiding Principles of Differentiation**

Tomlinson and Allan (2000), cite a number of key principles that reflect effective practice in a differentiated classroom: First, according to them, a differentiated classroom is flexible, where teachers and students understand that given classroom elements are tools that can be used in a variety of ways to promote individual and whole-class success. These classroom elements include: time, materials, modes of teaching, and ways of grouping students, ways of expressing learning, and ways of assessing learning.

Secondly, in a differentiated instruction, assessment and instruction are inseparable. The teacher sees everything a student says or does as useful information both in understanding that particular learner and in crafting instruction to be effective for that learner. And so differentiation of instruction stems from effective and ongoing assessment of learner needs.

Thirdly, in a differentiated instruction, all students participate in ‘respectful’ work. That is, each student needs to be involved in challenging tasks that are equally interesting and equally engaging, and which provide them with equal access to essential understanding and skills.

Fourth, in a differentiated class, students and teachers are collaborators in learning. The teacher studies their students to ascertain what works and what doesn’t

work for them and continually involves students in decision-making about the classroom. As a result students become more independent learners.

Fifth, in a differentiated class, the teacher uses flexible grouping options. The teacher plans student working arrangements that vary widely and purposefully often over relatively short periods of time. Whole-class, small group and one-on-one arrangements are used. The flexible grouping of students helps ensure access to a wide variety of learning opportunities and working arrangements.

Sixth, in differentiated instruction, the teacher focuses on the essentials. That is, the teacher provides clarity about what is essential for students to know, understand and do. And finally, in a differentiated instruction, the teacher modifies content, process and products; and finds key opportunities to meet learners where they are at, in order to propel them forward in knowledge, understanding and skill.

### **Adapting the Supports**

While differentiating the program is about the ‘what’ of teaching, deciding on adaptations is about the ‘how’. Once a teacher has identified specific content he/she intends to teach within their classroom curriculum, he/she needs to decide how he/she will ensure that all students will be able to access the content. This may involve making changes to the learning environment, adopting specific teaching strategies, modifying teaching and learning materials, or adjusting a task or activity.

Giangreco, Cloninger, and Iverson (2011) cite some examples of how supports can be adapted. These include: using cooperative learning groups; using visual representations – such as graphic organizers, visual timetables, and diagrams– to organize information and reduce the amount of text required; providing written or visual versions of spoken material (e.g., sign language, transcripts for videos); providing adapted computer keyboards or other alternatives to the standard keyboard

and mouse (e.g., switch access with corresponding software); using tactile equivalents of written or visual material (e.g., Braille, three-dimensional objects); using interactive web tools and social media (e.g., interactive animations, chats); arranging the class layout so that specific students are close enough to clearly see the whiteboard or hear instructions; and reducing noise for students who find it distracting (e.g., by providing ear muffs or sound-proofed quiet areas in the classroom).

## **Cooperative Learning**

In recent years, although there have been efforts to change from teacher-centered approaches to student-centered approaches in an attempt to provide students with greater skills and knowledge, lecture-based teaching continues to be the most prevalent teaching method (MOEST, 2009; Thanh-Pham, 2010a & 2010b).

But, in order to encourage students to work together rather than compete, to improve their achievement and knowledge retention, an alternative to lecture-based teaching could be cooperative learning (CL) (Magnesio & Davis, 2010; Mehra & Thakur, 2008). This approach has been reported to promote more positive student attitudes toward their learning (Johnson & Johnson, 2008), enhance more positive relationships between participants (Johnson & Johnson, 2005) and develop self-esteem, cohesiveness, and learning skills (Sahin, 2010; Slavin, 2011).

According to Slavin (2011), CL comprises “instructional methods in which teachers organize students into small groups, which then work together to help one another learn academic content” (p.344); and consists of five basic elements namely: positive interdependence, promotive interaction, individual accountability, teaching of interpersonal and social skills and quality of group processing.

## **Student Engagement and Participation**

Dunleavy, Milton, and Crawford (2010) sum up their research from the students' perspective saying: "students want to experience work that is meaningful, not necessarily easy. They want to work with ideas that matter, solve real problems, learn from each other, people in their communities, and experts in the subjects they are studying, engage in dialogue in their classes, and know that their learning contributes to making a difference in the world; they consistently demand to be respected" (p. 1).

Student engagement has been built around the hopeful goal of enhancing all students' abilities to "learn how to learn and/or to become lifelong learners in a knowledge-based society" (Gilbert, 2007, p. 1). Expanding the capacity to learn means creating a climate in which that feeling of enfranchisement and entitlement is systematically broadened and strengthened – not weakened, undermined or simply ignored.

### **Improving Student Engagement**

Reasonable amount of research has been done on strategies to improve student engagement in learning and a clear pattern of practices has emerged. For example, Windham (2005) recommends that to engage learners in learning, new educational curriculum and activity must include the following: "interaction, exploration, relevancy, multimedia and instruction" (pp 57-59).

**Interaction.** Respectful relationships and interaction between teachers and students, both virtual and personal, are shown to improve student engagement. According to research by Willms, Friesen, and Milton (2009), students today are intensely social and interactive learners. Those surveyed stated that they want to

interact with people both within and beyond the classroom and school environment.

Their findings repeatedly showed that:

Students want stronger relationships with teachers, with each other, and with their communities – locally, provincially, nationally and globally; they want their teachers to know them as people; students want their teachers to know how they learn; they want their teachers to take into account what they understand and what they misunderstand and to use this knowledge as a starting point to guide their continued learning; and students want their teachers to establish learning environments that build interdependent relationships and that promote and create a strong culture of learning. (p.36)

When Dunleavy and Milton (2009) asked students what their ideal school would look like and what learning environment increases engagement, they listed three criteria that correlate to the concept of interaction: ‘learn from and with each other and people in their community, connect with experts and expertise, and have more opportunities for dialogue and conversation.’ (p. 10)

Windham (2005) suggests that “students should be given the opportunity to interact with faculty and researchers outside the confines of the curriculum and to develop meaningful relationships with them” (p. 58). Enabling such expanded relationships requires a shift from vertical to horizontal classrooms, where teachers are no longer the sage on the stage, but are learners learning alongside students, helping them actively construct their learning experiences and knowledge.

The same idea is noted by Friesen in Dunleavy and Milton (2009), that authentic intellectual engagement requires a deeper reciprocity in the teaching-learning relationship where students’ engagement *begins* as they actively construct their learning in partnership with teachers, work toward deep conceptual

understanding, and contribute their own ideas to building new knowledge or devising new practices in activities that are “worthy of their time and attention” (Friesen, as cited in Dunleavy and Milton (2009, p. 14).

According to Claxton (2007), this kind of teaching involves more interaction, negotiation, and exploration among learners and teachers, who explore and discuss content together, often with teachers modeling learning as opposed to telling students what the answers, process, or outcomes should be. And as described by Dunleavy and Milton (2009), open, caring, respectful relationships between learners and teachers are essential to develop and support social and psychological engagement in learning, but also are part of the new curriculum itself.

Further, effective learning experiences are shaped by student-teacher relationships that support the development of learners’ social and emotional competencies. As students move through middle and secondary schools, they face increasing complexity; and they themselves consistently report that what most helped them thrive in spite of these challenges was the quality of relationships they developed with adults in their schools. Thus, when students have opportunities to connect with adults who approach these relationships with:

A spirit of caring, empathy, generosity, respect, reciprocity and a genuine desire to know students personally, they can make a unique contribution to learners’ emerging adaptive capacity, self-sufficiency, resiliency, confidence, and knowledge of themselves as learners (Dunleavy & Milton, 2009).

This dimension of student engagement has also provided schools with *direction* for adopting proactive dropout prevention strategies focused on improving school climate factors that tend to have the most influence in supporting high levels of engagement in the life of school. According to Dunleavy and Milton (2009) these

include: “an ethic of caring and supporting relationships, respect, fairness, trust and a strong disciplinary climate, teachers’ sense of shared responsibility and efficacy related to learning, and high expectations for academic success” (p. 8).

It is worth noting that students expect and respect challenging, rigorous, disciplined, positive, and safe learning environments. Willms, Friesen, and Milton (2009), in *Transforming Classrooms through Social, Academic and Intellectual Engagement*, suggest one factor of relationship building that stands above others: “the importance of a positive classroom disciplinary climate. Students who describe their classroom disciplinary climate as positive are one and a half times more likely to report high levels of interest, motivation and enjoyment in learning” (p. 35).

**Exploration.** Classroom practices reported to engage learners are predominantly inquiry-based, problem-based, and exploratory (Willms, Friesen, & Milton, 2009).

**Relevancy.** One common prerequisite for engaging learners is “relevancy.” Today’s learners ask that their learning apply to real-life scenarios whenever possible as opposed to being theoretical and text-based. Working with authentic problems or community issues engages students and builds a sense of purpose to the learning experience (Claxton, 2007; Dunleavy & Milton 2009; Willms, Friesen, & Milton, 2009). “The work students undertake also needs to be relevant, meaningful, and authentic – in other words, it needs to be worthy of their time and attention” (Willms, et al., 2009, p. 34).

Moreover, effective teaching is characterized by thoughtfully designing learning tasks with these features: the task requires and instills deep thinking; the task immerses students in disciplinary inquiry; the task is connected to the world outside



the classroom; the task has intellectual rigor; the task involves substantive conversation (Willms, Friesen, & Milton, 2009, p. 34).

Claxton (2007) further suggests that activities and curricula must have the following factors to engage learners: Relevancy: the topic connects with students' interests and concerns; (2) Responsibility: students have genuine control over what, why, how, and when they organize their learning; and (3) Reality: solving problems or making progress genuinely matters to someone (p. 12).

## **Classroom Environments and their Effect on Teachers and Students**

There is research evidence which shows that what teachers teach (the curriculum) and how they teach it (pedagogy) are central to the value of every lesson. According to Windham (2005), students want more autonomy to engage in and design their own learning. They want to learn and utilize their learning preferences and styles and want support to do so. For example, given the freedom and sense of safety to do so:

Students can find material that challenges the faculty member's worldview and expertise; they can uncover stories and research results that the faculty member has never heard about. It can be uncomfortable when the instructor no longer controls the subject matter the students will use. (p. 8.16)

According to *The New Zealand Curriculum* (2007), effective teachers: ensure that every student can access learning, if necessary drawing on specialist supports to achieve this; ensure that learning opportunities connect with students' prior knowledge and experience; ensure that every student has multiple opportunities to interact with others and with a variety of material; provide opportunities for students

to express themselves in a range of ways; and provide opportunities for students to show what they know and are learning.

Evidence shows that more effective teachers are better at engaging and managing students in the classroom. For example, the US Measures of Effective Teaching (MET) project used the ability to create an effective learning environment as one measure (Kane & Cantrell, 2010).

A more recent research by McDonald (2013) reveals that a good learning environment raises student expectations, encourages them to participate, and ensures that no student can fly under the radar. Creating an engaging learning environment includes ensuring students feel able and safe to challenge teachers as part of the learning process.

There are numerous studies which report a range of classroom environmental factors that affect learning. For example, a major study by Hattie (2008) identified interventions related to the classroom climate that significantly improved student engagement and learning. It highlighted the importance of teachers being clear, setting high expectations for student achievement, and working hard to develop good relationships with and between students. A given classroom environment also matters for teachers. It can have a big impact on the teacher's job satisfaction. Experimental studies consistently show that engaging and well-managed classrooms enhance student behavior and achievement (Oliver, Wehby, & Reschly, 2011).

Research by Project Tomorrow (2010) suggests that successful, student-engaging classrooms combine these five aspects: 1) learning that is relevant, real, and intentionally interdisciplinary – at times moving learning from the classroom into the community; 2) technology-rich learning environments – not just computers, but all types of technology, including scientific equipment, multi-media resources, industrial

technology, and diverse forms of portable communication technology; 3) positive, challenging, and open – sometimes called “transparent” learning climates – that encourage risk-taking and guide learners towards co-articulated high expectations- students are involved in assessment for learning and of learning; 4) collaboration among respectful “peer-to-peer” type relationships between students and teachers (horizontal organization model); and 5) professional learning communities working together to plan, research, develop, share, and implement new research, strategies, and materials; and a culture of learning – teachers are learning with students.

## **Multimedia and Technology**

Multimedia and technology such as cameras, video, and video editing, projectors, smart boards, sound recording equipment, animation and gaming software, and the universal PowerPoint have proven helpful in engaging students in learning about subjects, in exploring ways to present their learning, and in helping students control their learning (Dunleavy & Milton, 2009).

But other elements of teaching matter too. One of them is creating a classroom environment that gives all students the best opportunity to learn. Creating classroom seating arrangement is just as important as syllabus coverage.

## **Students’ Assessment and the Role of Feedback**

Students’ assessment is represented by the notion of assessment as a tool *for* learning instead of being a tool *of* learning (Dochy & McDowell, 1997). Educators’ understanding of the two types of assessment is critical. According to Armstrong (2006), standardized testing often leads to teaching to the test instead of to learner’s needs, interests, and abilities; and usually removes responsibility and accountability from the learner, to the effect that it can disengage learners. Teaching to the test normally calls for teachers to use summative assessment practices, whose goal is to

*evaluate student learning* at the end of an instructional unit by comparing it against some standard or benchmark. Examples of summative assessments include: a midterm exam, a final project, a paper, a senior recital.

Leahy, Tompson, and William (2005), drew attention to the wide gap between assessment for learning theory and assessment for learning practice. And later, they summarized some of the definitions for formative assessment (assessment for learning) that have been proposed over the years (Leahy, Tompson & William, William (2010), suggesting that the most comprehensive definition is that adopted by Black and William (2009) which says:

Practice in a classroom is formative to the extent that evidence about student achievement is elicited, interpreted, and used by teachers, learners, or their peers, to make decisions about the next steps in instruction that are likely to be better, or better founded, than the decisions they would have taken in the absence of the evidence that was elicited. (p. 89)

Davies (2000) says, assessment for learning is ongoing, and requires deep involvement on the part of the learner in clarifying outcomes, monitoring on-going learning, collecting evidence and presenting evidence of learning to others. According to her, assessment that directly supports learning has five key characteristics namely: 1) learners are involved so a shared language and understanding of learning is developed; 2) learners self-assess and receive specific, descriptive feedback about the learning during the learning; 3) learners collect, organize, and communicate evidence of their learning with others; 4) instruction is adjusted in response to ongoing assessment information; and 5) a safe learning environment invites risk taking, encourages learning from mistakes, enables focused goal setting, and supports thoughtful learning.

**The role of assessment.** Summative assessment or assessment of Learning is the assessment that becomes public and results in statements or symbols about how well students are learning. It often contributes to pivotal decisions that will affect students' futures. It majorly involves the use of practice tests practice tests, which usually involve students taking a test, passively listening as the teacher goes over the correct answers, then taking another test. It is primarily seen as a means to determine grades and to find out to what extent students have reached the intended objectives (Armstrong, 2006).

Formative assessments on the other hand differ in a very important way from this approach to testing and are based on Benjamin Bloom's approach to mastery learning, which emphasizes the value of formative assessment and corrective procedures that re-teach content to struggling learners in a new way (Guskey, 2010).

**Role of feedback.** Studies related to feedback underscore the importance of providing feedback that is instructive, timely, referenced to the actual task, and focused on what is correct and what to do next (Hattie & Timperley, 2007; Shute, 2008). Feedback provides information that helps learners confirm, refine, or restructure various kinds of knowledge, strategies, and beliefs that are related to the learning objectives (Hattie & Timperley, 2007). They observe that when feedback provides explicit guidance that helps students adjust their learning, there is a greater impact on achievement; students are more likely to take risks with their learning, and they are more likely to keep trying until they succeed (Brookhart, 2008; Hattie & Timperley, 2007; Shute, 2008).

Timing is important when giving feedback. Recent research indicates that the timing of feedback depends to some extent on the nature of the task and on whether students are high performing or low performing (Shute, 2008). When students are

engrossed in figuring out a difficult task, feedback should be delayed; however, when students can use feedback to complete a task, immediacy helps. Providing immediate feedback can encourage students to practice, and it helps them make connections between what they do and the results they achieve.

Delaying feedback may encourage development of cognitive and metacognitive processing for high-performing students, yet it may cause frustration for struggling and less-motivated students (Shute, 2008). Further studies indicate that students may benefit from delayed feedback when they are learning concepts and from immediate feedback when they are acquiring procedural skills (Franzke, Kintsch, Caccamise, Johnson, & Dooley, 2005; Shute, 2008).

### **Synthesis**

All the literature and related studies reviewed and considered in this study were connected to the Theoretical Framework for this study as follows:

Literature reviewed indicated that an effective accountability system is one that uses a range of tools to perform varied functions such as: to create practices that are likely to be beneficial for all students, irrespective of their differences; to evaluate how well these practices are working; and to address problems as they occur, creating what, according to Hodges (2001) might be referred to as “pedagogy of plenty” (pp.1-9), and to embrace a constructivist approach to teaching.

In the most current studies reviewed there is a realization that the potential benefits of assessment are much wider and encroach on all stages of the learning process. There is a New Assessment Culture (NAC) which strongly emphasizes the integration of instruction and assessment, in order to align learning and instruction more with assessment. Thus, even though empirical research on this combination is

rather scarce, it is, generally acknowledged that assessment plays a crucial role in the learning process and, accordingly, on the impact of new teaching methods.

Recent studies reviewed have also emphasized the role of feedback in students' assessment. The studies related to feedback underscore the importance of providing feedback that is instructive, timely, referenced to the actual task, and focused on what is correct and what to do. Feedback provides information that helps learners confirm, refine, or restructure various kinds of knowledge, strategies, and beliefs that are related to the learning objectives.

Several studies on the issue of curriculum development and evaluation in English language teaching (Yıldıran & Tanrıseven, 2015; Aybek, 2015; Özüdoğru & Adıgüzel, 2015; Kandemir, 2016); the evaluation of 3rd grade curriculum (Çankaya, 2015); the evaluation of 4th and 5th grade English curriculum (Erkan, 2009; Güneş, 2009; Seçkin, 2010); 6th, 7th, 8th grades (Demirlier, 2010; Çelen, 2011; Orakçı, 2012; Yörü, 2012); the difficulties experienced by the teachers during the application of English curriculum (Arı, 2014); the evaluation of 9th grade curriculum (Karcı, 2012), CEFR-related curriculum (Zorba & Arıkan, 2016); and the development of English curriculum in Gülhane Military Medical Academy (Sarı, 2003). However, no critical analysis has been encountered in the literature in relation to educators' accountability for learning and equity in designing learner-centered classroom curriculum, Pedagogy and students' assessment in the context of WKUC, and this was the major gap to be filled by this study.

Therefore, as a way of filling this gap, the researcher proposes a framework that illustrates how educators in WKUC secondary schools could model their classroom curriculum, pedagogy, and students' assessment to bring about educational equity and improved students' achievement. (Figure 7, p. 182)

## **CHAPTER THREE**

### **RESEARCH METHODOLOGY**

This chapter deals with the Research Methodology that guided this study. Here, the researcher has given highlights on: research design, population and sampling techniques, research instruments, data gathering procedures validity and reliability of the questionnaires, statistical treatment of data, study area, and ethical considerations.

#### **Research Design**

The study adopted concurrent mixed research method design. As a method, concurrent mixed design focuses on collecting, analyzing, and mixing both quantitative and qualitative data in a single study. Its central premise is that the use of quantitative and qualitative approaches concurrently provides a better understanding of research problems than either approach alone. The design offers the strength of confirmatory results drawn from quantitative multivariate analyses, along with in-depth structured explanatory descriptions as drawn from qualitative analyses.

To gather quantitative data, the researcher used self-conducted teacher and student questionnaires to obtain information for analysis and presentation. The qualitative data was gathered using semi-structured interviews involving teachers and administrators. This data gathering technique helped to reveal complex personal and emotional problems; it allowed obtaining the requested information in full and depth; it provided an opportunity to give instant feedbacks to responses; its flexibility to adapt to various and suddenly changeable conditions; it offered freedom to change the number and order of questions (Ekiz, 2003; Çepni, 2005; Yıldırım & Şimşek, 2005);



and its ability “to contribute both to the practical concerns of people in an immediate problematic situation” (Galmore et al, 1986, p. 161). In this way the researcher endeavored to achieve a dual purpose of studying the school system and concurrently collaborating with members of the system in changing it in what is together regarded as a desirable direction. Accomplishing this twin goal required the active collaboration of researcher and client (teachers and administrators) and so the approach emphasized on the importance of co-learning as a primary aspect of this research process.

### **Population and Sampling Techniques**

The total population of the study was 3,067 consisting of 22 administrators, 157 teachers, and 2,888 students of secondary schools in WKUC. A combination of purposive and stratified random sampling techniques was applied. Purposive sampling method was used in the identification of the administrators while stratified random sampling was used to identify teachers and students. The purposive sampling involved all of the 22 administrators, while the stratified random sampling involved a sample of 100 teachers, and 351 students based on Slovin’s formula:  $n = N / (1 + Ne^2)$  with a confidence level of 95 percent (error margin or alpha level of 0.05), giving a total sample size of 473 participants. Where:  $n$  = no. of samples,  $N$  = total population and  $e$  = error margin /margin of error. This is summarized in Table 1.

Table 1

*Population and Sample of the Study*

<b>Population Category</b>	<b>Population</b>	<b>Sample</b>
Administrators	22	22
Teachers	157	100
Students	2,888	351
<b>Total</b>	<b>3,067</b>	<b>473</b>

## **Research Instruments**

Data gathering process involved a combination of questionnaires, semi-structured interviews, observation guide as well as focus group discussions with teachers and administrators. Observation guide was used to assist in obtaining information on actual classroom teaching, school programs and academic records.

**Development of the questionnaires.** The questionnaires were developed through correct conceptualization of the variables from literature. The literature was reviewed during the preparation phase of the form and open-ended questions were then developed. The views of three experts in the field of curriculum and instruction, administration and supervision from University of Eastern Africa, Baraton (UEAB) education were obtained in order to ensure internal validity. In line with the feedback from the experts, corrections were made to the form and related explanations as suggested by UEAB education experts. The researcher followed six steps to develop the questionnaire for this study as stated below:

**Step 1: Identify the goal of the questionnaire.** This involved asking several questions: What kind of information would be gathered with the questionnaire? What is the main objective? Is the questionnaire the best way to go about collecting this information? The researcher wrote a list of objectives by outlining the kind of data he wanted to collect which would serve as the basis for choosing his questions. The researcher then came up with several research questions which, in the case of this study were summarized to seven referred to research questions. Thereafter, the researcher developed three null hypotheses that he wanted to test. The questions that were included on the questionnaire aimed at systematically testing these hypotheses.

**Step 2: Choosing question types.** The researcher for the purpose of this study opted for rating scale questions. These questions allowed the respondent to assess a particular issue based on a given dimension. The researcher provided a scale that gave an equal number of positive and negative choices ranging from strongly agree to strongly disagree.

**Step 3: Developing questions for the questionnaire.** The researcher made sure that the questions that were developed for the questionnaire were succinct, clear, and direct in order to get the best answers from the respondents. To avoid confusion, the researcher avoided writing complex statements and asked only one question at a time. The researcher also avoided asking for private information as much as possible except for the anonymized demographic data. The researcher avoided asking questions that would lead to answers such as “I don’t know” or “Not applicable to me.” This was done to avoid giving the respondents a way of not answering certain questions. Providing these options could also lead to missing data, which could be problematic during data analysis.

**Step 4: Restricting the length of the questionnaire.** The researcher tried to keep the questionnaire as short as possible while still aiming at collecting the necessary information. This was done by including only questions that were directly useful to the research questions; as well as avoid asking redundant questions.

**Step 5: Identifying the target demographic.** Before distributing the questionnaire, the researcher decided on the target group to respond to the questionnaire. There were questionnaires for teachers and students. These were divided into two parts:

*Part one* sought demographic information such as gender, age, employment status, level of education, and experience for teacher respondents; and gender, age, grade level and length of time the school for the student respondents.

*Part two* contained questions on both dependent and independent variables seeking to obtain participants' perceptions regarding the extent to which educators are accountable for learning in the areas of classroom curriculum design, Pedagogy, and students' assessment.

**Step 6: Piloting the Questionnaire.** The term pilot study is used in two different ways in social science research. It can refer to so-called feasibility studies which are "small scale version(s), or trial run(s), done in preparation for the major study" (Polit, Beck, & Hungler, 2001, p. 467). However, a pilot study can also be the pre-testing or 'trying out' of a particular research instrument (Baker, 1994, pp.182-183). It is the second use of piloting that was of interest to the researcher in this study. The researcher pilot tested the instruments (questionnaires) for teachers, administrators, and students with a small population of 15 teachers, 2 administrators and 30 students respectively to determine if they were set to do what he needed them to do. The participants were sampled from one school in Nairobi County far away from the schools in this study and were not included in this study. The piloting enabled the researcher to determine whether some questions needed to be paraphrased, reordered or removed altogether.

**Validity of the questionnaires.** It is vital for a test to be valid in order for the results to be accurately applied and interpreted. The general concept of validity was traditionally defined as "the degree to which a test measures what it claims, or purports, to be measuring" (Brown, 1996, p. 231). Validity principles are applicable to all studies, whether they are based on questionnaires, observational studies, or other

types of assessments. Research validity helps us to know how true the claims and propositions made in a study are.

A research study is considered valid when it has the following characteristics:

1) it is able to correctly find the relationship between the variables, 2) it measures what it claims to be measuring, 3) the findings are generalizable, and also 4) it has adequate statistical power to reject a false null hypothesis (Messick, 1994). On the other hand, the power of a study is its ability to find the truth: that is correctly rejecting a false-null hypothesis or supporting a true-null hypothesis. Therefore, a valid study is also a powerful study, because its findings are the true results of that study.

For this study, content validity, construct validity, as well as internal validation of the questionnaires and interviews were established through expert validation by having a panel of independent experts from UEAB Department of Education to judge whether the items adequately sampled the domain of interest; while and external validation was done by external experts.

*Content validity* refers to the extent to which the items on a test are fairly representative of the entire domain the test seeks to measure (Haynes SN, Richard DCS, & Kubany ES, 1995). The experts were asked to judge the questions on how well they covered the material of study; and the same judgment was used to determine whether the questionnaires had content validity.

*Construct validity* defines how well a test or experiment measures up to its claims. It deals with whether an instrument or measurement tool or a test is measuring what it claims to be measuring (Brown, 2000). It refers to whether the operational definition of a variable actually reflects the true theoretical meaning of a concept. It is a measure of how well the test measures the construct.

*Internal validation* refers to how well an experiment is done, especially whether it avoids confusing (more than one possible independent variable acting at the same time). It is the extent to which we can be confident that there is a certain type of relationship (e.g., causal) between the dependent and the independent variables of the study (Bellini & Rumrill, 1999). The less chance for confusion in a study, the higher its internal validity is. In other words, internal validity measures how well some test items or questions measure particular characteristics or variables in the model.

In this study internal validation dealt with whether the treatment used in this study had an actual effect on the outcome variable. Thus, establishing internal validation enabled the researcher to build the confidence that there is certain type of relationships such as causal relationships between the dependent and the independent variables of the study; and that if the study lacked internal validity, then the assumption would be that some factors in this study, other than the independent variables, were present that would affect the outcome to some extent, but they had not been accounted for. Internal validation, therefore, helped the researcher to determine the amount of credit that could be attributed to the relationships between variables that were true.

*External validation* is the validity of applying the conclusions of a scientific study outside the context of that study. This type of validation addresses the generalizability of the findings, which is of particular importance for rehabilitation practitioners, because they need to make inferences from the sample under the study to the treatment provided to a greater population (Bellini & Rumrill, 1999). In other words, it is the extent to which the results of a study can be generalized to and across other situations, people, stimuli, and times. Thus, external validity in this study

enabled the researcher to determine how generalizable the findings would be before carrying out the study. That is, whether the findings from this study could be applied elsewhere, outside this study.

**Reliability of the questionnaires.** The Cronbach's alpha reliability coefficient for each section of the questionnaire was established using the data gathered from a pilot study which was done in one secondary school in the county of Nairobi, which was not among the schools covered by this study. The Cronbach alpha provides a coefficient of inter-item correlations, that is, the correlation of each with the sum of all the other items. This is a measure of the internal consistency among the items. Data collected from the pilot study was analyzed using Statistical Package for Social Sciences (SPSS for windows, version 23) to compute the reliability coefficient.

When this was done, it was observed that whenever the items in the questionnaire were correlated to each other, the value of alpha increased. However, it was seen that a high coefficient alpha did not always mean a high degree of internal consistency because alpha was also affected by the length of the test. For example, when the test length was too short, the value of alpha reduced and vice versa. Thus, to increase alpha, especially in the case of students' questionnaire, the researcher deleted one item from Curriculum Design section, "*Design tasks and provide learning choices at different levels of difficulty,*" in order to remain with more related items to the questionnaire testing the same concept. So instead of the original 8 items under this section, the research used only 7 items; giving the results as indicated in Table 2.

Table 2

*The Cronbach's Alpha Reliability Coefficient for each Section of the Questionnaires*

Variables	Teachers' Questionnaire		Students' Questionnaire	
	Number of items	Cronbach's Alpha	Number of items	Cronbach's Alpha
Classroom Curriculum	7	.95	8	.77
Pedagogy	18	.95	16	.88
Students' Assessment	15	.94	18	.85

The researcher was guided by the interpretation of Cronbach's alpha coefficient as shown below:

- >0.90            very highly reliable
- 0.80-0.90        highly reliable
- 0.70-0.79        reliable
- 0.60-0.69        marginally/minimally reliable
- <0.60            unacceptably low reliability

The researcher for this study accepted 0.60 - 0.69 as minimal reliability; and this is consistent with Cohen, Manion, and Morrison (2018) who suggest that the reliability is acceptable if it is 0.67 or above.

### **Interview Schedule (Guide)/Observation Guide and Focus Group Discussions**

The researcher preferred the use of triangulation technique to collect data on the same topic from different sources. This was a way of ensuring the validity of this research. It involved different types of samples as well as methods of data collection. Triangulation is viewed as a qualitative research strategy to test validity through the convergence of information from different sources. The current study presented such information obtained from in-depth individual (IDI) interviews, observation guide and focus groups (FGs) as highlighted here below:



## **Interview Guide**

To develop the Interview Guide for this study, the researcher created a matrix to help him visualize how the interview questions were related to the research questions (see appendix B2). A general interview guide was used with semi-structured interview questions in an emergent design format developed to gain information from the interviewees. The questions for the interview guide were designed to be interpretive and were drawn from a review of the literature.

A Responsive Interviewing protocol (RIP) was then developed with follow-up questions and probes. This allowed the researcher to ask additional questions to explore the particular themes, concepts, and ideas introduced in the initial interview. Probes also formed part of the responsive interviewing Protocol. The researcher used this technique to keep the conversation going in order to complete an idea, fill in a missing piece, or request clarification (Rubin & Rubin, 2005).

The researcher used the semi-structured interviews to obtain in-depth information on issues raised, which touched on the concept of accountability for learning and equity in the areas of classroom curriculum design, Pedagogy, and students' assessment. Semi-structured interviews have benefits which include: helping to reveal complex personal and emotional problems; obtaining the requested information in full and depth; providing an opportunity to give instant feedbacks to responses; having a flexibility to adapt to various and suddenly changeable conditions; and offering freedom to change the number and order of questions (Ekiz, 2003; Çepni, 2005; Yıldırım & Şimşek, 2005).

The interviews were carried out with teachers and administrators working in the WKUC secondary schools during the time of this study. The questions during the

interviews provided information on teachers and administrators' views regarding educators' accountability for learning and equity in the three areas.

**Validation of the interviews.** To ensure the validity of the interviews, the researcher made sure that the interview schedule had the following characteristics: that the schedule contained indications of the interviewee's awareness of the purpose of the interview and how long it would take; that the questions were crafted to provide answers relevant to the topic or issue; that all questions were relevant, and had an impact on the purpose of the interview; that it took a one-step-at-a-time approach, with each question meant to tackle only one issue, instead of addressing several issues all at once; that instead of using questions answerable with a Yes or No, the questions were open-ended, which could be used as a starting or reference point for more questions; that the questions were neutral, avoiding leading questions that had the potential to dictate the answer to the interviewee.

**Categorization of responses.** The responses obtained from the teachers and administrators were recorded and transcribed and thereafter categorized in themes (categories). Basically, transcription involves listening to a recording of something and typing the contents up into a document, which is then returned to the client, giving them a written record of what's on the recording. Typically, this was an interview where the researcher interviewed subjects and needed to record their responses. The themes were formed by bringing together similar codes. This involved summarizing and interpreting the obtained data based on pre-determined themes, frequently using direct quotations to manifest the interviewed individuals' views in a striking way, and interpreting the obtained results within the framework of cause and effect relationships (Yıldırım & Şimşek, 2005).

The data obtained was subjected to descriptive analysis and content analysis. Descriptive analysis was made in terms of data reduction, presentation of data, inference and verification (Türnüklü, 2010) following the steps as in Figure 6.

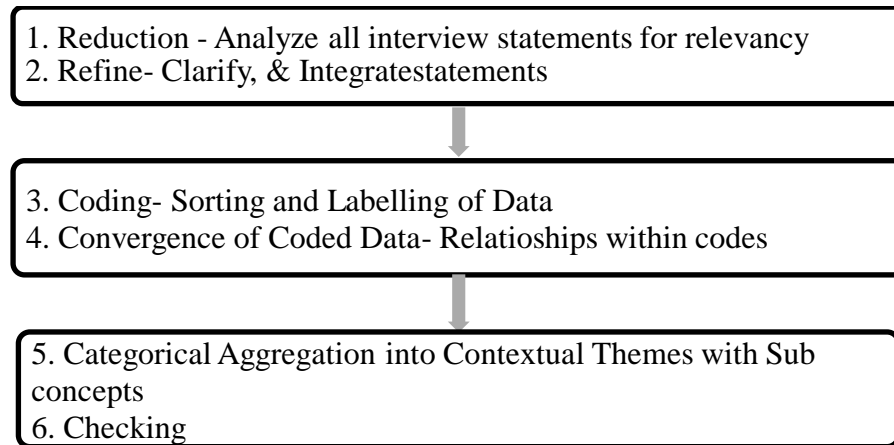


Figure 6. Data analysis steps for contextual categories.

## Observation Guide

To develop the observation guide for school programs and actual classroom teaching as used in this study, the researcher went through the following steps: 1) decided the outcome(s) he wanted to observe; b) created a general list of behaviors which indicated that someone was demonstrating a low or high level of the outcome; c) using the indicators, created an observation guide which was to be used at the beginning and end of a program; d) planning how frequently the observations would be performed represented in a matrix (see appendix C2).

**School programs and actual classroom teaching.** The observation guide for programs and actual classroom teaching included: list of the specific behaviors being observed (both verbal and physical behaviors which indicated the outcome), with space to make qualitative notes describing how the behavior was exhibited.

During each classroom observation, the researcher checked on the dominant Pedagogy approaches, classroom settings (seating arrangements), assessment techniques, and level of students' participation in the classrooms; and made short notes so as to produce lesson profiles, which illustrated the classroom process. The researcher opted to observe a whole session and record responses at the end.

### **Focus Group Discussions**

The researcher used focus group discussion with the purpose of stimulating conversation around a specific issue. The discussion was led by a facilitator (researcher) who posed questions and the participants gave their thoughts and opinions. This gave the facilitator the possibility to cross check one individual's opinion with other opinions gathered. The researcher used Focus group discussion because it made members to be more open and the dynamics within the group and interaction could enrich the quality and quantity of information needed.

### **Data Gathering Procedures**

**Academic approval for the research:** After research proposal defense, permission was granted to start the process of doing research.

**Official letters:** Necessary permission was obtained from relevant authorities. These included: seeking ethics clearance from the University of Eastern Africa, Baraton (UEAB) Research Ethics Committee; asking for authorization to do pilot study from the Director of Graduate Studies and Research of UEAB after having been endorsed by the supervisors; obtaining research permit from the National Commission for Science, Technology, and Innovation (NACOSTI) and West Kenya Union Conference leadership under whose jurisdiction the schools of this study belonged.

**Official endorsement:** Permission was obtained from authorities such as respective County Commissioners and County Education Directors where the schools covered by this study were situation before conducting the study.

Since this study employed concurrent-mixed research design with quantitative qualitative approaches, the research in this study preferred, as a way of ensuring validity, the use of triangulation method to collect data. This allowed the limitations from each method to be transcended by comparing findings from different perspectives. Triangulation means using more than one method to collect data on the same topic as highlighted below:

### **Data-gathering through Questionnaires**

The researcher visited the schools of this study and obtained permission from the administration and after explaining the purpose of this study, the participants were assured of confidentiality. The questionnaires were distributed to the respective respondents in person and received back responses direct in person. This approach ensured 100 percent return rate.

### **Data-gathering through Interviews**

The researcher conducted face-to-face interviews with teachers in groups and individually with administrators within the scope of the main study. Data was obtained through oral responses recorded using sound recorder, which was later transcribed into written format. With the agreement of the teachers, the researcher took notes of their attitudes and participation in the interviews, and recorded any special views expressed by them.

In developing the interviewing relationship, the researcher did the following: self-introduction and the research; asking for permission to record the interview; giving the interviewee assurances about anonymity and confidentiality; developing

rapport with the interviewee; starting with simple, factual questions about the interviewee's work environment; using prompts, probes and checks; being non-judgmental and keeping a neutral tone; in conclusion, inviting the interviewees to talk about any points that were not addressed; and thanking the interviewees and asking them if they agreed to check the summary or transcription of the interview later on.

### **Data-gathering through Observation**

To examine the relationship between variables of interest, the researcher used cross-sectional approach where data was collected to study a population at a single point in time. The researcher used this method of data collection for the following reasons: to provide contextual information needed to frame the evaluation and make sense of data collected using other methods; to develop insight into the Learning and Teaching (L&T) context, the environment, events, activities, interactions, language used and so on, which might point to issues requiring further exploration using other methods; to collect information about how a change in L&T has been implemented, independently of participant perceptions; and to learn about sensitive issues that participants would be unwilling to talk about. The researcher recorded information about the participants without changing or manipulating the natural environment in which they existed.

Two types of observation were employed: highly structured observations which consisted of a checklist of the incidence, presence, or frequency of predetermined evidence to be observed in the situation which would either support or refute a preconceived theory; and semi-structured and unstructured observations which allowed for issues to emerge from the observation, but might be semi-structured around issues considered to be relevant to the evaluation.

Observations covered aspects of change in learning and teaching such as learning and teaching activities (lectures, seminars, laboratory classes), documents and other teaching material presented to students, learning resources, learning environments, interactions between participants (administrators, teachers, and students). Apart from the aspects of change in learning and teaching mentioned above, the researcher also included secondary data and archives, evaluation and analysis of school programs and documents relevant to the research questions.

### **Data-gathering through Focus Group Discussions**

Preparation for the focus group included: identifying the purpose of the discussion; identifying the participants; and developing the open-ended questions. Running the focus groups involved: opening the discussion; managing the discussion; closing the discussion; and follow-up after the discussion. Focus groups composed of 6-8 participants (teachers), one facilitator (researcher) and one sound recorder.

### **Analysis of School Programs and Documents**

The researcher also looked at and analyzed documents, signposts, and models available in the schools. Analysis of school programs and documents involved: formal records such as students' registers to verify enrolment trends, syllabus samples to verify programs, teachers' records of work to verify syllabus coverage, and minutes of meetings as well as informal communications like notes, reports and memos to obtain any other information relevant to this study topic.

### **Statistical Treatment of Data**

Data obtained through questionnaires were subjected to quantitative data analysis techniques; descriptive statistics such as frequencies and percentages for research question 1, means and standard deviations for research question 2, t-test for independent samples for research question 3 and 4, Spearman rank-order correlation

coefficient for research question 5 with the level of significance set at 0.05, and Pearson Correlation for research 6 with correlation significant at the 0.01 level (2-tailed).

Data obtained through the semi-structured interviews was subjected to descriptive analysis and content analysis. After the interviews, the findings obtained from the answers given by the teachers and administrators were categorized in themes. Descriptive analysis was made in terms of data reduction, presentation of data, inference and verification (Türnüklü, 2010) to address research question 7 and 8. This involved summarizing and interpreting the obtained data based on pre-determined themes, frequently using direct quotations to manifest the interviewed individuals' views in a striking way, and interpreting the obtained results within the framework of cause and effect relationships (Yıldırım & Şimşek, 2005).

### **Study Area**

This study was conducted in Western Kenya region with particular reference to eleven SDA secondary schools of WKUC selected from the counties of Kisumu, Homa-Bay, Migori, Kakamega, Trans Nzoia, Uasin Gishu, and Nandi. Western Kenya region is one of the regions which are densely populated hence leading to the establishment of a number of both primary and secondary schools to provide basic education for the rapidly growing number of primary and secondary school going children. This growth in number of schools and student enrolment in secondary schools has its own impact on educators' accountability for learning and equity. The researcher, therefore, found this area to be of interest for study in examining educators' accountability for learning and equity in the schools.



## **Ethical Considerations**

**Honesty:** The researcher strictly observed honesty in reporting data. Every borrowed idea for this study was documented to avoid elements of dishonesty and plagiarism. Elements of manipulation or deception were carefully avoided.

**Rights to privacy:** Rights to privacy and confidentiality were respected. All steps necessary to ensure that identities or information acquired in the process of research were kept secure from interception or appropriation by unauthorized persons, and/or for non-research purposes. The researcher ensured that descriptions of other people's work and points of view were negotiated with those concerned before being published and that the researcher accepted responsibility for maintaining confidentiality. The respondents were assured of their security and protection.

**Securing informed consent:** The researcher carefully observed the principle of informed consent which requires that people should not be involved as participants in research without understanding and freely agreeing to such involvement. Identification of participants or informants in this research was done with their informed consent. The relevant persons such as administrators, teachers, and students were consulted, and the principles guiding the work were accepted in advance by all before making observations or examining documents produced for other purposes.

