# INFLUENCE OF TEACHER PERFORMANCE APPRAISAL AND DEVELOPMENT ON PUPILS ACADEMIC PERFORMANCE IN PUBLIC PRIMARY SCHOOLS IN SUNA EAST SUB-COUNTY, MIGORI COUNTY, KENYA.

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A Thesis Submitted to the School of Post-Graduate Studies in Partial Fulfillment of the Requirements of the Degree of Master of Education in Education Management (Planning and Economics) School of Education Kisii University, Kenya

# **DECLARATION**

# **DECLARATION BY CANDIDATE**

This	thesis	is	my	original	work	and	has	not	been	presente	ed for	degree	in	any	other
univ	ersity.	No	part	of this t	hesis	may	be re	eproc	duced	without	prior	written	per	missi	on of
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# **DEDICATION**

This thesis is dedicated to the memory of my mother Lois Aoko and father Martin Atieno Diang'a whose encouragement and prayers supported this process.

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# TABLE OF CONTENTS

Contents	Page
DECLARATION	ii
DEDICATION	iii
ACKNOWLEDGEMENTS	iv
TABLE OF CONTENTS	v
LIST OF TABLES	x
LIST OF FIGURES	xii
ABSTRACT	xiii
ABRREVIATION AND ACRONYMS	xiv
CHAPTER ONE	1
INTRODUCTION	1
1.0 Background of the Study	1
1.1 Statement of the Problem	7
1.2 Purpose of the Study	8
1.3 Objectives of the Study	8
1.4 Research Questions	9
1.5 Significance of the Study	9
1.6 Scope of the Study	12
1.7 Limitations of the Study	12
1.8 Theoretical Framework	13
1.9 Conceptual Framework	15
1.10 Assumptions of the Study	17
1.11 Operational Definition of Terms	18
CHAPTER TWO	20

LITERATURE REVIEW	20
2.1 Introduction	20
2.2 Concept of Teacher Performance Appraisal and Development	20
2.3 Teacher Professional Knowledge and Application on Academic Performance.	25
2.4 Effect of Time Management on Pupils Academic Performance	28
2.5 Teacher Attitude towards Innovation and Creativity in Teaching	33
2.6 Influence of Teacher Professional Development on Academic Performance	37
CHAPTER THREE	42
RESEARCH METHODOLOGY	42
3.1 Introduction	42
3.2 Research Design	42
3.3 Area of Study	43
3.4 Target Population	44
3.5 Sampling Procedure and Sample Size	44
3.6 Instruments of Data Collection	46
3.6.1 Questionnaires	46
3.6.2 Interview Schedules	47
3.7 Validity of Research Instruments	47
3.8 Reliability of the Instruments	48
3.9 Data Collection Procedures	48
3.10 Data Analysis	49
3.10.1 Data Analysis Matrix	50
3.11 Ethical Considerations	52

CHAPTER FOUR	53
DATA PRESENTATION, INTEPRETATION, ANALYSIS AND DISCUSSION	53
4.1 Introduction	53
4.1.1 Questionnaire Return Rate	54
4.1.2 Demographic Data of Respondents	55
4.1.3 Gender of Respondents	56
4.1.4 Academic Qualification of the Respondents	57
4.2 Influence of Teacher Professional Knowledge and Application	59
4.2.1 Lesson Observation in Schools	59
4.2.2 Professional Knowledge is Essential for Performance	61
4.2.3 Conducting Departmental panel Meetings in Schools	63
4.2.4 Availability of Current Syllabus	64
4.2.5 Challenges Leading to untimely Syllabus Coverage	65
4.2.6 School Mean Standard Score versus Teacher Qualification	67
4.2.7 School Mean Standard Score versus approved Schemes of Work	70
4.2.8 Influence of approved Schemes of Work	73
4.2.9 Influence of Professional Knowledge on Performance	75
4.3 Effect of Time Management on Pupils Academic Performance	76
4.3.1 Starting Lessons Late	77
4.3.2 Effect of Time Management in meeting deadlines on Pupils Performance	78
4.3.3 Strategies for ensuring lessons are taught for timely syllabus coverage	80
4.3.4 Criteria for Capturing Lessons taught in Schools	81

4.3.5 Conducting Remedial Programmes for Missed Lessons	82
4.3.6 Teachers Responses on Time Management Processes and Issues	85
4.4 Teachers Attitude towards Innovation and Creativity on Performance	88
4.4.1 Assessing Innovation and Creativity Measures	88
4.4.2 Learner Expectations and Ratings	97
4.5 Influence of Teacher Professional Development on Academic Performance	99
4.5.1 Importance of Teacher Professional Development	99
4.5.2 Professional Education Enhances Learning	102
4.5.3 Interaction with Professional Education bodies	103
4.5.4 Independence Test on Interaction with Education Professional Bodies	105
4.5.5 Effective Professional Development Process	107
4.5.6 Basis for Teacher Development Process	108
4.6 Chapter Summary	109
CHAPTER FIVE	113
SUMMARY OF FINDINGS, CONCLUSIONS, AND RECOMMENDATIONS	113
5.1 Introduction	113
5.2 Summary of Findings of the Study	113
5.2.1. Influence of Teacher Professional Knowledge and Application	113
5.2.2. Effect of Time Management on Pupils Academic Performance	114
5.2.3 Teacher Attitude towards Innovation and Creativity in Teaching	115
5.2.4 Influence of Teacher PD on Academic Performance	115
5.3 Conclusions	116

5.3.1 Teacher Performance Appraisal And Development	116
5.3.2 Teacher Professional Knowledge and Application	116
5.3.3 Time Management	117
5.3.4 Attitude of Teachers towards Innovation and Creativity in teaching	117
5.3.5 Teacher Professional Development	118
5.4 Recommendations	119
5.5 Suggestions for further Studies	121
APPENDICES	130
Appendix I: Head/Deputy Head Teachers Questionnaire	130
Appendix II: Teachers Questionnaire (TQ)	136
Appendix III: Interview Schedule for Teachers	141
Appendix IV: Interview Schedule for Education Officers	142
Appendix V: Krejcie and Morgan Table for Determining Sample	143
Appendix VI: Research Authorization (County Director of Education)	144
Appendix VII: Research Authorization (County Commissioner)	145
Appendix VIII : Research License (NACOSTI)	146
Appendix IX : Research Authorization (NACOSTI)	147
Appendix X: Descriptive Data on Teacher Professional Qualification	148
Appendix XI: Suna East Sub-County Map	151

# LIST OF TABLES

Table	Page
Table 1. 1: KCPE Performance in Suna East Sub-County	7
Table 3. 1: Population of Category of Respondents	45
Table 3. 2: Data Analysis Matrix	51
Table 4. 1: Questionnaire Return Table	54
Table 4. 2: Descriptive Data for Respondents	55
Table 4. 3: Gender of Respondents	56
Table 4. 4: Academic Qualification of the Respondents	58
Table 4. 5: Teacher Lesson Observation	60
Table 4. 6: Professional Knowledge is Essential for Enhancing Performance.	61
Table 4. 7: Conducting Departmental Panel Meetings in Schools	63
Table 4. 8: School Mean Score against Teacher Qualification	67
Table 4. 9: School Mean Score against Utilization of Approved Schemes of V	Vork71
Table 4. 10: Regression analysis on Influence of Professional Knowledge on	Performance
	75
Table 4. 11: Time management strategies versus Professional Records Prepar	ation
Deadlines	77
Table 4. 12: Assessing Learners and giving feedback	79
Table 4. 13: Teachers Responses on Criteria for capturing Lesson Attendance	in Schools
	81
Table 4. 14: Conducting Remedial Class Programmes for Lessons missed	84

Table 4. 15: Time Management Processes and Issues	85
Table 4. 16: ICT Learner Expectations and Ratings	98
Table 4. 17: Importance of teacher Professional development	101
Table 4. 18: Professional Development Enhances Learning	102
Table 4. 19: Interaction with Education Bodies	103
Table 4. 20: Interaction with Education Bodies Independence Test	105

# LIST OF FIGURES

Figure	Page
Figure 1. 1: Conceptual Framework	16
Figure 4. 1: Availability of Syllabuses	65
Figure 4. 2: Influence of Teachers Approved Schemes of Work	74
Figure 4. 3: Time Management Processes and Issues	87
Figure 4. 4: The school is a Learning Resource Centre	90
Figure 4. 5: Integrating Information, Communication and Technology in Teaching	91
Figure 4. 6: Integrating Information, Communication and Technology in Teaching	92
Figure 4. 7: Innovation and creativity are important in Learning	93
Figure 4. 8: Challenges facing Integration of ICT in Innovation and Creativity	94
Figure 4. 9: Availability of Digital Materials in Schools	95
Figure 4. 10: Effective Professional Development Process	107
Figure 4. 11: Basis for Teacher Professional Development.	108