**Voluntarily participation:** The researcher made sure that all participants were allowed to influence the work, and the wishes of those who did not wish to participate were respected.

## **CHAPTER FOUR**

### **PRESENTATION OF FINDINGS, ANALYSIS AND INTERPRETATION**

This chapter dealt with presentation of findings, analysis and interpretation of data gathered from the subjects of this study. The study was guided by eight research questions seeking to establish educators' accountability for learning: a framework for equity and students' achievement in WKUC secondary schools.

Demographic information of the respondents was determined based on gender, age, employment status as a teacher, level of education, teaching experience, and length of service in the school of study in case of teachers; and based on gender, age, grade level, and length of time in the school in respect to students. This was in response to research question one.

To determine educators' accountability for learning in question two, teachers and students were asked to rate educators regarding the extent to which they are accountable for learning in the area of classroom curriculum design, Pedagogy, and students' assessment. Data obtained through questionnaires were then subjected to quantitative data analysis techniques; and means and standard deviations were applied for analysis.

Research question three sought to establish if there was any significant difference between educators' accountability for learning in the high-performing and low-performing secondary schools in the areas of classroom design, Pedagogy, and students' assessment based on i) teachers' responses and ii) students' responses in the areas of classroom curriculum design, Pedagogy, and students' assessment. Data

obtained through questionnaires were subjected to quantitative data analysis techniques; and t-test for independent samples was applied for this research question and results were presented in tables and analyzed.

Research question four sought to establish if there was significant difference between the male and female educators' perception on the accountability for learning in the areas of classroom curriculum design, Pedagogy, and students' assessment. Data obtained through questionnaires were subjected to quantitative data analysis techniques; and t-test for independent samples was applied for this research question, and presented in a table and analyzed.

Question five sought to establish if there was significant relationship between educators' perception on the accountability for learning in the areas of classroom curriculum design, Pedagogy, and students' assessment when they are grouped according to age, level of education, and years of experience. Data obtained through questionnaires were subjected to quantitative data analysis techniques; and since age, education and experience are ordinal variables; the researcher used Spearman rank-order correlation coefficient with the level of significance set at 0.05.

Question six established if any significant relationships existed between educators' perceptions of accountability for learning in i) Classroom Curriculum Design and Pedagogy; ii) Classroom Curriculum Design and Students' Assessment; and iii) Pedagogy and Students' Assessment. In addressing question six, a case study, which is a qualitative research method, was employed to explore the use of active learning practices in educators' accountability for learning in two selected secondary schools out of the eleven schools covered by this study. Data for analysis in respect to this question was obtained through semi-structured interviews and focus group discussions with 22 teachers and 4 administrators of the two selected schools. The

data was recorded, transcribed, analyzed, and reported under specific themes in tables for analysis.

Question seven explored how accountability for learning practices could be entrenched into the administration, teaching, and learning activities for equity and improved students' achievement in the West Kenya Union Conference secondary schools and question eight helped in proposing a model to attain equity and improved students' achievement in West Kenya Union Conference secondary schools.

Research question eight sought to establish what framework/model could be proposed to attain equity and improved students' achievement in West Kenya Union Conference secondary schools.

Data obtained through the semi-structured interviews was subjected to descriptive analysis and content analysis. After the interviews, the findings obtained from the answers given by the teachers and administrators were categorized in themes. Descriptive analysis involved summarizing and interpreting the obtained data based on pre-determined themes, frequently using direct quotations to manifest the interviewed individuals' views in a striking way, and interpreting the obtained results within the framework of cause and effect relationships (Yıldırım & Şimşek, 2005). Descriptive analysis was made in terms of data reduction, presentation of data, inference and verification (Türnüklü, 2010).

### **Demographic Characteristics of the Respondents**

**Research question one. What are the demographic characteristics of the respondents?**

Table 3 and 4 present the demographic data for the teachers and students respectively included in the study for the 2018-2019 school year used for the demographic data analyses.

## Teachers' Demographic Characteristics

**Gender distribution.** As revealed in Table 3, 64 (64.6%) of the 99 teacher respondents were males and only 35 (35.4%) were females. This implies that the majority of the teachers teaching in the WKUC secondary schools are male teachers.

**Age range.** As indicated in Table 3, the majority of respondents (88.9%) are aged below 40 years. A few (representing only 7.1% and 4.0%) are in the age range of 40-49, and 50-59 respectively. This implies that majority of the teachers teaching in the WKUC secondary schools are young, below retirement age.

Table 3

### *Demographic Characteristics of Teacher Respondents*

<i>Demographic Variable</i>	<i>Category</i>	<i>N(f)</i>	<i>%</i>
Gender	Male	64	64.6
	Female	35	35.4
	<b>Total</b>	<b>99</b>	<b>100</b>
Age	Below 40	88	88.9
	40-49	7	7.1
	50-59	4	4.0
	<b>Total</b>	<b>99</b>	<b>100</b>
Employment Status	Permanent	16	16.2
	Contract	81	81.8
	No response	2	2.0
	<b>Total</b>	<b>99</b>	<b>100</b>
Highest Level of Education	Diploma	4	4.0
	Bachelor's	90	90.9
	Master's	5	5.1
	<b>Total</b>	<b>99</b>	<b>100</b>
Teaching Experience	0-1 Years	22	22.2
	2-3 Years	32	32.3
	4-5 Years	24	24.2
	6 Years and above	19	19.2
	No response	2	2.0
	<b>Total</b>	<b>99</b>	<b>100</b>
Years of Service	0-1 Years	46	46.5
	2-3 Years	24	24.2
	4-5 Years	15	15.2
	6 Years and above	12	12.1
	No response	2	2.0
	<b>Total</b>	<b>99</b>	<b>100</b>

**Employment status.** Regarding employment status, 81 of the teachers (81.1%) responded as working on contractual employment basis and only 16 (16.2%)

working on permanent employment. This reflects a possibility of an absence of a policy to regularize teachers on permanent terms; hence the reason for more teachers employed on contract or else there is a possibility of low motivation of teachers to stay longer in the schools.

**Highest level of education.** As presented in Table 3, majority of the teachers engaged in the secondary schools in WKUC are Bachelor's degree holders representing 90.9% and 5% Master's, and only a small percentage of 4% are Diploma holders. This shows that over 95% of all the teachers engaged in the secondary schools WKUC are adequately prepared and qualified for secondary school teaching.

**Teaching experience.** As Table 3 reveals, 32 (32.3%) of the teachers who participated in this study have teaching experience of between 2-3 years; 24 (24.2%) represents teachers with teaching experience of 4-5 years, 22 (22.2%) represents teachers with teaching experience of 0-1 years, and 19 (19.2%) represent teachers with teaching experience of 6 years and above while 2 (2%) represents the number of teachers who did not give any response on this item. These results suggest that the majority of the teachers (over 75%) who are employed in the WKUC secondary schools have teaching experience of less than five years.

**Years of service as a teacher in the school.** The information provided in table T reveals that 46 of the teachers (representing 46.5%) who participated in this study have served in the schools for a period between 0-1 years. This is followed by 2-3 years (representing 24.2%), followed by 6 years and above (representing 21.1%), and 4-5 years (representing 15.2%).

This finding reflects a high turnover rate in all the schools covered by this study. This is consistent with the interviews with administrators and teachers. Teachers interviewed unanimously agreed that over 25 percent of the teachers

currently in schools leave the schools over the first few years after recruitment. This was also supported by available statistics from school records on teacher turnover. This was also confirmed during the interviews with teachers. Observation of the records revealed that on the average, over 25 percent of teachers employed in the WKUC secondary schools leave every year. Teachers interviewed also estimated that over 25 percent of the teachers currently in schools leave the schools over the first few years after recruitment.

During the focus group discussions teachers and administrators made the assumption that that students' low achievement in the schools was due to the high teacher turnover. They reasoned that in the high-turnover schools, the inexperienced and underqualified teachers are often hired to fill empty spots which may have a negative impact on student learning. That is, if there is a difference in quality between teachers who leave and those who replace them, then student achievement can change. For example, when leaving teachers are, on average, worse than those who replace them, the compositional effect of turnover on student achievement is positive. However, if leaving teachers are better than the ones who replace them, the effect may be negative.

These assumptions are consistent with one other correlational evidence by Boyd, Lankford, Loeb, and Wyckoff (2005). Although little research has been undertaken to assess the causal effect of teacher turn over on student achievement (Ingersoll, 2000; Guin, 2004), research has found out that high rates of turnover harm student achievement. In such cases Pearson correlations are significant and negative, indicating that schools with higher turnover also have lower achievement.

However, there is also the assumption which explains that the overall effect of turnover depends on the resulting distribution in effectiveness of individual teachers.

For example, if leaving teachers are equally as effective as those who replace them, then there should be no net effect of turnover. In such explanation, turnover effects are driven only by leavers and their replacements. That is, the students of teachers who stay in the same school from one year to the next are unaffected by turnover.

Other than the impact of teacher turnover on students' achievement, turnover may have substantial impact on the financial and human resources in schools as well. The recruiting, hiring, and training of new teachers require significant financial costs (Barnes, Crowe, & Schaefer, 2007). These costs drain resources that might otherwise be spent on program improvement or working conditions (Carroll, Reichardt, & Guarino, 2000; Darling-Hammond & Sykes, 2003; Barnes et al, 2007). Such dynamics may harm schools with historically underserved student populations the most, as these schools tend to have more persistent turnover and in some cases have fewer overall resources to work with. In addition, new hires in underserved schools often are less experienced and so require more supports to improve (Carroll et al., 2000; Darling-Hammond & Sykes, 2003).

## **Students' Demographic Characteristics**

**Gender distribution.** As shown in Table 4, 192 (54.7%) of the students who responded to the questionnaire were boys, whereas 159 (45.3%) were girls, and 2 (0.6%) did not respond to this item. This reveals that the majority of the students who responded to the students' questionnaire were boys (over 50%) suggesting that there are more boys than girls studying in the secondary schools in WKUC.

**Age range.** Table 4 reveals that 170 of students (representing 48.4%) aged between 17-18 years, 132 students (37.6%) aged between 15-16 years, and 28 students (8%) aged between 19-20, 20 students (5.7%) aged below 15 years, and 1(0.3%) of the students did not indicate his/her age range.



Table 4

*Demographic Characteristics of Student Respondents*

<i>Demographic Variable</i>	<i>Category</i>	<i>N(f)</i>	<i>%</i>
Gender	Male	192	54.7
	Female	159	45.3
	No response	2	0.6
	<b>Total</b>	<b>351</b>	<b>100.0</b>
Age	Below 15	20	5.7
	15-16	132	37.6
	17-18	170	48.4
	19-20	28	8.0
	No response	1	.3
	<b>Total</b>	<b>351</b>	<b>100.0</b>
Grade Level	Form one	57	16.2
	Form two	74	21.1
	Form three	108	30.8
	Form four	110	31.3
	<b>Total</b>	<b>351</b>	<b>100.0</b>
Length of time in the school	Under one year	77	21.9
	1-2 Years	80	22.8
	2-3 Years	77	21.9
	3-4 Years	115	32.8
	No response	2	.6
	<b>Total</b>	<b>351</b>	<b>100.0</b>

**Grade level.** As presented in Table 4, 110 form fours and 108 form threes (representing 31.3% and 30.8%) respectively participated in this study. Form twos and ones were 74 and 57 (21.1% and 16.2%) respectively and 2 (6%) of the student participants did not respond.

**Length of time in the school.** The information provided in Table 4 reveals that 115(32.8%) of the student respondents have been in the schools for between 3-4 years, 80 students (23%) have stayed in the schools for between 1-2 years, and 77 (21.9%) have stayed in the schools for less than one year. Those who did not respond were 2 students (representing 0.6%). This data shows that there are more students who start in the schools of this study but who transfer to other schools before completion. This implies that the completion rate of students in the respective schools is below 40%.

## Educators' Accountability for Learning

**Research question two: To what extent are educators in the West Kenya Union Conference secondary schools accountable for learning in the areas of Classroom Curriculum Design, Pedagogy, and Students' Assessment?**

### **Classroom Curriculum Design**

**Teachers' responses.** Teachers' responses to question two were analyzed and interpreted by means of descriptive statistics (mean and standard deviations).

Data that provided answers to this question is presented on Table 5

Table 5

*Teachers' Ratings of Educators' Accountability in Classroom Curriculum Design*

<b>Items</b>	<b>Mean</b>	<b>Std. Deviation</b>
Believe that all students are capable of achieving at high levels, and take responsibility for their learning, despite the circumstances in their lives and society that can make achievement difficult.	3.35	.83
Keep track of the ways I address individual learning styles and preferences	3.41	.66
Recognize the importance of students' active participation and engagement in the learning process	3.75	.54
Provide students with options and choices regarding how they are going to learn and how they are going to show their learning whenever possible	3.33	.78
Use cooperative learning and grouping strategies to increase student participation	3.62	.53
Construct tasks at different levels of difficulty	3.39	.74
Make the task more or less familiar based on the proficiency of the learners' experiences or skills for the task	3.37	.71
<b>Classroom Curriculum Design</b>	<b>3.46</b>	<b>.44</b>
N = 99		

Note: 3.50 - 4.00 Strongly Agree (High extent); 2.50 - 3.49 Agree (Average); 1.50 - 2.49 Disagree (Moderate); and 1.00 - 1.49 strongly disagree (low)

When teachers' views regarding the extent to which educators are accountable for learning in all of the seven items of classroom curriculum are analyzed, it is seen that the average of the seven items is on an *average* level at ( $M = 3.46$  and  $SD = .44$ ). These results, therefore, imply that teachers view educators' accountability for learning in WKUC secondary schools generally on an *average* level.

However, when analyzed in terms of the sub-elements of classroom curriculum, it is seen that educators' are to a *high extent* accountable for learning in recognizing the importance of students' active participation and engagement in the learning process ( $M = 3.75$ ,  $SD = .54$ ); and also in the use of cooperative learning and grouping strategies to increase student participation ( $M = 3.62$ ,  $SD = .53$ ).

Based on these findings, it can be inferred that educators in WKUC secondary schools to a *high extent* recognize that students learn more when they actively participate and engage in their process of learning, whether it is through discussion, practice, review, or application, and/or in the psychomotor domain such as role play, and replication; and also to a *high extent* they value the use of cooperative learning and grouping strategies to increase student participation as important factors for improving students' achievement.

This, however, is somehow contrary to what was observed in the various classes. During classroom observations, it was seen that, except for a few, most of the teachers observed, especially in the low-performing schools, majorly used lecture method of teaching with very minimal students' participation. It was evident that teachers were simply "*teaching to the test,*" trying to *cover the set syllabus in preparing the students for the expected exams* as confirmed by some teachers interviewed after classroom observation.

It was also observed that in the classes where teachers used the lecture method, students tended to practice passive participation by writing notes, sitting quietly, or simply listening to lectures. When asked to say why they were using lecture method, their responses put together, clearly reflected their misunderstanding of what equity pedagogy really entails and hence resistance to using it in class. One

response which came out clearly was this: “*Equity pedagogy is too demanding with the limited teaching-learning resources at our disposal.*”

Only in a few classes that were observed, teachers to some extent practiced equity pedagogy in their classrooms. In these classes, the learners fairly practiced active participation which included asking questions, giving opinions and discussing about the related topic lectured.

The importance of students’ active participation and engagement in the process of learning, and the use of cooperative learning and grouping strategies to increase student participation conform to studies found in the literature. For example, results on students’ participation and engagement is consistent with the study conducted by Tatar (2005a) showing that active participation of students with discussions in the classroom is important for the purpose of achieving effective learning and plays an important role in the success of education and personal development of students in the future.

Research by Fernandes, Huang and Rinaldo (2011) also shows that participation and engagement is beneficial for student learning; and that classroom participation is associated with the generation and promotion of higher order thinking skills, and this cognitive stimulation provides students with a different environment which promotes positive and effective learning experiences.

It has also been found that students, who are active participants, tend to have better academic achievement, compared with students, who are passive in participation. For instance, research by Linnenbrink and Pintrich (2003) reports that participation and engagement predicts students’ achievement and comprehension of educational material.

More recently, “student engagement has been built around the hopeful goal of enhancing all students’ abilities to learn how to learn or to become lifelong learners in a knowledge-based society” (Gilbert, 2007, p.1). According to him, student engagement has become both a strategic process for learning and an accountability outcome unto itself. Siti (2010) supports this statement claiming that students who are actively involved in the classroom discussions showed higher satisfaction in the learning process for the reason that students will learn how to think critically and thus enhance their intellectual development if they are engaged as active participants in the classroom.

Research survey by Willms, Friesen, and Milton (2009) also revealed that student engagement primarily and historically focused upon increasing achievement, positive behaviors, and a sense of belonging in students so that they would remain in school. They stated that students want to interact with people both within and beyond the classroom and school environment. Their findings repeatedly showed that students want:

Stronger relationships with teachers, with each other, and with their communities – locally, provincially, nationally and globally; their teachers to know them as people; their teachers to know how they learn; students want their teachers to take into account what they understand and what they misunderstand, and to use this knowledge as a starting place to guide their continued learning; their teachers to establish learning environments that build interdependent relationships and that promote and create a strong culture of learning. (p. 36)

The present study’s finding which shows that educators to a *high extent* believe that cooperative participation between teachers and students is integral in the

process of learning is supported by numerous studies. For example, Bibi (2002) and Siddiqui (2003) carried out their research by using cooperative learning for improving performance of English as Second Language (ESL) learners and the results were positive. A Study carried out by Arbab (2003) for two weeks on general science students also proved that students taught with cooperative learning method has improved results than control group. As noted by Gilliam (2002), cooperative learning is a viable and effective instructional method because it guarantees the building of higher level thinking skills and academic achievement.

The study by Iqbal (2004) who conducted a study to examine the effect of cooperative learning on academic achievement on secondary school students in the subject of mathematics also supports this finding. He reports that there was a significant difference between the achievement scores of the students taught by the cooperative and traditional method. The students who were taught by the cooperative method showed higher scores.

In recent years, a few studies done by Fakeye (2010) and Glomo-Narzoles (2015) used student achievement division as an experimental treatment in a study involving low performance students. They found out that the cooperative learning achievement division group scored significantly higher on academic performance than the English as First Language (EFL) learners. A similar study by Swab (2012) also found that cooperative learning resulted in significantly higher achievement in a college-level computer aided drafting course.

Educators' levels of accountability in the other aspects of curriculum were also evaluated and rated as follows: keeping track of the ways they address individual learning styles and preferences ( $M = 3.41, SD = .66$ ); constructing tasks at different levels of difficulty ( $M = 3.39, SD = .74$ ); making the task more or less familiar based

on the proficiency of the learners' experiences or skills for the task ( $M = 3.37$ ,  $SD = .71$ ); believing that all students are capable of achieving at high levels, and take responsibility for their learning, despite the circumstances in their lives and society that can make achievement difficult ( $M = 3.35$ ,  $SD = .83$ ); and providing students with options and choices regarding how they are going to learn and how they are going to show their learning whenever possible ( $M = 3.33$ ,  $SD = .78$ ).

These results reveal that educators' accountability for learning in these particular areas is to an *average extent*. It can be deduced from the findings that educators in the WKUC secondary schools only to an average level value these particular aspects of the curriculum as factors that positively influence students' achievement. Perhaps, this could be the reason why they do not seem to pay more attention to these aspects when designing classroom curriculum. Thus, in spite of the fact that educators are responsible for planning, developing, and reviewing the classroom curriculum, the above finding implies that educators in most WKUC secondary schools are not very effective in varying classroom instruction.

However, the idea of keeping track of the ways individual learners' styles and preferences is critical and has been found to be an important aspect of curriculum as reported by Fiszer (2004), who explained that there is significant improvement in students' achievement when students are organized by their level of interest and learning performance preferences. Contrary to the suggestion that today's students are asking for a diluted or moderated curriculum, research shows that students prefer to be held to high expectations. They also desire quality, rigorous, and meaningful curriculum and high academic goals.

Students' desire for instructional challenge was reported by a majority of authors reviewed, including Willms, Friesen, and Milton (2009) and Dunleavy and

Milton (2009). This supports the belief that all students are capable of achieving at high levels, and take responsibility for their learning, despite the circumstances in their lives and society that can make achievement difficult.

Effective teaching and learning is based on teachers' belief that the core of teaching and learning is the same, regardless of whether a student has a disability or requires additional support; which may call for what is referred to as *differentiating and adapting* (Mitchell & Maxwell, 2010). According to Tomlinson and Allan (2000), differentiation refers to the responses that teachers make to learners' needs. In teaching reading, for example, one size does not fit all. At its most basic level, differentiation consists of the efforts of teachers to respond to variance among learners in the classroom. That is, whenever a teacher reaches out to an individual or small group in order to vary his or her teaching to create the best learning experience possible, that teacher is differentiating instruction.

Effective differentiation functions on the premise that every student can do remarkable things with appropriate guidance and support. As a teacher develops his/her expertise with these varied approaches, he/she will be able to: recognize that units of work can easily be modified in the classroom program to cater effectively for students with diverse needs, by using a range of approaches and strategies in planning and teaching; recognize that some students need multiple opportunities to engage with a range of materials to support their understanding; and that these opportunities may involve using assistive technology or simple adaptations; reflect on and evaluate multiple ways students can demonstrate their understanding in different learning areas; for students with diverse needs, it may be at the same level or a different level to their peers; identify ways that all students might assess their capabilities and reflect on their own learning (Murphy, 2008).



It is a common knowledge that no two students are alike in their thought processes, abilities, interests, and approaches to learning. Therefore, Universal Design for Learning (UDL) is a useful framework to support schools to plan for all students from the outset (*The New Zealand Curriculum, 2007*). UDL provides the opportunity for all students to access, participate in, and progress in the general-education curriculum by reducing barriers to instruction. It helps them to ensure that the school curriculum meets the needs of all students, providing everyone with equal opportunities to learn.

It is also common that schools serve children from a variety of families and backgrounds, with a variety of learning strengths and needs and so differentiated instructions are very necessary to help all students learn and succeed. What and how educators differentiate depends on the needs of the students in the class at any one time. Making curriculum accessible for all students may require ‘thinking outside the box’ in daily practice. This requires educators to be prepared to do things differently, to work towards a shift from being a ‘routine expert’ to an ‘adaptive expert’ (Timperley, 2011).

**Students’ responses.** Students’ responses to question two were analyzed and interpreted by means of descriptive statistics (mean and standard deviations). Data that provided answers to this question is presented on Table 6.

Educators’ accountability for learning regarding all the 8 items of classroom curriculum was rated on an *average* level at  $M = 2.89$ ,  $SD = .66$ . When analyzed in terms of individual elements of classroom curriculum, educators’ accountability was rated *average* level as follows: arranging curriculum in line with subject objectives and goals ( $M = 3.17$ ,  $SD = .96$ ); adjusting classroom curriculum to reflect national standards ( $M = 2.99$ ,  $SD = 1.10$ ); providing a variety of avenues for students’

exploration of a topic and expression of learning ( $M = 2.93$ ,  $SD = 1.10$ ); ensuring that curriculum is appropriate to students from diverse backgrounds ( $M = 2.85$ ,  $SD = 1.11$ ); varying curriculum to present essential facts, skills and attitudes ( $M = 2.83$ ,  $SD = 1.02$ ); providing tasks and learning choices at different levels of difficulty ( $M = 2.80$ ,  $SD = 1.10$ ); providing broad access to a wide range of teaching and learning materials ( $M = 2.80$ ,  $SD = 1.20$ ); and varying classroom curriculum based on students' level of achievement ( $M = 2.73$ ,  $SD = 1.10$ ).

Table 6

*Students' Ratings of Educators' Accountability in Classroom Curriculum Design*

<b>Items</b>	<b>Mean</b>	<b>Std. Deviation</b>
Adjust classroom curriculum to reflect national standards	2.99	1.08
Arrange curriculum in line with subject objectives and goals	3.17	.96
Vary curriculum to present essential facts, skills and attitudes	2.83	1.02
Vary classroom curriculum based on students' level of achievement	2.73	1.08
Ensure that curriculum is appropriate to students from diverse backgrounds	2.85	1.11
Provide tasks and learning choices at different levels of difficulty	2.80	1.06
Provide a variety of avenues for students' exploration of a topic and expression of learning	2.93	1.06
Provide broad access to a wide range of teaching and learning materials	2.80	1.20
<b>Classroom Curriculum Design</b>	<b>2.89</b>	<b>.66</b>
N = 351		

Note: 3.50 - 4.00 Strongly Agree (High extent); 2.50 - 3.49 Agree (Average); 1.50 - 2.49 Disagree (Moderate); and 1.00 - 1.49 strongly disagree (low)

These results imply that educators' accountability for learning in designing classroom curriculum, according to students, is not adequately meeting expectations; which by inference may mean that educators in WKUC secondary schools do not seem to well recognize the importance of these aspects of classroom curriculum in enhancing students' achievement.

However, going by what Null (2011) sees curriculum to be-as a map of how to achieve the outputs of desired student performance, in which appropriate learning activities and assessments are suggested to make it more likely that students achieve the desired results, a *high level* of educators' accountability for learning in the area of

curriculum design should be expected. It is here where educators decide on: what should be taught, to whom, under what circumstances, how, and with what end in mind; put more concretely, what should be taught to students in this school, at this time, how, and to what end; and what process should they use to decide what their curriculum should be within the school.

## **Pedagogy**

**Teachers' responses.** Teachers' responses to this question were analyzed and interpreted by means of descriptive statistics (mean and standard deviations).

Data that provided answers to this question is presented on Table 7.

Table 7

### *Teachers' Ratings of Educators' Accountability in Pedagogy*

<b>Items</b>	<b>Mean</b>	<b>Std. Deviation</b>
Vary direct instruction by small group needs	3.29	.75
Vary the learning process depending upon how students learn	3.40	.67
Provide graphic organizers to support note-taking	2.96	.80
Vary the length of time a student may take to complete a task in order to provide additional support for struggling learners	3.31	.74
Present information through both whole-to-part and part-to-whole	3.32	.69
Provide a variety of avenues for student exploration of a topic or expression of learning	3.39	.67
Provide broad access to a wide range of materials and technologies	3.24	.79
Offer a choice of tasks, including student-designed options	3.05	.83
Encourage investigation or application of key concepts and principles in student interest areas	3.42	.64
Try to uncover student learning profiles	3.09	.71
Balance presentations and learning experiences according to students' learning profiles	3.31	.68
Encourage students to explore information and ideas through auditory, visual and kinesthetic modes	3.25	.72
Balance varied perspectives on an issue or topic	3.42	.64
Provide a safe learning environment that invites risk taking, encourages learning from mistakes, enables focused goal setting, and supports thoughtful learning	3.60	.62
Arrange my classroom and structure lessons to increase student motivation	3.63	.55
Create a learning environment with flexible spaces and learning options	3.48	.66
Make sure there are places in the room to work quietly and without distraction as well as places that invite student collaboration	3.38	.75
Set out clear guidelines for independent work that matches individual needs	3.47	.62
<b>Pedagogy</b>	<b>3.33</b>	<b>.41</b>
N = 99		

Note: 3.50 - 4.00 Strongly Agree (High extent); 2.50 - 3.49 Agree (Average); 1.50 - 2.49 Disagree (Moderate); and 1.00 - 1.49 strongly disagree (low)

When analyzing data presented in Table 7, it is seen that the mean of the 18 items of Pedagogy is on an *average* level at  $M = 3.33$ ,  $SD = .41$ . Results, however, show that educators are to a *high extent* accountable for learning in only two specific aspects of Pedagogy which include: arranging classroom and structuring lessons to increase student motivation ( $M = 3.63$ ,  $SD = .55$ ) and providing a safe learning environment that invites risk taking, encourages learning from mistakes, enables focused goal setting, and supports thoughtful learning ( $M = 3.60$ ,  $SD = .62$ ).

Regarding the remaining 16 items of Pedagogy, educators' accountability is rated on an *average* level as follows: creating a learning environment with flexible spaces and learning options ( $M = 3.48$ ,  $SD = .66$ ); setting out clear guidelines for independent work that matches individual needs ( $M = 3.47$ ,  $SD = .62$ ); encouraging investigation or application of key concepts and principles in student interest areas ( $M = 3.42$ ,  $SD = .64$ ); balancing varied perspectives on an issue or topic ( $M = 3.42$ ,  $SD = .64$ ); providing a variety of avenues for student exploration of a topic or expression of learning ( $M = 3.39$ ,  $SD = .67$ ); making sure there are places in the room to work quietly and without distraction as well as places that invite student collaboration ( $M = 3.38$ ,  $SD = .75$ ); presenting information through both whole-to-part and part-to-whole ( $M = 3.32$ ,  $SD = .69$ ); varying the length of time a student may take to complete a task in order to provide additional support for struggling learners ( $M = 3.31$ ,  $SD = .74$ ); balancing presentations and learning experiences according to students' learning profiles ( $M = 3.31$ ,  $SD = .68$ ); varying direct instruction by small group needs ( $M = 3.29$ ,  $SD = .75$ ); encouraging students to explore information and ideas through auditory, visual and kinesthetic modes ( $M = 3.25$ ,  $SD = .72$ ); providing broad access to a wide range of materials and technologies ( $M = 3.24$ ,  $SD = .79$ ); trying to uncover student learning profiles ( $M = 3.09$ ,  $SD = .71$ ); offering a choice of tasks, including

student-designed options ( $M = 3.05$ ,  $SD = .83$ ); and providing graphic organizers to support note-taking ( $M = 2.96$ ,  $SD = .75$ ).

**Students' responses.** Students' responses to this question were analyzed and interpreted by means of descriptive statistics (mean and standard deviations).

Data that provided answers to this question is presented on Table 8. According to students, the overall accountability for learning in the area of Pedagogy as presented in Table 8 is *rated average* with an overall  $M = 2.71$  and  $SD = .56$ .

Table 8

*Students' Ratings of Educators' Accountability in Pedagogy*

<b>Items</b>	<b>Mean</b>	<b>Std. Deviation</b>
Hold workshops for students to create their own ideas and questions on a topic	2.40	1.19
Offer choice of tasks including student-designed options	2.23	.99
Create effective student discussion groups that have students of the same abilities	2.53	1.17
Encourage students to "think out loud" when answering questions in class to help them reflect on how they arrived at answers	3.21	.99
Ask questions of varying difficulty from simple factual recall to more analysis and synthesis	3.12	.91
Encourage investigation or application of key concepts and principles in student interest areas	2.89	1.08
Connect content with students' cultures, experiences, and talents	2.37	1.23
Use centers of interest, interest groups, specialty groups/expert groups; Teachers always choices within an area of study or topic	2.55	1.04
Work to uncover student diverse learning profiles and balance presentations and learning experiences	2.68	.99
Create a learning environment with flexible spaces and learning options	2.90	1.08
Encourage students to explore information and ideas through visual, auditory, and kinesthetic (VAK) modes	2.38	1.12
Allow students to demonstrate what they have learned in creative ways (posters, drawings, diagrams, mind-maps, poems, etc.)	2.54	1.20
Show students how to take notes by using guided notes for them to model	3.01	1.04
Foster a cooperative learning environment that is meant to benefit students from diverse ethnic/cultural backgrounds	2.76	1.07
Create problem-based learning environments in the classroom allowing students to explore the problem, find solutions, and share their conclusions	2.90	1.08
Ensure a choice of competitive, cooperative and independent learning experiences	2.99	.97
Balance varied perspectives on an issue or topic	2.92	.85
Provide authentic learning opportunities in various intelligence or talent areas	2.33	1.13
<b>Pedagogy</b>	<b>2.71</b>	<b>.56</b>
N = 351		

Note: 3.50 - 4.00 Strongly Agree (High extent); 2.50 - 3.49 Agree (Average); 1.50 - 2.49 Disagree (Moderate); and 1.00 - 1.49 strongly disagree (low)

Similarly, when analyzed in terms of individual elements of Pedagogy, students *agree* that educators' accountability for learning on all the cited elements of Pedagogy is rated with a mean ranging between  $M = 2.53$  and  $M = 3.21$ ; except on some few elements of Pedagogy their accountability for learning is to a *moderate extent*. These include: holding workshops for students to create their own ideas and questions on a topic ( $M = 2.40, SD = 1.19$ ); encouraging students to explore information and ideas through visual, auditory, and kinesthetic (VAK) modes ( $M = 2.38, SD = 1.12$ ); connecting content with students' cultures, experiences, and talents ( $M = 2.37, SD = 1.23$ ); providing authentic learning opportunities in various intelligence or talent areas ( $M = 2.33, SD = .99$ ); and offering choice of tasks including student-designed options ( $M = 2.33, SD = 1.13$ ).

The results in Table 7 and 8 imply that, based on teachers and students, educators' accountability for learning in respect to Pedagogy is not adequately meeting stakeholders' expectations. This by inference may mean that educators in most WKUC secondary schools, according to teachers and students, do not adequately apply effective Pedagogy which perhaps could be the reason for low students' achievement in most of the WKUC secondary schools.

Although the term effective is normally contested, the researcher in this study conceptualizes effective pedagogy in reference to those teaching and learning activities which make some observable change in students, leading to greater engagement and understanding and a measureable impact on student learning.

The researcher in this study is interested in seeing classes where teachers embrace teaching practices that encourage learners to be active, participatory, co-operative, and promoting inquiry. However, according to the findings in Table 7 and 8, educators do not seem to adequately address these elements of Pedagogy.

According to Alexander (2001), such teaching practices include:

- teacher spoken discourse such as instruction, explanation, metaphor, questioning, responding, elaboration and management talk;
- visual representation like using a chalkboard, writing, diagrams, pictures, textbook, learning aids such as stones, experiments, drama to understand or construct the new knowledge being presented or indicated to the learners;
- the act of setting or providing tasks for learners to cognitively engage with new content or develop physical skills, such as experimentation, reading, writing, drawing, mapping, rehearsing, problem solving, practicing;
- variety of social interactions, in which language is central between learners or learners and teacher such as pairs, groups, individually or whole-class;
- teachers' monitoring, use of feedback, intervention, remediation and formative and summative assessment of the students or assessment by the students.

Other studies that have reported positively on effective pedagogy practices labelled as active pedagogy mention the following characteristics: students working with various objects individually and in groups, solving problems, and exploring spaces other than the classroom in Escuela Nueva schools (Benveniste & McEwan, 2000); and students working in pairs or small groups in order to make meaning of the lesson supported by the teacher's skill in eliciting information, asking questions, and following up questions to support learning (Barrow, Boyle., Ginsburg., Leu, Pier, Price-Rom, & Rocha, 2007).

## Students' Assessment

**Teachers' responses.** Teachers' responses to this question were analyzed and interpreted by means of descriptive statistics (means and standard deviations)

Data that provided answers to this question is presented on Table 9.

Table 9

### *Teachers' Ratings of Educators' Accountability in Students' Assessment*

<b>Items</b>	<b>Mean</b>	<b>Std. Deviation</b>
Use pre-assessment to determine where students need to begin, and then match students with appropriate activities	3.46	.66
Vary the ways in which student's learning is assessed (e.g. using a wide variety of assessments)	3.45	.76
Create assessments that respond to different learning modes	3.45	.63
Give choices about how students express their understanding	3.11	.75
Provide challenge, variety and choice	3.35	.69
Encourage students to express what they have learned in varied ways	3.54	.58
Encourage students' participation in self-assessment, goal setting and monitoring of their progress toward mastery of learning objectives	3.51	.65
Allow for varied working arrangements – alone or with a group	3.50	.60
Provide assignments at varying degrees of difficulty to match student readiness	3.46	.73
Work with students to develop rubrics that match and extend students' varied skill levels	3.29	.68
Use a continuum: (For example, simple to complex, less independent to more independent)	3.60	.61
On different levels with adjusted challenges	3.55	.62
Active learning for all students	3.47	.63
Engaging at all levels	3.58	.66
Aligned to objectives and goals	3.69	.55
<b>Students' Assessment</b>	<b>3.46</b>	<b>.40</b>
N = 99		

Note: 3.50 - 4.00 Strongly Agree (High extent); 2.50 - 3.49 Agree (Average); 1.50 - 2.49 Disagree (Moderate); and 1.00 - 1.49 strongly disagree (low)

When analyzed in terms of individual elements of students' assessment, teachers *strongly agree* that educators in WKUC secondary schools are always accountable for learning to a *high extent* in the following elements of Students' Assessment: students' assessments are always aligned to objectives and goals ( $M = 3.69$ ,  $SD = .55$ ); using a continuum: (for example, simple to complex, less independent to more independent ( $M = 3.60$ ,  $SD = .61$ ); engaging at all levels ( $M = 3.58$ ,  $SD = .66$ ); on different levels with adjusted challenges ( $M = 3.55$ ,  $SD = .62$ );



encouraging students' participation in self-assessment, goal setting and monitoring of their progress toward mastery of learning objectives ( $M = 3.51$ ,  $SD = .65$ ); and allowing for varied working arrangements – alone or with a group ( $M = 3.50$ ,  $SD = .60$ ).

Teachers *agree* that educators are accountable to *an average level* in the following students' assessment areas: active learning for all students ( $M = 3.47$ ,  $SD = .63$ ); using pre-assessment to determine where students need to begin, and then matching students with appropriate activities ( $M = 3.46$ ,  $SD = .66$ ); providing assignments at varying degrees of difficulty to match student readiness ( $M = 3.46$ ,  $SD = .73$ ); varying the ways in which student's learning is assessed (e.g. using a wide variety of assessments) ( $M = 3.45$ ,  $SD = .76$ ); creating assessments that respond to different learning modes ( $M = 3.45$ ,  $SD = .63$ ); providing challenge, variety and choice ( $M = 3.35$ ,  $SD = .69$ ); working with students to develop rubrics that match and extend students' varied skill levels ( $M = 3.29$ ,  $SD = .68$ ); and giving choices about how students express their understanding ( $M = 3.11$ ,  $SD = .75$ ). On the overall, it was established that that educators' accountability for learning is *average* with an overall  $M = 3.46$  and  $SD = .40$ . Thus, according to teachers, educators' accountability for learning in the area of students' assessment is rated *average*.

**Students' responses.** Students' responses to this question were analyzed and interpreted by means of descriptive statistics (means and standard deviations). Data that provided answers to this question is presented on Table 10.

When students' views regarding the extent to which educators are accountable for learning in the area of students' assessment were analyzed, it was established that students *agree* that educators in WKUC secondary schools are accountable to an *average level* with overall  $M = 2.86$  and  $SD = .59$ . The extent to which educators are

accountable for learning in the area of students' assessment is rated by students as *average*. That is, students generally *agree* that educators in WKUC secondary schools are always accountable for learning to an *average extent* in all the cited students' assessment areas with a mean ranging between  $M = 2.72$  and  $M = 3.18$ .

Table 10

*Students' Ratings of Educators' Accountability in Students' Assessment*

<b>Items</b>	<b>Mean</b>	<b>Std. Deviation</b>
Teachers are always engaged as designers of performance assessments and skilled assessors of students' performance	2.98	.96
Assessment for learning is always ongoing	3.18	.87
Teachers always allow learners to do self-assessment during the learning and receive specific, descriptive feedback about their learning	2.72	1.00
Teachers always use performance assessments that are responsive to emerging student needs	2.75	.98
Instruction is continually adjusted and revised on the basis of assessment results	2.95	.90
Students are always given opportunity to adjust their learning strategies and make timely corrections in response to targeted feedback from their teachers	2.87	1.03
Students' assessment always leads to increased teacher collaboration, and increased capacity to make mid-term corrections based on constructive data	2.73	1.05
Teachers usually adjust instruction for individual students based on need	2.72	1.06
Teachers usually analyze which students need more practice	2.91	1.05
Teachers always reflect on the effectiveness of their teaching practices	2.84	.98
Teachers always confer with students regarding their own assessment might	2.61	.94
Students are always given opportunity to determine the qualities of good performance	2.92	1.08
Teachers always share their teaching-learning intentions with their students	2.91	1.03
Assessments are always developed by teams of teachers of particular classes and subject areas	2.85	1.06
Teachers ensure rich involvement of the learners in monitoring on-going learning, collecting and presenting evidence of them learning	2.78	1.03
Students receive constructive timely feedback and corrective explanation on their mistakes from the teachers	2.90	1.13
<b>Students' Assessment</b>	<b>2.86</b>	<b>.59</b>
N = 351		

Note: 3.50 - 4.00 Strongly Agree (High extent); 2.50 - 3.49 Agree (Average); 1.50 - 2.49 Disagree (Moderate); and 1.00 - 1.49 strongly disagree (low)

Results in Table 9 and 10 imply that, based on teachers' and students' ratings, educators' accountability regarding students' assessment is not adequate. That is, according to teachers and students, educators in WKUC secondary schools do not seem to successfully use effective students' assessment hence leading to educational inequality and low students' achievement in their schools.

In the light of this finding, the researcher proposes the use of a combination of assessment *for* learning (AFL) because of its learner-centeredness and assessment *of* learning (AOL) in order to realize effective students' assessment. AFL calls for teachers to use formative assessment practices to monitor student success and engage in regular sharing conversations with students about how they are learning.

AFL is formative and is ongoing, minute-by-minute, day-by-day classroom assessment that is administered in the course of a unit of instruction. The purposes of formative assessment are to: identify students' strengths and weaknesses; foster increased autonomy and responsibility for learning on the part of the student; assist educators in planning subsequent instruction; and aid students in guiding their own learning, revising their work, and gaining self-evaluation skills (Cizek, 2010).

According to research by Willms, Friesen, and Milton (2009), assessment for learning (AFL) involves five effective teaching practices which might work to increase engagement in learning. These are: "creating thoughtful, intentional designs for learning; making learning meaningful; building relationships; improving teaching practice in the presence of peer teachers, and using assessment to improve learning and guide teaching" (pp. 33-37).

Given the opportunity to "co-create assessment criteria with their teachers, students figure out the criteria of powerful work, they are able to use the criteria to guide their own learning, both in school and beyond" (Willms, Friesen, & Milton 2009, p. 35). Teachers use assessment for learning to enhance students' motivation and commitment to learning. When teachers commit to learning as the focus of assessment, they change the classroom culture to one of students' success.

## Summary of Findings on Educators' Accountability for Learning

Table 11

*Accountability in classroom curriculum, Pedagogy, and students' assessment*

Variables	Teachers' Response			Students' Response		
	<i>M</i>	<i>SD</i>	Interpretation	<i>M</i>	<i>SD</i>	Interpretation
Classroom Design	3.46	.44	Average	2.89	.66	Average
Pedagogy	3.33	.41	Average	2.71	.56	Average
Students' Assessment	3.46	.40	Average	2.86	.59	Average

The summary of findings in Table 11 shows that Educators accountability for learning, based on teachers' and students' responses, is *average* in the areas of classroom curriculum design ( $M=3.46$ ,  $SD=.44$ ), Pedagogy ( $M=3.33$ ,  $SD=.41$ ) and students' assessment ( $M=3.46$ ,  $SD=.40$ ); and classroom curriculum ( $M=2.89$ ,  $SD=.66$ ), Pedagogy ( $M=2.71$ ,  $SD=.56$ ) and students' assessment ( $M=2.86$ ,  $SD=.59$ ) respectively.

### Comparison of Ratings of Students and Teachers in High-performing and Low-performing Schools

**Research question three: Is there a significant difference between educators' accountability for learning in the high-performing and low-performing secondary schools based on i) teachers' responses and ii) students' responses in the areas of Classroom Curriculum Design, Pedagogy, and Students' Assessment?**

*H<sub>01</sub>*: No significant difference exists between educators' accountability for learning in the high-performing and low-performing secondary schools based on i) teachers' responses and ii) students' responses in the areas of classroom curriculum design, Pedagogy, and students' assessment.

## Comparison of Classroom Curriculum Design (CCD)

The researcher conducted t-test for independent samples to compare educators' accountability for learning in the high-performing and low-performing secondary schools in the areas of classroom design, Pedagogy, and students' assessment based on i) teachers' responses and ii) students' responses in the areas of classroom curriculum design, Pedagogy, and students' assessment as presented in Tables 12a-12f.

Table 12a

*Comparison of Results Based on Teachers' Ratings of Accountability in CCD*

Group Statistics								
	School Performance	N	Mean	Std. Deviation	Std. Error Mean			
Classroom Curriculum Design	High performing	42	3.5618	.32224	.04972			
	Low performing	57	3.3814	.50163	.06644			
Independent Samples Test								
Classroom Curriculum Design	Levene's Test for Equality of Variances		t-test for Equality of Means					
	F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	
	Equal variances not assumed	5.113	.026	2.174	95.414	.032	.18042	.08299

When teachers' responses were analyzed in Table 12a to establish whether there was significant difference between educators' accountability for learning in the high-performing and low-performing secondary schools in the area of classroom curriculum design, the result obtained from the t-test for independent samples revealed that there was a *significant difference between educators' accountability for learning in the high-performing and low-performing secondary schools in the area of classroom curriculum design* at  $p = .032 < 0.05$  level. Therefore, the null hypothesis was *rejected*. This difference could be as a result of the following reasons:

- The educators in the high-performing schools might have identified and adequately addressed the diversity of student needs with differentiated pedagogical practice, of course without compromising on standards. They might have realized that ordinary students can have extraordinary talents; and they have personalized the education experience so that all students can meet high standards.
- Moreover, teachers in the high-performing school systems might have invested not just in their students' academic success but also in their well-being. It is a common belief that the quality of a school system does not exceed the quality of its teachers. As such high-performing school systems normally select and educate their teaching staff carefully. They improve the performance of teachers who are struggling and they structure teachers' pay to reflect professional standards. They provide an environment in which teachers work together to frame good practice, and they encourage teachers to grow in their careers.
- Perhaps educators in the high-performing school systems set ambitious goals, which are clear about what students should be able to do, and enable teachers to figure out what they need to teach their students. In other words, they have moved on from administrative control and accountability to professional forms of work organization. They might have created an environment where teachers are encouraged to be innovative, to improve their own performance and that of their colleagues, and to pursue professional development that leads to better practice.
- Educators in the high-performing school systems could be laying more emphasis not on looking upward within the administration of the school system, about looking outward to the next teacher or the next school, in which a culture of collaboration and strong networks of innovation is created. This could be another reason for the significant difference.

- These high-performing schools could be providing high-quality education across the entire system so that every student benefits from excellent teaching. They attract the best principals and the most talented teachers to the most challenging classrooms.

When students' responses were analyzed in Table 12b to establish whether there was significant difference between educators' accountability for learning in the high-performing and low-performing secondary schools in the area of classroom curriculum design, the result obtained from the t-test for independent samples revealed that *there was significant difference between educators' accountability for learning in the high-performing and low-performing secondary schools in the area of classroom curriculum design* at  $p = .001 < 0.05$  level. Therefore, the null hypothesis was *rejected*. This implies that educators in the high-performing schools were more accountable in classroom curriculum design than educators in low-performing schools.

Table 12b

*Comparison of Results Based on Students' Ratings of Accountability in CCD*

Group Statistics								
	School Performance	N	Mean	Std. Deviation	Std. Error Mean			
Classroom Curriculum Design	High performing	221	2.8128	.70035	.04711			
	Low performing	129	3.0329	.55809	.04914			
Independent Samples Test								
Classroom Curriculum Design	Levene's Test for Equality of Variances			t-test for Equality of Means				
	F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	
	Equal variances not assumed	5.732	.017	-3.234	316.083	.001	-.22014	.06807

From this finding it can be seen that students' ratings and teachers' ratings are complementary. That is, both teachers and students are in agreement that there is a

correlation between educators' accountability for learning in the area of classroom design and students' performance. That is, the more educators are accountable in classroom curriculum design the higher the chances that students' performance will improve. This is consistent with prior studies showing the importance of curriculum alignment in improving student achievement (Schmidt-Davis, & Bottoms, 2001; Boscardin, Aguirre-Munoz, Stoker, Kim, Kim, & Lee, 2005). The result also validates findings from Boscardin et al. (2005) that teacher expertise was highly related to student achievement. From the focus group discussions, it was also revealed that having less curricular coverage negatively impacts learning. For example, it was revealed that *"if a topic is not in the curriculum or adequately covered, achievement is likely to be low."*

These findings are important because curriculum and teacher training are both areas schools can control. Each school can decide what is to be included in its curriculum, of course within the context of the National Curriculum, and based on what they think is important for their students to learn. Consequently, the schools can use these results in order to further review and revise their curriculum as they deem necessary. Moreover, with the help of the results from this study, schools can target their teachers' professional development training in the areas where it is needed most.

### **Comparison of Pedagogy (TP)**

When teachers' responses were analyzed in Table 12c to establish whether there was significant difference between educators' accountability for learning in the high-performing and low-performing secondary schools in the area of Pedagogy, the result obtained from the t-test for independent samples revealed that *there was no significant difference existed between educators' accountability for learning in the*



high-performing and low-performing secondary schools in the area of Pedagogy at  $t = 1.627, p = .107 > 0.05$ . Thus, the null hypothesis was accepted.

Table 12c

*Comparison of Results Based on Teachers' Ratings of Accountability in TP*

Group Statistics							
	School Performance	N	Mean	Std. Deviation	Std. Error Mean		
Pedagogy	High performing	42	3.4075	.41523	.06407		
	Low performing	57	3.2735	.39735	.05263		
Independent Samples Test							
Levene's Test for Equality of Variances							
t-test for Equality of Means							
	F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference
Pedagogy							
Equal variances assumed	.495	.483	1.627	97	.107	.13404	.08236

This finding aligns with results of earlier studies. For example, although recurrently there is research evidence to suggest the positive impact of particular strategies, little of it is rigorously comparative between different approaches, and the evidential basis for the claims around specific strategies can be non-consequential (Muijs & Reynolds, 2001). In fact, one of the key outcomes of research on successful pedagogies is that there are no 'magic bullets' in terms of classroom strategies (Muijs, 2010, p. 23).

When students' responses were analyzed in Table 12d to establish whether there was significant difference between educators' accountability for learning in the high-performing and low-performing secondary schools in the area of Pedagogy, the result obtained from the t-test for independent samples revealed that *significant difference existed between educators' accountability for learning in the high-performing and low-performing secondary schools in the area of Pedagogy at  $p = .001 < 0.05$  level*. Therefore, the null hypothesis was rejected.

Table 12d

*Comparison of Results Based on Students' Ratings of Accountability in TP*

Group Statistics							
	School Performance	N	Mean	Std. Deviation	Std. Error		
					Mean		
Pedagogy	High performing	221	2.6404	.56581	.03806		
	Low performing	129	2.8234	.52521	.04624		
Independent Samples Test							
Levene's Test for Equality of Variances							
t-test for Equality of Means							
Pedagogy	F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference
Equal variances assumed	.573	.450	-2.996	348	.003	-.18300	.06108

This result implies that, there is a correlation between educators' accountability for learning and performance in the area of Pedagogy. This argument is in line with the researcher's finding made during classroom observation. For example, in classes where teachers used teaching practices that encourage learners to be active, participatory, co-operative, and promoting inquiry, there were indicators of students' high performance.

The findings between teachers and students' responses on Educators' accountability in Pedagogy were different. The findings revealed that based on teachers' responses, *no significant difference existed between educators' accountability for learning in the high-performing and low-performing secondary schools in the area of Pedagogy*; but based on students' responses, *educators in the high performing schools are more accountable in Pedagogy than those in low performing schools*. That is, findings between teachers and students' responses on Educators' Accountability in Pedagogy were different.

This could be attributed to the fact that when teachers do self-evaluation, they may go through halo effect-the tendency for an impression created in one area to influence opinion in another area. The weaknesses are associated with teachers' self-

evaluation. Teachers fear promoting weakness among their capability. Moreover, in self-evaluation, confident teachers do not wish to appear over-confident and boastful; and most teachers tend to overstate the quality of their own performance relative to others. Self-evaluation has an element of interdependency to self.

But students are better evaluators of teachers than teachers themselves; and based on students' responses, educators in the high performing schools are more accountable in Pedagogy than those in low performing schools, and this could be the reason why the schools are performing high.

According to *The New Zealand Curriculum* (2007), effective teachers teach all their students effectively. It explains that although no formula guarantees learning for every student in every context, there is strong evidence of the kinds of teaching approaches that consistently improve student learning. The evidence shows that students learn best when teachers establish strong relationships with students when they: “create a supportive learning environment, encourage reflective thought and action, enhance the relevance of new learning, facilitate shared learning, make connections to prior learning and experience provide sufficient opportunities to learn, and inquire into the teaching–learning relationship.” (p. 34)

### **Comparison of Students' Assessment (SA)**

When teachers' responses were analyzed in Table 12e to establish whether there was significant difference between educators' accountability for learning in the high-performing and low-performing secondary schools in the area of students' assessment, the results obtained from the t-test for independent samples reveals that *no significant difference existed between educators' accountability for learning in the high-performing and low-performing secondary schools in the area of students'*

assessment at  $t = 1.701$ ,  $p = 0.092 > 0.05$ . Therefore, the null hypothesis was accepted.

This result shows that based on teachers' responses, it does not matter which type of school one is teaching in. That is, educators in the high-performing schools do not necessary make any significance difference in their accountability in the area of students' assessment compared with their counterparts in the low performing schools.

Table 12e

*Comparison of Results Based on Teachers' Ratings of Accountability in SA*

Group Statistics							
	School Performance	N	Mean	Std. Deviation	Std. Error Mean		
Students' Assessment	High performing	42	3.5414	.36561	.05642		
	Low performing	57	3.4050	.41382	.05481		
Independent Samples Test							
Levene's Test for Equality of Variances							
t-test for Equality of Means							
Students' Assessment	F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference
Equal variances assumed	.103	.749	1.701	97	.092	.13636	.08016

Contrary to this finding is research evidence that formative assessment is a powerful lever for improving outcomes for learners. Assessment is an integral part of the teaching and learning process. Its purpose is to inform students regarding their learning progress and teachers regarding ways to adjust the curriculum and instruction to respond effectively to the learning needs of students. For example, a series of substantial reviews of research, synthesizing several thousand research studies, have also documented the impact of classroom assessment practices on students (Hattie & Timperley, 2007). While many of these reviews have documented the negative effects of some assessment practices, they also show that, when used appropriately, Embedded Formative Assessment (EFA) has considerable potential for enhancing student achievement (William, 2010).

When students' responses were analyzed in Table 12f to establish whether there is significant difference between educators' accountability for learning in the high-performing and low-performing secondary schools in the area of students' assessment, the result obtained from the t-test for independent samples reveals that there was a *significant difference existed between educators' accountability for learning in the high-performing and low-performing secondary schools in the area of students' assessment at  $t = -2.759, p = .006 < 0.05$* . Thus, the null hypothesis was *rejected*.

This result shows that based on students' responses, educators in the high-performing schools are more accountable in students' assessment than those in low performing schools. This means that through successful use of effective students' assessment, educational equity and improved students' achievement should be realized.

Table 12f

*Comparison of Results Based on Students' Ratings of Accountability in SA*

Group Statistics							
	School Performance	N	Mean	Std. Deviation	Std. Error Mean		
Students' Assessment	High performing	221	2.7923	.61371	.04128		
	Low performing	129	2.9643	.53083	.04674		
Independent Samples Test							
Levene's Test for Equality of Variances							
				t-test for Equality of Means			
Students' Assessment	F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference
Equal variances not assumed	5.624	.018	-2.759	299.558	.006	-.17205	.06236

The results in Table 12a-12f also agree with the findings from the analysis of school programs and documents as well as responses from the focus group discussions with teachers and administrators. Analysis of school programs and documents revealed marked differences in the way things were done in the high-

performing and low-performing schools. For example, in the high-performing schools the following features were clearly evident and confirmed during focus group discussions:

1. **A shared vision of what a high-performing school is and does.** According to teachers and administrators in the high-performing schools, *“It is this shared vision that drives every facet of school change. It is the one that drives constant improvement in the school. Everyone knows what the plan is and the vision is posted at every important point and evidenced by actions.”*
2. **The principal has the responsibility and authority to hold the school-improvement enterprise together, including day-to-day know-how, coordination, strategic planning, and communication.** In the high performing schools, lines of leadership for the school's improvement efforts are clear. The school leadership team has the responsibility to make things happen. The principal makes sure that assignments are completed. Leadership is shared, distributed, and sustained, and according to teachers and administrators, *“It is this shared, distributed, and sustained leadership that propels the school forward and preserves its institutional memory and purpose.”*
3. **The school is a community of practice in which learning, experimentation, and time and opportunity for reflection are the norm.** School leadership fosters and supports interdependent collaboration. Expectations of continuous improvement permeate the school culture and *“everyone's job is to learn.”*
4. **The school and constituency devote resources to content-rich professional development, which is connected to reaching and sustaining the school vision and increasing student achievement.** In the high performing schools,

professional development is intensive, of high quality, ongoing, and relevant secondary education. Teachers get professional support “*to improve instructional practice such as classroom visitations, peer coaching, demonstrations, lessons, and so on*”. These opportunities for learning “*increase knowledge and skills, challenge outmoded beliefs and practices, as well as provide support in the classroom.*”

5. **The school staff holds itself accountable for the students’ success.** In the high-performing schools, the school staff collects, analyzes, and uses data as a basis for making decisions. The administrators and faculty grapple with school-generated evaluation data to identify areas for more extensive and intensive improvement. The school staff regularly, intentionally and explicitly reconsiders its vision and practices when data call them into question.
6. **School staffs possess and cultivate the collective will to persevere; believing it is their business to produce increased achievement and enhanced development of all students.** The educators in the high performing schools “*see barriers as challenges not problems*” as mentioned in one of the group discussions with administrators from the high-performing schools.
7. **The school staffs work with colleagues and universities to recruit, prepare, and mentor novice and experienced teachers.** Principals in the high-performing schools insist on having teachers who promote young adolescents' intellectual, social, emotional, physical, spiritual and ethical growth.
8. **The school includes families and community members in setting and supporting the school's path toward high performance.** The administrators and teachers in the high-performing schools inform families and community

members about the school's goals for student success and the students' responsibility for meeting those goals. This is done through school programs such as class conferences with parents and guardians. *“The administrators and teachers engage all stakeholders in ongoing and reflective conversation, consensus building, and decision making about governance to promote school improvement done during forums such as (Parents-Teachers' Association) PTA meetings.”*

Similarly, in the high-performing schools, the following rudiments for high performance were observed and confirmed during the focus group discussions:

1. **All students are expected to meet high academic standards.** Expectations are clear for students and parents. Prior to students beginning an assignment, teachers supply students with exemplars of high quality work that meet the performance standard or level. Students know what high-quality work should be like. Students revise their work based on meaningful feedback until they meet or exceed the performance standard or level.
2. **Curriculum, instruction, assessment, and appropriate academic interventions are aligned with high standards.** Teachers provide a coherent vision for what students should know and be able to do. Students, teachers and families understand what students are learning and why. In any class and at any time, students can explain the importance of what they are learning. The curriculum is rigorous, non-repetitive, and moves forward substantially. Work is demanding and steadily progresses.
3. **The curriculum emphasizes deep understanding of important concepts and the development of essential skills.** Teachers make connections across the disciplines to reinforce important concepts and assist students in thinking



critically and applying what they have learned to solve real-world problems.

All teachers incorporate academic and informational literacy into their course work (reading, writing, note taking, researching, listening, and speaking).

4. **Instructional strategies include a variety of challenging and engaging activities that are clearly related to the grade-level standards, concepts, and skills being taught.** To reach students, all teachers draw from a common subset of instructional strategies and activities such as direct instruction, cooperative learning, project-based learning, simulations, hands-on learning, and integrated technology
5. **Teachers use a variety of methods to assess and monitor the progress of student learning (tests, quizzes, assignments, exhibitions, projects, performance tasks, portfolios).** All teachers use frequent assessments to benchmark key concepts and the achievement of their students. Students learn how to assess their own and others' work against the performance standards, expectations, or levels.
6. **The teachers and master timetable provide students time to meet rigorous academic standards.** Students are provided more time to learn the content, concepts or skills if needed. Flexible scheduling enables students to engage in academic interventions, extended projects, hands-on experiences, and inquiry-based learning.
7. **Teachers know what each student has learned and still needs to learn.** Students are provided the support they need to meet rigorous academic standards. Students have multiple opportunities to succeed and receive extra help as needed, such as: co-teaching or collaborative resource model, support

and intervention classes, before- and after-school tutoring, and homework centers.

8. **The teachers are provided time and frequent opportunities to enhance student achievement by working with colleagues to deepen their knowledge and to improve their standards-based practice.** They collaborate in analyzing student achievement data and making decisions about rigorous curriculum, standards-based assessment practice, effective instructional methods, and evaluation of student work. The professional learning community employs coaching, mentoring, and peer observation as a means of continuous instructional improvement.
9. **Timely syllabus coverage is a mandatory strategy.** In the high performing schools, timely syllabus coverage is a mandatory venture. The administrators in the high performing schools argued that students feel motivated when they approach examination period clear mind that they have adequately covered the syllabus (see appendix C3).

### **Comparison of Educators' Perceptions According to Gender**

**Research question four: Is there significant difference between the male and female educators' perception on the accountability for learning in the areas of classroom curriculum design, Pedagogy, and students' assessment?**

*H<sub>02</sub>*: There is no significant difference between the male and female educators' perception on the accountability for learning in the areas of classroom curriculum design, Pedagogy, and students' assessment.

Data obtained through questionnaires were subjected to quantitative data analysis techniques; and t-test for independent samples was applied for this research question, and presented and analyzed in Table 13.

The researcher conducted t-test for independent samples to establish if there was significant difference between the male and female educators' perception on the accountability for learning in the areas of classroom curriculum design, Pedagogy, and students' assessment.

When teachers' responses are analyzed to establish whether there is significant difference between the male and female educators' perception on the accountability for learning in the areas of classroom curriculum design, Pedagogy, and students' assessment, the results are indicated in Table 13.

Table 13

*Comparison of Male and Female Educators' Perceptions on Accountability*

<b>Group Statistics</b>								
		Gender of respondents	N	Mean	Std. Deviation	Std. Error Mean		
Classroom Curriculum Design		Male	64	3.4427	.47766	.05971		
		Female	35	3.4857	.37260	.06298		
Pedagogy		Male	64	3.3104	.46123	.05765		
		Female	35	3.3667	.29060	.04912		
Students' Assessment		Male	64	3.4569	.44933	.05617		
		Female	35	3.4738	.28667	.04846		

<b>Independent Samples Test</b>								
		Levene's Test for Equality of Variances		t-test for Equality of Means				
		F	Sig.	T	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference
Classroom Curriculum Design	Equal variances assumed	.416	.521	-.461	97	.646	-.04301	.09327
Pedagogy	Equal variances assumed	3.438	.067	-.654	97	.514	-.05634	.08611
Students' Assessment	Equal variances not assumed	4.696	.033	-.228	94.588	.820	-.01688	.07418

The result obtained from the t-test for independent samples as presented in Table 13 revealed that *there was no significant difference between male and females educators' perception on the accountability for learning in the areas of classroom*

*curriculum design, Pedagogy, and students' assessment at  $p = 0.646 > 0.05$ ;  $p = 0.514 > 0.05$ ;  $p = 0.514 > 0.05$ ; and  $p = 0.820 > 0.05$  respectively. Thus, the null hypothesis was *accepted*.*

It means that both male and female educators have similar perceptions on their accountability for learning. This finding agrees with the findings of Majzub and Rais (2010) and Martino and Rezai-Rashti (2012) who found that teachers' effectiveness is not designated by their gender, rather it is extensively affected by ability, training, aptitude, experiences and motivation of teachers and degrading the effectiveness of teaching and teacher effect to a teacher's gender is very simplistic.

However, studies from various perspectives comparing the performance of male and female teachers in the profession and reaching different conclusions have been conducted. For example, while in their study comparing male and female teachers, Spilt, Koomen and Jak (2012) have determined that female teachers can build better relationships with students. McGrath and Sinclair (2013) have concluded that parents and students deem male teachers useful especially for male students.

The finding of this present study on male and female educators' perception on their accountability for learning raises the importance of keeping the maximum quality of teacher training for teachers and getting rid of traditional gender roles for both sexes. In fact, freedom of teachers from traditional gender roles is a step that both males and females need to achieve.

### **Relationship between Educators' Accountability for Learning and Demographic Characteristics**

**Research question five: Is there significant relationship between educators' perception on the accountability for learning in the areas of**

**classroom curriculum design, Pedagogy, and students' assessment and demographic characteristics (age, level of education, and years of experience)?**

*H<sub>03</sub>*: There is no significant relationship between educators' perception on the accountability for learning in the areas of classroom curriculum design, Pedagogy, and students' assessment and demographic characteristics (age, level of education, and years of experience).

Table 14

*Relationship between Educators' Accountability and Demographic Characteristics*

		Age of respondents	Highest level of education	Teaching experience
Classroom Curriculum Design	Spearman's rho	-.031	.027	.027
	Sig. (2-tailed)	.764	.793	.797
Pedagogy	Spearman's rho	-.062	.166	.041
	Sig. (2-tailed)	.541	.100	.692
Students' Assessment	Spearman's rho	-.168	.112	-.088
	Sig. (2-tailed)	.096	.270	.389

*Note*:  $r < 0.30$  is considered weak correlation;  $r \geq 0.30$  moderate;  $r \geq 0.50$  large;  $r \geq 0.70$  very large.  
 \*\* Correlation is significant at the 0.01 level (2-tailed).

The researcher applied Spearman rank-order correlation coefficient as presented in Table 14 to establish if there was significant relationship between educators' perception on the accountability for learning in the areas of classroom curriculum design, Pedagogy, and students' assessment and demographic characteristics (age, level of education, and years of experience).

The results in Table 14 are interpreted as follows:

- i. That the relationship between educators' perception on the accountability for learning in the area of classroom curriculum design and age of respondents ( $r_{1, 1}$ ) was at  $p = 0.76$  with a weak, inverse, and non-significant relationship of  $p = -0.03$  between educators' perception on the

accountability for learning in the area of classroom curriculum design and age of respondents.

- ii. That the relationship between educators' perception on the accountability for learning in the area of classroom curriculum design and level of education (r1, 2) was at  $p = 0.79$  with a weak, direct, and non-significant relationship of  $p = 0.03$  between educators' perception on the accountability for learning in the area of classroom curriculum design and level of education.
- iii. That the relationship between educators' perception on the accountability for learning in the area of classroom curriculum design and teaching experience (r1, 3) was at  $p = 0.80$  with a weak, direct, and non-significant relationship of  $p = 0.03$  between educators' perception on the accountability for learning in the area of classroom curriculum design and teaching experience
- iv. That the relationship between educators' perception on the accountability for learning in the area of Pedagogy and age of respondents (r2, 1) was at  $p = 0.54$ . This finding shows that there is *no significant relationship between educators' perception on the accountability for learning in the area of Pedagogy and age of respondents.*
- v. That the relationship between educators' perception on the accountability for learning in the area of Pedagogy and level of education (r2, 2) was at  $p = 0.10$ . This finding shows that there is *no significant relationship between educators' perception on the accountability for learning in the area of Pedagogy and level of education.*

- vi. That the relationship between educators' perception on the accountability for learning in the area of Pedagogy and teaching experience ( $r_{2, 3}$ ) was at  $p = 0.69$  with a weak, direct, and non-significant relationship of  $p = 0.04$  between educators' perception on the accountability for learning in the area of Pedagogy and teaching experience.
- vii. That the relationship between educators' perception on the accountability for learning in the area of students' assessment and age of respondents ( $r_{3, 1}$ ) was at  $p = 0.10$ . This finding implies that there is *no significant relationship between educators' perception on the accountability for learning in the area of students' assessment and age of respondents*.
- viii. That the relationship between educators' perception on the accountability for learning in the area of students' assessment and level of education ( $r_{3, 2}$ ) was at  $p = 0.27$ . This finding implies that there is *no significant relationship between educators' perception on the accountability for learning in the area of students' assessment and level of education*.
- ix. That the relationship between educators' perception on the accountability for learning in the area of students' assessment and teaching experience ( $r_{3, 3}$ ) was at  $p = 0.39$ . This finding implies that there is *no significant relationship between educators' perception on the accountability for learning in the area of students' assessment and teaching experience*.

The results obtained from the Spearman Rank-order Correlation Coefficient analysis reveal that there is *no significant relationship in the educators' perception on the accountability for learning in the areas of classroom curriculum design, Pedagogy, and students' assessment and demographic characteristics (age, level of education, and teaching experience)*. Thus, the null hypothesis is *accepted*.

According to prior studies, the influence of aging on employee life still represents a major issue in the agenda of psychology researchers. In particular, nowadays, how to maintain an engaged and highly performing workforce represents a great challenge for both researchers and practitioners (Hedge & Borman, 2012). It is even a challenge in the case of WKUC schools. As shown in Table 3, p. 96, below 40 years of age is 88.9%; teachers on contract status are 81.8% and only 12% had 6 years and above teaching in the school.

These findings are consistent with past research and have significant employee policy implications. For example, although Beehr and Bowling (2002) observe that older workers will play a prominent role on future workforces, they also note that older workers are becoming an increasingly important concern for organizations for reasons beyond their sheer numbers. For instance, the shift to an older workforce has caused many organizations to spend more money on succession planning, pension benefits, health insurance, and medical benefits (Beehr & Bowling, 2002).

The findings of this study, however, failed to show that age, highest level of education and years of teaching experience really influence educators' accountability for learning. They also failed to validate findings from Boscardin et al. (2005) that teacher expertise was highly related to student achievement.

While it may be true that age, highest level of education and years of experience do not influence educators' accountability for learning in the context of this study, the finding contradicts some studies that have been done. For instance, two recent papers provide evidence that teachers continue to improve over the course of their careers (Harris & Sass, 2011; Wiswall, 2013).

Moreover, a number of Center for Analysis of Longitudinal Data (CALD) studies confirm findings from existing research that, on average, brand new teachers



are less effective than those with some experience under their belts (Kane, Rockoff & Staiger, 2006; Clotfelter, Ladd & Vigdor, 2007a, 2007b; Harris & Sass, 2007; Sass, 2007; Ladd, 2008). According to Clotfelter et al. (2007a); Ladd, (2008); Sass, (2007), early-career experience has a clear payoff in teacher effectiveness, and the impact is stronger than the effect of most other observable teacher-related variables including advanced degrees, teacher licensure tests scores, National Board certification at the elementary level, and class size.

In education, teacher experience is probably the key factor in personnel policies that affect current employees. The primary assumption is that experience promotes effectiveness. However, Carrell & West (2011) found out that in higher education, more experienced professors have less success in promoting student short-term test-score growth than their less experienced colleagues, but they contribute substantially more to their students' lasting knowledge and academic skills. This implies that teachers' long experience is not a guarantee for their continued effectiveness in teaching. It calls for the need for continued teacher development programs for the WKUC secondary schools through in-servicing.

Nevertheless, there are other studies that report mixed findings on this perception. For example, while the research and policy communities agree that teachers improve quickly early in their careers (Boyd, Lankford, Loeb, & Wyckoff, 2008; Staiger & Rockoff, 2010; Harris & Sass, 2011; Kraft & Papay, 2014), there is debate about whether teachers continue to learn after they gain experience in the classroom; that is, do teachers, on average, continue to improve in their teaching effectiveness as they gain experience in the teaching profession?

These findings may lead to further questions: What is the relationship between teacher's age, level of education and experience and teacher productivity? Do students

attain higher levels of achievement when taught by more experienced teachers? For example, is it an equity problem that low-performing students and students in low-performing schools are more likely to be taught by less experienced teachers and to be attending schools with high rates of teacher turnover? Should stakeholders invest in professional development and learning opportunities for more experienced teachers, or focus these resources on novice teachers only? Should experience be rewarded through salary schedules that tie pay to experience in an effort to retain veteran teachers? Should policy be focused on building teaching as a long-term profession, or on recruiting and training a short-term teaching workforce?

The findings of this study revealed that the majority of the teachers (88.9%) in the schools were aged below 40 years. A few (representing only 7.1% and 4.0%) were in the age range of 40-49, and 50-59 respectively; 81.1% of the teachers were working on contractual employment basis; only 16.2% were working on permanent employment; and only 12% had served in the schools for 6 and above years. These results show that there are high teacher turn-over rate and low student completion rate (below 40%) in the schools covered by this study. (Tables 3 and 4, pp. 96 and 100)

### **Relationship between Educators' Perceptions of Accountability for Learning in Classroom Curriculum Design, Pedagogy, and Students' Assessment**

**Research question six: What relationships exist between educators' perceptions of accountability for learning in: classroom curriculum design and Pedagogy; classroom curriculum design and Students' Assessment; and Pedagogy and Students' Assessment?**

The researcher applied Pearson Product-moment Correlation Coefficient in Table 15 to establish if any significant relationships existed between educators' perceptions of accountability for learning in i) Classroom Curriculum Design and Pedagogy; ii) Classroom Curriculum Design and Students' Assessment; and iii) Pedagogy and Students' Assessment.

Table 15

*Relationship between Teachers' Accountability for Learning in i) Classroom Curriculum Design and Pedagogy; ii) Classroom Curriculum Design and Students' Assessment; and iii) Pedagogy and Students' Assessment.*

		<b>Correlations</b>	
		Pedagogy	Students' Assessment
Classroom Curriculum Design	Pearson Correlation	.742**	.709**
	Sig. (2-tailed)	.000	.000
	N	99	99
Pedagogy	Pearson Correlation		.723**
	Sig. (2-tailed)		.000
	N		99

\*\* . Correlation is significant at the 0.01 level (2-tailed).

The results in Table 15 were interpreted as follows:

- i. Significant relationship existed between educators' perceptions of accountability for learning in Classroom Curriculum Design and Pedagogy. The relationship is direct and moderate at  $p = .000$  level (2-tailed) and Pearson's  $r = .742$ .
- ii. Significant relationship existed between educators' perceptions of accountability for learning in Classroom Curriculum Design and Students' Assessment. The relationship is direct and moderate at  $p = .000$  level (2-tailed) and Pearson's  $r = .709$ .

- iii. Significant relationship existed between educators' perceptions of accountability for learning in Pedagogy and Students' Assessment. The relationship is direct and moderate at  $p = .000$  level (2-tailed) and Pearson's  $r = .723$ .

In summary, these results revealed that direct, positive and moderate linear relationships existed between teachers' accountability for learning in Classroom Curriculum Design and Pedagogy at  $p = .000$  level (2-tailed) and Pearson's  $r = .742$ ; Classroom Curriculum Design and Students' Assessment at  $p = .000$  level (2-tailed) and Pearson's  $r = .709$ ; and Pedagogy and Students' Assessment. The findings imply that accountability in the three areas is interrelated. Therefore, in order to achieve equity and improved students' achievement, it is necessary to ensure that teachers are accountable for learning in classroom curriculum design; are also accountable in Pedagogy and students' assessment; and teachers who are accountable in Pedagogy are also accountable in students' assessment.

These results are consistent with previous research. For example, years of research on teacher quality support the fact that effective teachers not only make students feel good about school and learning, but also that their work actually results in increased student achievement. There are studies that have substantiated that a whole range of personal and professional qualities of teachers are associated with higher levels of student achievement. For instance, Darling-Hammond (2000) observed that verbal ability, content knowledge, pedagogical knowledge, certification status, ability to use a range of teaching strategies skillfully, and enthusiasm for the subject characterize more successful teachers.

## Perspectives on Accountability for Learning and Improved Students' Achievement and Equity

**Research question seven: How can accountability for learning practices be entrenched into the administration, teaching, and learning activities for equity and improved students' achievement in the West Kenya Union Conference secondary schools?**

When the teachers and administrators' views in Table 16 regarding the concept of accountability were analyzed, it was seen that the most frequently expressed view by teachers is *being accountable for one's actions* ( $n = 21$ ). This is followed by *being held responsible for successfully completing given tasks with ability to at least provide explanation for any failure; and being answerable for any deviations from stated goals and values* ( $n = 18$ ) as well as *being answerable to all organization's stakeholders for actions taken and results realized* ( $n = 17$ ).

Table 16

### *Views Regarding the Concept of Accountability*

Themes	Teachers		Administrators	
	<i>f</i>	%	<i>f</i>	%
Being held responsible for successfully completing given tasks with ability to at least provide explanation for any failure	18	81.8	4	100
Being answerable to all organization's stakeholders for actions taken and results realized	17	77.3	4	100
Being answerable for any deviations from stated goals and values	18	81.8	4	100
Being accountable for one's own actions	21	95.5	4	100

As seen in Table 16, all the administrators expressed the same views regarding the concept of accountability as *being held responsible for successfully completing given tasks with ability to at least provide explanation for any failure* ( $n = 4$ ); *being answerable to all organization's stakeholders for actions taken and results realized* ( $n = 4$ ); *being answerable for any deviations from stated goals and values* ( $n = 4$ ) and *being accountable for one's own actions* ( $n = 4$ ).

These views revealed that teachers and administrators assigned the following meanings to the concept of accountability: *being responsible, being answerable and being accountable. In explaining why they say so, teachers stated that administrators are responsible for developing, maintaining, and enhancing a school environment that promotes effective learning. They are also responsible for ensuring that teachers are knowledgeable about their students and how learning best occurs. They argued that “effective principals are needed in every school system striving for excellence in education.” An effective principal “makes good decisions about personnel, professional development and other issues that affect the quality of instruction and student achievement.” “He or she can shape the school environment to make it conducive to learning, align instruction with a standards-based curriculum and organize resources to improve teaching and learning.”*

These views are supported by studies that have been done elsewhere. For example, a study by Hitt, Tucker, and Young (2012) addressed the issue of continuing development for more experienced principals. According to them, the foundation for this development should be ensuring that time is available for “reflection, growth, and renewal” (p. 11). A study by Hitt and Tucker (2016) found out that principal practices influence student achievement, and identifying those that influence student achievement guides principal development and decision-making.

Table 17

*Views Regarding Who Should Be Accountable At Schools*

<b>Themes</b>	Teachers		Admin	
	<i>f</i>	%	<i>f</i>	%
Everyone engaged at school	20	90.1	4	100
Parents who receive educational services for their children	16	72.7	4	100
Administrators	22	100	4	100
Teachers	22	100	4	100
Students	22	100	4	100

Examination of the views regarding who should be accountable at schools as represented in Table 17 reveals that teachers ( $n = 20$ ) and administrators ( $n = 4$ ) express the view that *everyone employed at schools is accountable*. In addition, teachers expressed that *parents who receive educational services* ( $n = 16$ ), *administrators* ( $n = 22$ ), *teachers* ( $n = 22$ ) and *students* ( $n = 2$ ) should also be *held accountable*. All administrators agreed that they the *administrators* ( $n = 4$ ), *teachers* ( $n = 4$ ), *students* ( $n = 4$ ), and *parents* ( $n = 4$ ) should all be *held accountable*.

When asked to elaborate on their reason for this view, both teachers and administrators stated that the creation of school climate requires the “*collaborative effort of the school heads, teachers, learners, support staff, and even parents who receive services for their children.*”

According to the National School Climate Council (2007), school climate is based on patterns of people’s experiences of school life and reflects norms, goals, values, interpersonal relationships, teaching and learning practices, and organizational structures. School climate matters. According to research findings, “positive and sustained school climate is associated with and/or predictive of positive child and youth development, effective risk prevention and health promotion efforts, student learning and academic achievement, increased student graduation rates, and teacher retention” (Brown, Corrigan, & Higgins-D’Alessandro; Centers for Disease Control and Prevention, 2009; Benninga, Berkowitz, Kuehn, & Smith, 2003; Berkowitz & Bier, 2006; Greenberg, Weissberg, O’Brien, Zins, Fredericks, Resnik, & Elias, 2003).

And as Najeemah (2012) observes, a healthy school climate can be described as one with a strong academic emphasis and a principal who has influence with superiors and is willing to use it on behalf of teachers. This kind of environment is conducive to the development of teachers’ beliefs that they can influence students’

learning, often referred to as personal teaching efficacy. This in turn improves teachers' confidence that they can reach students only by getting the support of the organization which will help them manage and teach students.

Hence, both the teachers and administrators observed that it is the learners, teachers and school heads that must create the school climate in whichever way they want. They held that *“everyone who is engaged with school should be held accountable at varied levels”* for the success of student learning. Upon further probing on who should be accountable in schools, both teachers and administrators expressed the view that school accountability is broad and requires the involvement of *“the MoEST, the school or school system, school principal, teachers, students, parents and community”* within which a given school is located. They maintained that this is true because the MoE, for example, is *“responsible for putting a plan in place so that all educators, parents, students and other stakeholders understand how schools are monitored and what criteria to be used to determine school improvement.”*

Administrators argued that while the school system *“establishes strong strategic plan that communicates the school vision, mission, goals, beliefs, values and objectives,”* the school itself *“puts in place action plans for improving each content area based on current school realities or baseline data from the most recent school assessments, a professional development plan aligned to the action plans, a technology plan, a plan for improving student attendance and parent involvement, as well as a plan that outlines how data will be utilized, analyzed and interpreted.”*

Teachers also argued that the principal of a school is *“not only an instructional leader but also must be a change agent, capable of dealing with vast ambiguities, human relations, school culture shaping; budgetary matters, as well as the general management of the school activities.”* They maintained that a school principal should,



therefore, *“be knowledgeable, courageous and willing to hold everyone accountable for keeping their students at the center of everything they do.”* They further held the view that *“teachers are given the responsibility to use varied instructional strategies, effective assessment techniques, data utilization and integration of technology if they want their students to be successful. Teaching students at a high level of proficiency should, therefore, be the core work of every teacher.”*

Both teachers and administrators interviewed underscored the role of parents in schools. They maintained that the chances of children being successful in school increase when their parents are fully vested in the school community, capable of monitoring school work, communicating effectively with teachers, and able to identify resources to help with social, emotional health issues and other impediments to school success. They also hold the view that students should be taught to be responsible and take ownership for their education, even as they are being assisted by their teachers.

These views also came out clearly in the focus group discussions in response to the question: *Students’ Academic Failures in a School: Who is Responsible?* During the focus group discussions with teachers there was a general agreement that every educator should be held accountable for the success of all students under his/her jurisdiction. But it also emerged from the discussions that school managers should also understand that teachers cannot perform effectively without resources and support. That is, when teachers choose to work with students who need more support, they should be rewarded; and students who need more resources should also get them. They see that administrative support is also necessary for classroom teachers, like in the area of classroom coaching, Pedagogy, and academic mentoring.

In the focus group discussions, the idea that students fail because of their own personal shortcomings, academic or otherwise, was being superseded by the idea of school and/or teacher failure. The cause of, and responsibility for students' failure was seen increasingly as a deficient or inadequate provision of educational requirements by schools, and by extension, school systems. That is, it is the failure of schools to provide education appropriate to different needs that leads students to fail. This reasoning is supported by research which sees school failure as an issue of equity; and so reorienting educational systems towards the goal of promoting equity is advanced as the necessary redress of student failure in schools (Field, Kuczera, & Pont, 2007).

When asked to state some of the conditions of accountability (those that may influence educators' accountability for learning) both the teachers and administrators involved in the focus group discussions agreed that *just as many actors affect the educational process, many extraneous variables affect the learning process within a classroom and are beyond the control of the individual teacher*. These external variables they said include: *the level of support provided by the community, church and state, the availability of books for every learner, the number of computers, sufficient instructional supplies, the support of curriculum specialists, and so forth*. They also observed that *within the classroom, the number and type of students can have dramatic effects on the level of academic achievement experienced by the class*. It was observed that *class size does make a difference, especially when a teacher is expected to work with a large number of students with learning challenges, whether they are disabled, limited in their English, or other*.