#### **ABSTRACT**

Academic performance of most public primary schools in Suna East Sub-County is a major challenge in Migori County. Out of the five zones in the sub-county, there was low pupil performance in the assessment score with a mean standard score of 234.33 out of 500 marks for the period of 2013-2018 (Table 1.1). The purpose of this study was therefore to investigate influence of teacher performance appraisal and development on pupil's academic performance in Kenya Certificate of Primary Education (K.C.P.E) results in Suna East Sub-County. It was guided by the following objectives; to investigate the influence of teacher professional knowledge and application; to determine the effect of time management; to find out the attitude of teachers towards innovation and creativity in teaching and to establish the influence of teacher professional development on pupil's academic performance. This study was based on two theories; the goal setting theory by Edward Locke and Expectancy theory by Vroom. The study had a population of 65 head teachers, 65 deputy head teachers and 500 assistant teachers in public primary schools. Krejcie and Morgan table was used to obtain a sample size of 56 Head teachers, 56 deputy head teachers, and 217 assistant teachers. The study used a survey design and both qualitative and quantitative methods of data collection and analysis whereby the study used questionnaires, interview schedules and document analysis to collect data. Quantitative data was analyzed and presented in Tables, bar-charts, and pie-charts. The data collected was analyzed using statistical package of social sciences (SPSS) version 21 to generate tables, bar-charts, pie-charts and descriptive statistics. Qualitative data analysis involved interpretation of patterns and themes. Document analysis was used to generate literature review, and in understanding policy guidelines. Inferential statistics was used whereby Anova analysis was used to gauge influence of professional knowledge on performance and  $\chi^2$  was used to assess level of interaction between teachers and educational bodies. Validity of the research instruments was determined through open discussion with the supervisors of Kisii University. For Instrument reliability, a split-half correlation test was conducted whereby a coefficient of +0.79 or greater was considered good internal consistency. A Reliability of +0.79 for teacher's questionnaires and +0.82 for administrator's questionnaires were established during pilot study in schools that were not involved in the study. This research would be significant in the field of education in enhancing quality education by educators, educational stakeholders and learners. Research findings of this study revealed that teacher professional knowledge and application is essential in enhancing teaching for enhancing pupils academic performance. The study also revealed that time management amounted to timely syllabus coverage; teachers met deadlines in preparation of professional documents. Further, on innovation and creativity in teaching and learning the research found out that there were challenges which need be resolved. Lastly the study established that professional development of teachers was important in enhancing pupil's academic performance. It concluded that TPAD programmes should be embraced by all educators for enhanced performance. The study recommended the application of TPAD as a tool that must be used in all schools to enhance pupils academic performance.

#### ABRREVIATION AND ACRONYMS

**ANOVA** Analysis of Variance

**CORT** Code of Regulation for Teachers

**CPD** Continuous Professional Development

**CSO** Curriculum Support Officer

**EFA** Education for All

**ERS** Early Retirement Scheme

**FPE** Free Primary Education

**GOK** Government of Kenya

**HRM** Human Resource Management

ICT Information Communication Technology

**KCPE** Kenya Certificate of Primary Education

**KEMI** Kenya Education Management Institute

**KICD** Kenya Institute of Curriculum Development

**KISE** Kenya Institute of Special Education

**KNEC** Kenya National Examination Council

M.S.S Mean Standard Score

**MOE** Ministry of Education

**MOEST** Ministry of Education Science and Technology

MCG Migori County Government

**NACOSTI** National Commission for science, Technology and Innovation

**P1** Primary teacher

**PD** Professional Development

**PMR** Performance Management Reforms

**PSC** Public Service Commission

Senior Teacher

**SPSS** Statistical Package for Social Sciences

**TPAD** Teacher Performance Appraisal and Development

**TSC** Teachers service Commission

**TSD** Teacher Service Delivery

**VERS** Voluntary Early Retirement Scheme

#### **CHAPTER ONE**

#### INTRODUCTION

#### 1.0 Background of the Study

The growth of an organization, its stability and prosperity depends on appropriate staff qualifications and work appraisal system. Actual work performance must be appraised. Gardner (2010) revealed that in the United States of America, Educationists were credited for their effort to come up with performance appraisal systems with an effort to appraise educational personnel towards enhancing their work output. Despite the many challenges they experienced, their appraisal system yielded many fruits. This greatly led to the advancement of their educational institutions. The issue of performance appraisal in Cape Town is also evident in the works presented by Callaghan (2005), whose study showed that utilization of rating based on personality that was commonly used advocated for a more participative approach of self-appraisal. Self-performance appraisal approach based on TPAD was most preferred because it focused on what an individual could be able to achieve in the future more than it looked backward.

Dewey (2009) notes that the increasing importance of performance appraisals is attributed to the increasing impossibility of managers, administrators and supervisors to efficiently manage organizations without the understanding how people perform and meet their duties and how targets are set. Appraisal knowledge is essential for important functions of management such as maintenance of control on present operations as well as preparation for the future, making of decisions regarding promotions and compensations (Friesen and Jardine, 2010). Appraisals are therefore beneficial not only to the managers and the organizations/institutions but also to the teaching and non-teaching staff and to some extent the entire community.

In Nigeria, Fafunwa (2005) in his studies on performance appraisal explains that the growing need for enhanced accountability on the part of managers in education has resulted in increasing importance of a performance appraisal system for academicians. Workers' appraisal is taken to be a great issue, which needs to be embraced efficiently by academicians as an important work aspect. Fafunwa further explains that; organizations are getting focused to measure, evaluate, compensate, design and change their systems consistently as a result of appraisal information. Studies done by Ayeni (2010) proposed that incorrect appraisal systems could result in inaccurate results of performance appraisals and therefore lower commitment, motivation and loyalty of the staff, but most importantly, they can lead to poor academic attainment by learners in any functional organization.

Teacher Appraisal as discussed by Trivediprajapati (2010) emphasized goal setting and the establishment of performance related realities which are essential in the general attainment of organizations general set goals, targets and objectives-leading to better results. Performance appraisal therefore; could be an annual passage in institutions that could cause nervousness and dread in most knowledgeable, battle hardened executives, whose main aims and objectives are to enhance the general performance of such organizations including their staff and learners. Despised by the assessors, institutions often try refining the approaches that link performance appraisals to other matters of administration including promotions, rewards and training, in an argument that; achievements of employees ought to be evaluated through the appraisal system.

World Bank (2007) has shown that in Egypt and Zambia, appraisal approaches have become open to analysis, and this has resulted to legal cases being sought, some presenting arguments for and others presenting arguments in contradiction with appraisal issues. In addition, Studies done by Muwanguzi (2006) on Appraisal system and teacher

performance in Uganda indicated that the Ugandan government utilized the current laws and regulations' provisions in initiating various reforms in educational institutions as far as appraisals were concerned. This brought a lot of performance improvements making it a recognized holistic method for enhancing motivation, enhancing performance, in addition to management of human resources in institutional systems resulting into improved academic performance of learners. Academic performance has an inclination on socio-economic status of homes and this was evidenced by the work of Nyagiati and Yambo (2018); Nyanda, Yambo and Getange (2018) from Tanzania who also argued that children from illiterate and humble homes perform poorer than their counterparts from rich and well to do homes for the required school materials are readily availed to them.

In Kenya, the code of regulation for teachers printed by the government of Kenya (2015) emphasized the need for performance management through staff appraisal system. This stands because performance appraisals are mainly predestined for improving the general academic standards of learners in learning institutions. Teachers Service Commission (2016) provided an appraisal system that is open, where instructors are required to reinforce administration and endlessly evaluate learners' performance and implementation of curriculum at the organizational level. Improved academic standard enhances the general image of learners, the institution and teachers including other educational partners such as the Ministry of Education and the Teachers Service Commission (TSC).

This is also supported by performance guidelines in Republic of Kenya (2012) which explains that the Teacher Performance Appraisal and Development System (TPADs) was mainly introduced into schools in six counties in February 2014 and after 2 years of training it was revised and finalized by the end of 2015 as a tool that is essential in helping raise the academic standard among the school going pupils. This programme

aimed at improving teacher's performance and in enhancing the quality of learners' academic performance in schools.

Further, Wango (2009) indicated that performance appraisal tool should consist of several key areas in enhancing learner's academic performance. Such areas include among others:-professional knowhow and its application, management of time, creativity and innovation in teaching and learning, protection of learners, discipline, safety as well as teachers' conduct, co-curricular activities promotion and additional growth in teachers, which needs to be conducted on a regularly basis. During appraisal, rating of teachers is done on a five-point scale: 5 to 1, where 5 means; completely met and surpassed the target, 4 completely met the target, 3 met the greatest target, 2 met some targets and 1 did not meet the target with their various percentages. This kind of rating takes into consideration the most crucial parts teachers are supposed to play to meet the general set targets for academic excellence in an institution.