As a result, several measures were proposed in order to ensure students' academic success in schools which included: collaboration, high performance expectations, and innovations, educational outcomes for all students, holistic focus on

learners, focusing on improving classroom practices, and avoiding distortions as discussed below:

## **Collaboration**

Results obtained from focus group discussions revealed that both teachers and administrators hold a general consensus on the idea of collaboration among administrators, teachers, learners, parents, and everybody else who is connected with in ensuring student success in schools. That is, in order to ensure students' improved achievement in schools means holding administrators, teachers, students, support staff and other school stakeholders like parents accountable for quality work directly impacting student learning.

However, the challenge for leadership is to make individual moral and professional accountability collective. But, schools that do this nurture a continuing process of review and dialogue about learning and achievement. This becomes an essential part of their culture and practice and an inherent part of teachers' professionalism. West-Burnham (2011) suggests that creating a culture of personal accountability and holding others to account in a consistent and transparent way is one of the most significant elements in securing and sustaining outstanding performance.

## **Preparation for the Principal-ship**

Teachers and administrators agreed on the fact that school principals play a very critical part in influencing students' performance; and so they reason that for schools to realize equity and students' achievement, they must hire or develop principals with the right skills. This is supported by Christie, Thompson, and Whitely (2009), who observed that "getting the right people to become school leaders is very

important, but so is providing these people with the right set of skills to be effective leaders.” (p. 4)

### **High Performance Expectations**

From the focus group discussions it also became clear that for students’ academic success to be realized in the schools, high performance expectations must be in place for school system leaders, principals, teachers, and students. The benefits of high performance expectations are well documented. High performance expectations often improve performance. Research by Berger and Pope (2011) concluded that high expectations help individuals succeed, because they take actions that are consistent with high positive expectations and because they are more resilient in the face of adversity.

### **Innovative Practices**

According to the United Nations Education Science and Cultural Organization (UNESCO) in Okoye (2012), innovative practice is a general change that is deliberate and must never be regarded as simple adjustment. Innovation is a technique or idea, a practice or an object that is perceived by an individual or another unit as new (Nwafor, 2007). Microsoft (2013) sees innovation as the act or process of inventing or introducing something new. It is also a new invention or way of doing something. Furthermore, innovation is a change in the thought process of doing things or the useful application of inventions and discoveries (McGeown 2011).

From these definitions, it implies that when new inventions and discoveries are put in practice, or a successful introduction of a better thing/method, therefore, innovation could have taken place. From the group discussions this study revealed that in order to foster the students’ entire competency, teachers should implement innovative ways of teaching in their actual classroom to develop positive belief and

create conducive environment for cooperative learning. This is necessary because a healthy system should tend towards inventing new procedures, move towards new goals, produce new kinds of products, diversify itself and become more rather than less differentiated over a period of time (Ochitwa in Okoye, 2012).

Innovation in Education according to Nwafor (2007) is a deliberate, systematic, novel, specific and persistent change in the system of a particular society, which is aimed at improving the system or creating a new one, for a more effective and efficient means of attending to the educational needs of the social group, in their social environment. Innovations in Education therefore are new, creative ideas which are meant to bring effectiveness and change to the educational sector. They can simply be said to be the new things in the educational sector meant to bring more efficiency and effectiveness.

Research studies have shown that students' academic achievement in the three core science subjects like Biology, Chemistry and Physics, have been very poor with little or no appreciable improvement over the years (Jegede, 2010; Olorundare, 2014; Oloyede, 2010); but it is believed that innovative practices in science education can help to enhance the students' academic achievement in the science subjects.

For example, in case of Science, examples of innovative practices that are capable of enhancing students' achievement may include: teachers being aware of Information and Communication Technology (ICT) as enriching agents in the curriculum or as a tool for instruction; packaging classroom curriculum with content that leads to self-actualization by students; and making the curriculum content to focus on practical activities with emphasis on locally available materials meant to imbue the learners with the spirit of inquiry (Adeyegbe, 2004). That is teachers have to lead in the active development of innovative teaching and learning materials using

ICTs and also in constructing a rich and enabling learning environment for the students. The emphasis should now be placed on interactivity, practical laboratory activity and applications of science and technology to the environment and development needs of the country.

### **Educational Outcomes for All students**

According to Australian Qualifications Framework Council (2013), learning outcomes describe the knowledge, skills and the application of the knowledge and skills a person has acquired and is able to demonstrate as a result of learning. The term student outcomes, as used in this study, typically refers to either (1) the desired learning objectives or standards that schools and teachers want students to achieve, or (2) the educational, societal, and life effects that result from students being educated.

Consistent with these definitions, there was an emerging viewpoint from the focus group discussions that in order to ensure improved students' achievement and equity in schools, education systems in schools *should provide successful educational outcomes with all students*. Both administrators and teachers no longer see education as adequate if it is only providing equal access to the same -“one size fits all”- educational opportunity. They embrace the idea of *providing education that promotes equity by recognizing and meeting varied educational needs of learners*.

They also observed that since in a normal class each student comes with different prior experiences, capacities, and interests, it calls for *varied engaging opportunities in order to attain equitable student outcomes*. And so they argue that if everyone has the same or equal opportunities, he or she is not fully tapping into the interplays possible within the classroom community. But if students individually are given the *educational assets or rights that allow them to successfully tap into varied*

*opportunities*, then all students are better positioned to succeed. These opportunities include:

**Holistic focus on learners.** Holistic education aims at helping students be the most that they can be; what Abraham Maslow referred to as "self-actualization" (Maslow, 1970). Education with a holistic perspective is concerned with the development of every person's intellectual, emotional, social, physical, artistic, creative and spiritual potentials.

According to Zimmermann, Fahrur, and Skowron (2014), there are pedagogical approaches that encourage learners to become civically involved. These normally emphasize the active components of learning: discovery, reflective observation, trial and error, and growing with challenges or collaboration. The ability to act as autonomous, responsible individuals and the skill known as civic competence are formed in broad-reaching, heterogeneous learning environments, and therefore, are inherently composed of a variety of learning experiences. These experiences, in turn, need to be connected by means of a consciously designed learning process. The more these different learning opportunities complement each other, the more efficient and sustainable the learning process becomes. Such processes combine group interactions and experiential learning, cognitive learning, opportunities for informal learning, and reflection.

However, observation of the school programs revealed schools of this study tended to over concentrate on discussing the performance of the learners in regard to KCSE results; and except for the high performing schools, very minimal is discussed in reference to performance of the learners at other levels. It was also revealed through group discussions that majority of parents have left their children in the hands of teachers and do not care to follow up on what their children do in school; some do

not even attend school meetings throughout the year and do not even care to find out what deliberations and decisions are made in such meetings.

**Focusing on improving classroom practices.** The teachers and administrators observed that since the point of classroom curriculum design, Pedagogy, and students' assessment is to improve classroom practice and student learning, all types of classroom curriculum, teaching and students' assessment should have educational value and should have practical benefits for those who participate in them, especially students and teachers. Weimer (2009) gives Six Keys to Classroom Excellence in Effective Teaching Strategies:

**Interest and explanation** – “When our interest is aroused in something, whether it is an academic subject or a hobby, we enjoy working hard at it. We come to feel that we can in some way own it and use it to make sense of the world around us.” (p. 98). Thus, coupled with the need to establish the relevance of content, instructors need to craft explanations that enable students to understand the material. This involves knowing what students understand and then forging connections between what is known and what is new.

**Concern and respect for students and student learning** – Weimer (2009) highlights several principles that can be applied as follows:

**Appropriate assessment and feedback** – This principle involves using a variety of assessment techniques and allowing students to demonstrate their mastery of the material in different ways. It avoids those assessment methods that encourage students to memorize and regurgitate. It recognizes the power of feedback to motivate more effort to learn.



**Clear goals and intellectual challenge** – Effective teachers set high standards for students. They also articulate clear goals. Students should know up front what they will learn and what they will be expected to do with what they know.

**Independence, control and active engagement-** Study by Weimer shows that “Good teaching fosters a sense of student control over learning and interest in the subject matter” (Weimer, 2009, p. 100). That is, good teachers create learning tasks appropriate to the student’s level of understanding. They also recognize the uniqueness of individual learners and avoid the temptation to impose “mass production” standards that treat all learners as if they were exactly the same (p. 102). This suggests that students who experience teaching of the kind that permits control by the learner, not only learn better, but that they enjoy learning more.

**Learning from students** – “effective teaching refuses to take its effect on students for granted. It sees the relation between teaching and learning as problematic, uncertain and relative. Good teaching is open to change: it involves constantly trying to find out what the effects of instruction are on learning, and modifying the instruction in the light of the evidence collected.” (p. 102)

**Avoiding distortions.** What educators in the schools should be concerned about most is how to identify effective communication strategies to avoid distortions. Educators need to be aware of barriers to listening and strategies for effective listening; barriers to accurate perception and strategies for accurate perception; and barriers to effective verbal communication and strategies for effective verbal communication (McNaughton, Hamlin, McCarthy, Head-Reeves, & Schreiner, 2008; Weger, Castle, & Emmett, 2010).

Table 18

*Views Regarding Accountability of School Principals*

<b>Themes</b>	Teachers		Admin	
	<i>f</i>	<i>%</i>	<i>f</i>	<i>%</i>
Making good decisions about personnel, professional development and other issues that affect the quality of instruction and student achievement	19	86.4	4	100
Holding everyone with responsibilities to high standards of performance	21	95.5	4	100
Responsiveness to Students, Parents, and Community	22	100	4	100
Displaying transparent and open management	22	100	4	100
Having a sense of responsibility	22	100	4	100
Providing a democratic environment	22	100	4	100
Providing accurate information to superiors	22	100	4	100
Shaping the school environment to make it conducive for learning	22	100	4	100
Organizing resources to improve teaching and learning.	22	100	4	100

As represented in Table 18 teachers hold the view that principals are seen to be accountable in respect to: *holding everyone with responsibilities to high standards of performance (n =22)*, being *responsive to students, parents, and community (n =22)*, *displaying transparent and open management (n = 22)*, *having a sense of responsibility (n = 22)*, *providing a democratic environment (n = 22)*, *providing accurate information to superiors (n = 22)*, *shaping the school environment to make it conducive for learning (n = 22)*, *organizing resources to improve teaching and learning (n = 22)*, and *making good decisions about personnel, professional development and other issues that affect the quality of instruction and student achievement (n = 21)*.

Table 18 further reveals that both teachers and administrators believe that for school principals to be seen to be accountable they should be able to: *hold everyone with responsibilities to high standards of performance; be responsive to students, parents, and community; display transparent and open management; have a sense of responsibility; provide a democratic environment; provide accurate information to*

*superiors; shape the school environment to make it conducive for learning; organize resources to improve teaching and learning; and make good decisions about personnel, professional development and other issues that affect the quality of instruction and student achievement.*

When they were asked to state further what they meant with these views, teachers and administrators expressed a common view that “*effective principals know that they cannot go it alone.*” They are not the “*lonely-at-the-top, hero-principal who has become a fixture of popular culture.*” Instead, they “*make good use of all the skills and knowledge on the faculty and among others, encouraging the many capable members of the staff who make up a school community, including students and support staff, to step into leadership roles and responsibilities.*”

They observed that “*the more open a principal is to spreading leadership around, the better it is for student learning.*” According to them, “*effective principals do not only shape school buildings characterized by the basics such as safety and orderliness, but they also see to it that schools create an atmosphere in which students feel supported and responded to. For teachers, too, principals set a tone (pitch/key) as in music.*”

These views are consistent with a recently published Wallace Perspective report (The Wallace Foundation, 2012) that takes a look back at the foundation’s research and field experiences. The report cited five practices in particular that seem central to effective school leadership namely: shaping a vision of academic success for all students, one based on high standards; creating a climate hospitable to education in order that safety, a cooperative spirit, and other foundations of fruitful interaction prevail; cultivating leadership in others so that teachers and other adults assume their part in realizing the school vision; improving instruction to enable

teachers to teach at their best and students to learn at their utmost; and managing people, data and processes to foster school improvement.

There is also an emergence of research that has found an empirical link between school leadership and student achievement. A seminal study, *How Leadership Influences Student Learning*, asserted that leadership was the second most important school-based factor in children's academic achievement and noted that there were few, if any, cases of troubled schools turning around without effective leaders (Leithwood, Louis, Anderson, & Wahlstrom, 2004).

These views are also consistent with research by Louis et al. (2010) which established that "effective principals ensure that teachers do not work in isolation from one another, but work collaboratively, giving each other help and guidance to improve instructional practices." (p. 50)

According to Table 19, both teachers and administrators expressed that schools should be accountable for *the physical and emotional well-being of students* (n = 22) (n = 4), *both student learning and teacher learning* (n = 22) (n = 4), *equity and access of students to learning resources* (n = 22) (n = 4), and *performance improvement* (n = 22) (n = 4).

Table 19 presents the most frequently repeated teachers' and administrators' views regarding what schools should be accountable for. Both teachers and administrators expressed that schools should be accountable for the physical and emotional well-being of students (n = 22) (n = 4), both student learning and teacher learning (n = 22) (n = 4), equity and access of students to learning resources (n = 4), and performance improvement (n = 22) (n = 4).

Table 19

*Views Regarding What Schools Should Be Accountable For*

<b>Themes</b>	Teachers		Admin	
	<i>f</i>	%	<i>f</i>	%
Physical and emotional well-being of students	22	100	4	100
Both student learning and teacher learning	22	100	4	100
Equity and access of students to learning resources	21	95.5	4	100
Performance improvement	22	100	4	100

These findings are consistent with research findings already in literature.

Research suggests a link between positive outcomes and school autonomy but only if combined with sufficient accountability (OECD, 2010; 2011). Earley and Weindling (2004) identify four key accountability relationships for schools. They say that schools have responsibilities for and have to account to:

- Pupils and parents (moral accountability)
- Colleagues (professional accountability)
- Employers or government (contractual accountability)
- The market, where clients have a choice of institution (market accountability)

As presented in Table 20, the most frequently expressed views by teachers and administrators include: *environment of trust* ( $n = 22$ ) ( $n = 4$ ), *increases in achievement* ( $n = 22$ ) ( $n = 4$ ), *increases in quality work* ( $n = 22$ ) ( $n = 4$ ), *peaceful and sincere environment* ( $n = 22$ ) ( $n = 4$ ), *prevention of problems* ( $n = 22$ ) ( $n = 4$ ), *democratic environment* ( $n = 22$ ) ( $n = 4$ ), *transparent environment* ( $n = 22$ ) ( $n = 4$ ), *increase in motivation* ( $n = 22$ ) ( $n = 4$ ), and *effective conduct of teaching and learning* ( $n = 22$ ) ( $n = 4$ ).

Table 20

*Views Regarding the Benefits of School Principals with Accountability*

<b>Themes</b>	Teachers		Admin	
	<i>f</i>	%	<i>f</i>	%
Environment of trust	22	100	4	100
Increases in achievement	22	100	4	100
Increases in quality work	22	100	4	100
Peaceful and sincere environment	22	100	4	100
Prevention of problems	22	100	4	100
Democratic environment	22	100	4	100
Transparent environment	22	100	4	100
Increase in motivation	22	100	4	100
Effective conduct of teaching and learning	22	100	4	100

These views suggest that in order for schools to realize equity and improved students' achievement, the manager should engage principals with accountability. Principals with accountability bring about the benefits such as: environment of trust, increases in quality work, peaceful and sincere environment, prevention of problems, democratic environment, transparent environment, increase in motivation, and effective conduct of teaching and learning which eventually results in increases in students' achievement.

The views are consistent with previous research available in the literature. For instance, assessment of the importance of principals is echoed repeatedly by educators, researchers focused on leadership, and organizations concerned with ensuring that all students have access to high-quality schools. For example, a report issued by the Southern Regional Education Board suggests that "a principal can impact the lives of anywhere from a few hundred to a few thousand students during a year" (Schmidt-Davis & Bottoms, 2011, p. 2).

However, "it is neither teachers alone nor principals alone who improve schools, but teachers and principals working together" (Schmidt-Davis & Bottoms, 2011, p. 2). Principals are increasingly expected to lead their schools within a

framework of collaboration and shared decision-making with teachers and other staff members.

When the teachers and administrators' views regarding the concept of learner-centered accountability are analyzed in Table 21, it is seen that the most frequently expressed views by teachers are: *learner-driven learning* ( $n = 22$ ), *learning which moves students from passive receivers of information to active participants in their own discovery process* ( $n = 22$ ), *learning which is driven by each individual student's needs and abilities* ( $n = 22$ ).

Table 21

*Views Regarding the Concept of Learner-Centered Accountability*

Themes	Teachers		Admin	
	<i>f</i>	%	<i>f</i>	%
Teacher and learner are co-designers	18	81.8	4	100
Learner-driven learning	22	100	4	100
Learning which moves students from passive receivers of information to active participants in their own discovery process.	22	100	4	100
Learning which is driven by each individual student's needs and abilities.	22	100	4	100

This is followed by the view that *teacher and learner are co-designers* ( $n = 18$ ). All Administrators shared the same concept of learner-centered accountability to mean a situation where: *teacher and learner are co-designers* ( $n = 4$ ), *learning is learner-driven* ( $n = 4$ ), *learning moves students from passive receivers of information to active participants in their own discovery process* ( $n = 4$ ), and where *learning is driven by each individual student's needs and abilities* ( $n = 4$ ).

As presented in Table 21 it is seen that teachers and administrators agree that learner-centered accountability involves *learner-driven learning*, *learning which moves students from passive receivers of information to active participants in their own discovery process*, *learning which is driven by each individual student's needs*

*and abilities, and that in a learner-centered accountability both teacher and learner are co-designers.*

These views are in line with McCombs and Whilser (1997) who state that learners should be included in educational decision-making processes, whether those decisions concern what learners focus on in their learning or what rules are established for the classroom; that the diverse perspectives of learners should be encouraged and respected during learning experiences; that the differences among learners cultures, abilities, styles, developmental stages, and needs should be accounted for and respected; and that learners should be treated as co-creators in the teaching and learning process, as individuals with ideas and issues that deserve attention and consideration (p. 7).

Table 22

*Views Regarding Key Elements in Schools which are Truly Learner-Centered*

<b>Themes</b>	Teachers		Admin	
	<i>f</i>	%	<i>f</i>	%
Safety	21	95.5	4	100
Democratic environment	21	95.5	4	100
Engagement	20	90.0	4	100
Connectedness	19	86.4	4	100
Support	22	100	4	100
Collaboration	22	100	4	100
The ratio of teachers to students	22	100	4	100

When teachers and administrators' views regarding elements that make accountability in schools truly learner-centered as presented in Table 22 are analyzed, it is seen that the most frequently stated views by teachers and administrators are: *support* ( $n = 22$ ) ( $n = 4$ ), *collaboration* ( $n = 22$ ) ( $n = 4$ ), and *the ratio of teachers to students* ( $n = 22$ ) ( $n = 4$ ). This is followed by *safety* ( $n = 21$ ) ( $n = 4$ ), *democratic environment* ( $n = 21$ ) ( $n = 4$ ), *engagement* ( $n = 20$ ), and *connectedness* ( $n = 19$ ).

Thus, *safety, democratic environment, engagement, connectedness, support, collaboration, and ration of teachers to students* are key elements that make



accountability in schools truly learner-centered. The views of teachers and administrators presented in Table 22 imply that active learning environment has a positive effect on communication and, therefore, active participation process at every educational level should be encouraged. These views are consistent with the findings of recent studies. Lena, Bergendahl, Stenlund, & Tibell (2001) for example, found out that university students' motivation and communication levels are raised in the active learning environment; and Avcı (2001) argues that paying attention to individuals' interests and needs besides the physical characteristics of the classroom, will make the active learning process functional.

The views presented in Table 23 show that a class which is truly learner-centered is characterized by: where *group work is encouraged and students learn to collaborate and communicate with one another (n=22)(n=4)*; *activities are designed to uncover the knowledge, skills, interests, attitudes, and beliefs of every learner-activities are personally, socially, and domain relevant; a variety of learning models are used (n=22)(n=4)*; *the students ask the questions, and questions are valued over answers (n=22)(n=4)*; *learning is personalized by a variety of criteria (planning, teaching and assessment center around the needs and abilities of learners (n=22)(n=4)*; *students are presented with subject-related problems or challenges soliciting their thoughts and ideas about how to solve the problem, and asking them to explain the reasons behind their thinking (n=22)(n=4)*; *assessment is persistent, authentic, transparent, and never punitive (n=22)(n=4)*; *and there are constant opportunities for practice (n=22)(n=4)*.

Table 23

*Views Regarding Conditions that would Exist if a Class were Truly Learner-Centered*

<b>Themes</b>	Teachers		Admin	
	<i>f</i>	%	<i>f</i>	%
Students are encouraged to learn independently, with the appropriate guidance from the teacher as it becomes necessary.	21	95.5	4	100
Both students and instructors share the focus. Instead of listening to the teacher exclusively, students and teachers interact equally.	22	95.5	3	75
Group work is encouraged, and students learn to collaborate and communicate with one another.	22	100	4	100
Activities are designed to uncover the knowledge, skills, interests, attitudes, and beliefs of every learner. Activities are personally, socially, and domain relevant.	22	100	4	100
A variety of learning models are used	22	100	4	100
Availability of variety of resource materials. Ideas come from a divergent sources	21	95.5	4	100
Teachers craft instruction and apply technology in a way that best serves each student's learning journey.	21	100	4	100
Technology use is always guided by what is appropriate for the task at hand how activities can be designed to develop higher-order thinking skills	21	95.5	4	100
The students ask the questions. Questions are valued over answers	22	100	4	100
Learning is personalized by a variety of criteria (Planning, teaching and assessment center around the needs and abilities of learners).	22	100	4	100
Learner-centered classrooms take into account learners' background knowledge, interests, social and cultural values.	21	95.5	4	100
Students are presented with subject-related problems or challenges soliciting their thoughts and ideas about how to solve the 4problem, and asking them to explain the reasons behind their thinking.	22	100	4	100
Criteria for success are balanced and transparent.	21	95.5	4	100
Learning habits are constantly monitored and modeled.	21	95.5	4	100
Assessment is persistent, authentic, transparent, and never punitive.	22	100	4	100
There are constant opportunities for practice	22	100	4	100
Learning-centered classrooms have 'talking walls'.	21	95.5	4	100

Others include: *where both students and instructors share the focus-instead of listening to the teacher exclusively students and teachers interact equally (n=22)(n=3); students are encouraged to learn independently, with the appropriate guidance from the teacher as it becomes necessary (n=21)(n=4); availability of variety of resource materials; ideas come from a divergent sources (n=21)(n=4); teachers craft instruction and apply technology in a way that best serves each*

*student's learning journey (n=21)(n=4); technology use is always guided by what is appropriate for the task at hand how activities can be designed to develop higher-order thinking skills (n=21)(n=4); criteria for success are balanced and transparent; learning habits are constantly monitored and modeled (n=21)(n=4); and learning-centered classrooms have 'talking walls' (n=21)(n=4).*

Table 24

*Views Regarding Strategies of Learner-centered Teaching in schools*

Themes	Teachers		Admin	
	<i>f</i>	%	<i>f</i>	%
Creation of positive learning environment	22	100	4	100
Elimination of rules and consequences	10	45.5	3	75
Creation of ongoing projects	19	86.4	3	75
Integration of technology	22	100	4	100
Replacing homework with engaging in-class activities.	14	64.6	4	100
Involving students in evaluation	18	81.8	4	100
Collaboration	22	100	4	100
Use of various learning strategies in classrooms.	22	100	4	100

According to Table 24, both teachers and administrators agree that in order to deliver learner-centered teaching in schools, the strategies should include: *creation of positive learning environment, integration of technology, collaboration, and use of various learning strategies in classrooms, as well as creation of ongoing projects, involving students in evaluation, replacing homework with engaging in-class activities, and elimination of rules and consequences.* Teachers and administrators mentioned that the “*creation of a favorable school climate*” is vital to delivering learner-centered teaching in schools.

According to research, school climate refers to a number of factors that affect students' experience at school, including its physical features, the academic environment, the quality of school relationships, and participation in school-related activities. Factors related to school climate include the availability of physical and mental health supports and services, the fairness and adequacy of disciplinary actions,

and the health and safety of the school setting, including the presence and use of alcohol and illegal drugs, bullying, harassment, and violence (U. S. Department of Education, 2010). Outcomes associated with a positive school climate include (a) fewer emotional and behavioral problems; (b) greater academic success; and (c) greater job satisfaction among school personnel (McEvoy & Welker, 2000)

Table 25

*Views Regarding a Teacher's Reasons for Placing Students in a Class*

Themes	Teachers		Admin	
	<i>f</i>	%	<i>f</i>	%
Learning activity (change classroom layout according to different activities)	22	100	4	100
Behavior management (putting space between certain students, or moving some closer to teacher's desk for close monitoring).	22	100	4	100
Group task involving specific students				
According to abilities (grouping similar abilities)	22	100	4	100
Students are free to choose where they sit in class	22	100	4	100
Group task involving specific students				
According to abilities (grouping similar abilities)	22	100	4	100

At the beginning of every school year, as part of classroom management, teachers normally face the question of how and where to seat their students. This is an important decision, as classroom seating arrangements influence classroom climate and students' relationships with each other. Teachers determine whom students sit close to, whom they are exposed to, and with whom they interact during the school day. Unfortunately, this aspect of classroom management is hardly addressed in teacher trainings, even though the physical design of the classroom has shown to be important for both the academic and social development of students.

When asked to state what reasons would guide teachers where their respective students would sit class, varied answers emerged. Some said that seating arrangement in class is determined by specific learning activities the learners are to be engaged in. Others said that sometimes classroom seating arrangement may come as a

behavior management strategy; where a teacher puts space between certain students, or move some students closer to the teacher's desk for close monitoring. Yet other sections of teachers alluded to the idea that classroom seating arrangement depends on group task involving specific students or according to students' different abilities where a teacher groups students according to similar abilities. Some teachers also stated that they give students freedom to choose where they want to sit in class at the beginning of each lesson.

These views are supported by research findings. For example, Fernandes, Huang and Rinaldo (2011) say it would be good for students if the learning activity dictated the seating. However, on the topic of giving a free choice of seats, they have a different view. They point out that since the learning experience for students is different for those at the front than for those nearer the back of the room, therefore, throwing it open to students to decide means some will get a better pick than others; and students who enter the classroom first may be in the position to select desirable seats first; thus, those who are unable to come first may be left with seats they do not desire, and this may have a negative effect to learning for them.

A recent study in the Netherlands also explored not only the different types of seating arrangements in elementary schools, but also the teachers' considerations for deciding who sits where (Gremmen, Van den Berg, Segers, & Cillessen, 2016). They found that most frequently mentioned reason for small groups was cooperation between students, whereas teachers who chose rows/columns did so to create a quiet atmosphere in which students can work well academically.'

Table 26 presents teachers and administrators' views regarding the position of a teacher in active learning practices. In giving their views teachers and administrators cited the following: *providing a conducive environment for learners* ( $n = 22$ ) ( $n = 4$ ),

*providing supervision of the activities of the learners (n = 22) (n = 4), providing instructions on what learners are expected to do (n = 21) (n = 4), role model in spiritual, emotional, and moral values (n = 21) (n = 4), and providing guidance (n = 12) (n = 2).*

Table 26

*Views Regarding the Teacher’s Position in Active Learning Practices*

Themes	Teachers		Admin	
	<i>f</i>	%	<i>f</i>	%
The teacher should be a guide	12	2	54.5	50
The teacher provides a conducive environment for learners	22	4	100	100
The teacher is an instructor providing instructions on what learners are expected to do	21	4	95.5	100
The teacher is a role model in spiritual, emotional and moral values	21	4	95.5	100
The teacher supervises the activities of the learners	22	4	100	100

According to the information presented in Table 26, several teachers stated that the teacher should be a good guide in the learning process and organize the learning environment. They also indicated that the teacher should be a good observer and attentive during in-class practices. Teachers and administrators believe that teachers are the ones who are responsible for creating classrooms that promote effective learning for all and for being familiar with the instructional techniques that promote effective learning for all. As counselors, teachers are concerned with improving both the conditions for learning (parent education, classroom environment, and teacher attitude) and for helping all individual learners develop to their fullest potential. They stated that making learners mostly engage in drama and science practical and offering these activities in a balanced and holistic way will support the active learning process.

This view is supported by various studies (Gibson & Chase, 2002; Harton, Richardson, Barreras, Rocloff, & Latane, 2002; Aydede & Kesercioğlu, 2012) who reported that educational environments and curricula prepared by taking the active

learning process as a basis have a positive influence on learning. In this way, learners participate in the active learning process by interacting with their environments rather than remaining passive during learning. Moreover, learners should actively be included in activities such as speaking, painting, drama, project, and field trip. These kinds of learning processes will contribute to learner's social and cognitive learning as observed by Katz (2003).

When teachers and administrators' views regarding the role of teachers in the creation of learner-centered accountability as presented in Table 27 are analyzed, it is seen that most of them agreed that these include: *organizing appropriate relationships in classrooms* ( $n = 22$ ), *valuing students' engagement* ( $n = 22$ ) ( $n = 4$ ), *developing healthy relationships with learners* ( $n = 22$ ) ( $n = 4$ ), *creating an effective communication environment* ( $n = 22$ ) ( $n = 4$ ), *using extrinsic forms of motivation* ( $n = 22$ ) ( $n = 4$ ), *treating students fairly* ( $n = 22$ ) ( $n = 4$ ), *establishing clear expectations for behavior* ( $n = 22$ ) ( $n = 4$ ), *facilitating students' personal discovery* ( $n = 21$ ) ( $n = 4$ ), and *involving learners in decision-making and the creation of school/class rules* ( $n = 22$ ) ( $n = 4$ ).

Table 27

*Views Regarding Teachers' Role in the Creation of Learner-Centered Accountability*

<b>Themes</b>	Teachers		Admin	
	<i>f</i>	%	<i>f</i>	%
Organizing appropriate relationships in classrooms	22	100	4	100
Facilitating students' personal discovery.	21	95.5	4	100
Valuing student engagement.	22	100	4	100
Honoring student passion and interest.	20	90.1	4	100
Developing healthy relationships with learners.	22	100	4	100
Creating an effective communication environment.	22	100	4	100
Involving learners in the creation of school/class rules.	19	86.4	4	100
Using extrinsic forms of motivation.	22	100	4	100
Treating students fairly.	22	100	4	100
Establishing clear expectations for behavior.	22	100	4	100

The findings are in agreement with the work of Pekin (2000) who also found that in the active learning model, the teacher arranges the learning environment in advance, and determines what he will do before the educational process. According to Pekin (2000), the teacher who prepares and plans the lesson goes on with the role of a guide. He starts the activity by informing the children, offers the related materials, and exposes them to a problem situation.

Plourde and Alawiye (2003) also reported that teachers employing the active learning process are more successful. Stephen, Ellis and Martlew (2010) determined that the teachers teaching in an environment constructed based on the active learning process are more successful.

Table 28

*Views Regarding Barriers to Learner-Centered Learning in Schools*

<b>Themes</b>	Teachers		Admin	
	<i>f</i>	%	<i>f</i>	%
Limited resources (e.g. textbooks)	22	100	4	100
Poor teaching and learning environments	20	100	4	100
Large class sizes for the limited resources	18	81.8	4	100
Lack of special training on how to use some of the teaching and learning aids	17	77.3	4	100

In giving their views in regard to the barriers to learner-centered accountability in schools as in Table 28, both teachers and administrators cited *limited resources such as textbooks (n=22) (n=4), poor teaching and learning conditions (n=20)(n=4), large class sizes for the limited resources (n=18), and lack of special training on how to use some of the teaching and learning aids such as projectors (n=17)(n=4).*

Studies by Barrett (2007), Hardman, Abd-Kadir, Agg, Migwi, Ndambuku, Smith (2008), Price-Rom and Sainazarov (2009), Altinyelken (2010), and Vavrus and Lesley (2012) indicate that while teachers may be aware of how to use group work, they are normally hampered in their ability to fully implement this because of the lack



of resources. So even when teachers make an effort to make their own, providing sufficient numbers with large class sizes becomes almost impossible.

Table 29 presents teachers and administrators' views regarding accountability efforts most effective in motivating teachers.

Table 29

*Views Regarding Accountability Efforts most Effective In Motivating Teachers*

<b>Themes</b>	Teachers		Admin	
	<i>f</i>	%	<i>f</i>	%
Teacher training and development opportunities	22	100	4	100
Achievement of goals	22	100	4	100
Expectancy-value	22	100	4	100
Salary package and availability	22	100	4	100
Recognition and appreciation for work well done	22	100	4	100
Involvement in decision-making	22	100	4	100
Reduced workload	19	86.4	3	75
Availability of funds to facilitate teaching	22	100	4	100
Equitable distribution of teaching and learning resources	22	100	4	100

When these views are analyzed, it is seen that both teachers and administrators believe that teachers are most motivated by the following: When they are given *training and development opportunities* (n = 22) (n = 4), when they are assisted to *achieve set goals* (n = 22) (n = 4), when there is value in what they expect to get- *expectancy value* (n = 22) (n = 4), *salary package and availability* (n = 22) (n = 4), *recognition and appreciation for work well done* (n = 22) (n = 4), *involvement in decision-making* (n = 22) (n = 4), *availability of funds to facilitate teaching* (n = 22) (n = 4), *equitable distribution of teaching and learning resources* (n = 22) (n = 4), and *reduced workload* (n = 19) (n = 3).

These views are consistent with what is found in literature. For example, teacher motivation refers to reasons that emanating from individuals' intrinsic values to choose to teach and sustaining teaching, and the intensity of teacher motivation which is indicated by effort expended on teaching as influenced by a number of contextual factors. Sinclair (2008) defined in terms of attraction, retention and

concentration as something that determines 'what attracts individuals to teaching, how long they remain in their initial teacher education courses and subsequently the teaching profession, and the extent to which they engage with their courses and the teaching profession.

According to Dörnyei and Ushioda (2011), there are two dimensions of teacher motivation in accordance with their conceptions of motivation, namely, the motivation to teach and the motivation to remain in the profession; and four components of teacher motivation include: prominent intrinsic motivation which is closely related to inherent interest of teaching; social contextual influences relating to the impact of external conditions and constraints; temporal dimension with emphasis on lifelong commitment; and demotivating factors emanating from negative influences.

Table 30

*Views Regarding Advantages of Learner-Centered Accountability to Teachers*

Themes	Teachers		Admin	
	<i>f</i>	%	<i>f</i>	%
Teachers have ample time to rest and prepare	18	4	81.8	100
Teachers' reflective practice is supported	22	4	100	100
Teachers' have some remedial time to spend on weaker students	21	4	95.5	100

Table 30 presents teachers and administrators' views regarding advantage of learner centered accountability in building the morale of teachers. According to the table it is seen that teachers and administrators share the same views that learner-centered accountability has an advantage in building the morale of teachers in the following ways: *supporting teachers' reflective practice* ( $n = 22$ ) ( $n = 4$ ), *offering teachers some remedial to spend on weaker students* ( $n = 21$ ) ( $n = 4$ ), and *offering teachers opportunity to rest and prepare* ( $n = 18$ ) ( $n = 4$ ).

## **Accountability for Quality Work Directly Impacting Student**

### **Achievement**

**Management and governance accountability.** All schools covered by this study are governed by a school Board of Management (BoM) in accordance to the Kenya Basic Education Act (2013) requirements. The Act clearly stipulates the relevant duties and functions the school Board of Management which includes the following: promoting the best interests of the institution and ensuring its development; promoting quality education for all pupils in accordance with the standards set under this Act or any other written law; ensuring and assuring the provision of proper and adequate physical facilities for the institution; manage the institution's affairs in accordance with the rules and regulations governing the occupational safety and health; providing for the welfare and human rights and safety of the pupils, teachers and non-teaching staff at the institution; and encouraging a culture of dialogue and participatory democratic governance at the institution just to mention a few, and perform any other function to facilitate the implementation of its functions under this Act or any other written law.

However, the functioning of these Boards is not clearly reflected in the manner in which school programs and activities are implemented. For example, it was observed and confirmed during group discussions, that there are instances when some principals make decisions by themselves individually or and only in consultation with the chairperson to the board and other BoM members hardly question such decisions.

The researcher also observed lack of School Development Plans in most schools and creating an opportunity for poor planning in respect to positioning of infrastructure. Group discussion with teachers revealed lack of involvement of teachers in budget preparation. Only in a few schools are teachers involved in budget

preparation up to departmental levels. Information on the funds received and how it is eventually spent is, however, never relayed back to the teachers. It was observed and confirmed during group discussions that, although all the schools observed do generate annual financial reports for discussion at end year Board meetings, auditing of the funds that the schools receive every year was irregular and such audit reports if any are never shared with the parents, guardians or/and students.

**Classroom teaching.** During each classroom observation, the researcher checked on the level of students' participation in classroom, and made short notes so as to produce lesson profiles, which illustrated the classroom process. Observation data were triangulated by short interviews with a group of respective teachers separately at the end of each lesson observed; asking teachers to state their feelings, thoughts, perceived achievements and difficulties encountered during the teaching. The results were then reported under the following headings:

**Teaching methodology and learner participation.** Most of the teachers observed majorly used lecture method of teaching. It was evident that they were "teaching to the test," perhaps trying to cover the set syllabus in preparing the students for the expected exams. Only in a few classes that were observed, teachers to some extent practiced equity pedagogy in their classrooms. In these classes, the learners fairly practiced active participation which included asking questions, giving opinions and discussing about the related topic lectured.

In the classes where teachers used the lecture method, the students tended to practice passive participation by writing notes, sitting quietly, or simply listening to lectures. When asked to say why they were using lecture method, their responses combined clearly reflected their misunderstanding of what equity pedagogy really entails and hence resistance to using it in class. One response which came out clearly

was this: “*equity pedagogy is too demanding with the limited teaching-learning resources at our disposal.*”

**Teacher-student interaction.** From the discussions, it also came out clearly that the majority of teachers had positive perceptions towards teacher-student interaction taking place in classrooms in the WKUC secondary schools. The discussion revealed that *teacher versus* the whole class is the most common type of teacher-student interaction in the classroom. This suggests that more teacher-student interactions should be applied in the WKUC classrooms to help students improve their overall achievement.

**Classroom seating arrangement.** When teachers were asked whether seating arrangement matters at all in influencing learning, they expressed that the physical setup of chairs, tables, and presentation in a classroom can significantly influence learning. This understanding is consistent with research finding which suggests that classroom arrangement should allow children to use materials actively Huber (2000). Harvey and Kenyon (2013) also observed that students tend to prefer more flexible seating arrangements.

The seating arrangement observed in all the schools of this study was predominantly the traditional lecture setup typically consisting of rows of fixed seating with the chalkboard or white board placed on the wall right in front of the learners; where students face the teacher with their backs to one another. It was evident that this kind of arrangement supported teacher-centered instruction with predominantly lecture method of teaching.

The highest communication interactions between teachers and students typically occur with students in the first row or along the middle of the classroom. Students in the back rows are more likely to be less engaged. When asked to provide

reasons for this kind of seating arrangement, teachers especially cited the following as the major reasons: it encourages individualized work and productivity; it minimizes disruptions and cheating during exams; it is effective for demonstrations; test taking, and presentations; it is easier to supervise; and that it fits well with most classroom general setting.

However, when asked whether there are possible disadvantages with this kind of seating arrangement, the teachers unanimously highlighted several disadvantages which included: discouraging student-centered discussion and group work; promoting uneven distribution of interaction among class; it is easier for students to lose focus; and it is difficult for a teacher to move easily from student to student in this kind of seating arrangement. This is in line with Rands and Gansemer-Topf (2017) who observe that spaces designed in a student-centered manner, focusing on learner construction of knowledge, can support student learning.

**Access to information.** The majority of the teachers are aware of the data in regards to the learners in the school and their performance. However, very few have any idea on the resource requirements of their schools and the management of resources that the schools receive. The level of awareness of some teachers in regards to various policies and guidelines in education service provision was also observed as minimal. This was attributed to lack of access to such documents at the school level; especially in cases where the school head teachers limit such information to themselves and do not share with the teachers such information in the school.

**Finances.** The major part of funds for the school programs and activities comes from fees charged. This majorly takes care of tuition, boarding and meals. How much schools receive for these programs and activities is closely related to enrolment. That is high enrolment means more income from fees and vice-versa. In the group

discussions, it came out that the funds collected as fees are not sufficient for all the needs of the learners.

**Teacher retention and turnover rates.** The researcher observed specific school records to establish the following: teacher turn over and retention rates, students' enrolment trends, students' entry behavior, and KCSE results analyses to establish performance trends of the schools of this study for a period of five (5) years. Data obtained were verified in consultations with respective persons in the schools who were authorized to provide information. From the available records it was established that in all the schools, especially the low performing schools, teacher turnover rates are very high (over 25%).

Quit often researchers and policymakers assume that teacher turnover harms student learning in the sense that institutional memory is lost and resources get used on the hiring process. However, some organizational management literature has demonstrated that some turnover may in fact be beneficial. Turnover, for example, can result in better person job matches and infusion of new ideas into organizations. At this point, Jackson (2010) demonstrates that poor person-job matches predict migration and that teachers tend to be more productive in their new schools.

Moreover, turnover can have institutional benefits if the less effective employees leave. Verification with the administrators revealed that the rate at which teachers leave the schools actually has significant effect on students' performance and enrolment. The longer teachers stay in a given school the more consistently and effectively syllabus coverage is done; and this eventually leads to increased students' achievement in the respective schools.

Little research has assessed the causal effect of teacher turn over on student achievement (Ingersoll, 2001; Guin, 2004). Most existing research on the relationship

between teacher turnover and student achievement is correlational, revealing negative correlations (Guin, 2004). These results are consistent with other correlational evidence (Boyd, Lankford, Loeb, & Wyckoff, 2005).