According to studies done by Kobia, and Mohamed (2006) in Kenya, teacher performance appraisal and development clearly explains how a competent teacher is expected to behave during instructions with an aim of improving the teaching standards in both public and private schools. The study further explains that appraisals largely focus on personalities and what they are capable of doing. Researchers and educators emphasize that appraisals play a critical role in developing favorable jobs as well as institutional attitudes, in addition to enhancing motivation, which according to the Teachers Service Commission (2015), finally increases the general performance of an individual and the entire school organization.

In Migori County, Performance Appraisal has been embraced with a lot of enthusiasm especially in Suna East Sub-County where this study was conducted. This is due to the fact that educational Stakeholders have realized it is the only way to ensuring better

academic performance in Migori educational institutions both public and private. Studies done by Republic of Kenya (2011) noted that it has helped the educational workforce to be more productive, skillful and up to the tusk. This is in terms of time management, professional development, creativity and innovation and teacher professional development among many other educational teaching standards and requirements.

According to Richard (2002), the reforms about Performance Appraisal are aimed at improving efficiency and effectiveness, while reducing costs. In this case effectiveness refers to goal accomplishment while efficiency evaluates the ratio of outputs consumed to outputs achieved. The board in their studies suggests that the greater the output for a given input, the greater the efficiency. Performance appraisal therefore strives at ensuring teachers use the right teaching methods during teaching, as well as managing their work in a more professional manner. The requirements of proper performance appraisal seem to be a major challenge in Suna East Sub-County, a gap which this study aims at filling.

A report by Ministry of Education (2018) in Migori County showed that effective and efficient academic performance requires teachers to prepare for the lesson in advance, with all the necessary professional documents. Although teachers From Suna East Sub-County use relevant teaching and learning materials for teaching, they still carry with them text books to class meaning they are not adequately prepared for the lessons. They use text books to make notes for the learners and at the same time teach. This tendency consumes a lot of their time making their lessons to be less efficient and effective as far as syllabus coverage is concerned. Performance appraisal therefore is aimed at correcting these problems especially in Suna East Sub-County public primary Schools. There are also occasions noted when teachers are late for lessons or miss lessons for no apparent reason even when physically present in learning institutions. Others also waste a lot of time teaching what is not relevant to the lesson planned.

A research conducted in Migori County by Oguta, (2020) noted that teacher appraisal did support professional development of teachers and it was significant in improving learners' performance in Migori County's secondary schools. The work of Oguta, (2020) further indicated that collaborative teaching, team development, teacher personal knowledge, teacher retraining, and teacher appraisal were useful for enhancing teacher professional development (PD) which influenced academic performance. Among the six indicators put to test five were crucial for academic performance. The variable that did not impact on student achievement was teacher preparation where interviewed teachers revealed that preparation was time consuming and turned them into clerks. The gap in this research is that it was conducted in secondary schools.

A study was conducted by Kadenyi (2014) in Vihiga Sub-County and supported by Oguta (2020) that surveyed influence of teacher appraisal on improvement of learner performance. The study revealed that; despite immense investment in the appraisal system by the government, there is much yet to be realized in regards to enhance academic performance. The analysis by Kadenyi (2014) exhibited that head-teachers and teachers acknowledged that appraisal of teachers on service delivery were actively being conducted.

Table 1.1 KCPE Academic performance for the three Zones in Suna East Sub-County Public primary Schools for the last 5 Years (Suna East Sub-County K.C.P.E Examination Analysis Report of 2017)

**Table 1. 1: KCPE Performance in Suna East Sub-County** 

ZONES KCPE YEAR/MEAN SCORES								
ZONE	2013	2014	2015	2016	2017	2018		
Anjego	230	220	215	218	239	228		
God-Jope	225	221	218	229	244	235		
Migori	248	247	248	253	252	251		
Total	703	688	681	700	735	714		
MSS	234	229	227	233	245	238		

Source: Ministry of Education (2018)

The highest sub-county Mean Standard Score (MSS) for the last six years is 245 marks. This mean score is below the expected average of 250 marks. The general means for all the three zones for the last six years is also very low. This therefore justified the need to investigate the influence of Teacher Performance Appraisal and Development on teaching outcome in primary Schools in Suna East Sub-County, Migori County Kenya.

## 1.1 Statement of the Problem

Public primary schools in Suna-East Sub-County have registered very low academic performance since the year 2013 in KCPE results according to Ministry of Education, (2018). This has led to high pupils dropout rate in most schools. Many pupils who struggle to complete their education circle perform poorly and are not able to perform simple tasks including operating basic arithmetic and reading. The allocated government resources are therefore poorly underutilized despite the numerous resources the government and other development partners provide including parental sacrifices.

High dropout rate and low pupil academic performance is therefore a major concern in villages and in towns including Suna-East Sub-County where this research study was conducted. The challenge of low pupil academic performance has also contributed to many learners languishing in poor living conditions and this puts a lot of strain in Suna East Sub-County economy in terms of labor force, economic resources and skilled manpower. TPAD as a TSC policy therefore aimed at ensuring a better pupil academic performance. The government has also formed several task forces to help find out why there are always low pupils academic performance through assessments and teachers induction programmes without much tangible results. Low pupil academic performance therefore needs a very urgent attention. In Suna East Sub-County, this is evident in table 1.1where this research was conducted. The schools that are seen to be trying in terms of pupil's academic performance are not regular in their performance. This is a major setback to the Sub-County and education stakeholders in Suna East public primary schools.

#### 1.2 Purpose of the Study

This study's purpose was to investigate the influence of teacher performance appraisal and development on pupil's academic performance.

#### 1.3 Objectives of the Study

The following objectives guided the study:

- To investigate the influence of Teacher Professional Knowledge and application on pupil's academic performance in public primary schools in Suna East Sub-County.
- To determine the Effect of Time Management on pupils academic performance in Suna East Sub-County public Primary Schools Migori County Kenya

- iii. To assess attitude of teachers towards Innovation and Creativity in Teaching on pupil's academic performance in public primary schools in Suna East Sub-County.
- iv. To establish the impact of Teacher Professional Development (PD) on pupil's academic performance in public primary schools in Suna East Sub-County.

#### 1.4 Research Questions.

This study was guided by the following research questions:

- i. How does teacher professional knowledge and application influence pupil's academic performance in Suna East Sub-County in Migori County?
- ii. To what extent does time Management affect pupil's academic performance in public primary schools in Suna East Sub-County in Migori County?
- iii. How does attitude of teachers towards Innovation and Creativity in teaching influence pupils academic performance in public primary schools in Suna East Sub-County in Migori County?
- iv. What is the impact of Teacher Professional Development (PD) on Pupils academic performance in Suna East Sub-County in Migori County?

#### 1.5 Significance of the Study

The findings obtained from various schools will be useful to the Ministry of Education and the Teacher's Service Commission in developing relevant in-service programmes that target teachers in their teaching and learning for better pupil's academic performance in schools. They will also be significant to school administrators and parents because it would provide information on the influence of Teacher Performance Appraisal and Development (TPAD) on pupils' academic performance in public primary schools in Suna East Sub-County Migori County Kenya and beyond. This will enable them to acknowledge views and perspectives of others in enhancing quality and holistic academic

performance as is emphasized by Friesen and Jardine (2010) in Alberta towards reducing any resistance related to appraisal programmes.

The study also aimed at finding out the importance of an appropriate mix of workforce that could be essential in enhancing better academic performance a view that is encouraged by Fullan (2002) on issues related to educational administration, planning and appraisal managements. Helping solve various problems from different viewpoints is very vital in helping reduce learners' anxiety which may result in unexpected learners' unrest in schools and therefore high dropout rates, low general attitude towards schooling and strikes and finally low academic performance. It also reduces the fear for both academics and co-curricular activities which generally assists in enhancing academic performance of learners. This research will add to stored knowledge as it will prompt more research on existing Teacher Performance Appraisal and Development (TPAD) tools that are relevant for the ever advancing world of academics in meeting the current and future demands of education and the educators. The findings of this study will be helpful to teachers and their immediate supervisors to ascertain the strengths and weaknesses regarding performance appraisal tools and academic demands in schools towards the betterment of education in Kenya and beyond and more so in uplifting the pupils academic performance in schools.

The findings and recommendations during this study will also enable the supervisors and assistant teachers to identify whether the teachers performance appraisal is effective or not. They will be able to make suggestions for improvement and structuring of performance appraisal systems for motivation of learners so that they can perform effectively and take necessary action towards improving on their grades thus improving the quality of education and the educational sector at large. It will help reduce the fear of

assessments that has ever been realized in most parts of the Sub-County and county at large with the effort to maintaining and improving the educational system practiced in Kenya (P.S.C, 2011). This study is also important since it has suggestions relevant for the ever changing educational demands and the general labour force demands in the real work situation. It is also a significant Endeavour in promoting good work environment in the workplace and motivation of the teaching fraternity, an effort which will help reduce cases of examination and assessment irregularities which poses stress to the learners, teachers, parents and other education officials and departments. It will help in guiding institutions to develop organizational strategies, administration and planning by identifying future management potentials and overall productivity demands. This is a point supported by Chandran (2005) from Nairobi Kenya.

The study provides recommendations on how and where evaluation on performance needs to be emphasized in order to make education and educators relevant in the field of education; which is advancing at an alarming rate; hence the demands of every nation in terms of man-power creation in terms of relevant skills and attitudes acquisition and change especially in the real job market after the studies. This study is also a future reference for future researchers in the field of education, administration, planning and economics in addressing the future needs of learners, educators, educational personnel, Teachers service Commission, the ministry of education, educational planners, curriculum developers in making necessary adjustments and structures to meet the educational demands of Kenyans as a nation. Researchers and scholars would also find the study important as it will add to the body of knowledge in relation to academic performance, not only in Suna East Sub-County, but also beyond for the betterment of the learners, teachers and the entire Kenyan nation.

#### 1.6 Scope of the Study

The scope of this study covered specifically public primary schools in Suna East Sub-County, Migori County, Kenya since most private schools within this study area have their own internal appraisal systems. The study dealt with head teachers, deputy head-teachers, and assistant teachers in public primary schools within S.E Sub-County comprising of three zones. Curriculum Support Officers (C.S.Os) were not involved in this study since their role in TPAD at school level is different. Headteachers, Deputy headteachers, and teachers in private schools were not involved in this study since they have their own appraisal systems. The study focused on the Influence of TPAD on pupils academic performance in Suna East Sub-County Public Primary Schools, Migori County, Kenya.

#### 1.7 Limitations of the Study

There were several limitations. First, some administrators were not willing to release required TPAD data to facilitate analysis. The administrators challenge was resolved by the researcher assuring them of anonymity and confidentially. Responses improved after the researcher guaranteed the respondents that the information gathered was for purposes of the study only. This showed that the assumption that respondents involved in the study would give prompt and accurate data that would be required in the study was a limitation.

Secondly, the specified time of forty five minutes to sixty minutes for interviews was rarely explored fully because interviewees had obligations and infrequently gave fully estimated interviews. Nevertheless, the qualitative data collected from interviewed respondents enabled the researcher to give crucial generalizations. Further, the research was carried out in primary schools in Suna East Sub-County, Migori County and the strength of factors were diverse from individual school to the other. So, deductions were

made with care. It was also noted that some schools were inaccessible by the use of a motor vehicle due to poor road network and bad weather conditions. The researcher therefore used motor cycles and in extreme conditions walked to reach some far located schools. A few respondents also failed to return the questionnaires though this did not affect the study

#### 1.8 Theoretical Framework

This study adopted two theories; the goal setting theory advanced by Locke and Latham (2012) and expectancy theory by Vroom (2002). The two theories were used together since they support and bridge the gaps between them. The goal setting theory postulated that; an individual's self-established goals play a significant part of motivating the individual for enhanced performance. This is because; such an individual keeps focused on his/her goals as is explained by Friesen (2010). Once goals are set there must be deriving force towards their achievements.

Appraisal requires target and goal setting every beginning of term. It involves the establishment of specific, measurable, attainable, realistic and time-targeted (SMART) objectives, which a teacher strives to achieve during instructions as per the set teaching standards discussed in this study. Goal setting theory was used in this study because teacher performance appraisal and development requires teachers to set achievable targets for themselves every beginning of the term as has already been mentioned in the appraisal tool presented by the Teachers Service Commission (2016); taking into consideration the different teaching standards set by the MOEST and the teachers service commission.

Goal setting affects academic performance by compelling teachers and learners to focus on goals' pertinent programmes and activities from goals' inappropriate activities. It acts as a source of energy, where greater objectives induce higher efforts, while inferior objectives induce reduced effort. Studies done by Fazal (2012) also clarified performance expectations in his studies done in Pakistan on the role played by study skills in educational achievements of pupils. At times under goal setting theory which is based on individuals skill building, the organizational goals are in conflict with the managerial goals.

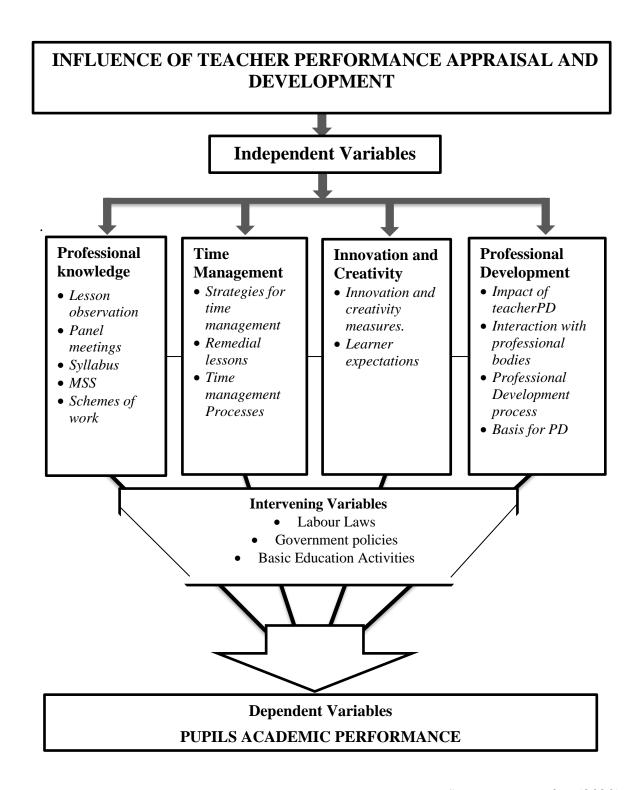
This necessitated use of expectancy theory to validate the whole research. Expectancy theory emphasizes on the rationale for an organization relating rewards in a direct way to educational performance as well as ensuring that rewards should only be provided to the deserved, and also required by receivers, who in the case of the study were teachers. This is supported by the TSC who puts a lot of emphasis on teacher promotions based on their appraisal records. It also has its basis on the hypothetical guidance that; People usually adjust their manners in organizations based on expected gratification from valued goals.

Further, Victor (2007) believed that pupils' educational performance is affected by expectations laid down regarding forthcoming events; where in the case of this study, teachers expect to gain through promotions and other rewards out of the pupils academic performance obtained and achieved by the learners at the end of the learning programmes. Tracking progress regularly against academic performance and objectives also provide the greater opportunity to recognize and reward teachers for better results and exceptional effort contributing to job satisfaction and productivity bringing better image to the entire education sector and beyond. The two theories were applied in this study since they anchored academic performance through the effort made by the teachers in embracing the need for better appraisal management system and structures (Simiyu, 2012).

#### 1.9 Conceptual Framework

A conceptual framework is a diagram that demonstrates the relationship that exists among a study's variables. In this study, the dependent variable is the pupils' academic performance in public primary schools. The study's independent variable was teacher performance, appraisal and development. The researcher developed this conceptual framework utilizing the input-mediating-outcome model. The specific independent variables included; professional knowledge and application, time management, innovation and creativity in teaching and professional development of teachers.

Mediating variables included: relevant labour laws, government policies and basic education Act, with the output being the pupil's academic performance in Suna East public primary schools. The conceptual framework was illustrated as follows in Figure 1.1



Source: Researcher (2020)

Figure 1. 1: Conceptual Framework

Figure 1.1 shows the relationship between independent variables, professional knowledge and application, time management, innovation and creativity and professional

development and dependent variables; good K.C.P.E results, proper management of resources, proper content mastery and high discipline standards. It also shows how they are regulated by the mediating variables such as labour laws, government policies and basic education Act in trying to mirror whether teacher performance appraisal and development has any influence on the general pupils academic performance in public primary schools in Suna East Sub-County Migori, Kenya.