### **Enrolment trends, students' entry behavior and KCSE results.**

From the available records it appeared that performance was higher in schools where students had higher entry behaviors than in schools with students with low entry behaviors, and there was evidence from the records that high performing schools also enjoyed higher and steady enrolment trends. This implies that there is a relationship between entry behavior and performance enrolment. This means that educators should be keen on students' entry behaviors to ensure that appropriate measures are taken.

**Quality assurance and standards support.** Observation of available records revealed that teacher performance records were lacking in most schools covered by this study. At the Classroom level, it was not easy to determine the extent to which the teachers were delivering the right content. Instead the performance of the teacher was left to be reflected in the performance of the learners, mostly during external examinations. The MoEST QASOs rarely visit most of these schools. As a result, the school terms in these schools often begin with the teachers not aware of the specific dates that the QASOs would be visiting their schools. The criterion that determines which schools to be visited during a particular term is also not readily available for these schools. In fact, some schools indicated that one calendar year ends without any QASO visiting their schools and as such no quality assurance support is received from MoE throughout the year. Only in a few of these schools, especially in the high performing ones, some element of internal QA & S was observed; but still almost all of the QA&SOs were not very clear on the kind of support teachers require and they too had capacity gaps.



During focus groups with teachers and administrators it was revealed that, although some feedback is given to the schools after visits have been conducted by MoE QASOs, the feedback never trickles down to the learners and their parents/guardians. Most of the time the feedback is discussed at the teachers level while other actors in education service provision are left out. The feedback at times reaches the headquarters of MoE but there are no clear mechanisms of responding to such feedback until a crisis emerge, especially when results are extremely poor.

According to teachers and administrators, feedback is an essential part of effective learning. It helps students understand the subject being studied and gives them clear guidance on how to improve their learning. Provided are students given opportunity to engage with feedback, it should enhance learning and improve assessment performance. This understanding is supported by previous studies contained in literature. The impact of feedback on future practice and the development of students' learning were also highlighted by Eraut (2006) saying:

When students enter higher education, the type of feedback they then receive, intentionally or unintentionally, will play an important part in shaping their learning futures. Hence we need to know much more about how their learning, indeed their very sense of professional identity, is shaped by the nature of the feedback they receive. We need more feedback on feedback. (p. 118).

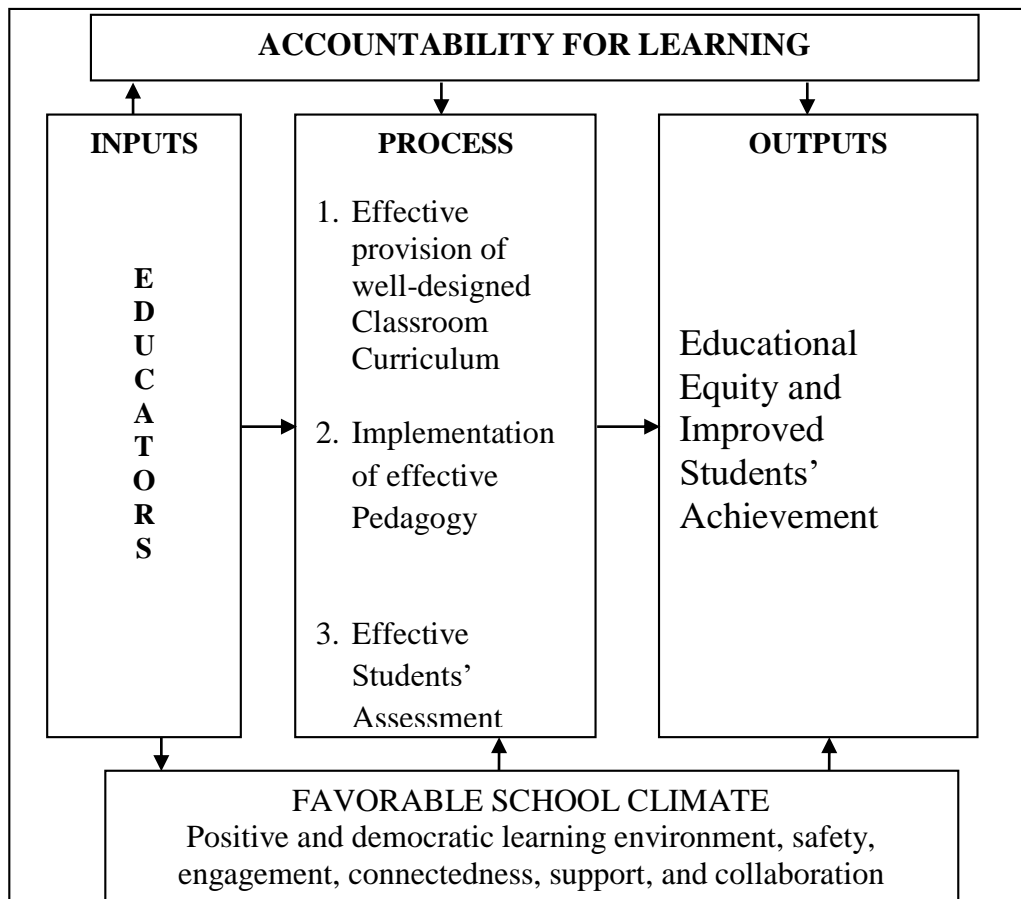
According to Ferguson (2011), feedback is considered as a vital approach to facilitate students' development as independent learners in order to monitor, evaluate, and regulate their own learning. There is a large indication supporting the usefulness of feedback to promote student learning; however, diverse student surveys across the world have also emphasized that students are dissatisfied with the feedback they receive on their course works (Nicol, 2010). They (students) claim that there is lack of

adequate, timely feedback while their teachers claim that students fail to apply the advice given (Orrell, 2006).

## **Proposed Framework/Model for Educational Equity And Improved Students' Achievement**

**Research question eight: What framework/model can be proposed to attain equity and improved students' achievement in West Kenya Union Conference secondary schools?**

Based on the findings of the study and review of literature, a framework/model was developed as presented in figure 7.



*Figure 7.* Educators' accountability for educational equity and improved students' achievement model.

The framework illustrates how educators in WKUC secondary schools, working under favorable school climate which has positive and democratic learning environment, safety, engagement, connectedness, support, and collaboration, could model their classroom curriculum, pedagogy, and students' assessment, to bring about educational equity and improved students' achievement. The arrows in the framework show that Educators, through effective provision of well-designed classroom curriculum, implementation of effective pedagogy, and successful use of effective students' assessment, should be able to realize educational equity and improved students' achievement.

The proposed framework is supported by numerous previous studies as highlighted below:

### **Effective Provision of Well-designed Classroom Curriculum**

Research by UNESCO (2013) defines curriculum as what, why, how, and how well students should learn in a systematic and intentional way, expected learning outcomes define the totality of information, knowledge, understanding, attitudes, values, skills, competencies, or behaviors a learner should master upon the successful completion of the curriculum.

According to UNESCO (2013), the curriculum framework, including the expected learning outcomes, communicates what teachers and learners should know and do; and the development, dissemination, and implementation of relevant and effective curriculum and expected learning outcomes can improve teaching and learning. To improve education quality, special efforts are needed to align the intended curriculum normally referred to as the official guidance, the implemented curriculum referred to as what teachers and learners actually do, and the attained curriculum referred to as what students actually learn.

## **Implementation of Effective Pedagogy**

The proposed conceptual framework borrows two pedagogical approaches namely: learner-centered approach and activity-based learning approach. These involve quality teaching that refers not merely to school, national or international student examinations or assessments but also to the quality of the teacher-student interaction in the classroom through effective pedagogy, including freedom from corporal punishment (Barrow K., Boyle H., Ginsburg M., Leu E, Pier D, Price-Rom A, Rocha V., 2007; Alexander, 2017). Although the ultimate goal of any pedagogy is to develop student learning, the 2005 Global Monitoring Report on quality (UNESCO, 2005) includes creative, emotional and social development as indicators of quality learning.

Previous studies reported positively on practices characterized as learner-centered frequently labelled them as involving one or more of the following: examples and questions drawing on students' previous knowledge and experience (Nyaumwe & Mtetwa, 2006; Barrett, 2007; Arkorful 2012; Childs A., Tenzin W., Johnson D., & Ramachandran K., 2012; Epstein & Yuthas, 2012, problem solving and higher order thinking skills (Megahed N., Ginsburg M., Abdellah A., & Zohry A, 2008); instructional aids (Clarke, 2003, Coffey, 2012; UNICEF, 2008; Hardman, Abd-Kadir, Agg, Migwi, Ndambuku, Smith, 2009); good relationships and interaction between teachers and students (Lefoka & Sebatane, 2003 & Blum, 2009); pair and group work (Hamid & Honan, 2012; Joong, 2012; Stuart, 2002).

## **Effective Students' Assessment**

The proposed framework in Figure 7, p.181, takes cognizance of the New Assessment Culture (NAC) which strongly emphasizes the integration of instruction and assessment, in order to align learning and instruction more with assessment

(Segers, Dochy, & Cascallar, 2003). The way students prepare themselves for an assessment depends on how they perceive the assessment, before, during and after the assessment and these effects can have either positive or negative influences on learning as observed by Gielen, Dochy, & Dierick (2003).

Barrett (2005) reports that there are ten research-based principles of Assessment for Learning (AFL) to guide classroom practice, that AFL should be:

Part of effective planning of teaching and learning, focus on how students learn, be recognized as central to classroom practice, be regarded as a key professional skill for teachers, be sensitive and constructive because any assessment has an emotional impact, take account of the importance of, and foster, learner motivation, promote commitment to learning goals and a shared understanding of the criteria by which they are assessed, develop learners' capacity for self-assessment so that they can become reflective and self-managing, recognize the full range of achievements of all learners; and that learners should receive constructive guidance about how to improve. (p. 17)

**Advantages of assessment for learning.** Learner-centered assessment involves the active engagement of students in setting goals for their learning and growth, monitoring their progress toward those goals, and determining how to address any gaps. Also called self-regulated learning, the ability to manage one's own learning and growth is a key type of expertise needed for 21st-century College and career success (Dembo & Seli 2008).

Classroom assessment practices such as self-assessment, peer assessment, and portfolio have the potential to not only help students learn core content knowledge and skills, but also to develop important self-regulatory habits (Andrade, 2010). According to Barrett (2005), AFL is noted to increase student engagement and is

more about learning for further development and less about marking to standard expectations or meeting externally dictated accountability measures.

Assessment experts from the Forum for Education and Democracy (Wood, Darling-Hammond, Neill, & Roschewski, 2007) note that ongoing formative assessments, including performance assessments, can be responsive to emerging student needs and enable fast and specific teacher response, something that standardized examinations with long lapses between administration and results cannot do. These researchers found that performance assessments can provide meaningful, real time information for students, teachers, parents, and administrators, and can be a spring-board for improving teacher practice. They also note that as teachers use and evaluate tasks, they become more knowledgeable about the standards and how to teach them, and about what their students' learning needs are. Thus, when teachers are engaged as designers of performance assessments and skilled assessors of their students' performance, the impact on curriculum and instruction can be profound (Wood et al., 2007).

Student learning is also enhanced during performance assessment as students adjust their strategies and make timely corrections in response to targeted feedback from their instructors. Further benefits of assessment systems with embedded performance assessment include greater teacher buy-in, increased teacher collaboration, and increased capacity to make mid-course corrections based on formative data (Wood, et al. 2007).

Student-centered assessment promotes learning and growth by providing useful feedback to the students themselves, their teachers, and others about what the students need in order to progress toward the learning target. This quality of learner-centered assessment echoes modern conceptions of formative assessment in that

assessment is a moment of learning, not just grading, ranking, or sorting (Andrade & Cizek, 2010; Shute, 2008).

Although many people associate being evaluated with mild to moderate anxiety, not motivation, and research has shown that grades can be associated with decreased motivation and lower achievement (Lipnevich & Smith, 2008), recent studies, however, have shown that formative assessment—particularly detailed, task-specific comments on student work—can activate interest in a task (Cimpian, Arce, Markman, & Dweck, 2007) and result in better performance (Lipnevich & Smith, 2008). Impressive gains have also been reported in student achievement through the use of teacher-created, criterion-referenced assessments (Bambrick, 2008).

Bambrick (2008) observes, such assessments are developed by teams of teachers from within and across schools in particular grades and subject areas; they work together to develop items that directly measure the curricula enacted in their classrooms. The teachers use the same assessments on an interim basis throughout the school year, perhaps every six weeks, get together to discuss the results at length, and share pedagogical approaches to helping fellow colleague's students succeed; and the key to the success of these efforts is that teachers work together—normally referred to as collegial teaching, to develop the items, discuss the results, and then adjust their pedagogy accordingly when they return to their classrooms.

According to Hattie and Timperley (2007) and Shute (2008), providing feedback is an ongoing process in which teachers communicate information to students that helps them better understand what they are to learn, what high-quality performance looks like, and what changes are necessary to improve their learning. Davidson and Feldman (2010) report that learner-centered assessment provides useful

information that stakeholders at all levels—including students, teachers, administrators, parents, districts, and states—can use to support learning.



## **CHAPTER FIVE**

### **SUMMARY, CONCLUSIONS AND RECOMMENDATIONS**

This chapter presents summary, conclusions and recommendations emanating from this study. The chapter is divided into five sections which include: a) summary, b) summary of findings, c) conclusions, d) recommendations, and e) recommendations for further studies.

#### **Summary**

This project was an exploratory study on educators' accountability for learning in the areas of Classroom Curriculum Design, Pedagogy, and Students' Assessment aimed at developing a learner-centered accountability framework for equity and improved students' achievement.

Although there were several studies on the issue of curriculum development and evaluation in English language teaching, no critical analysis had been encountered in the literature in relation to educators' accountability for learning and equity in designing learner-centered classroom curriculum, Pedagogy and students' assessment, which was the focus of this study, in the context of West Kenya Union Conference. This study, therefore, sought to provide educators with a learner-centered accountability framework for improved learning and equity that embraces classroom curriculum design, Pedagogy and students' assessment techniques that will help all students within their jurisdiction to develop the attitude, the resourcefulness, and the skills necessary for them to become lifelong, strategic, and motivated learners. Focusing on the classroom, the study outlined how teachers can become leaders in

accounting for equitable learning and improved students' achievement by using a four-step process of observation, reflection, synthesis, and replication of effective curriculum design, Pedagogy, and students' assessment practices.

The study was guided by three theories/models in relation to curriculum design, Pedagogy, and students' assessment. First, the study was informed by the Taba Model of Curriculum Development which advocates that teachers, being aware of the students' needs, should be the ones to develop curriculum, rather than higher authorities dictating the curriculum to them. Second, in order to develop pedagogy, this study borrowed constructivist ideas built on Information Construction (ICON) Model, as interpreted by Black and McClintock (1995), which shares a focus on the learner-centered approach and the density of the learner's cognitive course of action for their learning and support needs; and the value of providing learner's with opportunities to make meaning and be real dynamic contributors in the learning-teaching experience. Third, in order to accommodate diverse students who may not succeed in normal classrooms, this study also made reference to Tomlinson's Differentiated Instruction (DI) Model which shows that students' readiness, interests, and learning profiles determine what teachers prepare.

The study employed concurrent mixed methods design in data gathering and analyzing processes involving the use of quantitative and qualitative approaches concurrently including a combination of questionnaires, semi-structured interviews, focus group discussions as well as observation of actual classroom teaching, school programs and documents.

### **Summary of Findings**

The following were the findings:

### **Research Question One: Demographic Characteristics**

The majority of the teachers in the schools are young, aged below 40 years; and 81.1% of the teachers who participated in this study were working on contractual employment basis and only 16.2% working on permanent employment. Only 12% had served in the schools for 6 and above years. This study revealed high teacher turn-over rates and low completion rate (below 40%) of students in the schools covered by this study. (Tables 3 and 4, pp. 96 and 100)

### **Research Question Two: Accountability for learning in Classroom Curriculum, Pedagogy, and Students' Assessment**

The extent of educators' accountability for learning, based on teachers' and students' responses, was average in Classroom Curriculum Design, Pedagogy and Students' Assessment. (Table 11, p. 118)

### **Research Question Three: Comparison of Ratings of Teachers and Students in High-performing and Low-performing Schools**

- i. Based on Teachers' responses (Tables 12a, 12c and 12e, pp. 120, 124 and 127).  
There was significant difference between educators' accountability for learning in the high-performing and low-performing secondary schools in the area of Classroom Curriculum Design at  $p = .032 < 0.05$  and Students' Assessment at  $p = .006 < 0.05$  respectively. Therefore, the null hypothesis was rejected. No significant difference existed between educators' accountability for learning in the high-performing and low-performing secondary schools in the area of Teaching Pedagogy at  $p = .107 > 0.05$ . Therefore, the null hypothesis was accepted.
- ii. Based on Students' responses (Tables 12b, 12d and 12f, pp. 122, 125 and 128).  
There was a significant difference between educators' accountability for learning in the high-performing and low-performing secondary schools in Classroom

Curriculum Design, Pedagogy and Students' Assessment at ( $p=.001 < 0.05$ ), ( $p = .001 < 0.05$ ), ( $p = .006 < 0.05$ ) respectively. Therefore, the null hypothesis was rejected.

#### **Research Question Four: Comparison of Male and Female Educators'**

##### **Perception on Accountability**

There was no significant difference between male and female educators' perceptions on the accountability for learning in Classroom Curriculum Design, Pedagogy and Students' Assessment at ( $p= 0.646 > 0.05$ ;  $p= 0.514 > 0.05$ ; and  $p = 0.820 > 0.05$ ) respectively. (Table 13, p. 134) Thus, the null hypothesis was accepted.

#### **Research Question Five: Relationship between Educators' Accountability and Demographic Characteristics**

No significant relationship existed between educators' perceptions on the accountability for learning in Classroom Curriculum Design, Pedagogy and Students' Assessment when grouped according to age, level of education, and years of experience. (Table 14, p. 136) Thus, the null hypothesis was accepted.

#### **Research Question Six: Relationship between Teachers' Accountability for Learning in i) Classroom Curriculum Design and Teaching Pedagogy; ii) Classroom Curriculum Design and Students' Assessment; and iii) Teaching Pedagogy and Students' Assessment**

Significant positive and moderate relationship existed between educators' perceptions of accountability for learning in Classroom Curriculum Design and Teaching Pedagogy, Classroom Curriculum Design and Student Assessment, and Teaching Pedagogy and Students' Assessment at ( $p = .000 < .01$ ). (Table 15 p. 142)

**Research Question Seven: Learning Practices (Tables 16 and 30, pp. 144 and 172):-**

- i. Ensuring student success in schools means holding administrators, teachers, students, support staff, and parents accountable for quality work directly impacting student learning.
- ii. The creation of a favorable school climate which includes positive and democratic learning environment, safety, engagement, connectedness, support, and collaboration is key in making accountability in schools truly learner-centered.

**Research Question Eight: Proposed Model for Attaining Equity and Improved Students' Achievement in West Kenya Union Conference Secondary Schools (Figure 7, p. 181)**

The proposed framework illustrates how educators in WKUC secondary schools, if working in a favorable school climate, could model their Classroom Curriculum, Teaching Pedagogy, and Students' Assessment to bring about Educational Equity and Improved Students' Achievement.

**Conclusions**

1. Majority of the teachers in WKUC are young adults, work on contractual employment, and served the schools for less than 6 years.
2. WKUC secondary school educators' accountability for learning in Classroom Curriculum Design, Pedagogy and Students' Assessment is average.
3. Educators in high-performing schools are more accountable for learning in Classroom Curriculum Design and Students' Assessment than educators in low-performing schools. However, their accountability in the area of Pedagogy is similar in both groups.

4. Male and female educators have similar perceptions on the accountability for learning in Classroom Curriculum Design, Pedagogy and Students' Assessment.
5. Educators in high-performing schools are more accountable for learning in Classroom Curriculum Design and Students' Assessment than educators in low-performing schools. However, their accountability in the area of Teaching Pedagogy is similar in both groups.
6. In a normal class each student comes with different prior experiences, capacities, and interests, which calls for varied engaging opportunities in order to attain equitable student outcomes.
7. With effective provision of well-designed Classroom Curriculum, implementation of effective Pedagogy, and successful use of effective Students' Assessment, educators in WKUC should be able to realize educational equity and improved students' achievement.

## **Recommendations**

Based on the findings of this study, the following recommendations are made:

1. **Remodeling Classroom Curriculum, Pedagogy and Students' Assessment for Educational Equity and Improved Students' Achievement**

There is need for a paradigm shift to give schools at the local level more control of the curricula program. This calls for a remodeling of Classroom Curriculum, Pedagogies and Students' Assessment for Educational Equity and Improved Students' Achievement in the context of the framework proposed in this study as presented in Figure 7, Pg. 181.

2. **Educators' Accountability for Learning in Classroom Curriculum Design, Pedagogy, And Students' Assessment**

- i. To increase accountability for learning in the schools, educators should be encouraged to adopt various methods of active interactive teaching techniques such as problem-based learning and study group to stimulate active involvement of students and providing feedback that is instructive, timely, referenced to the actual task, and focused on what is correct and what is to be done next.
- ii. To create conducive environments requires that teachers foster positive relationship with the students; and since learning is an interactive process which involves active participation from both the teachers and students in the classroom, an understanding on the behavior of the students in the classroom is critical as it will help the teachers identify the passive students and plan ways to encourage them to actively participate in the classroom.

### 3. **Achieving Teacher Retention in the Schools**

School administrators should set the tone for the entire teaching staff, making sure to consider implementing policies/programs and systems which will work to retain teachers. These may include the following:

- a. **Developing Retirement Policy** that may work to make teachers have a sense of job security and permanency in their work. This will reduce the number of teachers on contract.
- b. **Providing teachers with specific coaching** to empower them to improve on specific areas they would like to work on. This system works for both new and experienced teachers, who are also eager to grow.
- c. **Providing leadership opportunities and guarding teachers' free time.** Administrators should find out what their teachers are interested in

learning about outside of the classroom and see what possibilities are available for them. At the same time, administrators should do what is possible to ensure teachers have the time they need to rejuvenate and use their free time as planned.

- d. **Supporting flexible arrangements.** One reason teachers leave is due to burn outs; especially true for teachers who are also parents. Teachers are dedicated workers who usually feel greatly fulfilled by their work. However, when they are in unsupportive environments, they feel disrespected and burn out quickly. By giving teachers flexible working arrangements, administrators might find that they are less burnt out and more satisfied with their work.

### **Areas for Further Studies**

The study results point to eight key extensions for future research.

1. A study seeking to understand and apply specific strategies that support student engagement in learning both in and beyond the classroom is worth undertaking.
2. A combination of quantitative and qualitative research, taking active learning practices as a basis, could be explored on different sample groups and relationships between secondary school students' active learning processes and different variables.
3. A study to establish the impact of school and National examinations on the pedagogic practices of teachers in comparison to when these are absent or there is continuous assessment to determine what levels of learning take place in classrooms with no school or National examinations



4. Further study on the inclusion of interpersonal relationships in the instructional setting and to what extent those relationships affect the students' learning environment, thereby making a contribution to the literature.

## REFERENCES

- Adeyegbe, S. O. (2004). Research into STM curriculum and schools' examination in Nigeria; The state of the art. *Science Teachers Association of Nigeria proceedings of 45th Annual Conference*, 70-79.
- Aduda, D. & Ouma, W. (2017, December 22). Uproar over mass KCSES exams failure. *Daily Nation* (Kenya). Retrieved June 18, 2019 from <https://www.nation.co.ke/news/Uproar-grows>
- Afe, J. O. (2001). *Reflection on becoming a teacher and the challenges of teacher education*: Inaugural lecture series 64. Benin City: University of Benin.
- Alexander, R. J. (2001). *Culture and pedagogy: International comparisons in primary education*. Oxford and Boston: Blackwell.
- Alexander, R. J. (2017). *Towards dialogic teaching: Rethinking classroom talk* (5th ed.). York: Dialogos.
- Alquraini, T., & Gut, D. (2012). Critical components of successful inclusion of students with severe disabilities: Literature review. *International Journal of Special Education*, 27(1), 42-59.
- Altinyelken, H. K. (2010). Pedagogical renewal in Sub-Saharan Africa: The case of Uganda. *Comparative Education*, 46(2), 151-171.
- Andrade, H. L. (2010). Students as the definitive source of formative assessment: Academic self-assessment and the self-regulation of learning. In H. L.
- Andrade, H. L., & Cizek, G. J. (2010). *Handbook of formative assessment*. New York, NY: Routledge.
- Arbab, S. (2003). Effects of Cooperative Learning on General Science Achievement of 9th Class Students. Unpublished Master dissertation, Rawalpindi: PAF College of Education for Women.

- Arcagök, M. S., & Erüz, E. (2006). *Kamu mali yönetimi ve kontrol sistemi*. Ankara: Maliye Hesap Uzmanları Derneği Yayınları
- Arı, A. (2014). Teacher opinions about evaluation of 6th Grade English lesson curriculum in primary schools. *Journal of Theoretical Educational Science*, 7(2), 172-194.
- Arkorful K. (2012). *Complementary education program and the opportunity to learn in the northern region of Ghana*, PhD thesis, University of Sussex.
- Armstrong, T. (2006). *The Best Schools: How human development research should inform educational practice*. Alexandria, VA: Association for Supervision and Curriculum Development (ASCD).
- Arterbury, E. (2011, January). *Tyler, Olivia, Taba*. Lecture conducted from Lamar University, Beaumont, Texas. Austin, TX: Professional Associates Publishing.
- Australian Qualifications Framework Council (2013). *The Australian Qualifications Framework Second Edition*.
- Avcı, S. (2001). Aktif öğrenme. Retrieved January, 2019 from <http://www.ogretmenlersitesi.com>
- Aybek, B. (2015). İlk okul ikinci sınıf İngilizce dersinin İngilizce öğretmenlerinin görüşlerine dayalı olarak değerlendirilmesi. *Turkish Studies*, 10(15), 67-84.
- Aydede, M.N., & Kesercioğlu, T. (2012). Aktif öğrenme uygulamalarının öğrencilerin kendi kendine öğrenme becerilerine etkisi. *Hacettepe Üniversitesi Eğitim Fakültesi Dergisi*, 43, 37-49
- Baker, E., Linn, R., Herman, J., & Koretz, D. (2002). *Standards for educational accountability systems [Policy Brief 5]*. Los Angeles, CA: National Center for Research on Evaluation, Standards, and Student Testing.
- Baker, T.L. (1994), *Doing Social research* (2nd Ed.), New York: McGraw-Hill Inc.

- Balcı, A. (2003). Kamu yönetiminde hesap verebilirlik anlayışı. In A. Balcı, N. K. Öztürk & A. Nohutçu (Eds.), *Kamu yönetiminde çağdaş yaklaşımlar-sorunlar, tartışmalar, çözüm önerileri, modeller, dünya ve Türkiye yansımaları* (pp. 115-133). Ankara: Seçkin Yayınları.
- Bambrick-Santoyo, P. 2008. "Data in the Driver's Seat." *Educational Leadership*, 65(4).
- Banks, J.A. & Banks, C. (2013). *Multicultural Education: Issues and Perspectives*. 8th ed.
- Banks, J.A., & Banks, C.A. (2004). *Handbook of research on multicultural education* (2nd ed.). San Francisco: Jossey-Bass.
- Barbara Kline Taylor (2015) Content, Process, and Product: Modeling Differentiated Instruction, *Kappa Delta Pi Record*, 51:1, 13-17, DOI: 10.1080/00228958.2015.988559. Retrieved June 18, 2019 from <http://dx.doi.org/10.1080/00228958.2015.988559>
- Barnes, G., Crowe, E., & Schaefer, B. (2007). *The costs of turnover in five districts. A pilot study*. Washington, DC: National Commission on Teaching and America's Future.
- Barrett A (2007). Beyond the polarization of pedagogy: Models of classroom practice in Tanzanian primary schools, *Comparative Education*, 43 (2): 273-294.
- Barrett, H.C. (2005). White Paper: Researching Electronic Portfolios and Learner Engagement. Retrieved January 2019 from <http://www.taskstream.com/reflect/whitepaper.pdf>
- Barrett, H.L. (2007). "Researching Electronic Portfolios and Learner Engagement: The Reflect Initiative." *Journal of Adolescent & Adult Literacy*. Vol.50, No. 6.

- Barrow K., Boyle H., Ginsburg M., Leu E, Pier D, Price-Rom A, & Rocha V. (2007). *Professional development and implementing active-learning, student-centered pedagogies*, Cross national synthesis on education quality report no. 3. Washington, DC: USAid. Retrieved September 30, 2018 from [www.equip123.net/docs/E1-CrossNationalSynthesis3.pdf](http://www.equip123.net/docs/E1-CrossNationalSynthesis3.pdf).
- Baş, H. (2007). *Hesap verme sorumluluğu ve kamu mali yönetimi ve kontrol kanunu*. Retrieved April 2, 2019 from <http://maliyesempozyumu.pamukkale.edu.tr/hasanbas.pdf>
- Bellini, J.L, & Rumrill, P.D. (1999). Perspectives on scientific inquiry: Validity in Rehabilitation Research. *J Vocational Rehabilitation*, 13 (131–138). Retrieved June 27, 2019 from [https://scholar.google.com/scholar?hl=en&safe=off&as\\_q=Bellini%20JL,%20Rumrill%20PD.%20Perspectives%20on%20scientific%20inquiry:%20Validity%20in%20rehabilitation%20research.%20J%20Vocat%20Rehabil.%201999;13:131%E2%80%93138](https://scholar.google.com/scholar?hl=en&safe=off&as_q=Bellini%20JL,%20Rumrill%20PD.%20Perspectives%20on%20scientific%20inquiry:%20Validity%20in%20rehabilitation%20research.%20J%20Vocat%20Rehabil.%201999;13:131%E2%80%93138).
- Benner, P., Sutphen, M., Leonard, V., & Day, L. (2010). *Educating nurses: A call for radical transformation*. San Francisco, CA: Jossey-Bass
- Benninga, J.S., Berkowitz, M.W., Kuehn, P., & Smith, K. (2003). The relationship of character education implementation and academic achievement in elementary schools. *Journal of Research in Character Education*, 1(1), 19-31.
- Benveniste L.A., McEwan P.J. (2000). Constraints to implementing educational innovations: The case of multigrade schools, *International Review of Education*, 46 (1-2): 31-48.
- Berger, J., & Pope, D. (2011). Can losing lead to winning? *Management Science*, 57 (5): 817-827.

- Berkowitz, M.W., & Bier, M.C. (2006). *What works in character education: A report for policy makers and opinion leaders* (Research report). Retrieved from the Center for Character and Citizenship website:  
<http://www.characterandcitizenship.org/research/WWCEforpolicymakers.pdf>
- Bhutto, S. & Chhapra, I.U. (2013). Educational Research on “Constructivism”:  
*International Journal of Scientific and Research Publications*, 3(12), 250-3153.
- Bibi, A. (2002). The comparative effectiveness of teaching English grammar with the help of textbook and by using group work activities. Unpublished doctoral dissertation, Islamabad: Allama Iqbal Open University. Dawn. 20.
- Black, J. B. & McClintock, R. O. (1995). An Interpretation Construction Approach to Constructivist Design. In B. Wilson (Ed.) *Constructivist learning environments*. Englewood Cliffs, NJ: Educational Technology Publications, 1995.
- Black, P. & William, D. (2009). Developing the theory of formative assessment,  
*Educational Assessment, Evaluation and Accountability*, 21(1), 5–31
- Blase, J., Blase, J., & Phillips, D. (2010). *Handbook of school improvement: How high performing principals create high performing schools*, California: Corwin.
- Blum, N. (2009). Small NGO schools in India: Implications for access and innovation, *Compare: A Journal of Comparative and International Education*, 39 (2): 235-248.
- Blum, R. (2005). A case for school connectedness. *Educational leadership: The adolescent learner*, 62(7), 16–20.

- Blum, R. W. (2002). Promoting school ... during middle school. *American Educational Research Journal*, 38, 437–460.
- Boscardin, C.K., Aguirre-Munoz, Stoker, Kim, J., Kim, M., & Lee, J. (2005). Relationship between opportunity to learn and student performance, *Educational Assessment*, 10(4), 307-332.
- Boyd, D., Lankford, H., Loeb, S., & Wyckoff, J. (2005). Explaining the short careers of high achieving teachers in schools with low-performing students. *American Economic Review*, 95(2), 166-171.
- Boyd, D., Lankford, H., Loeb, S., Rockoff, J., & Wyckoff, J. (2008) “The Narrowing Gap in New York City Teacher Qualifications and Its Implications for Student Achievement in High-Poverty Schools,” *Journal of Policy Analysis and Management* 27, no. 3: 793–818.
- Brookhart, S. (2008). “Portfolio Assessment.” In T.L. Good, ed. *21st Century Education: A Reference Handbook, Vol. 1*. Thousand Oaks, CA: SAGE.
- Brown, B.B (March 25, 2003). *Employees` Organizational Commitment and Their Perception of Supervisors` Relations-Oriented and Task-Oriented Leadership Behaviors*, PhD thesis in Human Development, Faculty of the Virginia Polytechnic Institute and State University: Falls Church, Virginia. (Online) Accessed 8 July 2017, [www.emeraldinsight.com/insight](http://www.emeraldinsight.com/insight)
- Brown, C.A., Smith, M.S., & Stein, M.K. (1995). Linking teacher support to enhanced classroom instruction. *Paper presented at the annual meeting of the American Educational Research Association*, NY.
- Brown, Corrigan, & Higgins-D’Alessandro (2009). Centers for Disease Control and Prevention, *Handbook of Prosocial Education*. Rowman and Littlefield Publishing Group.

- Brown, J. D. (1996). *Testing in language programs*. Upper Saddle River, NJ: Prentice Hall Regents.
- Brown, JD. (October, 2000). What is construct validity? Shiken: JALT testing and evaluation *SIG Newsletter*, 8–12. Retrieved June 27, 2019 from [https://scholar.google.com/scholar?hl=en&safe=off&as\\_q=Brown%20JD.%20What%20is%20construct%20validity?%20Shiken:%20JALT%20testing%20and%20evaluation%20SIG%20newsletter.%20October%202000:8%E2%80%93312](https://scholar.google.com/scholar?hl=en&safe=off&as_q=Brown%20JD.%20What%20is%20construct%20validity?%20Shiken:%20JALT%20testing%20and%20evaluation%20SIG%20newsletter.%20October%202000:8%E2%80%93312).
- Brundrett, M & Rhodes, C. (2011). *Leadership for quality and accountability in education*, London & New York, Routledge
- Bruns, B., Filmer, D. & Patrinos H. A. (2011). *Making Schools Work : New Evidence on Accountability Reforms*. Human Development Perspectives. World Bank. © World Bank. Retrieved June 17, 2019 from <https://openknowledge.worldbank.org/handle/10986/2270> License: CC BY 3.0 IGO.”
- Bui, X., Quirk, C., Almazan, S., & Valenti, M. (2010). *Inclusive Education Research & Practice*. Maryland Coalition for Inclusive Education.
- Çankaya, P. (2015). *An evaluation of the primary 3rd grade English language teaching program: Tekirdağ case* (Unpublished Master Thesis). Çanakkale 18 Mart University, Çanakkale.
- Carlile, O., & Jordan, A. (2005). It works in practice but will it work in theory? The theoretical underpinnings of pedagogy In S. Moore, G. O’Neill, & B. McMullin (Eds.), *Emerging Issues in the Practice of University Learning and Teaching*. Dublin: AISHE.



- Carrell, S.E. & West, J.E. (2011). Does professor quality matter? Evidence from random assignment of students to professors. *Journal of Political Economy*, 118(3), 409-432.
- Carroll, S., Reichardt, R., & Guarino, C. (2000). *The distribution of teachers among California's school districts and schools*. Santa Monica, CA: RAND
- Carter, L. (2007). *Total instructional alignment*. Bloomington, IN: Solution Tree Press.
- Cavilla, D. (2014). Thoughts on access, differentiation, and implementation of a multicultural curriculum. *Gifted Education International*, 30(3), 281-287.
- Cekolin, C.H (2001). The effect of self-regulated learning strategies on academic achievement. *International Dissertation abstract-A*, 61(12) pp-4656.
- Çelen, G. (2011). *İlköğretim altıncı sınıf İngilizce öğretim programının değerlendirilmesi* (Unpublished MA Thesis). Mehmet Akif Ersoy University, Burdur.
- Çepni, S. (2005). *Araştırma ve proje çalışmalarına giriş*. Trabzon: Üçyol Kültür Merkezi.
- Childs A., Tenzin W., Johnson D., & Ramachandran K. (2012). Science education in Bhutan: Issues and challenges, *International Journal of Science Education*, 34 (3): 375-400.
- Christie, K., Thompson, B., & Whiteley, G. (2009). Strong leaders, strong achievement: Model policy for producing the leaders to drive student success. Retrieved April 25, 2019 from Education Commission of the States website: [www.ecs.org/clearinghouse/79/23/7923.pdf](http://www.ecs.org/clearinghouse/79/23/7923.pdf)
- Chubin, D.E., May, G.S., & Babco, E.L. (2005). "Diversifying the Engineering Workforce," *Journal of Engineering Education*, Vol. 94, No. 1, pp. ...

- Cimpian, A., Arce, H.M., Markman, E.M., & Dweck, C.S. (2007). "Subtle Linguistic Cues Affect Children's Motivation. *Psychological Science*, 18(4).
- Cizek, G.J. (2010). "An Introduction to Formative Assessment: History, Characteristics, and Challenges." In H.L. Andrade & G.J. Cizek, eds. *Handbook of Formative Assessment*. New York, NY: Routledge.
- Clarke P (2003). Culture and classroom reform: The case of the District Primary Education Project, India, *Comparative Education*, 39 (1): 27-44.
- Claxton, G. (2007). Expanding young people's capacity to learn. *British Journal of Educational Studies*. 55 (2), 1-20.
- Clotfelter, C.T., Ladd, H. F. & Vigdor, J. L. (2007a). "How and Why Do Teacher Credentials Matter for Student Achievement?" CALDER Working Paper 2. Washington, DC: The Urban Institute.
- Clotfelter, Charles T., Helen F. Ladd, and Jacob L. Vigdor (2007b). "Teacher Credentials and Student Achievement in High School: A Cross-Subject Analysis with Student Fixed Effects." CALDER Working Paper 11. Washington, DC: The Urban Institute.
- Coffey (2012). *Activity based learning, Ghana*. Draft synthesis report for DfID. Reading: Coffey.
- Cohen, L., Manion L., & Morrison, K. (2018). *Research methods in education* (8<sup>th</sup> ed). London: Routledge.
- Correspondent (2019, June 10). Secondary School Heads are Convening in Mombasa for their Annual Conference, amid the Raging Controversy on the New Curriculum. Retrieved July 9, 2019 from <https://www.capitalfm.co.ke/news/2019/06/secondary-school-heads-convene-in-mombasa-for-annual-conference/>

- Costa, A. L.; Loveall, R.A. (2002). The Legacy of Hilda Taba. *Journal of Curriculum and Supervision*, vol.18 issue 1, p.56.
- Council of Chief State School Officers (2008). *Educational Leadership Policy Standards: ISLLC 2008*; Council of Chief State School Officers: Washington, DC, USA.
- Çubukçu, Z., (2012). Teachers' evaluation of student-centered learning environments, *Education*, 133 (1), 49-66.
- Darling-Hammond, L., & Sykes, G. (2003). Wanted: A national teacher supply policy for education: The right way to meet the "Highly Qualified Teacher" challenge. *Education Policy Analysis Archives*, 11(33). Retrieved April 18, from <http://epaa.asu/epaa/v11n33>
- Darling-Harmond, L. (2000). Teacher quality and student achievement: A review of state policy evidence. *Education Policy Analysis Archives*, 8(1), 1-50.
- Davidson, J. & Feldman, J. (2010). "Formative Assessment Applications of Culminating Demonstrations of Mastery. In H.L. Andrade & G.J. Cizek, eds. *Handbook of Formative Assessment*. New York, NY: Routledge.
- Davies, A. (2000). *Making classroom assessment work*. Mcville, British Columbia, Canada: Connections Publishing.
- Dembo, M. H., & Seli, H. (2008). *Motivation and learning strategies for college success: a self-management approach*. 3rd ed. New York: Lawrence Erlbaum Associates.
- Demirlier, H. (2010). *Students' and teachers' attitudes towards the newly developed curriculum of primary schools* (Unpublished MA Thesis). Muğla University, Muğla.