# 1.10 Assumptions of the Study

The researcher assumed that the respondents involved in the study would give prompt and accurate data that would be required in the study. The respondents read and understood the questionnaires; the relevant and updated records obtained from primary schools and the findings and recommendations of this study would be found useful by the teachers MOE, TSC, county director of education, CSOs and other educational stakeholders both locally and nationally in assessing objectives, goals, aims and curriculum demands towards better pupils academic performance in schools. The study will help in formulation of sound policies that will help in retaining and posing a conducive learning environment capable of ensuring the learners are equipped with relevant skills, knowledge and attitudes relevant in the 21st century and beyond towards a better pupils academic performance.

## **1.11 Operational Definition of Terms**

**Academic Achievement:** Education success one has attained in the field of Education as

measured in terms of certificates attained

Appraisal: refers to the process of evaluation of the teachers' performances

against the recommended standards of performance.

**Gender mainstreaming:** Making girls and boys concerns and experiences an Integral

Part of any planned action.

**Head teacher:** Is a teacher who is in-charge of a school.

**Integrity:** Honesty and moral correctness

**Loco Parents:** A Latin term for 'the place of parents' responsibility of a person

to take on the same responsibilities as parents

**Learning outcome:** The desired teaching outcome realized within a given period of

Time with a particular cohort of learners.

Outcomes: Visible results that are expected to be achieved at primary school

level which are realized as a consequence of specific outputs.

Outputs: Comprise specific products or services (immediate and visible

results of an activity in a given period.

**Priority:** Something one considers to be of more importance and should be

dealt with first.

**Progress Review:** Formal feedback session at which education officials and teachers

discuss their progress towards meeting the elements prerequisite for

performance. Also, it shows the need for any changes on set of

plans; and any performance deficiencies the supervision are noted.

**Rating:** 

refers to **a** written record that presents criteria for determining employees' performance on every critical component and the assignment of summary ratings.

**Teaching indicator:** Standard measure by which the teaching of an Institution/individual is assessed.

**Teaching Standards:** Elements that define the minimum level expected of teachers in Kenya and critical set of requirements for professional conduct of teachers.

**Theory** refers to a set of ideas, philosophies or thoughts that are meant to provide explanations as to why things happen or exist.

## **CHAPTER TWO**

#### LITERATURE REVIEW

#### 2.1 Introduction

This chapter presents various relevant literatures to investigate the influence of teacher performance appraisal and development on pupil's academic performance. The review was organized as per the key variables of the study: teacher professional knowledge and application, time management, innovation and creativity in teaching and teacher professional development on pupil's academic performance.

# 2.2 Concept of Teacher Performance Appraisal and Development

Any form of development depends on the production level and workers commitment within a given system. The commitment of workers can only be enhanced through good appraisal systems. According to the 'International Society for Performance Improvement' (2006), the urge to improve productivity dates back to the start of civilization in countries. Stone tools' invention for products such as iron and iron include some old human endeavors pointers for producing more. Performance appraisals are linked to several modifications that have been begun in public sectors with objectives of improvement of accountability and maximization of utilization of scarce resources in enhancing pupil's academic performance. A study carried out by Mackie (2008) on performance appraisal indicates that scholars agree that it is one of the reforms that have been initiated with the new public management movement. The main intention is making the government more effective by utilization of less strength for production of more.

Performance appraisal is therefore a multifaceted concept that has many interacting variables. The variables include; performance management, commitment, stakeholder as well as employee involvement and performance targets. It is through such complex concept that good academic performance can be achieved. The work of Armstrong (2006)

indicates that the management of performance has its concerns on encouragement of behavior that results in organizational goals and objectives' attainment. It generates a shared comprehension of how performance is improved through agreements regarding what improvements to be made and how achievements can be evaluated. In this case, performance of pupils can only be mainly measured in terms of the results they produce by the end of the year. A study done in India by Buytendijk (2009) indicates that good performance appraisal systems ought to focus on consequences.

In Thailand, Dooren (2006) also argued that a good performance target needs to bring clarity preciseness on measurement parameters in line organizational needs in question. A study done by Mackie (2008) also argued that target setting in performance appraisal in public institutions is a prof to the entire public in that; community resources should be spent in a prudent way. Mackie further emphasizes that setting of targets in a performance appraisal system ensures focus in organizations and at the larger public services' level. Early performance appraisal systems according to Cardy and Dobbin (2005) indicated that it must show simplicity and mainly focus on employees in the ranking and comparison of persons with others. In the period 1970s, a large number of countries in the European and American countries assumed the Japanese Total Quality Management system that emphasized on teamwork as opposed to individuals work as the emphasis of appraisals' productivity as well as improvement. Lin and Lee (2011) assert that; in Australia, the performance appraisal system was in the beginning established for private enterprises, however, has since been continually adopted in the public sector. Performance appraisals have been adopted due to limited resources, though they should be innovative to attain greater pupils' educational performance.

Letsoalo (2007) study in South Africa demonstrated that performance appraisal can only succeed if there are ownership at all appraisal levels since people normally reject change in cases of lack of reliable and clear outcomes. Dooren (2006) study designated that a performance appraisal scheme works as a control mechanism that is adopted by top executives to provide guidance, control and also monitor the activities of their juniors to make sure that they are contributing to the general development of an organization. In a study done by Simiyu (2010), introduction of a performance appraisal system and development in institutions is affected by tangible outputs presence, which are easy procedures and institutional environments that includes support offered by political class and stakeholders in public entities. Concepts of performance appraisal have been attracting significant consideration from researchers because of its potential for transforming learning as well as the overall educational performance.

Data from the Republic of Kenya (2012) presents that performance appraisal entails systematic evaluations of teachers' performance, and helps in enhancing comprehension of teachers' abilities for intended growth as well as development. It is deeply anchored on, values, norms and philosophies of societies. Appraisals reflect particular attitudes geared towards performance (self) and motivation, in addition to relationships (subordinates, peers, executives, organization), all having variance from a country, society and culture to the next. Public Service Commission (2011) has revealed that appraisals should concur with cultural values, norms as well as beliefs so that they can become operative. The deep–seated values, beliefs and norms in diverse cultures have affected the motivation of teachers, in addition to organizational equity perception as well as justice towards the needs of performance. As a result, performance appraisals generated and considered effective in a country may possibly not be appropriate assessments of other cultural regions.

Dooren, and Thijs (2010) study showed that particular cultures and countries value personal accomplishment and assertiveness traits, while some place more emphasis on collaboration and interpersonal influences. Countries that score highly on the level of aggressiveness have considered performance appraisals as a technique of guaranteeing impartiality amongst teachers and also other employees in order for greatly performing workers to obtain greater rewards. Countries that have scored low assertiveness levels, but highly in personal relationships may possibly dislike the community separations and pay inequality of either highly or lowly performing staffs. Employees from such a more collaborative, rather than an individual cultural orientation are more concerned with interpersonal associations with other workers relative to individual interests.

Highly assertive nations place value performance effects for effectiveness and self-management purposes, while lowly assertive countries normally interprets performance outcomes as aspects that are as obtrusive and threatening. In such a case, performance appraisal of highly aggressive nations is likely to be less advantageous for nations that score low in aggressiveness (Nzuve and Njeru, 2013). Nevertheless, nations that score lowly in aggressiveness may possibly adopt performance appraisals for purposes of improvement of long-term communication within organizations, such as clarification of job objectives, guidance and additional plans of development. This could lessen existing gaps between organizational expectations and job performance and (Vroom, 2002). Performance appraisals regulate processes, communicate officially with workers, provide performance related information, and provides chances to workers for correction of information deficits, as well as room for improving pupils' educational performance gaps. The TSC annual report 2015/2016 on performance appraisal indicate that performance appraisal is part of a broad public sector reforms aimed at improving efficiency and

effectiveness that leads to attainment of the expected organizations goals, aims and objectives.

According to the TSC handbook (2015), performance appraisal is a commission's management tool for measuring performance appraisal needs against set performance targets for a better learning and the general academic performance. Nzuve and Njeru (2013) showed that operative performance appraisal management systems define anticipations and support individualized performance objectives with organizational ones. This enables the school administrators and teachers to be involved in improving the academic standards and the general success of their schools. Performance appraisal therefore remains a freely negotiated performance agreement between the teachers' service commission in the teaching sector as the manager of the teaching force in the public and private schools, the head teacher and other teachers in Kenya.

Further, Teachers service commission (2016) indicated that the benefits of teacher performance appraisal and development includes forming the basis for the reward systems as has been noted by other scholars, including promotions and deployment to positions of higher authority, improving learners performance in every learning institution in line with the TSC vision of being a transformative teaching service for quality education in professionalizing the teaching force, ensuring excellence in the provision of efficient and effective service for quality teaching, promotion of better understanding of personal strengths and weaknesses in relation to expected performance targets, improving communication and enhancing feedback between the teachers and the supervisors thus enhancing interpersonal relationship and helping the teachers internalize the culture, norms and values of the institution.