- Dirksen, D. J. (2010). Differentiated instruction: An online workshop at Western New Mexico University.
- Dochy, F., & McDowell, L. (1997). Assessment as a tool for learning. *Studies in Educational Evaluation*, 23(4), 279–298.
- Dörnyei, Z., & Ushioda, E., (2011). *Teaching and researching motivation* (2nd ed.). New York, NY: Longman.
- Dunleavy, J. & Milton, P. (2009). What did you do in school today? Exploring the concept of Student Engagement and its implications for Teaching and Learning in Canada. Toronto: Canadian Education Association (CEA), 1-22
- Dunleavy, J., Milton, P. & Crawford, C. (2010). The Search for Competence in the 21st Century. *Quest Journal 2010*. Leading Edge Learning.ca (Abstract) p. 2  
Retrieved January 2019 from  
<http://www.leadingedgelearning.ca/q2010/Docs/QuestJournal2010/Article12.pdf>
- Ekiz, D. (2003). *Eğitimde araştırma yöntem ve metotlarına giriş*. Ankara: An Englund MM, Luckner AE, Whaley GJL, Egeland B. (2004). Children's achievement in early elementary school: Longitudinal effects of parental involvement, expectations, and quality of assistance. *Journal of Educational Psychology*, 96:723–730. 4.
- Epstein MJ. & Yuthas K. (2012). Scaling effective education for the poor in developing countries: A report from the field, *Journal of Public Policy & Marketing*, 31 (1): 102-114.
- Eraut, M. Feedback (2006) *Learning in Health and Social Care*. 5:111–118

- Erkan, M. A. (2009). *İlköğretim okulları 4. ve 5. Sınıflar yeni İngilizce öğretim programının uygulanmasında karşılaşılan sorunların incelenmesi* (Unpublished MA Thesis). Gaziantep University, Gaziantep.
- Ernest, J. M., Heckaman, K. A., Thompson, S. E., Hull, K. M., & Carter, S. W. (2011). Increasing the teaching efficacy of a beginning special education teacher using differentiated instruction: A case study. *International Journal of Special Education*, 26, 191-201.
- Evertson, C. M., & Weinstein C. S. (Eds.). (2006). *Handbook of classroom management: Research, practice and contemporary issues*. Mahwah, NJ: Lawrence Erlbaum.
- Fakeye, D. O. (2010). "Students' personal variables as correlates of academic achievement in English as a second language in Nigeria," *Journal of Social Sciences*, vol. 22, no. 3, pp. 205–211.
- Ferguson, P. (2011). Student perceptions of quality feedback in teacher education. *Assessment & Evaluation in Higher Education*, 36(1), 51-62.
- Fernandes, A. C., Huang, J., & Rinaldo, V. (2011). Does where a student sits really matter? The impact of seating locations on student classroom learning. *International Journal of Applied Educational Studies*, 10(1), 66-77.
- Field, S., Kuczera, M. & Pont, B. (2007), *No More Failures: Ten Steps to Equity in Education*, OECD, Paris.
- Figlio, D. N., & Kenny, L. W. (2007). Individual teacher incentives and student performance. *Journal of Public Economics*, 91, 901–914.
- Figlio, D., Loeb, S. (2011). School Accountability. In Eric A. Hanushek, Stephen Machin, and Ludger Woessmann, editor: *Handbooks in Economics*, 3(383-421)

- Fiszer, E. P. (2004). *How teachers learn best: An ongoing professional development model*. Lanham, MD: Scarecrow Education.
- Fraenkel, J. R. (1992). Hilda Taba's contributions to social studies education. *Social Education*, 56(3), 172-178.
- Franzke, M., Kintsch, E., Caccamise, D., Johnson, N., & Dooley, S. (2005). "Summary Street: Computer Support for Comprehension and Writing." *Journal of Educational Computing Research*. Vol. 33.
- Giangreco, M. F., Cloninger, C. J., & Iverson, V. S. (2011). *Choosing outcomes and accommodations for children (COACH): A guide to educational planning for students with disabilities* (3rd edition). Baltimore: Paul H. Brookes Publishing.
- Gibson, H. L., & Chase, C. (2002). Longitudinal impact of an inquiry-based science program on middle school students' attitudes toward science. *Science Education*, 86(5), 693-705. <http://dx.doi.org/10.1002/sce.10039>
- Gielen, S., Dochy, F., & Dierick, S. (2003). Evaluating the consequential validity of new modes of assessment: The influence of assessment on learning, including pre-, post-, and true assessment effects. In M. Segers, F. Dochy, & E. Cascallar (Eds.), *Optimizing new modes of assessment: In search of qualities and standards* (pp. 37–54). Dordrecht: Kluwer Academic Publishers
- Gilbert, J. (2007). *Catching the Knowledge Wave: Redefining knowledge for the post-industrial age*. *Education Canada*, 47(3), 4-8. Canadian Education Association. Retrieved August 2018 from <http://www.cea-ace.ca>.
- Gilliam, J. H. (2002). *The Impact of cooperative learning and course learning environment factors on learning outcomes and overall excellence in the community college classroom*. Unpublished Dissertation, North Carolina State University.

- Gilmore T, Krantz J, Ramirez R (1986). Action Based Modes of Inquiry and the Host-  
*Researcher Relationship. Consultation 5.3* (Fall 1986), p. 161.
- Glomo-Narzoles, D. (2015). "Student team achievement division (STAD), its effect  
on the academic performance of EFL learners," *American Research Journal of  
English and Literature*, vol. 1, no. 4, pp. 1–7.
- Greenberg, M.T., Weissberg, R.P., O'Brien, M.U., Zins, J.E., Fredericks, L., Resnik,  
H., & Elias, M.J. (2003). Enhancing school-based prevention and youth  
development through coordinated social, emotional, and academic learning.  
*American Psychologist*, 58(6/7), 466-474.
- Gremmen, M. C., van den Berg, Y. H., Segers, E., & Cillessen, A. H. (2016).  
Considerations for classroom seating arrangements and the role of teacher  
characteristics and beliefs. *Social Psychology of Education*, 19(4), 749-774.
- Guin, K. (2004). Chronic teacher turnover in urban elementary schools. *Educational  
Evaluation and Policy Analysis*, 12(4), 1-25.
- Güneş, T. (2009). *İlköğretim 5. Sınıf İngilizce dersi öğretim programına ilişkin  
öğretmen görüşleri* (Unpublished MA Thesis). Hacettepe University, Ankara.
- Guskey, T.R. (2010). "Formative Assessment: The Contributions of Benjamin S.  
Bloom." In H.L. Andrade & G.J. Cizek, eds. *Handbook of Formative  
Assessment*. New York, NY: Routledge.
- Hamid O.M. & Honan E. (2012) Communicative English in the primary classroom:  
Implications for English-in-education policy and practice in Bangladesh,  
*Language, Culture and Curriculum*, 25 (2): 139-156.
- Hanushek, E. & Raymond, M. (2002). Sorting out accountability systems. In W.  
Evers & H. Walberg (Eds.) *School accountability* (pp. 75-104). Palo Alto, CA:  
Stanford University, Hoover Press.

- Harden, R.M. & Laidlaw, J.M., (2013). Be fair to students: four principles that lead to more effective learning, *Medical teacher*, 35, 27–31.
- Hardman F, Abd-Kadir J, Agg C, Migwi J, Ndambuku J, Smith F (2009). Changing pedagogical practice in Kenyan primary schools: The impact of school-based training, *Comparative Education*, 45 (1): 65-86.
- Hardman, F., Abd-Kadir, J., Smith, F., (2008). Pedagogical renewal: improving the quality of classroom interaction in Nigerian Primary Schools. *International Journal of Educational Studies* 28 (1), pp. 55 – 69.
- Hargreaves, A., & Shirley, D. (2012). *The Global Fourth Way: The Quest for Educational Excellence*. California: Corwin.
- Harris, D. & T. Sass. (2007). “Teacher Training, Teacher Quality, and Student Achievement.” (Center for Analysis of Longitudinal Data in Education Research, March). Retrieved March 14, 2019 from <http://files.eric.ed.gov/fulltext/ED509656.pdf>
- Harris, D. N., & Sass, T. R. (2011). Teacher training, teacher quality, and student achievement. *Journal of Public Economics*, 95(7), 798-812.
- Harton, H. C., Richardson, D. S., Barreras, R. E., Rocloff, M. J., & Latane, B. (2002). Focused interactive learning: A tool for active class discussion. *Teaching of Psychology*, 29(1), 10-15. [http://dx.doi.org/10.1207/S15328023TOP2901\\_03](http://dx.doi.org/10.1207/S15328023TOP2901_03)
- Harvey E.J. & Kenyon M.C. (2013). Classroom Seating Considerations for 21st Century Students and Faculty. *Journal of Learning Spaces*, 2(1).
- Hattie, J. (2008). Visible learning: A synthesis of over 800 meta-analyses relating to achievement. Oxon: Routledge.
- Hattie, J., and Timperley, H. (2007). The Power of Feedback, *Review of Educational Research*, 77 (1), pp. 81-112.



- Hawks, S.J. (2014). The flipped classroom: Now or never? *AANA Journal*, 82, 264-269.
- Haynes, SN, Richard DCS, Kubany, ES (1995). Content validity in psychological assessment: a functional approach to concepts and methods. *Am Psychological Association*, 7(3):238–247. Retrieved June 27, 2019 from.  
[https://scholar.google.com/scholar?hl=en&safe=off&as\\_q=Haynes%20SN,%20Richard%20DCS,%20Kubany%20ES.%20Content%20validity%20in%20psychological%20assessment:%20a%20functional%20approach%20to%20concepts%20and%20methods.%20Am%20Psychol%20Assoc.%201995;7\(3\):238%E2%80%93247](https://scholar.google.com/scholar?hl=en&safe=off&as_q=Haynes%20SN,%20Richard%20DCS,%20Kubany%20ES.%20Content%20validity%20in%20psychological%20assessment:%20a%20functional%20approach%20to%20concepts%20and%20methods.%20Am%20Psychol%20Assoc.%201995;7(3):238%E2%80%93247).
- Hedge, J.W. & Borman, W. C. (2012). *Oxford handbook of work and aging*. New York: Oxford University Press.
- Hitt, D. & Tucker, P. (2016). Systematic review of key leader practices found to influence student achievement: A unified framework. *Review of Educational Research*, 86(2), 531-569.
- Hodges, H. (2001). “Overcoming a Pedagogy of Poverty” R. Cole, Ed. *More Strategies for Educating Everybody’s Children*, ASCD, 2001, pp.1-9.
- Huber, L.K. (2000). Promoting multicultural awareness through dramatic play centers. *Early Childhood Education Journal*, 27(5), 234-239.
- Huebner, T. A. (2010). Differentiated learning. *Educational Leadership*, 67(5), 79–81.
- Ingersoll, R. (2001). Teacher turnover and teacher shortages: An organizational analysis. *American Educational Research Journal*, 38(3), 499-534.
- Iqbal, M. (2004). Effective of Cooperative Learning on Academic Achievement of secondary school students in Mathematics. Unpublished doctoral dissertation,

University Institute of Education and Research, Arid Agriculture University,  
Rawalpindi.

- Jackson, K. (2010). Match quality, worker productivity, and worker mobility: Direct evidence from teachers (Working Paper No. 15990). Cambridge, MA: National Bureau of Economic Research.
- Jansen J. (1998). Curriculum reform in South Africa: A critical analysis of outcomes-based education. *Cambridge Journal of Education*, 28(3), 321-331.
- Jegade, S. A., 2010. Nigerian students' perception of technical words in senior secondary school chemistry curriculum. *Pakistan Journal of Social Sciences*, 7(2), 109-111.
- Johnson, D. W., & Johnson, R. (2005). New Developments in Social Interdependence Theory. *Genetic, Social, & General Psychology Monographs*, 131(4), 285-358. Retrieved January 17, 2019 from <http://dx.doi.org/10.3200/MONO.131.4.285-358>
- Johnson, D. W., & Johnson, R. T. (2008). Social Interdependence Theory and Cooperative Learning: The Teacher's Role. In R. M. Gillies, A. Ashman & J. Terwel (Eds.), *Teacher's Role in Implementing Cooperative Learning in the Classroom* (pp. 9-37). New York, U.S.A: Retrieved January 17, 2019 from Springer. [http://dx.doi.org/10.1007/978-0-387-70892-8\\_1](http://dx.doi.org/10.1007/978-0-387-70892-8_1)
- Joong YHP (2012). Understanding the ecologies of education reforms: Comparing the
- Julnes, P. D. L. (2006). Performance measurement an effective tool for government accountability? The debate goes on. *Evaluation*, 12(2), 219-235.
- Kahongeh, J. (2018, March 23). Schools ill-equipped to support children with Special Needs: Report. *Daily Nation* (Kenya). Retrieved June 18, 2019 from

<https://www.nation.co.ke/news/Uproar-grows-over-KCSE-exam-mass-failure-1056-4238376-format-xhtml-h5m7y6z/index.html>

Kandemir, A. (2016). *İlkokul 2. Sınıf İngilizce öğretim programının katılımcı odaklı program değerlendirme yaklaşımıyla değerlendirilmesi* (Unpublished MA Thesis). Pamukkale University, Denizli.

Kane, T. and Cantrell, S (2010). "Learning about teaching: Initial findings from the measures of effective teaching project". MET Project Research Paper, Bill & Melinda Gates Foundation

Kane, T. J., Rockoff, J. E., & Staiger D. O. (2006). "What Does Certification Tell Us about Teacher Effectiveness? Evidence from New York City." Working Paper 12155. Cambridge, MA: National Bureau of Economic Research.

Karcı, C. (2012). *Orta öğretim dokuzuncu sınıf İngilizce öğretim programının öğretmengörüşlerine göre değerlendirilmesi* (Unpublished MA Thesis). Adnan Menderes University, Aydın.

Katikamu Observer Magazine (2006/2007). *A report on Katikamu SDA school Academic performance*. Retrieved February 28, 2018 from:  
<http://katikamuSDA.org/index.htm#>

Katz, L. (2003). State of the art in early childhood education 2003.ERIC Document No. 475, 599.

Kim, J. K. (2005). The Effect of a Constructivist Teaching Approach on Student Academic Achievement, Self-concepts and leaning strategies. *Asia Pacific Education Review*, 6(1), 7-19.

Kim, MC & Hannafin, MJ. (2011). Scaffolding 6th graders' problem-solving in technology-enhanced science classrooms: a qualitative case study,

Instructional Science: *An International Journal of the Learning Sciences*,  
39(3), 255–82

- Kimani, G. N., Kara, A. M. & Njagi, L. W. (2013). Teachers' factors influencing students' academic achievement in secondary schools in Nyandarua County, Kenya. *International journal of education and research*, 1(3), 1-14.
- Kingore, B. (2004). *Differentiation: Simplified, realistic, and effective*.
- Kirst M. W. (1990). *Accountability: Implications for State and Local Policymakers*. Washington, DC: Information Services, Office of Educational Research and Improvement, U.S. Department of Education.
- Korotchenko, T. V., Matveenko, I. A., Strelnikova, A. B., & Phillips, C. (2015). Backward design method in foreign language curriculum development. *Procedia-Social and Behavioral Sciences*, 215, 213-217.
- Kraft, M.A. & Papay, J.P. (2014). "Can Professional Environments in Schools Promote Teacher Development? Explaining Heterogeneity in Returns to Teaching Experience," *Educational Evaluation and Policy Analysis* 36, no. 4: 476–500.
- Krosbergen & Van luit (2005). Constructivist Mathematics Education for Students with Mild Mental Retardation. *European Journal of Special Needs Education*, 20(1), 107 116.
- Ladd, H. (2001). School-based educational accountability systems: The promise and the pitfalls. *Natl. Tax J.* 54 (2), 385–400.
- Ladd, H. F. (2008). "Value-Added Modeling of Teacher Credentials: Policy Implications." Paper presented at the second annual CALDER research conference, "The Ins and Outs of Value-Added Measures in Education: What

- Research Says,” Washington, D.C., November 21. Retrieved March 28, 2019 from [http://www.caldercenter.org/upload/Sunny\\_Ladd\\_presentation.pdf](http://www.caldercenter.org/upload/Sunny_Ladd_presentation.pdf).
- Lane, K. L., Carter, E. W., Common, C., and Jordan, A. (2012), Teacher Expectations for Student Performance: Lessons Learned and Implications for Research and Practice, in Bryan G. Cook, Melody Tankersley, Timothy J. Landrum (ed.) *Classroom Behavior, Contexts, and Interventions (Advances in Learning and Behavioral Disabilities, Volume 25)* Emerald Group Publishing Limited, pp. 95-129.
- Lavy, V. (2007). Using performance-based pay to improve the quality of teachers. *Future Child* 17 (1), 87–109.
- Lea, S.J., Stephenson, D. & Troy., J. 2003. Higher Education Students ‘Attitudes to Student Centered Learning: Beyond ‘educational bulimia’. *Studies in Higher Education*, 28(3):321-334.
- Leahy, S., Lyon, C., Tompson, M., & Wiliam, D. (2005). Classroom assessment: Minute by minute, day by day. *Educational Leadership*, 63(3), 19-25
- Lefoka JP, Sebatane EM (2003). *Initial primary teacher education in Lesotho: Multi-site teacher education project (MUSTER)*. London: Department for International Development.
- Leithwood, K.; Louis, K.S.; Anderson, S.; & Wahlstrom, K. (2004). *Review of Research: How Leadership Influences Student Learning*; The Wallace Foundation: New York, NY, USA.
- Lena, A. N., Bergendahl, C., Stenlund, P., & Tibell, T. (2001). An open laboratory experiment, a method for active learning: *Biochemistry education for millennium, Dissertation Abstract International*, 53(7), 846-A, (E29-E34).

- Levitt, R., Janta, B., & Wegrich, K. (2008). *Accountability of teachers: Literature review*. Cambridge, UK: RAND.
- Levy, H. (2008). Meeting the needs of all students through differentiated instruction: Helping every child reach and exceed standards. *Clearing House: A Journal of Educational Strategies, Issues and Ideas*, 81(4), 161–164.
- Linnenbrink, E. A., & Pintrich, P. R. (2003). The role of self-efficacy beliefs in student engagement and learning in the classroom. *Reading & Writing Quarterly*, 19(2), 119-137.
- Lipnevich, A. & Smith, J. (2008). *Response to Assessment Feedback: The Effects of Grades, Praise, and Source of Information*. Research report RR-08-30. Princeton, NJ: Educational Testing Service.
- Louis, K.S.; Dretzkea, B.; Wahlstrom, K. (2010). How does leadership affect student achievement? Results from a national US survey. *Sch. Effect. Sch. Improv.: Int. J. Res. Pol. Pract.*, 21, 315–336.
- Macalister, J., & Nation, I.S. P. (2011). *Case studies in language curriculum design*. New York: Routledge.
- Machemer, P. L., & Crawford, P., (2007). Student Perceptions of Active Learning in a Large Cross-Disciplinary Classroom. *Active Learning in Higher Education*, 8(1), 9-30.
- Magnesio, S., & Davis, B. H. (2010). A Novice Teacher Fosters Social Competence with Cooperative Learning. *Childhood Education*, 86(4), 216-223
- Majzub, R., M., & Rais, M., M. (2010). Boys' Underachievement: Male versus Female Teachers. *Procedia Social and Behavioral Sciences*, 7, 685–690.
- Malena, C., & McNeil, M. (2010). *Demanding Good Governance: Lessons from Social Accountability, Initiatives in Africa*. Washington DC: World Bank.

- Martino, W., & Rezai-Rashti, G. (2012). Rethinking the influence of male teachers: Investigating gendered and raced authority in an elementary school in Toronto. *Review of Education, Pedagogy, and Cultural Studies*, 34 (5) 258-281.
- Marzano, R.J. (2003). *What works in schools: Translating Research into action*. Alexandria, VA: ASCD.
- Marzano, R.J. (2007). *The art and science of teaching*. Alexandria, VA: Association for Supervision and Curriculum Development.
- Maslow, A.H. (1970). *Religions, values, and peak-experiences*. New York: Viking Press. (Original work published 1964). *Mathematics Educator*, 16 (2): 35-42.
- McDonald, T. (2013). *Classroom Management: Engaging students in learning*. (2<sup>nd</sup> Ed). Australia & NZ: Oxford University Press
- McEvoy, A., & Welker, R. (2000). Antisocial behavior, academic failure, and school climate: A critical review. *Journal of Emotional and Behavioral Disorders*, 8(3), 130- 140.
- McGrath, K., & Sinclair, M. (2013). More male primary-school teachers? Social benefits for boys and girls. *Gender and Education*, 25(5), 531-547.
- McKown, C., & Weinstein, R. S. (2008). Teacher expectations, classroom context, and the achievement gap. *Journal of School Psychology*, 46, 235–261.
- McLaughlin, J.E., Roth, M.T., Glatt, D.M., Gharkholonarehe, N., Davidson, C.A., Griffin, L.M, Mumper, R.J. (2014). The flipped classroom: A course redesign to foster learning and engagement in a health professions school. *Academic Medicine*, 89, 236-243. doi:10.1097/ ACM.0000000000000086

- McLean, M., & Gibbs, T. (2010). Twelve tips to designing and implementing a learner-centered curriculum: Prevention is better than cure. *Medical teacher*, 32(3), 225.
- McNaughton, D., Hamlin, D., McCarthy, J., Head-Reeves, D., & Schreiner, M. (2008). Learning to listen: Teaching an active listening strategy to preservice education professionals. *Topics in Early Childhood Special Education*, 27, 223-231.
- Meg, E (2012). Innosight Institute, *A Guide to Personalizing Learning: Suggestions for the Race to the Top-District Competition*. Retrieved March 16, 2018 from <https://www.christenseninstitute.org/publications/a-guide-to-personalizing-learning/>
- Megahed N., Ginsburg M., Abdellah A., & Zohry A (2008) *Active-learning pedagogies as a reform initiative: The case of Egypt. Equip1 research report*. Washington, DC: American Institutes of Research.
- Mehra, V., & Thakur, K. (2008). Effects of Cooperative Learning on Achievement and Retention in Mathematics of Seventh Graders with different Cognitive Styles. *Indian Educational Review*, 44(1), 5-31
- Messick, S. (1994). The interplay of evidence and consequences in the validation of performance assessments. *Education Research*, 23(2):13–23. DOI: 10.3102/0013189X023002013
- Microsoft (2013). *Inclusive Innovation Showroom Demonstrates Accessibility*, Microsoft, Redmond, WA
- Middaugh, E.; Perlstien, D. (2005). Thinking and Teaching in a Democratic Way: Hilda Taba and The Ethos of Brown. *Journal of Curriculum and Supervision*, vol. 20 issue 3, p234-256.



- Ministry of Education and Training of Vietnam [MOET] (2009). *Development Strategy from 2009 to year 2020 for the Cause of Industrialization and Modernization of Vietnam*. Hanoi: Vietnamese Government.
- Mitchell, T. and Maxwell, S. (2010). Defining Climate Compatible Development. CDKN Policy Brief. Climate & Development Knowledge Network, London, UK. <http://cdkn.org/resource/defining-climate-compatible-development/>.
- Mongon, D & Chapman, C. (2012). *High Level Leadership*, London & New York, Routledge.
- Moreno, M. (2015, August). How I use multicultural education to impact students learning and develop critical thinking skills. *Multicultural Perspectives*, 17(3), 152-154.
- Muijs, R.D. & Reynolds, D, (2001). *Effective teaching: evidence and practice*, London, Sage
- Muijs, R.D. (2010). Changing classroom practice. In D Hargreaves, A Lieberman, M Fullan, & D Hopkins (eds), *Second International Handbook of Educational Change*, London, Springer, 857–68
- Mulgan, R. (2000). Accountability: An ever–expanding concept? *Public Administration*, 78(3),554-573.
- Murphy, P. (2008). ‘Defining pedagogy’. In K. Hall, P. Murphy & J. Soler (Eds.), *Pedagogy and practice: culture and identities* (pp. 28-39). London: SAGE publications.
- Najeemah, M. Y. (2012). School climate and teachers’ commitment: A case study of Malaysia. *International Journal of Economics Business and Management Studies*, 1(2), 65–75. Retrieved June 19, 2018 from <https://ssrn.com/abstract=2151470>.

- Nation, I. S. P., & Macalister, J. (2010). *Language curriculum design*. New York: Routledge.
- National School Climate Council. (2007). *The School Climate Challenge: Narrowing the gap between school climate research and school climate policy, practice guidelines and teacher education policy*. Available at:  
<http://www.schoolclimate.org/climate/documents/policy/school-climate-challenge-web.pdf>
- NCLB ACT (2001). Pub. L. No. 107-110, § 115 Stat.1425.
- NCLB ACT. (2006). Reading between the lines: What the ACT reveals about college readiness in reading. Retrieved March 16, 2018, from  
[http://www.act.org/path/policy/pdf/reading\\_report.pdf](http://www.act.org/path/policy/pdf/reading_report.pdf)
- New Vision Team (January 21, 2010). A report on Uganda's best and worst secondary schools since 2000. Retrieved March 29, 2018 from:  
[www.newvision.co.ug/D/8/12/707756](http://www.newvision.co.ug/D/8/12/707756): *Uganda's worst secondary schools*. Retrieved on March 17, 2018.
- Nichols, B. & Sutton, C. (2013). Improving academic performance through the enhancement of teacher/student relationships: The relationship teaching model. *A journal of the international Christian community for teacher education*, 1(2), 1-2.
- Nicol, D. (2010). From monologue to dialogue: improving written feedback processes in mass higher education. *Assessment & Evaluation in Higher Education*, 35(5), 501-517.
- Null, W. (2011). *Curriculum: From theory to practice*. Lanham: Rowman & Littlefield Publishers.

- Nwafor, O. M. (2007). Educational innovation process and products. Onitsha, Nigeria: Perfect Image.
- Nyakangi, E. (2018, May 3). What is Competency Based Curriculum in Kenya? *Kenyaote*. Retrieved June 18, 2019 from <https://kenyaote.com/what-is-competency-based-curriculum-cbc-in-kenya-detailed-illustration/>
- Nyaumwe L.J, & Mtetwa D.K (2006). Efficacy of college lecturer and student peer collaborative assessment of in-service mathematics student teachers' teaching practice instruction,
- OECD (2010). *PISA 2009 Results: What Makes a School Successful? Resources, Policies and Practices Vol IV*, Paris, Organisation for Economic Co-operation and Development
- Okoye, F. N. (2012). Influence of school climate on educational innovations in Nsukka education zone of Enugu State Nigeria. Unpublished M.Ed Dissertation, Department of Educational Foundation,
- Oliver, R. M., Wehby, J. H. & Reschly, D. J. (2011). "Teacher Classroom Management Practices: Effects on Disruptive or Aggressive Student Behavior". Society for Research on Educational Effectiveness.
- Olorundare, A. S. (2014). Theory into practice: Beyond surface curriculum in science education. The 147th inaugural lecture, University of Ilorin, Ilorin, Nigeria.
- Oloyede, O. I. (2010). Enhanced mastery learning strategy on the achievement and self-concept in senior secondary school chemistry. *Humanity and Social Sciences Journal*, 5(1), 19-24.

- Orakcı, Ş. (2012). *İlköğretim 7. Sınıflar için uygulanan 2006 İngilizce öğretim programının öğretmen görüşlerine göre değerlendirilmesi* (Unpublished MA Thesis). Gazi University, Ankara.
- Ordu, S. R., & Ordu P. A. (2012). Accountability Needed Today for Success Tomorrow: Retrieved September 10, 2018 from <http://www.advanced.org/source/seven-levels-accountability-student-success>.
- Ornstein, A., & Hunkins, F. (2009). *Curriculum: Foundations, principles and issues*. Boston: Pearson/Allyn and Bacon
- Orrell, J. (2006). Feedback on learning achievement: rhetoric and reality. *Teaching in Higher Education*, 11(4), 441-456
- Özüdoğru, F., & Adıgüzel, O. C. (2015). İlkokul 2. sınıf İngilizce öğretim programının değerlendirilmesi. *Turkish Studies*, 10(11), 1251-1276.
- Pekin, H. (2000). *The effect of active interactive learning approach in primary education 5<sup>th</sup> grade mathematics education on student success*. Master's Thesis, Uludağ University Institute of Social Sciences, Bursa
- perceptions of parents and secondary teachers and students in China, *Peabody Journal of Education*, 87 (2): 267-282.
- Peters, B. G. (2007). Performance-based accountability. In A Shah (Ed.), *Performance accountability and combating corruption* (pp. 15-32). Washington DC, MD: The World Bank.
- Pham, H. L. (2012). Differentiated instruction and the need to integrate teaching and practice. *Journal of College Teaching & Learning*, 9(1), 13–20.
- Plourde, L. A. &, Alawiye, O. (2003). Constructivism and elementary preservice science teacher preparation: Knowledge to application. *College Student Journal*, 37 (3), 334-341.

- Polit, D.F., Beck, C.T. and Hungler, B.P. (2001). *Essentials of Nursing Research: Methods, Appraisal and Utilization*. 5th Ed. Philadelphia: Lippincott Williams & Wilkins
- Price-Rom, A., & Sainazarov, K. (2009). Active-learning pedagogies as a reform initiative: The case of Kyrgyzstan. Washington, DC: American Institutes for Research. Retrieved January 28, 2019, from <http://www.equip123.net/docs>.
- Project Tomorrow (2010). Unleashing the Future: Educators “Speak Up” about the use of Emerging Technologies for Learning. Speak Up 2009 National Findings. Teachers, Aspiring Teachers & Administrators, May 2010. Retrieved December 2018 from [www.tomorrow.org/speakup/](http://www.tomorrow.org/speakup/)
- Rands ML and Gansemer-Topf AN. (2017). The Room Itself is Active: How Classroom Design Impacts Student Engagement. *Journal of Learning Spaces*, 6(1).
- Raudenbush, R. (2004). *Schooling, statistics, and poverty: Can we measure school improvement?* ETS Angoff Lecture.
- Redding, S. (2006). *The mega system: Deciding, learning, connecting*. Lincoln, IL: Academic Development Institute.
- Reeves, D.B (2004). Accountability for Learning: How Teachers and School Leaders Can Take Charge. Retrieved March 16, 2018 from <https://www.amazon.com/Accountability-Learning-Teachers-School-Leaders/dp/0871208334>
- Richards, J. C. (2001). *Curriculum development in language teaching*. Cambridge: Cambridge University Press.
- Rothstein, R., Jacobson, R., Wilder, T. (2008). *Grading Education: Getting Accountability Right*. Teachers College Press.

- Rubin, H.J., & Rubin, I.S. (2005). *Qualitative interviewing: The art of hearing data*. Thousand Oaks, CA: Sage.
- Sahin, A. (2010). Effects of Jigsaw III technique on achievement in written expression. *Asia Pacific Education Review*, 12(3), 427- 435. Retrieved January 17, 2019 from <http://dx.doi.org/10.1007/s12564-010-9135-8>
- Sarı, R. (2003). *A suggested English language teaching program for Gülhane Military Medical Academy* (Unpublished Doctoral dissertation). Middle East Technical University, Ankara.
- Sass, T. R. (2007). "The Determinants of Student Achievement: Different Estimates for Different Measures." Paper presented at the first annual CALDER research conference, Washington, D.C., October 4.
- Schmidt, W. H., McKnight, C.C., Houang, R.T., Wang, H. C., Wiley, D.E., Cogan, L.S., Wolfe, R.G., (2001). *Why schools matter: A cross national comparison of curriculum and learning*. San Francisco: Jossey-Bass.
- Schmidt-Davis, J., & Bottoms, G. (2011). Who's next? Let's stop gambling on school performance and plan for principal succession. Retrieved April 25, 2019 from Southern Regional Education Board website [http://publications.sreb.org/2011/11V19\\_Principal\\_Succession\\_Planning .pdf](http://publications.sreb.org/2011/11V19_Principal_Succession_Planning.pdf)
- Seçkin, H. (2010). *İlköğretim 4. Sınıf İngilizce dersi öğretim programının değerlendirilmesi* (Unpublished Doctoral Dissertation). Hacettepe University, Ankara.
- Segers, M., Dochy, F., & Cascallar, E. (2003). The era of assessment engineering: Changing perspectives on teaching and learning and the role of new modes of assessment. In M. Segers, F. Dochy, & E. Cascallar (Eds.),

- Optimizing new modes of assessment: In search of qualities and standards* (pp.1–12). Dordrecht: Kluwer Academic Publishers.
- Shawer, S., Gilmore, D., & Banks-Joseph, S. (2009). Learner-driven EFL curriculum development at the classroom level. *International Journal of Teaching and Learning in Higher Education*, 20(2), 125-143.
- Shute, V. J. (2008). Focus on formative feedback. *Review of Educational Research*, 78(1), 153-189.
- Siddiqui, S. (2003, January 26). Collaborative approach to language learning. Karachi
- Sinclair, C. (2008). Initial and changing student teacher motivation and commitment to teaching. *Asia-Pacific Journal of Teacher Education*, 36, 79-104.
- Siti M. M. (2010). Understanding classroom interaction: a case study of international students' classroom participation at one of the colleges in Malaysia. *International Journal for the Advancement of Science & Art*. 1(2), 91-99.
- Slavin, R. E. (2011). Instruction Based on Cooperative Learning. In R. E. Mayer & P. A. Alexander (Eds.), *Handbook of Research on Learning and Instruction* (pp. 344-360). New York: Taylor & Francis.
- Sözen, S. (2005). *Teori ve uygulamada yeni kamu yönetimi*. Ankara: Seçkin Yayınları.
- Sözen, S., & Algan, B. (2009). *İyi yönetişim* (İyi yönetişim araştırma raporu). Ankara: İçişleri Bakanlığı.
- Spilt, J. L., Koomen, H. M. Y., & Jak, S. (2012). Are boys better off with male and girls with female teachers? A multilevel investigation of measurement invariance and gender match in teacher–student relationship quality. *Journal of School Psychology*, 50, 363–378.

- Staiger D.O. & Rockoff J. E. (2010). "Searching for Effective Teachers with Imperfect Information," *Journal of Economic Perspectives* 24, no. 3: 97–118
- Stephen, C., Ellis, J., & Martlew, J. (2010). Taking active learning into the primary school: A matter of new practices? *International Journal of Early Years Education*, 18(4), 315–329. <http://dx.doi.org/10.1080/09669760.2010.531916>
- Stevenson, H., & Gilliland, A. (2016). The teachers' voice: Teachers unions at the heart of new democratic professionalism. In J. Evers & R. Kneyber (Eds.), *Flip the System: Changing Education from the Ground Up*. New York, NY: Routledge.
- Stronge, J. H. (2007). *Qualities of effective teachers* (2nd ed.). Alexandria, VA: Association for Supervision and Curriculum Development.
- Struyf, E., Vandenberghe, R., & Lens, W. (2001). The evaluation practice of teachers as a learning opportunity for students. *Studies in Educational Evaluation*, 27(3), 215–238.
- Stuart JS (2002). College tutors: A fulcrum for change? *International Journal of Educational Development*, 22 (3): 13.
- Swab, G. (2012). "The effects of cooperative and individualistic learning structures on achievement in a college-level computer-aided drafting course," Ph.D. Dissertation, Virginia Polytechnic Institute and State University, Blacksburg, VA, USA.
- Tatar, S. (2005a). Classroom participation by international students: the case of Turkish graduate students. *Journal of Studies in International Education*. 9(4), 337-355.
- Taylor, R. T. (2010). *Leading learning, change student achievement today!* California: Corwin.



- Thanh-Pham, T. (2010a). Group Composition of Cooperative Learning: Does Heterogeneous Grouping Work in Asian Classrooms? *International Education Studies*, 3(3), 12-19
- Thanh-Pham, T. (2010b). Implementing a Student-Centered Learning Approach at Vietnamese Higher Education Institutions: Barriers under Layers of Casual Layered Analysis (CLA). *Journal of Futures Studies*, 15(1), 21-38
- The New Zealand Curriculum (2007). *A curriculum for students*. Published for the Ministry of Education by Learning Media Limited, Wellington, New Zealand.
- Tomlinson, C. A. & Allan, S. D. (2000). *Leadership for Differentiating Schools and Classrooms*. Alexandria, VA: Association for Supervision and Curriculum Development.
- Tomlinson, C. A. (2001). *How to differentiate instruction in mixed ability classrooms* (2<sup>nd</sup> ed). Alexandria, VA: Association for Supervision and Curriculum Development.
- Tomlinson, C. A., & Imbeau, M. B. (2010). *Leading and managing a differentiated classroom*. Alexandria, VA: Association for Supervision and Curriculum Development.
- Tomlinson, C.A. (2006). *An Educator's Guide to Differentiating instruction*. Cengage Learning. USA.
- Türnüklü, A. (2010). Eğitim bilim araştırmalarında etkin olarak kullanılabilir nitel bir araştırma tekniği: Görüşme. *Kuram ve Uygulamada Eğitim Yönetimi Dergisi*, 6(4), 543-559.
- U. S. Department of Education, (2010). Office of Safe and Drug-Free School; Overview Information; Safe and Supportive Schools; Notice inviting

- applications for new awards for fiscal year (FY). *Federal Register*, 75(131), 39504-39510.
- U.S. Department of Education (2001). *Twenty-third Annual Report to Congress on the Implementation of The Individuals with Disabilities Education Act*. Washington, DC: Office of Special Education Programs.
- UNESCO (2013). Institute for Statistics (UIS) and UNESCO IBE. Questionnaire on intended instructional time. (Downloadable from the UIS website)
- UNICEF (2008). *Third party assessment of GOI-UNICEF quality package for primary education (2003-2007): Final report*. New Delhi: UNICEF, India Country Office.
- Van Kuyk, J.J. (2009). Scaffolding: how to increase development? *European Early Childhood Education Research Journal*, 19(1), 133–46
- Vavrus, F. & Lesley B. (2012). Comparative Pedagogies and Epistemological Diversity: Social and Materials Contexts of Teaching in Tanzania. *Comparative Edzrcatioi Revie~i*. vol. 56, no. 4, pp. 634-58.
- Vavrus, F., Thomas, M., & Bartlett, L. (2011). Ensuring quality by attending to inquiry: Learner-centered pedagogy in sub-Saharan Africa. Addis Ababa: UNESCO: International Institute for Capacity Building in Africa. Retrieved January 28, 2019 from [http://doc.iiep.unesco.org/cgi-bin/wwwi32.exe/%5Bin=epidoc1.in%5D/?t2000=031300/\(100\)](http://doc.iiep.unesco.org/cgi-bin/wwwi32.exe/%5Bin=epidoc1.in%5D/?t2000=031300/(100)).
- Vegas, E., & Petrow, J. (2008). *Raising Student Learning in Latin America: The Challenge for the 21<sup>st</sup> Century*. World Bank.
- Walberg, H. J. (2011). *Improving student learning: Action principles for families, schools, districts and states*. Charlotte, NC: Information Age.

- Wallace Foundation (2012). Retrieved September 10, 2018 from  
[www.learningforward.org](http://www.learningforward.org) (JSD 55), February 2012 | Vol. 33 No. 1)
- Wanjohi, A.M. (2013, January 30). Challenges facing Kenya in achieving education for all. *Kenpro* (Kenya). Retrieved June 18, 2019  
<http://www.kenpro.org/challenges-facing-kenya-in-achieving-education-for-all/>
- Weger, H., Jr., Castle, G. R., & Emmett, M. C. (2010). Active listening in peer interviews: The influence of message paraphrasing on perceptions of listening skill. *International Journal of Listening*, 24, 34-49.
- Weimer, M. (2009). Six Keys to Classroom Excellence in Effective Teaching Strategies, July 20. Retrieved May 19, 2019 from  
<https://www.facultyfocus.com/articles/effective-teaching-strategies/effective-teaching-strategies-six>
- Westbrook, J., Durrani, N., Brown, R., Orr, D., Pryor, J., Boddy, J., & Salvi, F. (2013). *Pedagogy, curriculum, teaching practices and teacher education in developing countries. Education rigorous literature review*. Department for International Development.
- West-Burnham, J. (2011). The reality of autonomy, *ldr*, autumn [online] Retrieved May 19, 2019 from <https://dera.ioe.ac.uk/14919/1/towards-a-self-improving-system-school-accountability-thinkpiece%5B1%5D.pdf>
- White, J & Barber, M (Eds) (1997). *Perspectives on School Effectiveness Improvement*, London: Bedford Way Paper, Institute of Education, University of London.
- Wiggins, G. P., & McTighe, J. (2006). *Understanding by design*. Virginia: Ascd.

- William, D. (2010). An integrative summary of the research literature and implications for a newtheory of formative assessment. In H. L. Andrade & G. J. Cizek (Eds.), *Handbook of formative assessment* (pp. 18-40). New York, NY: Taylor & Francis.
- Willms, J. D., Friesen, S. & Milton, P. (2009). What did you do in school today? Transforming classrooms through social, academic and intellectual engagement. (First National Report) Toronto: Canadian Education Association.
- Windham, C. (2005). The Student Ős Perspective. In D. Oblinger & J. Oblinger (Eds), *Educating the Net generation* (pp. 5.1-5.16). Boulder, CO: EDUCAUSE. Retrieved January 2010, from <http://www.educause.edu/educatingthenetgen>
- Wiswall, M. (2013). The dynamics of teacher quality. *Journal of Public Economics*, 100, 61-78.
- Wood, G. H., Darling-Hammond, L., Neill, M., & Roschewski, P. (2007). *Refocusing Accountability: Using Local Performance Assessments to Enhance Teaching and Learning for Higher Order Skills*. Washington, DC: Forum for Education and Democracy.
- Yıldıran, C., & Tanrıseven, I. (2015). İngilizce öğretmenlerinin ilkokul 2. sınıf İngilizce dersi öğretim program hakkındaki görüşleri. *International Journal of Language Academy*, 3(1), 210-223.
- Yıldırım, A., & Şimşek, H. (2005). *Sosyal bilimlerde nitel araştırma yöntemleri*. Ankara: Seçkin Yayınları.
- Yörü, B. (2012). *İlköğretim sekizinci sınıf İngilizce öğretim programına ilişkin öğretmen görüşleri (Eskişehir örneği)* (Unpublished MA Thesis). Osmangazi University, Eskişehir.

- Yusuf, A. F. (2012). Influence of principals' leadership styles on students' academic achievement in secondary schools. *Journal of Innovative Research in Management and Humanities*, 3(1), 113-121.
- Zimmermann, N., Fahrur, H., & Skowron E. (Ed.) (2014). *Diversity Dynamics: Activating the Potential of Diversity in Trainings*; Berlin.
- Zorba, M. G., & Arıkan, A. (2016). A study of Anatolian high schools' 9th grade English language curriculum in relation to the CEFR. *Uşak Üniversitesi Eğitim Araştırmaları Dergisi*, 2(2), 13-24.

# APPENDICES

## APPENDIX A1

### Questionnaire for Teachers

#### PART I: Background Information

*These questions are about you, your education and the time you have spent in teaching. In responding to the questions, please mark the appropriate box.*

1. Gender:       Male               Female
2. Age:               Below 40       40-49               50-59               60+
3. Employment status as a teacher:  Permanent       Contract
4. Highest level of education:  Diploma       Bachelor's       Master's               PhD
5. Teaching Experience:       0-1 year       2-3 years       4-5 years               6+ ye
6. Your work as a teacher in this school:       0-1 year               2-3 years               4-5 years  
 6 years and above

#### PART II: Teachers' perceptions about the extent to which they are accountable for learning regarding Classroom Curriculum Design, Pedagogy, and Students' assessment?