# 2.3 Teacher Professional Knowledge and Application on Pupils Academic Performance.

Education requires holistic development of a human person. A good education system assists its members to become useful citizens in their contribution to the general development. A study done in Nigeria by Ayeni (2010) indicated that educational enterprising encompasses human intellect development, character, technical abilities and effective citizenships. Subsequently, the quality assurance matter in teaching has become an issue of unlimited concern for governments, learning institutions and all stakeholders in order to fulfill the society's expectations. Teachers are required to possess all-encompassing information in their subject areas in order to select suitable and satisfactory facts for planning of effective delivery, lesson notes, appropriate pupils' monitoring and evaluation, provision of consistent students' performance feedbacks, instructional materials improvisation, adequate records keeping and correct pupils' discipline towards enhancing pupils' academic performance in schools.

This is enhanced through a teacher's professional knowledge in ensuring better academic performance of pupils. Research done by Aronowitz (2008) indicated that in this age of information, head teachers are required to offer quality alignment and training of teachers towards putting up with contemporary thoughtfulness in curriculum planning affairs by guaranteeing great lessons' organization with continuity, sequence as well as concepts integration for facilitation of systematic assessment and implementation of the curriculum in order to achieve the aligned organizational targets. Through professional development of a teacher, it is possible to shape the teacher in a manner that fits in the new educational reforms for quality performance of both the institution and the pupils. The consciousness of such objectives is hinged on teachers' quality, input quality, classroom management teaching process as well as pupils' educational assessments by professional teachers. A

teacher's instruction quality has a noteworthy influence on pupils' educational performance (Callaghan, 2005). Such key factors, among others are determinants of the extent schools achieving the nationwide instructional objectives in the procedure of implementation of curricula.

Fullan (2002) asserts that teachers' professional development entails the overall formal and informal learning systems that teachers pursue and experience in captivating learning environments under circumstances of dynamic change and complexity that are suitable for pupils' academic performance. A collective contention in relation to that description is continuous knowledge acquisition process through development platforms o teachers. Such programmes enable teachers to acquire skills, knowledge as well as values for sustaining the anticipated intellectual vitality spark that helps in improving the teaching quality and academic performance of pupils. Teachers are in charge of translating and implementing educational policies. Excellent implementation needs proficiency, appropriate management of time, reliability, commitment, and a holistic practice attitude. Ayeni (2010) shows that deficient teachers in professional practices may not assist learners in meeting learning challenges and acceptable educational performance.

Professional development of teachers is predominantly significant due to the necessity for teachers to perform better and enhance pupils' standards of educational performance. In meeting the puzzling demands related to their jobs that are caused by technology innovations, instructors need to be able and enthusiastic to consistently advance in their skills, practices and content knowledge. Even though there are numerous methods to professional development of teachers like the group-type workshops, mentorship and full-time training in service. Whichever approaches are adopted for training of teachers, the imperative thing remains that teachers to be professionally fitted out (Hayes, 2010).

Teachers Service Commission has come up with timely policies to help guide Teachers professional Development in helping improve performance Appraisal output and academic performance in schools.

Ogbonnaya (2007) conducted a study in Lesotho exhibited that professional development has positive effects on student's achievements but the issue is that it has to be long term. Their study suggested that problem solving skills was greatest when professional development was focused on how students learn and how to gauge the learning effectively. In Southern Africa, a study conducted by Dembele, (2005) show that professional development is increasingly considered a pitch of learning. Along this field, three major phases appear consensual: planning, training and Continuous Professional Development (CPD). Further, a research conducted by Steyn, (2011) specified that Professional Development (PD) has become important for school improvement.

In a study conducted in Burundi by Varly and Mazunya (2017) on professional development discovered that the new curriculum in Burundi made teacher retraining a requirement for success of reforms. Interviews with teachers showed that the main innovations conveyed by the curriculum were often unknown or misunderstood by teachers. Therefore, The Rwanda case revealed that it is crucial to conduct retraining to enhance professional development.

A study by Osamwonyi, (2016) recommends that re-training should include seminars, workshops, conferences, exhibitions and processes that improve teachers and professional development in institutions from initial employment stage to retirement. Therefore, it becomes important that every attention be devoted to teacher in-service (retraining) education to promote professional development and growth. This view underscores importance of teacher retraining as an indicator for professional development in

secondary schools. According to the Teachers Service Commission, (2015) on policy Guidelines for teacher's appraisal and promotion, it was noted that teachers would be promoted based on performance. The policy summarizes the code that, first, school heads are obligated to offer oversight in regard to of teachers' performance appraisals in their individual institutions. Secondly, the commission determined the intervals at which appraisals in educational institutions are to be conducted and further, educational officers were given powers to enter any educational institution to ensure performance standards are reinforced and maintained.

This research ascertained that indeed Teachers Professional Development is a process which requires all stakeholders to participate to ensure the expected educational results especially pupils' academic performance in public primary schools. Professional development of teachers has been informed due to the fact that if instructors should stay enthusiastic on jobs, they need to have chances to continue their professional development, improvement and advancement in their selected careers. (Fullan, 2002) indicated that effective teachers' professional development is critical to quality learning and performance in education and to a larger extent in determining pupil's academic performance. Nevertheless, gaps seen in expert development of teachers no doubt lead to disadvantages in the teaching-learning processes, hence; low pupil's academic performance as has been seen in Suna East Sub-County schools, Migori County, Kenya.

## 2.4 Effect of Time Management on Pupils Academic Performance

Time management is a very important aspect in the development of a human person. Time as a resource must be properly utilized for good results. Studies done by Zhao (2009), on time management indicated that when working on a very important task like teaching where effective timely syllabus coverage is required, it is imperative to wisely manage

time. Management of time helps in carrying out tasks that appear to be more challenging, seemingly less overwhelming, more systematized, and are to be accomplished in the right period stipulated by the educationists in ensuring the most out of the available scarce resources in the learning sector. proper time management helps teachers to prepare and submit the required professional records within the time limit thereby leaving enough room to make up for any lost periods and enough room to attend to other school programmes and staff meetings which are also very crucial in the general academic success of a school. It also helps in reducing pressure which may unnecessarily pile up on a person due to work not done within the set targets.

Time as a resource affects every aspect of human endeavors. Time resource is enormously scarce and is a factor affecting every stakeholder in the education sector. Studies carried out by Ekundayo, Konwea and Yusuf (2010) illustrated instances where teachers and other educational stakeholders complain of lack of adequate period to carry out activities that which finally contribute to poor pupil's academic performance. They further assert that good teachers should effectively utilize time properly to accomplish plans. The most significant assets that teachers need to have skills in management of time. Such skills make it possible for teachers to dedicate a well-adjusted attention of interpersonal relations and production which finally in education leads to better pupil's academic performance.

According to Callaghan (2005) good time management is important since procrastination can be evaded as people have a less likelihood of putting off tasks when they are planned and written down in advance. Evaluation of the work documented enables an individual to work on areas which may have not been looked at properly for better future pupil's academic results. Studies conducted by Hager (2005) `indicated that knowledge of which

tasks needs to be completed assists people to identify the amount of free time they have to in the course of the day for all activities. It allows a person to know what he/she can do and how much time can be spent in doing such tasks; hence improving on work efficiency and output. Sticking to tasks schedules helps people to be less stressed concerning what should be accomplished and the bulk that is yet to be finished which may make some activities ending up not done at all. There are also less chances that people can work up to close deadlines. When time is not properly managed there is a high risk for life frictions among the staff, students and the general management.

Studies done by Kaushar (2013) suggested that missed appointments, neglected deadlines, or forgotten obligations and inadequate time management can result in increased difficulties in people's life, which on the other hand affect academic performance of pupils in a learning environments. As efficiency becomes progressively more operative, and so is the character of persons undertaking tasks and the institutions where such tasks are done. According to Jehn *et al* (2004) being recognized for having a reliable personality in terms of proper management of time makes one additionally appreciated at work, and also in individual life. Dependability and productivity are significant potentials that are greatly valued in an educational system for better academic performance by good time managers.

When a teacher does not have enough time; it is easy to end up feeling rushed and overwhelmed. Enough time should be created by individual teachers to comply with the checklist of professional documents as per the requirement of both the Teachers Service Commission as the education manager and the ministry of Education (KEMI, 2015). This reduces the level of stress that has always resulted into the loss of life for many knowledge providers; and at times resignations to other employment bodies. Everyone

needs time to relax and unwind. Having good time management skills helps a person to find better ways of utilizing resources at his disposal. Good time management practice leaves no room for procrastination; which has always been a big thief to development. The better you get at proper time management the more self-disciplined you learn in accomplishing tasks beforehand leaving room for other life activities KEMI (2015).

P. S. C (2011) asserts that efficient management of time provides room for people to achieve more goals in shorter spans of time that results in additionally free time. Free time enables a person to utilize educational opportunities, lower stress levels and keep one more attentive to guaranteeing the greatest out of the very inadequate resources in guaranteeing the most anticipated instructional product in performance terms in institutional set ups.

Since its commencement, the 8.4.4 secondary schools' programme has been reviewed two times in order to address increasing syllabus coverage challenges. Nevertheless, many teachers have not been able to complete syllabus on time as expected by the government policy. Odhiambo (2005) study on the degree of syllabus coverage in public schools in Kenya revealed that the syllabus was not always achieved before a year ends for the majority of classes in both secondary school and primary schools. In cases where syllabus is accomplished in time, pupils get sufficient time to revise and an enable final examinations' preparation. This elucidates why instructors and learners are pressured by government, school administration and parents to accomplish syllabus timely (Obong'o, 2009).

Completion of syllabus timely is utilized as a resolution to address educational performance matters in secondary schools. An additional challenge affecting completion of syllabus is teachers' absenteeism. Miller, Murnane and Willet (2008) asserts that

teachers' absence is a persistent challenge in a number of nations as it decreases education quality and leads to poor pupils' performance.

Merriam (2009) revealed that instructors engage students in undertakings that are not fundamental to teaching as well as learning. For example, Merriam (2009) has shown that in England, educators remained concerned with responsibilities taking a substantial amount of time that adds no worth to the teaching and knowledge acquisition process; for instance, engagement of students in games, farm activities, speeches and hygiene throughout class hours. At most times, educators attend conferences and meetings during schools' instruction hours.

For timely completion of syllabus, educators resort to teaching syllabus in irregular hours of school, like evening, early morning, weekends as well as holidays (Drucker (2005) and Ngugi (2013). Failure to teachers doing this, a class's syllabus may be spilled over to following years. Nevertheless, a class's syllabus is organized for completion in the course of a school term and an academic year. This challenge is faced by a large number of teachers in both primary and secondary schools within Kenya.

Mwangi (2011) study focusing on syllabus coverage as a time bound intervention in community secondary schools indicates that syllabus was in most cases never achieved before the year ends. If syllabus is timely completed, learners get an ample time for good preparation and revision towards final examinations that results in great performance. In addition, Nyakundi (2012) opine that a major factor for untimely incompletion of syllabus absenteeism of teachers (Ongeri & Bii, 2012), however, there are additional factors that this study established.

This state has revealed a gaps in teaching time management in a number of schools that the study sought to establish. Time linked matters in the teaching and learning processes like teaching in holiday, Gichunga (2011) highlighted uncovered syllabuses, Mwangi (2011) highlighted weekends' teaching, Sulo (2012) highlighted absenteeism of teachers, while Ongeri & Bii (2012) highlighted time management, all being indicators of poor use of time in teaching and learning of primary schools' learners.

## 2.5 Teacher Attitude towards Innovation and Creativity in Teaching

Innovation and creativity in learning has greatly transformed the education system. It is also very important to note that our learners profile has greatly changed. Chen (2010) argued that our learners have become digital natives that are weaned through video games, and are designated as marching through the schools, while bearing transformational changes in pouches in form of influential handheld multimedia devices (Kelly, McCain & Juke, 2009). Devoid of the classrooms' significance and tests' culpability, such digital expertise has transformed the traditional instructional paradigm, preventing the educator from reaching the students directly in order to transform learning proficiencies. Though many instructors nowadays have lamented that the students are incredible to deal with, game creators and other designers have been solving with desirable achievements the predicament that instructors are still grappling with: succeeding to get learners to master time-consuming things and challenging to derive desire from it.

Gee (2003) argued that educators need to build education on improved learning principles that currently conform in a poor manner to learning theories in great video games. For quite some time, schools have been tolerated as opposed to being experienced by learners as providing exhilarating investigations of society and self. Prensky (2010) asserts that in instruction of digital citizens, teachers should be ready to technologically advance and be more creative since today's children have a shorter attention span. Against such tenacious

representations of learners' dissatisfaction, there is great need for reflection on pedagogical and curricular approaches that are compatible with education styles in this generation. This negatively impacts on students' educational performance. In the present day, accountability movement has continued limiting time opportunities for time in school days to involve pupils in activities requiring innovation, creativity, critical thinking and problem solving characteristics. The same proficiencies that21<sup>st</sup> century skills partnership are recognized as essential for the future staff (World Bank, 2007).

Key (2010) has shown that objectivity is conventionally associated with academic content mastery. Nevertheless, students are unable to carry out routine seeking of information and solving of routine, rather, they come up with new, vigorous associations and handle educational challenges with refined innovative and creative technologies (Mc William, 2008). The hardship for instructors therefore is moving away from the convergent-intellectual multiple-choice tasks and recalling dominating assignments for educational practices. In fact, the plea for teachers to continue being receptive to such changes is an unavoidable one since teaching's future emphasis is on the association with young and originality of demands to shape lives (Friesen & Jardine, 2010). Knowledge acquisition is the fundamental profession of schools and at present, it needs to be supported through classrooms' teaching that operates for the 21st century students. Schools whose syllabuses and tutoring do not engage newer cohorts as active students and eloquent creators are therefore not just to the country's growth, particularly when information becomes power in globalized worlds. The demands of the 21st century are controlled by different ways of eloquence and correct-brain abilities, which will come progressively to force.

The herein stated view has been validated by Gardner (2010), who points on robust temperaments, and personalities that are unafraid to assume sensible risks, intellectual and

physical as important temperaments that mark the future creators and should be advanced by educators. Reeves (2004) revealed that curricula needs not only to focus on equipment essential for developing coherent and reasonable building of new information on various study grounds, however, also must antagonistically nurture a culture of creativity and innovativeness in students. Kelly *et al* (2009) assert that innovation and technology have changed the scales of work that have never been experienced previously. It is drives groundbreaking fluctuations that need academic stakeholders of rethinking development skills, design and production, and ways of assuring maintainable future for the next generation. This necessitates learners to get skilled to be philosophers and problems' solvers.

To fulfill the 21st century educational expectations, instructors must move off philosophies and methods of the past and be brave advocates for developing the sorts of learning dispositions required for students and work futures. This implies spending lesser time elucidating through teaching and investment of additional period in investigational and error-tolerant engagement modes. The teacher should not think for the students, (a gap experienced in current education system), nor impose thought on them for the teacher's thinking is authenticated only by the authenticity of the students' thinking as is posited by Prensky (2010). Studies conducted by Kobia and Mohamed (2006) pointed that schools should be focused more on offering platforms for comprehension, investigating and then co-creation of technology. Practical selection in teams remains the greatest way to inspire the younger generations and guiding them that creativity and innovation are imperative and amusing. When young people are not motivated they lose interest in academic issues. This can contribute to low academic performance. Educators therefore need to think more about how to engage and motivate the younger generation in making

the best use of content that they find themselves, and to work in ways that enable them to come up with new ideas which has been identified as key tenet of modern societies.

A study conducted by Deway (2009) gave emphasis to the role played by learners in educational processes and the role played by teachers in providing guidance to students through dynamic academic routines that are matching to individuals' inclination and the ability of children by utilization of innovative technologies. The study further recommended that experiences are educative when valuable information is developed through collaborative inquiries in authentic contexts within communities of practice. The impression that learning encompasses learners as collaborative problem-solving agents and co-creators is certainly an imperative one, and schools working to exploit on the generational features of sharing and cooperating with the peers have a greater likelihood of enacting and inspiring learning and teaching practices that contend with sharing and social engagements that flourish in the 21st century.

A study by Reeves (2004) has called for educators to re-evaluate professional practices and their influence on academic achievements of pupils and convert academic accountability from damaging and unedifying forces to productive and transformative forces in education. In focus of the spirit of the learner centered liability, a 21<sup>st</sup> century schooling needs therefore to be tangled with outcomes of performance and expertise in the essential subjects information and 21<sup>st</sup> century talents anticipated and greatly treasured in and out of school. Generally, rigorous educational values should determine learning and offer the background for education of 21<sup>st</sup> century skills through innovativeness creativity with help of modernized teaching and learning technologies at their disposal.

In Kenya a study conducted by Ndirangu (2017) suggested that there were no significant differences between male and female teachers' attitudes towards the utility of computers

and teacher professional development strategies in the classrooms. For managers and organizers of Kenya's digital learning program, this could encourage them to organize training without having to segregate genders as they all appear to have similar predispositions towards the utility of computers. Considering that there are no substantial differences in attitudes between male and female teachers towards the utility of computers and TPAD processes in classrooms development, additional studies may seek to emphasize joint training for the teachers. This study is also corroborated by Buliva (2018) who agreed that The teachers' responses suggested that there were no substantial differences in attitudes towards the utility of computers and TPAD interventions among teachers by genders. This study may assist education planners in the Suna East Sub-County in planning to exploit teacher attitude in enhancing academic achievement in Migori county.