**DIRECTIONS:** In your opinion, to what extent do you agree or disagree with the following statements regarding your classroom curriculum design, Pedagogy and students' assessment practices? *Please mark one choice in each row*

**KEY: 1- Strongly disagree      2- Disagree      3- Agree      4- Strongly agree**

<b>CLASSROOM CURRICULUM: In designing classroom curriculum, I:</b>	<b>RATINGS</b>			
Believe that all students are capable of achieving at high levels, and take responsibility for their learning, despite the circumstances in their lives and society that can make achievement difficult	1	2	3	4
Keep track of the ways I address individual learning styles and preferences	1	2	3	4
Recognize the importance of students' active participation and engagement in the learning process	1	2	3	4
Provide students with options and choices regarding how they are going to learn and how they are going to show their learning whenever possible	1	2	3	4
Use cooperative learning and grouping strategies to increase student participation	1	2	3	4
Construct tasks at different levels of difficulty	1	2	3	4
Make the task more or less familiar based on the proficiency of the learners' experiences or skills for the task	1	2	3	4

<b><i>PEDAGOGY: In presenting my class lessons, I always:</i></b>	<b>RATINGS</b>			
Vary direct instruction by small group needs	1	2	3	4
Vary the learning process depending upon how students learn	1	2	3	4
Provide graphic organizers to support note-taking	1	2	3	4
Vary the length of time a student may take to complete a task in order to provide additional support for struggling learners	1	2	3	4
Present information through both whole-to-part and part-to-whole	1	2	3	4
Provide a variety of avenues for student exploration of a topic or expression of learning	1	2	3	4
Provide broad access to a wide range of materials and technologies	1	2	3	4
Offer a choice of tasks, including student-designed options	1	2	3	4
Encourage investigation or application of key concepts and principles in student interest areas	1	2	3	4
Try to uncover student learning profiles	1	2	3	4
Balance presentations and learning experiences according to students' learning profiles	1	2	3	4
Encourage students to explore information and ideas through auditory, visual and kinesthetic modes	1	2	3	4
Balance varied perspectives on an issue or topic	1	2	3	4
Provide a safe learning environment that invites risk taking, encourages learning from mistakes, enables focused goal setting, and supports thoughtful learning	1	2	3	4
Arrange my classroom and structure lessons to increase student motivation	1	2	3	4
Create a learning environment with flexible spaces and learning options	1	2	3	4
Make sure there are places in the room to work quietly and without distraction as well as places that invite student collaboration	1	2	3	4
Set out clear guidelines for independent work that matches individual needs	1	2	3	4
<b><i>STUDENTS' ASSESSMENT: When assessing students' achievement, I always:</i></b>	<b>RATINGS</b>			
Use pre-assessment to determine where students need to begin, and then match students with appropriate activities	1	2	3	4
Vary the ways in which student's learning is assessed (e.g. using a wide variety of assessments)	1	2	3	4
Create assessments that respond to different learning modes	1	2	3	4
Give choices about how students express their understanding	1	2	3	4
Provide challenge, variety and choice	1	2	3	4
Encourage students to express what they have learned in varied ways	1	2	3	4
Encourage students' participation in self-assessment, goal setting and monitoring of their progress toward mastery of learning objectives	1	2	3	4
Allow for varied working arrangements – alone or with a group	1	2	3	4
Provide assignments at varying degrees of difficulty to match student readiness	1	2	3	4
Work with students to develop rubrics that match and extend students' varied skill levels	1	2	3	4
Use a continuum: (For example, simple to complex, less independent to more independent)	1	2	3	4
On different levels with adjusted challenges	1	2	3	4
Active learning for all students	1	2	3	4
Engaging at all levels	1	2	3	4
Aligned to objectives and goals	1	2	3	4

**This is the end. Thank you for taking your time and effort to complete this survey.**

## APPENDIX A2

### Questionnaire for Students

#### PART I: Background Information

*These questions are about you, your education and the time you have spent in this school. In responding to the questions, please mark the appropriate box.*

1. Gender       Male             Female
2. Age             Below15       15-16    17-18    19-20
3. Grade level    Form one       Form two     Form three    Form four
4. Length of time in this school    Under one year       1-2 years       2-3 years  
 3-4 years

#### PART II: Students' perceptions about the extent to which teachers are accountable for learning regarding classroom curriculum, Pedagogy, and students' assessment.

**DIRECTIONS:** In your opinion, to what extent do you agree or disagree with the following statements regarding classroom curriculum, teaching methods, and students' assessment? Please mark one choice in each row.

**KEY: 1- Strongly Disagree    2- Disagree    3- Agree    4- Strongly agree**

<b><i>CURRICULUM DESIGN: In this school, teachers always:</i></b>	<b>RATINGS</b>			
Adjust classroom curriculum to reflect national standards	1	2	3	4
Arrange curriculum in line with subject objectives and goals	1	2	3	4
Vary curriculum to present essential facts, skills and attitudes	1	2	3	4
Vary classroom curriculum based on students' level of achievement	1	2	3	4
Ensure that curriculum is appropriate to students from diverse backgrounds	1	2	3	4
Provide tasks and learning choices at different levels of difficulty	1	2	3	4
Provide a variety of avenues for students' exploration of a topic and expression of learning	1	2	3	4
Provide broad access to a wide range of teaching and learning materials	1	2	3	4
<b><i>PEDAGOGY: In this school, teachers always:</i></b>	<b>RATINGS</b>			
Hold workshops for students to create their own ideas and questions on a topic	1	2	3	4
Offer choice of tasks including student-designed options	1	2	3	4
Create effective student discussion groups that have students of the same abilities	1	2	3	4
Encourage students to "think out loud" when answering questions in class to help them reflect on how they arrived at answers	1	2	3	4
Ask questions of varying difficulty from simple factual recall to more analysis and synthesis	1	2	3	4
Encourage investigation or application of key concepts and principles in student interest areas	1	2	3	4
Connect content with students' cultures, experiences, and talents	1	2	3	4
Use centers of interest, interest groups, specialty groups/expert groups; Teachers always choices within an area of study or topic	1	2	3	4
Work to uncover student diverse learning profiles and balance presentations and learning experiences	1	2	3	4



Create a learning environment with flexible spaces and learning options	1	2	3	4
Encourage students to explore information and ideas through visual, auditory, and kinesthetic (VAK) modes	1	2	3	4
Allow students to demonstrate what they have learned in creative ways (posters, drawings, diagrams, mind-maps, poems, etc.)	1	2	3	4
Show students how to take notes by using guided notes for them to model	1	2	3	4
Foster a cooperative learning environment that is meant to benefit students from diverse ethnic/cultural backgrounds	1	2	3	4
Create problem-based learning environments in the classroom allowing students to explore the problem, find solutions, and share their conclusions	1	2	3	4
Ensure a choice of competitive, cooperative and independent learning experiences	1	2	3	4
Balance varied perspectives on an issue or topic	1	2	3	4
Provide authentic learning opportunities in various intelligence or talent areas	1	2	3	4
<b>STUDENTS' ASSESSMENT: In this school:</b>	<b>RATINGS</b>			
Teachers are always engaged as designers of performance assessments and skilled assessors of students' performance	1	2	3	4
Assessment for learning is always ongoing	1	2	3	4
Teachers always allow learners to do self-assessment during the learning and receive specific, descriptive feedback about their learning	1	2	3	4
Teachers always use performance assessments that are responsive to emerging student needs	1	2	3	4
Instruction is continually adjusted and revised on the basis of assessment results	1	2	3	4
Students are always given opportunity to adjust their learning strategies and make timely corrections in response to targeted feedback from their teachers	1	2	3	4
Students' assessment always leads to increased teacher collaboration, and increased capacity to make mid-term corrections based on constructive data	1	2	3	4
Teachers usually adjust instruction for individual students based on need	1	2	3	4
Teachers usually analyze which students need more practice	1	2	3	4
Teachers always reflect on the effectiveness of their teaching practices	1	2	3	4
Teachers always confer with students regarding their own assessment might	1	2	3	4
Students are always given opportunity to determine the qualities of good performance	1	2	3	4
Teachers always share their teaching-learning intentions with their students	1	2	3	4
Assessments are always developed by teams of teachers of particular classes and subject areas	1	2	3	4
Teachers ensure rich involvement of the learners in monitoring on-going learning, collecting and presenting evidence of them learning				
Students receive constructive timely feedback and corrective explanation on their mistakes from the teachers	1	2	3	4

**This is the end of the questionnaire. Thank you very much for your cooperation!**

## **APPENDIX B1**

### **Interview Schedule (Guide) for Teachers and Administrators**

#### **EDUCATORS' ACCOUNTABILITY FOR LEARNING: A FRAMEWORK FOR EQUITY AND IMPROVED STUDENTS' ACHIEVEMENT IN WEST KENYA UNION CONFERENCE SECONDARY SCHOOLS**

**Confidentiality:** All information that is collected in this study will be treated confidentially. While results will be made available by conference and by type of school within a conference, you are guaranteed that neither you nor this school nor any of its personnel will be identified in any report of the results of the study.

**Accountability Defined:** For this study the researcher has embraced a definition of accountability which states, "A personal choice to rise above one's circumstances and demonstrate the ownership necessary for achieving desired results—to See It, Own It, Solve It, and Do It." (<https://www.asme.org/career-education/articles/management-professional-practice/how-to-create-a-culture-of-accountability>).

**Accountability Indicators:** The accountability indicators in this study will include: academic achievement as measured by students reaching proficiency in nationally examinable subjects; academic progress as measured by individual student growth or another way of measuring student learning; high school graduation rates; measures of postsecondary readiness; student engagement; chronic absenteeism; and discipline rates.

#### **Q1. Teachers and Administrators' views regarding the concept of educators' accountability in the areas of classroom curriculum, Pedagogy, and students' assessment:**

What do you understand with the concept of accountability?

Who should be held accountable in schools?

What does accountability of school principals involve?

What should school principals be accountable for?

What should schools be accountable for?

#### **Q2. Teachers and Administrators' views regarding the concept of learner-centered accountability:**

What do you understand with the concept of learner-centered accountability?

What are the key elements that make accountability in schools truly learner-centered?

What conditions would exist if a class were truly learner-centered?

What specific strategies can contribute to the delivery of learner-centered teaching in schools?

**Q4. Teachers and Administrators' views regarding the teacher's position in active learning practices:**

What is your view about the teacher's position in active learning practices?

What role do teachers play in the creation of learner-centered accountability?

Which accountability efforts are most effective in motivating teachers?

What advantage does learner-centered accountability have in building the morale of teachers?

## APPENDIX B2

### *Matrix for interview guide*

Research Question	Interview questions	Key Concepts
<p><b>How can accountability for learning practices be entrenched into the administration, teaching, and learning activities for equity and improved students' achievement?</b></p>	<ul style="list-style-type: none"> <li>• What do you understand with the concept of accountability?</li> <li>• Who should be held accountable in schools?</li> <li>• What does accountability of school principals involve?</li> <li>• What should school principals be accountable for?</li> <li>• What should schools be accountable for?</li> <li>• What is your view regarding the benefits of school principals with accountability?</li> </ul>	<p>Accountability Concept</p>
	<p>In your view, what are the:</p> <ul style="list-style-type: none"> <li>• Key elements that make accountability in schools truly learner-centered?</li> <li>• Conditions that would exist if a class were truly learner-centered?</li> <li>• Strategies which contribute to the delivery of learner-centered teaching in schools</li> <li>• The barriers to learner-centered learning in schools</li> </ul>	<p>The concept of learner-centered accountability</p>
	<p>In your view what are:</p> <ul style="list-style-type: none"> <li>• The teacher's reasons for choosing where he/she places his/her students in a class</li> <li>• The teacher's position in active learning practices</li> <li>• The role of teachers in the creation of learner-centered accountability</li> <li>• Accountability efforts most effective in motivating teachers</li> </ul> <p>Advantages of learner-centered accountability in</p>	<p>The Role of teachers in the creation of learner-centered accountability</p>

	building the morale of teachers	
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## **APPENDIX C1**

### **OBSERVATION GUIDE (Checklist)**

#### **Part I: Classroom Curriculum Design**

Observe classroom curriculum content, process, product, and learning environment to see if they reflect national standards and present essential facts, skills and attitudes.

#### **Part II: Observing Instruction: Effective Teaching Practices** (Observe classroom

teaching methodology, learner participation, teacher's use of resources, classroom seating arrangement, assessment of students' work, and feedback : Explain how the teacher made lesson objectives clear to students; Describe instructional strategies the teacher uses that you found effective; Do all students participate in the lesson?

Explain how the teacher gives directions to the class; How does the teacher assess student learning during a lesson? What success-building strategies does the teacher use? How does the teacher close a lesson? Describe the teacher's use of resources; Give examples of how the teacher praises and encourages students; Observe and record some examples of how the teacher talks to the students and how the students talk to the teacher and to each other; Give examples of feedback the teacher gives students; How does the teacher respond to disruptive behavior? How does the teacher demonstrate high expectations for student learning? Identify the strategies the teacher uses to develop and promote positive relationships with students, among classmates, and with parents; What strategies does the teacher use to develop students' social skills? Describe any problem-solving or decision-making skills students display; Does the teacher regularly hold a class meeting? When and how is it conducted? Does the teacher schedule reflection time? How does the teacher reflect on classroom and student problems, situations, and experiences?)

**Part III: Observing Students' Assessment Practices** (e.g. Describe the teacher's grading scheme; Does the teacher issue progress reports? Do students have opportunities to impact their grades? Does the teacher use the computer to record grades?)

**PART IV: Observing Relevant Documents** (e.g. Management and Governance records, Quality Assurance and Standards records, School Financial records, School Development plans, Communication protocol (Access to information), Students' entry behavior trends for the last five years, Enrollment Trends for the last five years, Assessment records, Schemes of Work and Lesson plans, KCSE Results Analysis for the last five years).

## APPENDIX C2

### *Matrix for observation guide on school programs/activities*

<b>Observable Features</b>	<b>Signal/Observable Behaviors</b>	<b>Notes</b>
<b>School vision</b>	A shared vision of what a high-performing school is and does	It is this shared vision that drives every facet of school change. It is the one that drives constant improvement in the school. Everyone knows what the plan is and the vision is posted at every important point and evidenced by actions.
<b>Role of the Principal in the School</b>	The principal has the responsibility and authority to hold the school-improvement enterprise together, including day-to-day know-how, coordination, strategic planning, and communication	Lines of leadership for the school's improvement efforts are clear. The school leadership team has the responsibility to make things happen. The principal makes sure that assignments are completed. Leadership is shared, distributed, and sustained, and it is this that propels the school forward and preserves its institutional memory and purpose.
<b>The School Community</b>	<p>The school is a community of practice in which learning, experimentation, and time and opportunity for reflection are the norm</p> <p>The school includes families and community members in setting and supporting the school's path toward high performance</p>	<p>School leadership fosters and supports interdependent collaboration. Expectations of continuous improvement permeate the school culture and everyone's job is to learn.</p> <p>The administrators and teachers inform families and community members about the school's goals for student success and the students' responsibility for meeting those goals</p> <p>This is done through school programs such as class conferences with parents and guardians. The administrators and teachers</p>



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		engage all stakeholders in ongoing and reflective conversation, consensus building, and decision making about governance to promote school improvement done during forums such as (Parents-Teachers' Association) PTA meetings.
<b>The School and Its Constituency</b>	The school and constituency devote resources to content-rich professional development, which is connected to reaching and sustaining the school vision and increasing student achievement	
<b>The School Staff</b>	The school staff holds itself accountable for the students' success	<p>The school staff collects, analyzes, and uses data as a basis for making decisions. The administrators and faculty grapple with school-generated evaluation data to identify areas for more extensive and intensive improvement. The school staff regularly, intentionally and explicitly reconsiders its vision and practices when data call them into question. Professional development is intensive, of high quality, ongoing, and relevant secondary education.</p> <p>Teachers get professional support to improve instructional practice such as classroom visitations, peer coaching, demonstrations, lessons, and so on. These opportunities for learning increase knowledge and skills, challenge outmoded beliefs and practices, as well as provide support in</p>

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	<p>School staffs possess and cultivate the collective will to persevere; believing it is their business to produce increased achievement and enhanced development of all students</p> <p>The school staffs work with colleagues and universities to recruit, prepare, and mentor novice and experienced teachers</p>	<p>the classroom.</p> <p>The educators in the high performing schools “<i>see barriers as challenges not problems</i>” as mentioned in one of the group discussions with administrators from the high-performing schools</p> <p>Principal insists on having teachers who promote students' intellectual, social, emotional, physical, spiritual and ethical growth.</p>
<p><b>Expectations on Students' Academic Performance</b></p>	<p>All students are expected to meet high academic standards</p>	<p>Expectations are clear for students and parents. Prior to students beginning an assignment, teachers supply students with exemplars of high quality work that meet the performance standard or level (setting targets). Students know what high-quality work should be like. Students revise their work based on meaningful feedback until they meet or exceed the performance standard or level.</p>
<p><b>Curriculum, Instruction, and Assessment</b></p>	<p>Curriculum, instruction, and assessment, and appropriate academic interventions are aligned with high standards</p> <p>The curriculum emphasizes deep understanding of important concepts and</p>	<p>Teachers provide a coherent vision for what students should know and be able to do. Students, teachers and families understand what students are learning and why. In any class and at any time, students can explain the importance of what they are learning. The curriculum is rigorous, non-repetitive, and moves forward substantially. Work is demanding and steadily progresses.</p> <p>Teachers make connections across the disciplines to reinforce important concepts and assist students</p>

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<p>the development of essential skills</p>	<p>in thinking critically and applying what they have learned to solve real-world problems. All teachers incorporate academic and informational literacy into their course work (reading, writing, note taking, researching, listening, and speaking).</p>	
<p>Instructional strategies include a variety of challenging and engaging activities that are clearly related to the grade-level standards, concepts, and skills being taught</p>	<p>To reach students, all teachers draw from a common subset of instructional strategies and activities such as direct instruction, cooperative learning, project-based learning, simulations, hands-on learning, and integrated technology</p>	
<p>Teachers use a variety of methods to assess and monitor the progress of student learning (tests, quizzes, assignments, exhibitions, projects, performance tasks, portfolios).</p>	<p>All teachers use frequent assessments to benchmark key concepts and the achievement of their students. Students learn how to assess their own and others' work against the performance standards, expectations, or levels.</p>	
<p>The teachers are provided time and frequent opportunities to enhance student achievement by working with colleagues to deepen their knowledge and to improve their standards-based practice</p>	<p>Teachers collaborate in analyzing student achievement data and making decisions about rigorous curriculum, standards-based assessment practice, effective instructional methods, and evaluation of student work. The professional learning community employs coaching, mentoring, and peer observation as a means of continuous instructional improvement.</p>	
<p><b>Master Timetable</b></p>	<p>The teachers and master timetable provide students time to meet rigorous academic standards</p>	<p>Students are provided more time to learn the content, concepts or skills if needed. Flexible scheduling enables students to engage in academic interventions,</p>

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<b>Remedial Support To Students</b>	Teachers know what each student has learned and still needs to learn	extended projects, hands-on experiences, and inquiry-based learning. Students are provided the support they need to meet rigorous academic standards. Students have multiple opportunities to succeed and receive extra help as needed, such as: co-teaching or collaborative resource model, support and intervention classes, before- and after-school tutoring, and homework centers.
<b>Syllabus Coverage</b>	Timely syllabus coverage is a mandatory strategy	Timely syllabus coverage is a mandatory venture. The administrators in the high performing schools argued that <i>“students feel motivated when they approach examination period clear mind that they have adequately covered the syllabus.”</i>
<b>Seating Position</b>	<b>Level of students’ Participation</b>	<b>Signal/Notes</b>
Front	High	Active teacher-student interaction
Middle	Moderate	Reduced interaction
Back	Low	Passive students’ participation

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### APPENDIX C3

*Sample syllabus coverage strategy from one of the high performing schools*

FORM/TERM	I	II	III
I	40%	40%	20%
II	60% of F2 Work	40% of F2 Work	40% of F3 Work
III	60% of F3 Work	50% of F4 Work	30% of F4 Work
IV	20% of F4 Work	6 Complete Exams Revision	4 Complete Exams Revision

## APPENDIX D

### RELIABILITY COEFFICIENTS

#### TEACHERS' QUESTIONNAIRE

##### Reliability (Classroom Curriculum)

###### Reliability Statistics

Cronbach's Alpha	N of Items
.947	7

###### Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
Believe that all students are capable of achieving at high levels, and take responsibility for their learning, despite the circumstances in their lives and society that can make achievement difficult	10.53	26.390	.499	.963
Keep track of the ways I address individual learning styles and preferences	10.59	22.507	.916	.930
Recognize the importance of students' active participation and engagement in the learning process	10.88	23.110	.894	.932
Provide students with options and choices regarding how they are going to learn and how they are going to show their learning whenever possible	10.18	23.154	.821	.938
Use cooperative learning and grouping strategies to increase student participation	10.71	22.346	.842	.937
Construct tasks at different levels of difficulty	10.35	22.118	.913	.930
Make the task more or less familiar based on the proficiency of the learners' experiences or skills for the task	10.53	23.015	.867	.934

###### Scale Statistics

Mean	Variance	Std. Deviation	N of Items
12.29	31.346	5.599	7

## Reliability (Pedagogy)

### Reliability Statistics

Cronbach's Alpha	N of Items
.952	18

### Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
Vary direct instruction by small group needs	31.29	148.346	.597	.951
Vary the learning process depending upon how students learn	31.76	146.191	.828	.947
Provide graphic organisers to support note-taking	31.18	146.654	.792	.948
Vary the length of time a student may take to complete a task in order to provide additional support for struggling learners	31.29	145.971	.618	.951
Present information through both whole-to-part and part-to-whole	31.59	142.632	.838	.946
Provide a variety of avenues for student exploration of a topic or expression of learning	31.65	142.493	.832	.947
Provide broad access to a wide range of materials and technologies	31.35	146.493	.652	.950
Offer a choice of tasks, including student-designed options	31.29	149.096	.566	.951
Encourage investigation or application of key concepts and principles in student interest areas	31.59	146.757	.709	.949
Try to uncover student learning profiles	31.65	153.868	.464	.953
Balance presentations and learning experiences according to students' learning profiles	31.59	147.257	.687	.949
Encourage students to explore information and ideas through auditory, visual and kinesthetic modes	31.41	149.007	.663	.950
Balance varied perspectives on an issue or topic	31.41	147.257	.818	.947
Provide a safe learning environment that invites risk taking, encourages learning from mistakes, enables focused goal setting, and supports thoughtful learning	31.76	145.066	.814	.947
Arrange my classroom and structure lessons to increase student motivation	31.76	146.441	.815	.947
Create a learning environment with flexible spaces and learning options	31.59	146.507	.720	.949
Make sure there are places in the room to work quietly and without distraction as well as places that invite student collaboration	31.29	150.721	.581	.951
Set out clear guidelines for independent work that matches individual needs	31.53	145.765	.771	.948

### Scale Statistics

Mean	Variance	Std. Deviation	N of Items
33.35	164.368	12.821	18

## Reliability (Students' Assessment)

### Reliability Statistics

Cronbach's Alpha	N of Items
.939	15

### Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
Use pre-assessment to determine where students need to begin, and then match students with appropriate activities	25.71	93.471	.582	.938
Vary the ways in which student's learning is assessed (e.g. using a wide variety of assessments)	26.00	94.750	.691	.935
Create assessments that respond to different learning modes	25.88	90.985	.829	.931
Give choices about how students express their understanding	25.65	90.118	.744	.933
Provide challenge, variety and choice	25.94	91.309	.787	.932
Encourage students to express what they have learned in varied ways	25.82	91.279	.836	.931
Encourage students' participation in self-assessment, goal setting and monitoring of their progress toward mastery of learning objectives	26.18	93.029	.781	.933
Allow for varied working arrangements – alone or with a group	26.06	93.684	.573	.938
Provide assignments at varying degrees of difficulty to match student readiness	25.76	94.691	.498	.940
Work with students to develop rubrics that match and extend students' varied skill levels	25.71	94.346	.632	.936
Use a continuum: (For example, simple to complex, less independent to more independent)	25.82	94.029	.602	.937
On different levels with adjusted challenges	25.65	91.118	.741	.934
Active learning for all students	25.76	93.316	.614	.937
Engaging at all levels	25.94	90.184	.792	.932
Aligned to objectives and goals	26.00	91.125	.724	.934

### Scale Statistics

Mean	Variance	Std. Deviation	N of Items
27.71	105.721	10.282	15



## STUDENTS' QUESTIONNAIRE

### Reliability (Classroom Curriculum)

#### Reliability Statistics

Cronbach's Alpha	N of Items
.773	8

#### Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
Adjust classroom curriculum to reflect national standards	20.10	22.804	.476	.748
Arrange curriculum in line with subject objectives and goals	19.87	22.922	.568	.735
Vary curriculum to present essential facts, skills and attitudes	20.28	23.069	.487	.746
Vary classroom curriculum based on students' level of achievement	20.35	23.462	.401	.761
Ensure that curriculum is appropriate to students from diverse backgrounds	20.15	23.320	.410	.760
Provide tasks and learning choices at different levels of difficulty	20.24	23.422	.436	.755
Provide a variety of avenues for students' exploration of a topic and expression of learning	20.16	22.646	.513	.742
Provide broad access to a wide range of teaching and learning materials	20.31	21.668	.514	.742

#### Scale Statistics

Mean	Variance	Std. Deviation	N of Items
23.07	28.988	5.384	8

## Reliability (Students' Assessment)

### Reliability Statistics

Cronbach's Alpha	N of Items
.848	18

### Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
Hold workshops for students to create their own ideas and questions on a topic	46.57	91.929	.420	.842
Offer choice of tasks including student-designed options	46.71	93.011	.463	.840
Create effective student discussion groups that have students of the same abilities	46.48	98.795	.118	.857
Encourage students to "think out loud" when answering questions in class to help them reflect on how they arrived at answers	45.80	93.786	.415	.842
Ask questions of varying difficulty from simple factual recall to more analysis and synthesis	45.87	95.010	.387	.843
Encourage investigation or application of key concepts and principles in student interest areas	46.07	91.751	.494	.838
Connect content with students' cultures, experiences, and talents	46.59	89.898	.498	.838
Use centers of interest, interest groups, specialty groups/expert groups; Teachers always choices within an area of study or topic	46.45	94.428	.364	.844
Work to uncover student diverse learning profiles and balance presentations and learning experiences	46.26	93.433	.441	.841
Create a learning environment with flexible spaces and learning options	46.07	90.444	.552	.835
Encourage students to explore information and ideas through visual, auditory, and kinesthetic (VAK) modes	46.61	90.921	.493	.838
Allow students to demonstrate what they have learned in creative ways (posters, drawings, diagrams, mind-maps, poems, etc.)	46.41	89.691	.502	.838
Show students how to take notes by using guided notes for them to model	45.99	92.855	.440	.841
Foster a cooperative learning environment that is meant to benefit students from diverse ethnic/cultural backgrounds	46.20	91.293	.520	.837
Create problem-based learning environments in the classroom allowing students to explore the problem, find solutions, and share their conclusions	46.07	91.475	.501	.838
Ensure a choice of competitive, cooperative and independent learning experiences	46.03	93.592	.437	.841
Balance varied perspectives on an issue or topic	46.08	93.953	.508	.839
Provide authentic learning opportunities in various intelligence or talent areas	46.63	90.137	.537	.836

### Scale Statistics

Mean	Variance	Std. Deviation	N of Items
48.99	102.869	10.142	18

## Reliability (Pedagogy)

### Reliability Statistics

Cronbach's Alpha	N of Items
.875	16

### Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
Teachers are always engaged as designers of performance assessments and skilled assessors of students' performance	42.68	81.907	.469	.869
Assessment for learning is always ongoing	42.43	82.140	.520	.867
Teachers always allow learners to do self-assessment during the learning and receive specific, descriptive feedback about their learning	42.90	81.186	.510	.867
Teachers always use performance assessments that are responsive to emerging student needs	42.95	80.661	.531	.867
Instruction is continually adjusted and revised on the basis of assessment results	42.69	82.559	.470	.869
Students are always given opportunity to adjust their learning strategies and make timely corrections in response to targeted feedback from their teachers	42.77	78.889	.604	.863
Students' assessment always leads to increased teacher collaboration, and increased capacity to make mid-term corrections based on constructive data	42.92	79.967	.553	.866
Teachers usually adjust instruction for individual students based on need	42.86	81.755	.440	.871
Teachers usually analyze which students need more practice	42.71	80.899	.491	.868
Teachers always reflect on the effectiveness of their teaching practices	42.77	80.994	.530	.867
Teachers always confer with students regarding their own assessment might	43.03	82.468	.476	.869
Students are always given opportunity to determine the qualities of good performance	42.70	79.533	.555	.865
Teachers always share their teaching-learning intentions with their students	42.73	81.427	.486	.869
Assessments are always developed by teams of teachers of particular classes and subject areas	42.76	81.437	.461	.870
Teachers ensure rich involvement of the learners in monitoring on-going learning, collecting and presenting evidence of them learning	42.85	80.152	.554	.866
Students receive constructive timely feedback and corrective explanation on their mistakes from the teachers	42.78	78.579	.568	.865

### Scale Statistics

Mean	Variance	Std. Deviation	N of Items
45.63	91.294	9.555	16

## APPENDIX E

### LETTER FOR PILOT STUDY



**OFFICE OF THE DIRECTOR OF GRADUATE  
STUDIES AND RESEARCH**

**UNIVERSITY OF EASTERN AFRICA, BARATON**  
P. O. Box 2500, Eldoret, Kenya

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30 May 2018

**THE PRINCIPAL**  
Karura SDA Church School  
Nairobi, Kenya


**Re: PILOT STUDY OF RESEARCH INSTRUMENT**

Mr. Martin A. Akoto is a graduate student pursuing the degree **Doctor of Philosophy in Education (Curriculum and Teaching)** at the University of Eastern Africa, Baraton. He is currently writing his thesis entitled *Educators' Accountability for Learning: A Framework for Equity and Improved Students' Achievement in West Kenya Union Conference Secondary Schools*.

To establish the reliability of his research instrument, Mr. Akoto is conducting a pilot study. Kindly allow him to administer the questionnaires to students and teachers in your school.

Any assistance you will grant him will be greatly appreciated. May God richly bless you in all your undertakings.

Sincerely yours,

  
Prof. Elizabeth M. Role, PhD  
Director

Cc: Chair, Department of Education  
Office File



## APPENDIX F

### ETHHICS CLEARANCE LETTER



**OFFICE OF THE DIRECTOR OF GRADUATE STUDIES  
AND RESEARCH**

**UNIVERSITY OF EASTERN AFRICA, BARATON**

P. O. Box 2500-30100, Eldoret, Kenya, East Africa

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June 7, 2018

Martin A. Akoto  
School of Education, Humanities and Social Sciences  
University of Eastern Africa, Baraton

Dear Martin,

Re: ETHICS CLEARANCE FOR RESEARCH PROPOSAL (REC: UEAB/4/6/2018)

Your research proposal entitled "*Educators' Accountability for learning: A framework for Equity and Improved Students' Achievement in West Kenya Union Conference Secondary Schools*" was discussed by the Research Ethics Committee (REC) of the University and your request for ethics clearance was *granted approval*.

This approval is for one year effective June 7, 2018 until June 6, 2019. For any extension beyond this time period, you will need to apply to this committee one month prior to expiry date.

Note that you will need a research permit from the National Commission for Science, Technology, and Innovation (NACOSTI) and clearance from the study site before you start gathering your data.

We wish you success in your research.

Sincerely yours,

A handwritten signature in black ink, appearing to read "Jackie K. Obey".

Prof. Jackie K. Obey, PhD  
Chairperson, Research Ethics Committee



## APPENDIX G

### INSTITUTIONAL INTRODUCTION LETTER



**OFFICE OF THE DIRECTOR OF GRADUATE  
STUDIES AND RESEARCH**

UNIVERSITY OF EASTERN AFRICA, BARATON  
P. O. Box 2500, Eldoret, Kenya

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12 June 2018

National Council for Science, Technology, and Innovation  
P.O. Box 30623-00100  
Nairobi, Kenya

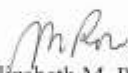
Dear Sir/Madam:

**Mr. Martin A. Akoto** is a graduate student pursuing the degree **Doctor of Philosophy in Education (Curriculum and Teaching)** at the University of Eastern Africa, Baraton. He is currently writing his thesis entitled *Educators' Accountability for Learning: A Framework for Equity and Improved Students' Achievement in West Kenya Union Conference Secondary Schools*.

I am asking you to please allow him to conduct his research in Adventist secondary schools in West Kenya. The research permit you will grant him will surely facilitate his data-gathering.

Any assistance you will grant him will be greatly appreciated. May God richly bless you in all your undertakings.

Sincerely yours,

  
Prof. Elizabeth M. Role, PhD  
Director

Cc: Chair, Department of Education  
Office File



A SEVENTH-DAY ADVENTIST INSTITUTION OF HIGHER LEARNING  
CHARTERED 1991

# RESEARCH AUTHORIZATION LICENCE



## NATIONAL COMMISSION FOR SCIENCE, TECHNOLOGY AND INNOVATION

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When replying please quote

NACOSTI, Upper Kabete,  
Off Waiyaki Way  
P.O. Box 30623-00100  
NAIROBI-KENYA

Ref. No. NACOSTI/P/19/35247/28574

Date: 6<sup>th</sup> March, 2019

Martin Audi Akoto  
University of Eastern Africa, Baraton,  
P.O. Box 2500-30100  
ELDORET.

### RE: RESEARCH AUTHORIZATION

Following your application for authority to carry out research on "*Educators accountability for learning a framework for equity and improved students achievements*," I am pleased to inform you that you have been authorized to undertake research in **selected Counties** for the period ending **6<sup>th</sup> March, 2020**.

You are advised to report to **the County Commissioners and the County Directors of Education, selected Counties** before embarking on the research project.

Kindly note that, as an applicant who has been licensed under the Science, Technology and Innovation Act, 2013 to conduct research in Kenya, you shall deposit a **copy** of the final research report to the Commission within **one year** of completion. The soft copy of the same should be submitted through the Online Research Information System.

  
**DR. MOSES RUGUTT, PHD, OGW**  
**DIRECTOR GENERAL/CEO**

Copy to:

The County Commissioners  
Selected Counties.

The County Directors of Education  
Selected Counties.

# APPENDIX H


## RESEARCH AUTHORIZATION LICENCE

**THIS IS TO CERTIFY THAT:**  
**MR. MARTIN AUDI AKOTO**  
**of UNIVERSITY OF EASTERN AFRICA,**  
**BARATON, 0-40100 KISUMU, has been**  
**permitted to conduct research in**  
**Bungoma , Busia , Homabay ,**  
**Kakamega , Kisumu , Migori , Siaya ,**  
**Transzoia , Turkana , Uasin-Gishu ,**  
**Vihiga , Westpokot Counties**

**on the topic: EDUCATORS**  
**ACCOUNTABILITY FOR LEARNING A**  
**FRAMEWORK FOR EQUITY AND**  
**IMPROVED STUDENTS ACHIEVEMENTS**

**for the period ending:**  
**6th March,2020**

**Permit No : NACOSTI/P/19/35247/28574**  
**Date Of Issue : 6th March,2019**  
**Fee Received :Ksh 2000**



**Applicant's Signature**

**Director General**  
**National Commission for Science,**  
**Technology & Innovation**



## APPENDIX I

### RESEARCH AUTHORIZATION LETTERS



**NATIONAL COMMISSION FOR SCIENCE,  
TECHNOLOGY AND INNOVATION**

Telephone: +254-20-2213471,  
2241349,3310571,2219420  
Fax: +254-20-318245,318249  
Email: [dg@nacosti.go.ke](mailto:dg@nacosti.go.ke)  
Website : [www.nacosti.go.ke](http://www.nacosti.go.ke)  
When replying please quote

NACOSTI, Upper Kabete  
Off Waiyaki Way  
P.O. Box 30623-00100  
NAIROBI-KENYA

Ref No. NACOSTI/P/19/35247/28574

Date: 6<sup>th</sup> March, 2019

Martin Audi Akoto  
University of Eastern Africa, Baraton,  
P.O. Box 2500-30100  
ELDORET.

**RE: RESEARCH AUTHORIZATION**

Following your application for authority to carry out research on "*Educators accountability for learning a framework for equity and improved students achievements,*" I am pleased to inform you that you have been authorized to undertake research in **selected Counties** for the period ending **6<sup>th</sup> March, 2020**.

You are advised to report to **the County Commissioners and the County Directors of Education, selected Counties** before embarking on the research project.

Kindly note that, as an applicant who has been licensed under the Science, Technology and Innovation Act, 2013 to conduct research in Kenya, you shall deposit a **copy** of the final research report to the Commission within **one year** of completion. The soft copy of the same should be submitted through the Online Research Information System.

  
**DR. MOSES RUGUTT, PHD, OGW**  
**DIRECTOR GENERAL/CEO**

Copy to:

The County Commissioners  
Selected Counties.

The County Directors of Education  
Selected Counties.



## THE PRESIDENCY

MINISTRY OF INTERIOR AND COORDINATION OF NATIONAL GOVERNMENT

Telephone: Kisumu 2022219/Fax: 2022219  
Email: ckisumucounty@gmail.com

COUNTY COMMISSIONER  
KISUMU COUNTY  
P.O. BOX 1912-40100  
KISUMU

Ref: CC/KC/ED/3/VOL.4/60

Date: 20<sup>th</sup> March, 2019

All Deputy County Commissioners  
**KISUMU COUNTY**

### **RESEARCH AUTHORIZATION: MARTIN AUDI AKOTO**

Reference is made to a letter from National Commission for Science Technology and Innovation ref: NACOSTI/P/19/35247/28574 dated 6<sup>th</sup> March 2019 on the above subject matter.

The above named is a student of University of East Africa, Baraton. He has been authorized to carry out a research on "*Educators accountability for learning a framework for equity and improved students achievements*". The research ends on 6<sup>th</sup> March, 2020.

Kindly accord him any assistance that he may need.

**P.A. DOLLA (MBS)**  
**COUNTY COMMISSIONER**  
**KISUMU COUNTY**

Copy to:

Martin Audi Akoto  
University of Africa, Baraton  
P.O. Box 2500-30100  
EDLDORRET



REPUBLIC OF KENYA

**MINISTRY OF EDUCATION**  
**State Department of Early Learning & Basic Education**

Telegrams: "schooling", Kisumu  
Telephone: Kisumu 057 - 2024599  
Email: countyeducation.kisumu@gmail.com

COUNTY DIRECTOR OF EDUCATION  
KISUMU COUNTY  
PROVINCIAL HEADQUARTERS NYANZA  
3<sup>RD</sup> FLOOR  
P.O. BOX 575 - 40100  
KISUMU

**When replying please quote**

REF: CDE/KSM/GA/19/3A/V.II/148

20<sup>th</sup> March, 2019

**TO WHOM IT MAY CONCERN**

**RE: RESEARCH AUTHORIZATION**  
**MARTIN AUDI AKOTO - NACOSTI/P/19/35247/28574**

The above named is from University of Eastern Africa, Baraton.

This is to certify that he has been granted authority to carry out research on "*Educators accountability for learning a framework for equity and improved students achievements in selected counties*" for the period ending 6<sup>th</sup> March, 2020.

Any assistance accorded to him to accomplish the assignment will be highly appreciated.

EVANS O. MOSE  
For: COUNTY DIRECTOR OF EDUCATION  
KISUMU COUNTY

FOR: COUNTY DIRECTOR OF  
EDUCATION - KISUMU



## MINISTRY OF EDUCATION

### STATE DEPARTMENT OF EARLY LEARNING & BASIC EDUCATION

Telegrams: "SCHOOLING" Homa Bay  
Telephone  
When replying please quote  
[cdehomabay@gmail.com](mailto:cdehomabay@gmail.com)

COUNTY DIRECTOR OF EDUCATION  
HOMA BAY COUNTY  
P.O BOX 710  
HOMA BAY  
DATE: 21<sup>ST</sup> MARCH, 2019

REF: MOEST/CDE/HBC/ADM/11/VOL.2/139

MARTIN AUDI AKOTO  
UNIVERSITY OF EASTERNAFRICA, BARATON  
P.O. BOX 2500 – 30100  
ELDORET.


#### RE: RESEARCH AUTHORIZATION.

Following your application for authority to carry out research on "***Educators accountability for learning a framework for equity and improved students achievements,***" in Homabay County for the period ending 6<sup>th</sup> March, 2020.

I am pleased to inform you that you have been authorized to undertake research in Homa Bay County for the period ending **6<sup>th</sup> March, 2020.**

Please submit a copy of your findings both in soft and hard copies to this office.

Thank you in advance.

  
COUNTY DIRECTOR OF EDUCATION  
HOMA BAY COUNTY  
P.O. Box 710 - 40200, HOMA BAY  
[shhemohay@gmail.com](mailto:shhemohay@gmail.com)  
**SHEM M. OMBONYO**  
**FOR: COUNTY DIRECTOR OF EDUCATION**  
Cc.

1. County Commissioner  
Homa Bay County.





## OFFICE OF THE PRESIDENT

MINISTRY OF INTERIOR AND COORDINATION OF NATIONAL GOVERNMENT

Telephone: Homa Bay 22104 or 22105/Fax: 22491  
E-mail: [cc\\_homabay@yahoo.com](mailto:cc_homabay@yahoo.com)  
When replying please quote

COUNTY COMMISSIONER  
HOMA BAY COUNTY  
P. O. BOX 1 – 40300  
**HOMA BAY**

REF NO: EDUC.12/IVOL.IV/160

21<sup>st</sup> March, 2019

Deputy County Commissioner  
**RACHUONYO SOUTH**

### RE: RESEARCH AUTHORIZATION – MARTIN AUDI AKOTO

This is to inform you that the above named person has been authorized to carry out a research on "**Educators accountability for learning a framework for equity and improved students achievements,**" in Homabay County for the period ending 6<sup>th</sup> March, 2020.

Kindly accord him the necessary assistance.

G.O. OTHINA  
For: COUNTY COMMISSIONER  
**HOMA BAY COUNTY.**

Cc

County Director of Education  
**HOMABAY COUNTY**

- ✓ Martin Audi Akoto  
University of Eastern Africa, Baraton  
P.O BOX 2500 – 3100  
**ELDORET**

---

*\*Please note our e-mail address [cc\\_homabay@yahoo.com](mailto:cc_homabay@yahoo.com)*



**THE PRESIDENCY**  
**MINISTRY OF INTERIOR AND COORDINATION OF**  
**NATIONAL GOVERNMENT**

Telephone: (059) 20511  
FAX (059)20381  
Email:  
countycommissionermigori@yahoo.com

**OFFICE OF THE COUNTY COMMISSIONER**  
MIGORI COUNTY  
P.O. BOX 2 - 40400  
**SUNA- MIGORI**

**When replying please quote**

**Ref. No: CC ED.12/19B VOL.II/351**

**Date: 22<sup>nd</sup> March, 2019**

**TO WHOM IT MAY CONCERN**

**RE: RESEARCH AUTHORIZATION**

Martin Audi Akoto NACOSTI/P/19/35247/28574 a student at University of Eastern Africa, Baraton has been authorized to carry out research on ***'Educators accountability for learning a framework for equity and improved students achievements in Awendo and Kuria West sub counties, Migori County'*** for the period ending 6<sup>th</sup> March, 2020.

Accord him the necessary assistance.

  
DENNIS N. MUTISO  
FOR: COUNTY COMMISSIONER  
**MIGORI COUNTY**



**CC**

The County Director of Education  
**MIGORI COUNTY**



**MINISTRY OF EDUCATION**  
**State Department of Early Learning and Basic Education**

Telephone: (059) 20420  
Fax: 05920420  
When replying please  
quote

COUNTY DIRECTOR OF EDUCATION  
MIGORI COUNTY  
P.O. Box 466-40400  
SUNA - MIGORI

REF: MIG/CDE/ADMN/73/VOL.II 29

DATE: 28<sup>th</sup> February, 2019

**Martin Audi Akoto**  
University of Eastern Africa, Baraton  
P.O. Box 2500 - 30100  
ELDORET

**RE: RESEARCH AUTHORIZATION**

Following your application for authority to carry out research on "Educators' Accountability for Learning a Framework for Equity and Improved Students Achievement", I am pleased to inform you that you have been authorized to undertake research in **Migori County** for a period ending **6<sup>th</sup> March, 2020**.

On completion of the research, you are expected to submit one hard copy and a soft copy of the research report/Thesis to this office.

Thank you.

*Pp*

FOR: COUNTY DIRECTOR OF EDUCATION  
MIGORI COUNTY  
P. O. Box 466 - 40400, SUNA,  
MIGORI

**Elizabeth Otieno (Mrs.)**  
County Director of Education  
**MIGORI COUNTY**

**REPUBLIC OF KENYA**



**THE PRESIDENCY  
MINISTRY OF INTERIOR & CO-ORDINATION OF  
NATIONAL GOVERNMENT**

Office Mobile No: 0707 085260  
Email-cckakamega12@yahoo.com

When replying please quote

Ref No: ED/12/1/VOL.IV/103

COUNTY COMMISSIONER  
KAKAMEGA COUNTY  
P O BOX 43-50100  
KAKAMEGA.

Date: 25/03/2019

**MARTIN AUDI AKOTO  
UNIVERSITY OF EASTERN AFRICA, BARATON,  
P O BOX 2500-30100  
ELDORET**

**RE: RESEARCH AUTHORIZATION**

Following your authorization vide letter Ref: NACOSTI/P/19/35247/28574 dated 6<sup>th</sup> March, 2019 by NACOSTI to undertake research on "*Educators accountability for learning a framework for equity and improved students achievements.*" I am pleased to inform you that you have been authorized to carry out the research on the same.

A handwritten signature in blue ink, appearing to read 'V. Cheron', written over a circular stamp or seal.

**V. CHERONO  
FOR: COUNTY COMMISSIONER  
KAKAMEGA COUNTY**





**MINISTRY OF EDUCATION  
STATE DEPARTMENT OF EARLY LEARNING AND BASIC EDUCATION**

Telephone: 056 – 30411  
Fax : 056 – 31307  
E-mail : [wespropde@yahoo.com](mailto:wespropde@yahoo.com)  
When replying please quote

COUNTY DIRECTOR OF EDUCATION  
KAKAMEGA COUNTY  
P. O. BOX 137 - 50100  
KAKAMEGA

**RE:**

**REF: KAK/C/GA/29/17 IV/144**

**25<sup>th</sup> March, 2019**

Martin Audi Akoto  
University of Eastern Africa, Baraton  
P. O. Box 2500 – 30100  
**ELDORET**

**RE: RESEARCH AUTHORIZATION**

The above has been granted permission by National Commission for Science, Technology and Innovation vide their letter Ref: NACOSTI/P/19/35247/28574 dated 6<sup>th</sup> March, 2019 to carry out research on **"Educators accountability for learning a framework for equity and improved students achievements Kakamega County among others counties"**, for a period ending **6th March, 2020**.

Please accord him any necessary assistance he may require.

**DICKSON O. OGONYA**  
COUNTY DIRECTOR OF EDUCATION  
KAKAMEGA COUNTY





## THE PRESIDENCY

Telephone: 054 – 30020  
Fax No: 054 – 30030

MINISTRY OF INTERIOR  
AND  
COORDINATION OF  
NATIONAL GOVERNMENT

COUNTY COMMISSIONER'S OFFICE  
TRANS NZOIA COUNTY  
P.O BOX 11 - 30200  
**KITALE**

E-mail: [cctransnzoiacounty@yahoo.com](mailto:cctransnzoiacounty@yahoo.com)  
When replying please quote:

25<sup>th</sup> Mach, 2019

TNZN/CNF/ED.12/2/VOL.VOL. 111/ (101)

### TO WHOM IT MAY CONCERN

### RESEARCH AUTHORIZATION

This is to inform you that **Martin Audi Akoto** of **University of Eastern Africa, Baraton**, has been authorized by National Commission for Science, Technology and Innovation to carry out research on **“Educators accountability for learning a framework for equity and improved students achievements,”** in **Trans Nzoia County**, for the period ending **6<sup>th</sup> March, 2020**.

Please accord him the necessary assistance.

**BEATRICE BIKEYO**  
**FOR: COUNTY COMMISSIONER**  
**TRANS NZOIA COUNTY**

COUNTY COMMISSIONER  
TRANS-NZOIA COUNTY  
P. O. Box 11 - 30200 KITALE



REPUBLIC OF KENYA  
Ministry of Education  
State Department of Early Learning and Basic Education

Telegrams: .....  
Telephone: Kitale 054-31653 - 30200  
Fax: 054-31109  
Email: [transzoiacde@gmail.com](mailto:transzoiacde@gmail.com)  
When replying please quote:

County Director of Education  
Trans Nzoia  
P.O. Box 2024 - 30200  
KITALE.

Ref. No. TNZ/CNT/CDE/R.GEN/1/VOL.II/9

Date: 25<sup>th</sup> March, 2019

TO WHOM IT MAY CONCERN

**RE: RESEARCH AUTHORIZATION – MARTIN AUDI AKOTO**

This office acknowledges receipt of a letter on the above subject Ref: NACOSTI/P/19/35247/28574 dated 6<sup>th</sup> March, 2019

Martin Audi Akoto, a student at University of Eastern Africa, Baraton is authorized to carry out research on “Educators accountability for learning a framework for equity and improved students achievements” in Trans-Nzoia County - Kenya for a period ending 6<sup>th</sup> March, 2020

The purpose of the letter is to request you to accord him the necessary assistance:

  
DR. S. W. MAINA (PhD)

COUNTY DIRECTOR OF EDUCATION  
TRANS-NZOIA COUNTY.

COUNTY DIRECTOR OF EDUCATION  
TRANS - NZOIA COUNTY  
P. O. Box 2024 - 30200,  
KITALE.



**NATIONAL COMMISSION FOR SCIENCE,  
TECHNOLOGY AND INNOVATION**

Telephone: +254-20-2213471,  
2241349, 3118571, 2219420  
Fax: +254-20-318245, 318249  
Email: dg@nacosti.go.ke  
Website: www.nacosti.go.ke  
When replying please quote

NACOSTI, Upper Kabete  
Off Wanyaki Way  
P.O. Box 39623-00100  
NAIROBI-KENYA

Ref No **NACOSTI/P/19/35247/28574**

Date **6<sup>th</sup> March, 2019**

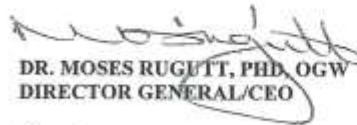
Martin Audi Akoto  
University of Eastern Africa, Baraton,  
P.O. Box 2500-30100  
**ELDORET.**

**RE: RESEARCH AUTHORIZATION**

Following your application for authority to carry out research on *“Educators accountability for learning a framework for equity and improved students achievements,”* I am pleased to inform you that you have been authorized to undertake research in **selected Counties** for the period ending **6<sup>th</sup> March, 2020.**

You are advised to report to the **County Commissioners and the County Directors of Education, selected Counties** before embarking on the research project.

Kindly note that, as an applicant who has been licensed under the Science, Technology and Innovation Act, 2013 to conduct research in Kenya, you shall deposit a **copy** of the final research report to the Commission within **one year** of completion. The soft copy of the same should be submitted through the Online Research Information System.

  
**DR. MOSES RUGUTT, PHD, OGW**  
**DIRECTOR GENERAL/CEO**

  
**COUNTY COMMISSIONER**  
**WASIN GISHILU COUNTY**  
**26/3/2019**

Copy to:

The County Commissioners  
Selected Counties.

The County Directors of Education  
Selected Counties.

REPUBLIC OF KENYA



**MINISTRY OF EDUCATION**  
STATE DEPARTMENT OF BASIC EDUCATION

Mobile : **0721820731**  
Email: [cdeuasingishucounty@yahoo.com](mailto:cdeuasingishucounty@yahoo.com)  
: [cdeuasingishucounty@gmail.com](mailto:cdeuasingishucounty@gmail.com)  
When replying please quote:

County Director of Education,  
Uasin Gishu County,  
P.O. Box 9843-30100,  
**ELDORET.**

Ref: No. MOEST/UGC/TRN/9/VOL III/35

26<sup>TH</sup> MARCH.2019

Martin Audi Akoto  
University of Eastern Africa, Baraton  
P.O Box 2500-30100  
**NAIROBI**

**RE: RESEARCH AUTHORIZATION**

This office has received a request from your Institution to authorize you to carry out research on *"Educators accountability for learning a framework for equity and improved student achievements,"* Within Uasin Gishu County.

We wish to inform you that the request has been granted until **6<sup>th</sup> March, 2020**. The authorities concerned are therefore requested to give you maximum support.

We take this opportunity to wish you well during this data collection.

FOR COUNTY DIRECTOR OF EDUCATION  
UASIN GISHU COUNTY  
P.O. BOX 9843, ELDORET  
Tel: 0719-127 212/ 053-2063342

  
**Michael Psinen**  
For: COUNTY DIRECTOR OF EDUCATION  
**UASIN GISHU**



**THE PRESIDENCY**  
**MINISTRY OF INTERIOR AND COORDINATION OF NATIONAL GOVERNMENT**

Tel: 053 5252621, 5252003, Kapsabet  
Fax No. 053 – 5252503  
E-mail:  
nandicountycommissioner@gmail.com  
When replying, please quote



County Commissioner's Office,  
Nandi County  
P.O. Box 30,  
**KAPSABET.**

Ref. No. NC.EDU/4/1/VOL.V(235)

26<sup>th</sup> March, 2019

Martin Audi Akoto,  
University of Eastern Africa, Baraton,  
P.O. Box 2500 – 30100,  
**NAIROBI.**

**RE: RESEARCH AUTHORIZATION**

This is in reference to letter No. NACOSTI/P/19/35247/28574 dated 6<sup>th</sup> March, 2019 from the Director General/CEO, National Commission for Science, Technology and Innovation on the above subject matter.

You are hereby authorized to conduct a research on **“Educators accountability for learning a framework for Equity and improved students achievements”** for a period ending **6<sup>th</sup> March, 2020.**

Wishing you all the best.

A handwritten signature in black ink, appearing to be 'SK'.



SAMUEL KIMITI, MBS  
COUNTY COMMISSIONER,  
**NANDI.**

REPUBLIC OF KENYA



MINISTRY OF EDUCATION  
STATE DEPARTMENT FOR EARLY LEARNING AND BASIC EDUCATION

Email: cdenandicounty@yahoo.com  
When replying please quote

Ref: NDI/CDE/RESEARCH/1/VOL.II/156

COUNTY DIRECTOR OF EDUCATION,  
NANDI  
P.O BOX 36 – 30300,  
KAPSABET.

26<sup>th</sup> March 2019

Martin Audi Akoto  
University of Eastern Africa, Baraton,  
P.O Box 2500-30100,  
**ELDORET.**

**RE: RESEARCH AUTHORIZATION.**

Reference is made to the National Commission for Science,  
Technology and Innovation's letter Ref: **No.**  
**NACOSTI/P/19/35247/28574** dated **6<sup>th</sup> March, 2019.**

The above named person has been granted permission by the  
County Director of Education to carry out research on  
***“Educators accountability for learning a framework  
for equity and improved students achievements in  
Adventist Secondary schools in west Kenya.*** for the period  
ending **6<sup>th</sup> March, 2020.**

Kindly provide him all necessary support he requires.

  
Clare Kusa

**COUNTY DIRECTOR OF EDUCATION  
NANDI COUNTY  
P.O. BOX 36-30300  
KAPSABET**

For: County Director of Education,  
**NANDI COUNTY.**

## APPENDIX J

### LETTERS FOR DATA GATHERING

West Kenya Union Conference  
of Seventh-day Adventists<sup>®</sup>

Secretariat

P.O. Box 7747 - 40100  
Kisumu, Kenya.  
Tel: +254-786353569/+254-720535746  
E-mail: [info@wku.adventist.org](mailto:info@wku.adventist.org)  
Website: [wku.adventist.org](http://wku.adventist.org)



June 19, 2018

Mr. Martin Akoto

Dear Martin,

**RE: REQUEST FOR PERMISSION TO GATHER RESEARCH DATA**

Receive our Christian greetings in Jesus name.

I refer to your request dated June 12, 2018 the subject referred to above.

This letter is written to inform you that your request to conduct research within West Kenya Union Conference is approved and forwarded to the Conferences as information.

Wishing you success in your research.

Sincerely,

Pr. Japheth Ochorokodi  
**EXECUTIVE SECRETARY**





**OFFICE OF THE DIRECTOR OF GRADUATE  
STUDIES AND RESEARCH**  
UNIVERSITY OF EASTERN AFRICA, BARATON  
P. O. Box 2500, Eldoret, Kenya

12 June 2018

*Received and accepted*

**THE PRINCIPAL**  
Kamagambo High School

**Re: REQUEST FOR PERMISSION TO GATHER RESEARCH DATA**

Mr. Martin A. Akoto is a graduate student pursuing the degree **Doctor of Philosophy in Education (Curriculum and Teaching)** at the University of Eastern Africa, Baraton. He is currently writing his thesis entitled *Educators' Accountability for Learning: A Framework for Equity and Improved Students' Achievement in West Kenya Union Conference Secondary Schools*.

Kindly allow him to administer his questionnaires to students and teachers in your school. He will conduct interviews with you and selected teachers. He will also observe classes during his visit to gather data.

Any assistance you will grant him will be greatly appreciated. May God richly bless you in all your undertakings.

Sincerely yours,

Prof. Elizabeth M. Role, PhD  
Director



Cc: Chair, Department of Education  
Office File



**OFFICE OF THE DIRECTOR OF GRADUATE  
STUDIES AND RESEARCH  
UNIVERSITY OF EASTERN AFRICA, BARATON  
P. O. Box 2500, Eldoret, Kenya**

12 June 2018



**Pastor Samuel Mosoba**  
Education Director  
Ranen Conference

**Re: REQUEST FOR PERMISSION TO GATHER RESEARCH DATA**

**Mr. Martin A. Akoto** is a graduate student pursuing the degree **Doctor of Philosophy in Education (Curriculum and Teaching)** at the University of Eastern Africa, Baraton. He is currently writing his thesis entitled *Educators' Accountability for Learning: A Framework for Equity and Improved Students' Achievement in West Kenya Union Conference Secondary Schools*.

Kindly allow him to gather his research data through questionnaires, interviews, and observation of classes in secondary schools in your conference. He will gather his data within June and July 2018.

Any assistance you will grant him will be greatly appreciated. May God richly bless you in all your undertakings.

Sincerely yours,

  
Prof. Elizabeth M. Role, PhD  
Director



Cc: Chair, Department of Education  
Office File



**OFFICE OF THE DIRECTOR OF GRADUATE STUDIES AND RESEARCH**

**UNIVERSITY OF EASTERN AFRICA, BARATON**  
P. O. Box 2500, Eldoret, Kenya

12 June 2018



**THE PRINCIPAL**  
Ranem Adventist School

**Re: REQUEST FOR PERMISSION TO GATHER RESEARCH DATA**

Mr. Martin A. Akoto is a graduate student pursuing the degree **Doctor of Philosophy in Education (Curriculum and Teaching)** at the University of Eastern Africa, Baraton. He is currently writing his thesis entitled *Educators' Accountability for Learning: A Framework for Equity and Improved Students' Achievement in West Kenya Union Conference Secondary Schools*.

Kindly allow him to administer his questionnaires to students and teachers in your school. He will conduct interviews with you and selected teachers. He will also observe classes during his visit to gather data.

Any assistance you will grant him will be greatly appreciated. May God richly bless you in all your undertakings.

Sincerely yours,

  
Prof. Elizabeth M. Role, PhD  
Director

Cc: Chair, Department of Education  
Office File





**OFFICE OF THE DIRECTOR OF GRADUATE  
STUDIES AND RESEARCH**  
UNIVERSITY OF EASTERN AFRICA, BARATON  
P. O. Box 2500, Eldoret, Kenya

12 June 2018



**THE PRINCIPAL**  
Nyabikaye Adventist School

**Re: REQUEST FOR PERMISSION TO GATHER RESEARCH DATA**

Mr. Martin A. Akoto is a graduate student pursuing the degree **Doctor of Philosophy in Education (Curriculum and Teaching)** at the University of Eastern Africa, Baraton. He is currently writing his thesis entitled *Educators' Accountability for Learning: A Framework for Equity and Improved Students' Achievement in West Kenya Union Conference Secondary Schools*.

Kindly allow him to administer his questionnaires to students and teachers in your school. He will conduct interviews with you and selected teachers. He will also observe classes during his visit to gather data.

Any assistance you will grant him will be greatly appreciated. May God richly bless you in all your undertakings.

Sincerely yours,

  
Prof. Elizabeth M. Role, PhD  
Director

Cc: Chair, Department of Education  
Office File



A SEVENTH-DAY ADVENTIST INSTITUTION OF HIGHER LEARNING  
CHARTERED 1991

**Greater Rift Valley Conference  
of Seventh-day Adventists®**

P.O. Box 3059, Eldoret 30100, Kenya  
Rivatex/Kipkaren Road,  
Tel: +254-020-2029356  
Fax: +254-020-2096356  
Email: info@grvc.adventist.or.ke  
Website: www.grvc.adventist.or.ke



June 20, 2018

Dear Elder Martin Akoto,

**RE: PERMISSION TO GATHER RESEARCH DATA**

Following your request through the Office of the Director of Graduate Studies at University of Eastern Africa -Baraton for permission to gather research data in our Adventist Schools within Greater Rift Valley Conference;

You are hereby **granted the permission and free access** to our schools within the territory namely Segero Adventist National School, Segero Adventist School-Eldoret, Segero Heralds Adventist School, Segero Baraton Adventist School and Kimolwet SDA Secondary School

We wish you success in your research and God bless you abundantly

Yours Faithfully,  
SEVENTH-DAY ADVENTIST CHURCH – GRVC

Mr. Paul Chesilim  
**EDUCATION DIRECTOR**



Cc. GRVC -Executive Secretary  
Principals -Adventist Schools



**OFFICE OF THE DIRECTOR OF GRADUATE  
STUDIES AND RESEARCH**  
UNIVERSITY OF EASTERN AFRICA, BARATON  
P. O. Box 2500, Eldoret, Kenya

12 June 2018



Received and  
permission granted  
to go on with the  
study to responsibility of  
MUNIRI CALVIN  
Department

**THE PRINCIPAL**  
Segero Adventist High School

**Re: REQUEST FOR PERMISSION TO GATHER RESEARCH DATA**

Mr. Martin A. Akoto is a graduate student pursuing the degree **Doctor of Philosophy in Education (Curriculum and Teaching)** at the University of Eastern Africa, Baraton. He is currently writing his thesis entitled *Educators' Accountability for Learning: A Framework for Equity and Improved Students' Achievement in West Kenya Union Conference Secondary Schools*.

Kindly allow him to administer his questionnaires to students and teachers in your school. He will conduct interviews with you and selected teachers. He will also observe classes during his visit to gather data.

Any assistance you will grant him will be greatly appreciated. May God richly bless you in all your undertakings.

Sincerely yours,

  
Prof. Elizabeth M. Role, PhD  
Director



Cc: Chair, Department of Education  
Office File



**OFFICE OF THE DIRECTOR OF GRADUATE  
STUDIES AND RESEARCH**  
UNIVERSITY OF EASTERN AFRICA, BARATON  
P. O. Box 2500, Eldoret, Kenya

12 June 2018



**THE PRINCIPAL**  
Segro Adventist School - Eldoret

*Reviewed and  
accepted for the  
purpose to  
continue*

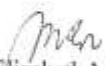
**Re: REQUEST FOR PERMISSION TO GATHER RESEARCH DATA**

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Sincerely yours,

  
Prof. Elizabeth M. Role, PhD  
Director



Cc: Chair, Department of Education  
Office File



**OFFICE OF THE DIRECTOR OF GRADUATE  
STUDIES AND RESEARCH**

**UNIVERSITY OF EASTERN AFRICA, BARATON**  
P. O. Box 2500, Eldoret, Kenya

12 June 2018

**THE PRINCIPAL**

Segero Heralds Adventist School

**Re: REQUEST FOR PERMISSION TO GATHER RESEARCH DATA**

**Mr. Martin A. Akoto** is a graduate student pursuing the degree **Doctor of Philosophy in Education (Curriculum and Teaching)** at the University of Eastern Africa, Baraton. He is currently writing his thesis entitled *Educators' Accountability for Learning: A Framework for Equity and Improved Students' Achievement in West Kenya Union Conference Secondary Schools*.

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Any assistance you will grant him will be greatly appreciated. May God richly bless you in all your undertakings.

Sincerely yours,

  
Prof. Elizabeth M. Role, PhD  
Director

Cc: Chair, Department of Education  
Office File







**OFFICE OF THE DIRECTOR OF GRADUATE  
STUDIES AND RESEARCH**

**UNIVERSITY OF EASTERN AFRICA, BARATON**  
P. O. Box 2500, Eldoret, Kenya

---

12 June 2018

**THE PRINCIPAL**

Segero Adventist School - Baraton

**Re: REQUEST FOR PERMISSION TO GATHER RESEARCH DATA**

**Mr. Martin A. Akoto** is a graduate student pursuing the degree **Doctor of Philosophy in Education (Curriculum and Teaching)** at the University of Eastern Africa, Baraton. He is currently writing his thesis entitled *Educators' Accountability for Learning: A Framework for Equity and Improved Students' Achievement in West Kenya Union Conference Secondary Schools*.

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Sincerely yours,

  
Prof. Elizabeth M. Role, PhD  
Director

Cc: Chair, Department of Education  
Office File





**OFFICE OF THE DIRECTOR OF GRADUATE  
STUDIES AND RESEARCH**  
UNIVERSITY OF EASTERN AFRICA, BARATON  
P. O. Box 2500, Eldoret, Kenya

12 June 2018

SEVENTH-DAY ADVENTIST CHURCH  
KENYA LAKE CONFERENCE  
DATE 24-16/2018  
EDUCATION DIRECTOR

Pastor Micah Agalo  
Education Director  
Kenya Lake Conference

**Re: REQUEST FOR PERMISSION TO GATHER RESEARCH DATA**

**Mr. Martin A. Akoto** is a graduate student pursuing the degree **Doctor of Philosophy in Education (Curriculum and Teaching)** at the University of Eastern Africa, Baraton. He is currently writing his thesis entitled *Educators' Accountability for Learning: A Framework for Equity and Improved Students' Achievement in West Kenya Union Conference Secondary Schools*.

Kindly allow him to gather his research data through questionnaires, interviews, and observation of classes in secondary schools in your conference. He will gather his data within June and July 2018.

Any assistance you will grant him will be greatly appreciated. May God richly bless you in all your undertakings.

Sincerely yours,

Prof. Elizabeth M. Role, PhD  
Director



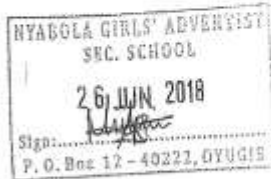
Cc: Chair, Department of Education  
Office File



**OFFICE OF THE DIRECTOR OF GRADUATE  
STUDIES AND RESEARCH**

**UNIVERSITY OF EASTERN AFRICA, BARATON**  
P. O. Box 2500, Eldoret, Kenya

12 June 2018



**THE PRINCIPAL**  
Nyabola Girls Adventist High School

**Re: REQUEST FOR PERMISSION TO GATHER RESEARCH DATA**

**Mr. Martin A. Akoto** is a graduate student pursuing the degree **Doctor of Philosophy in Education (Curriculum and Teaching)** at the University of Eastern Africa, Baraton. He is currently writing his thesis entitled *Educators' Accountability for Learning: A Framework for Equity and Improved Students' Achievement in West Kenya Union Conference Secondary Schools*.

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Sincerely yours,

  
Prof. Elizabeth M. Role, PhD  
Director



Cc: Chair, Department of Education  
Office File



SEVENTH-DAY  
ADVENTIST  
CHURCH

North West Kenya Conference  
P.O. Box 1264, Webuye 50205, Kenya  
Street: Webuye Flyover Eldoret - Bungoma Highway  
Opp. Salvation Army Primary School  
Tel: 0718891080  
Website: www.nwke.adventist.or.ke  
Email: adamwko@gmail.com

13<sup>th</sup> JUNE 2018

MARTIN A. AKOTO  
UEA -BARATON  
P.O BOX 2500.


ELDORET.


Dear Sir,

**RE: PERMISSION GRANTED**

On behalf of the North West Kenya Conference Family, I write to inform you that your request to gather data from our two Schools, namely; Chebwai Adventist Sec. School and Segero-Chesowos Adventist Sec. School is permitted. You are therefore free to undertake your research and call us for any assistance that may facilitate your research.

Yours faithfully

  
PR. ELIJAH MAKHANU  
NWKC Education Secretary





**OFFICE OF THE DIRECTOR OF GRADUATE STUDIES AND RESEARCH**

**UNIVERSITY OF EASTERN AFRICA, BARATON**  
P. O. Box 2500, Eldoret, Kenya

12 June 2018

*Request accepted*

*FR*  
*Francis Sanyal*  
*(Chief Principal)*



**THE PRINCIPAL**  
Chebwai Adventist School

**Re: REQUEST FOR PERMISSION TO GATHER RESEARCH DATA**

**Mr. Martin A. Akoto** is a graduate student pursuing the degree **Doctor of Philosophy in Education (Curriculum and Teaching)** at the University of Eastern Africa, Baraton. He is currently writing his thesis entitled *Educators' Accountability for Learning: A Framework for Equity and Improved Students' Achievement in West Kenya Union Conference Secondary Schools*.

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Sincerely yours,

  
Prof. Elizabeth M. Role, PhD  
Director



Cc: Chair, Department of Education  
Office File



**OFFICE OF THE DIRECTOR OF GRADUATE  
STUDIES AND RESEARCH**

**UNIVERSITY OF EASTERN AFRICA, BARATON**  
P. O. Box 2500, Eldoret, Kenya

12 June 2018

*Received  
Request granted.*

**THE PRINCIPAL**  
Segero Chesowos Adventist School

**Re: REQUEST FOR PERMISSION TO GATHER RESEARCH DATA**

**Mr. Martin A. Akoto** is a graduate student pursuing the degree **Doctor of Philosophy in Education (Curriculum and Teaching)** at the University of Eastern Africa, Baraton. He is currently writing his thesis entitled *Educators' Accountability for Learning: A Framework for Equity and Improved Students' Achievement in West Kenya Union Conference Secondary Schools*.

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Sincerely yours,

  
Prof. Elizabeth M. Role, PhD  
Director



Cc: Chair, Department of Education  
Office File



**OFFICE OF THE DIRECTOR OF GRADUATE  
STUDIES AND RESEARCH**

**UNIVERSITY OF EASTERN AFRICA, BARATON**  
P. O. Box 2500, Eldoret, Kenya

---

12 June 2018

**Pastor Lucas Olwayo**  
Education Director  
Central Nyanza Conference


**Re: REQUEST FOR PERMISSION TO GATHER RESEARCH DATA**

**Mr. Martin A. Akoto** is a graduate student pursuing the degree **Doctor of Philosophy in Education (Curriculum and Teaching)** at the University of Eastern Africa, Baraton. He is currently writing his thesis entitled *Educators' Accountability for Learning: A Framework for Equity and Improved Students' Achievement in West Kenya Union Conference Secondary Schools*.

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Sincerely yours,

  
Prof. Elizabeth M. Role, PhD  
Director



Cc: Chair, Department of Education  
Office File

A SEVENTH-DAY ADVENTIST INSTITUTION OF HIGHER LEARNING  
CHARTERED 1891



**OFFICE OF THE DIRECTOR OF GRADUATE  
STUDIES AND RESEARCH**  
UNIVERSITY OF EASTERN AFRICA, BARATON  
P. O. Box 2500, Eldoret, Kenya

12 June 2018

*Received  
granted.*  
*and*  
THE PRINCIPAL  
KISUMU SOUTH ADVENTIST  
SECONDARY SCHOOL  
P. O. BOX 5-40150, KISUMU  
JUN 12 2018  
*[Signature]*

**THE PRINCIPAL**  
Kisumu South Adventist School

**Re: REQUEST FOR PERMISSION TO GATHER RESEARCH DATA**

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Sincerely yours,

*[Signature]*  
Prof. Elizabeth M. Role, PhD  
Director

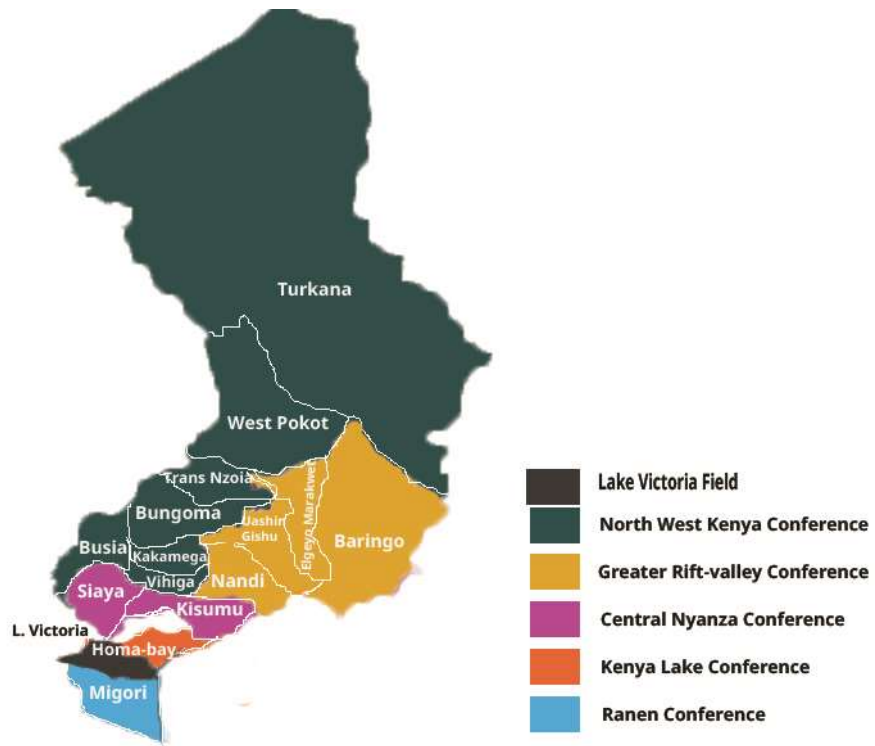


Cc: Chair, Department of Education  
Office File



## APPENDIX K

### MAP OF THE RESEARCH SITE





1991-1995	Bachelor of Education (B Ed), A double major In Education and Accounting; and a minor in Music, Daystar University with a Cumulative GPA 3.44
1988	Grade 5- Royal Schools of Music, Kisii Teacher's Diploma College
1986-1987	Advanced Level (A-Level, Private), 2 Principles
1980-1982	Primary Teacher Education (PTE); Kamagambo TTC
1975-1979	O-Level (EACE); Kamagambo High School
1968-1974	Certificate of Primary Education (CPE); Ranen Primary School

#### **D. Working Experience**

2014- On-Going	Director of Education/Music-West Kenya Union Conference of Seventh-day Adventist Church, Kisumu-KENYA
2011-2013	Director of Education/Music- East African Union of Seventh-Day Adventist Church, Nairobi-KENYA
January 2014-June 2014	Coordinator of Education/Music-West Kenya Union Conference, Kisumu-KENYA and Teacher- Kamagambo High School
June 2014 (Ongoing)	Director of Education/Music- West Kenya Union Conference
2009-2010	Principal Head of Mutitu Adventist Teachers College
2007-2009	Principal Head of Kitui SDA Primary & Secondary Schools
2005-2006	Teacher- Nyanchwa Adventist Secondary School
2003-2004	Tutor- Nyanchwa Adventist Teachers' Colleges
1996-2002	Principal Head of Ranen Adventist Secondary School

1987-1991	Dean of Students/Tutor-Nyanchwa Adventist Teachers' College
1985-1987	Tutor/Teacher-Nyanchwa Adventist Teachers' College and Secondary school simultaneously
1984, 1985	Deputy Head Teacher Osiri and Macalder Primary Schools respectively
1982-1985	Teacher-Obolo Primary school, Macalder Primary school and Osiri Primary schools in Migori District, Nyanza Province-Under Teachers' Service Commission

### **Awards**

2016	Certificate of Participation: Successfully participated in the <b>2016 East-Central Division Education Advisory</b> on June 27-29, 2016 at Advent Hill, Nairobi Kenya
2016	Certificate of Attendance: Successfully participated in the <b>East-Central Africa Higher Education Consultative Meeting on Technology in Education</b> held on June 22-26, 2016
2016	Certificate of Participation: Successfully participated in organizing the West Kenya Union Conference Teachers' Convention on April 19 <sup>th</sup> -24 <sup>th</sup> , 2016
2013	Certificate of Participation: Successfully participated as facilitator in <b>The Hope for The Cities: Mission With Compassion Church Planting Conference</b> at Lenana School Nairobi on the 14 <sup>th</sup> – 20 <sup>th</sup> April, 2013
2009	Certificate of Academic Excellence for attaining 1 <sup>st</sup> position among Private Schools in Kitui District in C.R.E – KCSE- 2009 with a mean score of 5.670.
2008	Certificate of Participation: Successfully participated in the East-Central African Division Teachers' Convention on August 27 <sup>th</sup> – 30 <sup>th</sup> , 2008 at University of Eastern Africa, Baraton, Eldoret-Kenya

2006 Certificate of Performance-3<sup>rd</sup> Best Improved Subject- Christian Religious Education in the Primary Teacher Education in the year 2005

2005 Certificate of Attendance-Adventist Teachers' Retreat organized by the Kenya Adventist Heeds' Association (KASHA) at Kisii

<b>TOPICS COVERED</b>
<ol style="list-style-type: none"><li>1. Conflict of Interest and Church Policy</li><li>2. Teachers' Obligation on Teenagers and Religion</li><li>3. Philosophy and Objectives of Adventist Education</li><li>4. Adventist Teacher Call and Commitment</li><li>5. Work Study and Self Support in Adventist Institutions</li><li>6. HIV/AIDS Infected and Affected</li><li>7. Behavioral Changes in the Community</li></ol>

2004 Certificate of recognition for officiating as a Chief Recorder during the inter-colleges Athletics Championship held Gusii Stadium organized by Kenya Teachers' Colleges Sports Association-Nyanza Zone

2003 Certificate of Attendance-Adventist Teachers' Retreat organized by the Kenya Adventist Heeds' Association (KASHA) at Murang'a Teachers College

<b>TOPICS COVERED</b>
<ol style="list-style-type: none"><li>1. Conflict of Interest and Church Policy</li><li>2. Teachers' Obligation on Teenagers and Religion</li><li>3. Time Management in School Operations</li><li>4. Legal Emphasis on Children's Rights</li><li>5. Maintenance of Self Support in Schools</li><li>6. Public Relations in Schools</li><li>7. Teenage Sexuality with Emphasis in HIV/AIDS</li><li>8. Effective Classroom Management</li><li>9. Integration of Adventurers, Pathfinder and Master Guide in Church Schools</li><li>10. Guidance and Counseling</li><li>11. Attitudes and Performance in Schools</li><li>12. Teaching of Science and Mathematics</li></ol>

2003 Certificate of Attendance-Elders' Seminar –Nyanchwa TCC

2002 Certificate of Service as Deputy Presiding Officer with the Electoral Commission of Kenya (E.C.K) in Nyatike Constituency during the 2002 General Election

2001 Certificate of Attendance: Effective Management Seminar for Heads of Educational Institutions No. 1/2002 at Kenya Institute of Administration

<b>EFFECTIVE MANAGEMENT SEMINAR FOR HEADS OF EDUCATIONAL INSTITUTION</b>		
<b>SUBJECTS COVERED</b>		
Module 1	Managing the Educational Institution	16Hrs
Module 2	Communication in Educational Institutions	14Hrs
Module 3	Managing Educational Projects	12Hrs
Module 4	Managing Institutional Financial and Material Resources	16Hrs
Module 5	Contemporary Issues Affecting Educational Institutions: <ul style="list-style-type: none"> <li>• Management of Information Systems</li> <li>• Work Ethics and Professionalism</li> <li>• Disaster Management</li> <li>• Managing Change and Innovation</li> <li>• Stress Management and Counseling Skills</li> <li>• Poverty Alleviation</li> <li>• Public Service Reforms</li> </ul>	14Hrs

1998 Certificates of Participation in the Station/Field Adjudication of Music Festivals

1997 Certificate of Attendance and Participation in the Seminar for Teaching in All Church Maintained Schools in Kenya at Kamagambo High School

<b>TOPICS COVERED</b>
<ol style="list-style-type: none"> <li>1. An Effective Christian Teacher</li> <li>2. Effective Communication in Church Schools</li> <li>3. Motivation of Teachers and Students</li> <li>4. Enabling Slow Learners to be High Achievers</li> <li>5. Strategies for Improving Academic Performance</li> <li>6. Discipline and Character Development</li> <li>7. Time Management</li> <li>8. Lesson Preparation and Use of Learning Aids</li> <li>9. The Role of Subject Panels</li> <li>10. Effective Evaluation</li> <li>11. Contribution of Health Recreation to learning</li> <li>12. School Management: Biblical Approach</li> <li>13. Guidance and Counseling</li> </ol>

- 1996 Certificate of Recognition of Excellence for Exemplary Department Performance- School of Education, Daystar University
- 1986 Certificate of Completion of Youth Ministry Training Course on Youth Leadership
- 1982 Certificate of Exceptional Performance in Conducting School Choirs during Primary Kenya Music Festivals Ranging from 1<sup>st</sup> to 3<sup>rd</sup> positions in various classes

### **Publications**

1. Akoto, M.A & Allida, D. (2017). Relationship of School Climate and Organizational Commitment of Secondary School Teachers in West Kenya Union Conference. *Baraton Interdisciplinary Research Journal*, Vol 7(Special Issue), pp 1-9.
2. Akoto, M.A (2013). *Job and Habakkuk: Be still and know that I am God; 2<sup>nd</sup> (ed.)* Pressline (K) Ltd: Nairobi-Kenya.
3. Akoto, M.A. (2005). *Job and Habakkuk: Be still and know that I am God.* Africa Herald Publishing House. Kendu-Bay- Kenya.
4. Akoto, M.A. (2005). *Colored Windows.* Africa Herald Publishing House. Kendu-Bay- Kenya. ISBN 978-9966 793-00-3

### **Hobbies**

- Guiding and Counseling
- Attending Church Services
- Listening to and Singing Gospel Music
- Voluntary Community Services
- Attending Seminars and Workshops
- Reading and Writing Spiritual Books
- Research and Generation of New Knowledge

### **Referees**

Prof. Elizabeth Role  
**Research and Statistics Consultant**  
**Data Analyst**  
 Riverside, California  
 Tel.: +1 812-2236115  
 E-mail: bethrole@gmail.com  
 rolee@ueab.ac.ke

Prof. Korso Gude  
DVC Academics  
University of Eastern Africa-Baraton  
P.O. Box 2500-30100  
ELDORET-KENYA  
E-mail: bkgude2012@gmail.com

Prof. John Odwar Agak  
Professor-Maseno University  
P.O. Box 333-40105  
MASENO-KENYA  
Cell Phone: 0722636123  
E-mail: john.agak@gmail.com