## 2.6 Impact of Teacher Professional Development on Pupils Academic Performance

A study by Osamwonyi, (2016) recommends that professional development should include seminars, workshops, conferences, exhibitions and processes that improve teachers and professional development in institutions from initial employment stage to retirement. Therefore, it becomes important that every attention be devoted to teacher inservice (retraining) education to promote professional development and growth. This view underscores importance of teacher retraining as an indicator for professional development in learning institutions.

According to the TSC, (2015, it was noted that teachers would be promoted based on performance. The guideline summarizes the code that, to begin with, heads of schools should oversight the performance appraisals programs of instructors in their particular institutes. Secondly, the commission determines the intervals of appraisals in academic

institutions. Further, officers have authorities to enter educational institution to make sure that there is reinforcement of performance standards. This research ascertained that; if indeed Teachers Professional Development is a process of teacher appraisal approach which can influence pupil academic achievement in public primary schools. Development of professional teachers is defined by the need for teachers to stay enthusiastic on their job. They need to be provided with opportunities for continued professional growth, progression and enhancement in their selected careers. (Fullan, 2002) point out that operative professional development of teachers is important for qualifying teaching and in educational performance, and to a greater extent, in determination of learners' educational performance.

According to studies conducted by Chen (2010), professional development is learning to earn or maintain professional credentials to formal course work, attending conferences and workshops and informal learning opportunities situated in practice. Professional development requires an individual to have a positive attitude towards professional development, the willingness to examine past actions and decisions in order to improve, reading widely, not only about current events but also subjects that can broaden a person's horizons, attending training programmes, building self-awareness, cultivating peer relations among many other professional development aspects. Teacher professional development is very crucial in the life of every practicing teacher. It is through teacher development programmes that the teachers are able to change with the changing demands of education.

According to Reeves (2004), professional development is among the important components in the present-day academic modifications presently occurring in the entire world amongst the teaching fraternity. Communities world over have acknowledged that

instructors do not only advocate for one variables that needs change for improvement of their instructional skills, but they encompass the most substantial change facilitating agents in educational related reforms. This twofold role played by instructors in educational changes, being both subjective and objective makes the teacher professional field of growth a developing and challenging area. With the daily changes in our working environment and the daily happenings, for instance economic changes, technological advancement, changes and amendments in the legislation; it is important teachers develop skillset that can enable them remain effective and relevant in the ever advancing career demands.

According to Muthaura, (2010) Teachers need to be trained in order to have the ability to facilitate learning effectively to help learners deduce their future skills for learning. The teacher development programmes should enable them to be culturally competent, talented, innovative, creative problem-solvers, skilled and critical thinkers. Training institutions need to understand that teachers whose competency levels are low will have difficulty in harnessing learners' competency and skills needed for survival which may finally result into low academic performance level. There is therefore need for 21st century skills in all teachers at all levels of training for improved teaching approaches and skills. Actual professional growth encompasses guaranteeing that one's knowledge and comprehension regarding area of knowledge in the career is always at the utmost level. This calls for acquisition of attitudes, knowledge and skills through job-related training programmes that result in career related qualifications. It as well calls for informal capacity development programs that may be conveyed on jobs for development and enhancement skills for improved results as is emphasized by Wango (2009).

Professional development may be done in areas such as ICT (information technology), health and safety, educational legal units, security of learners and teachers and educational facilities among many others areas. This novel importance is welcomed by instructors as it characterizes the much desired teachers' work appreciation and as well encourages concepts of professional teaching. Hard work done by educators in professional improvement is indispensable because it promotes the acknowledgement of work as authorities and it is the case for every professional in any field's novel chances for development, investigation, knowledge and development are at all times imperative for the achievement of any organization as is supported by Richard (2002).

According to studies done by Prensky (2010) on teaching digital natives, Prensky argued that effective methods of teaching have a noteworthy positive influence on what learners learn. Learning on ways of imparting knowledge, and working to grow into an outstanding instructor is an extensive process requiring the development of hands-on skills under the leadership and management of professionals and the attainment of particular information. Prensky (2010) further emphasizes that understanding what and how educators can be proficient in understanding why and when to complete given tasks. Teachers are conceived of reflective practitioners, individuals who enter the occupation with a particular knowledge base, and who can attain novel knowledge and capability on the basis of that previous knowledge, hence; the essence for additional expert development platforms. In doing so, the role of expert improvement is to assist educators in construction of new academic philosophies and practices for helping them to develop their proficiency in the field as we learn from Friesen (2010).

It also becomes imperative to denote that expert development is considered as a cooperative process even though there may be some opportunities for isolated work and

reflection, most effective professional development occurs when there are meaningful interactions not only among teachers themselves, but also between the employer of teachers, educational administrators, teachers, parents and the entire community members. This is well illustrated in the Teacher Performance Appraisal and Development (TPAD) under the required teaching standards as is discussed by Fazal (2012) on a closer focus on gender in Pakistan. Professional development programmes will enable the teachers to lead the teaching profession by participating in professional development and growth activities; and developing professional relationships and networks. The programmes will also help the teachers to develop and establish a respectful environment for a diverse population of students in which each child has a positive and nurturing relationship with caring adults.

Studies done by Kobia *et al* (2006) indicated that Teacher professional development programmes enable educators to evaluate students' learning through data to offer thoughts on what can be done for improvement of student learning and connecting professional development with professional goals, and participation in commended activities for expert learning and development. The 21<sup>st</sup> century educators therefore requires to function commendably in multifaceted, vigorous environment by using diverse research substantiated methods to advance teaching and learning through teacher development programmes.

#### **CHAPTER THREE**

#### RESEARCH METHODOLOGY

## 3.1 Introduction

This chapter presents research design, area of study, target population, sampling procedure and sample size, instruments of data collection, validity and reliability procedures and data analysis. It also took into account the ethical considerations to be observed during any research work.

## 3.2 Research Design

Research design refers to the overall strategy that a researcher chooses to integrate the different components of the study in a coherent and logical way, thereby, ensuring the effective address of the research problem. It constitutes the blueprint for the collection, measurement, and analysis of data. According to studies done by Chandran (2005) research design is the way in which research can be conducted to answer the question being asked. This research used descriptive survey design, since it is extensive, flexible and dependable and is useful in describing the characteristics of a larger population. Survey design according to Kothari (2007) ensures a more accurate sample to gather targeted results in which to draw conclusions and make important decision. Chandran (2005) further explains that research design is the plan to follow in order to realize the research objectives. It represents the master plan that specifies the methods and procedures for collecting and analyzing the required information. They further argue that it is the structure of an enquiry which deals with a logical problem in giving direction, order to the research making it efficient by reducing chances of drawing incorrect casual inferences from the data collected.

#### 3.3 Area of Study

The study was carried out in Suna East Sub-County public primary schools in Migori County .According to Maurice et al (2013) and the statistics on academic performance taken from the ministry of Education office in Migori Suna East Offices, Suna East Sub-County has three zones; Migori zone with a total of 18 public primary schools, God-Jope 24 public primary schools and Anjego with 25 public primary schools. Of the three zones, each zone has C.S.O (curriculum Support officer). The Sub-County is located in Migori County in Nyanza Region. It is bordering Uriri constituency to the South, Kuria East to the south Suna west and Nyatike to the west. It is a cosmopolitan Sub-County with majority of the population inhabited by the Luos, then the Luhya, Kisii and the Kuria tribes. It also has a few Somalian and Indian communities. The major economic activity in this Sub-County is tobacco and sugarcane growing and other small scale horticultural farming. It has a population of 97121 people (national census 2009) with an area of 207.30 square kilometres with latitude of 1.0707°S, and longitude of 34.4753°E.

The Sub-County registered the highest Sub-County academic mean of 245 in the Kenya Certificate of Primary Education (KCPE) for the last six years which is below average according to Kenya national examination council rating. In the year 2013 the KCPE mean was 234; in 2014 the mean was 229; in 2015 the mean was 227 in 2016 the mean was 233 in 2017 the mean was 245 and in the year 2018 the mean was 238. The means are also not stable. There was therefore the need to investigate the cause of this dismal pupil's academic performance. Suna East Sub-County was established in the year 2013 when Migori constituency was divided into Suna west and Suna East Sub-Counties. The drainage pattern in Suna East is punctuated with two permanent rivers that flow into Lake Victoria. The Sub-County has two rainy seasons that falls between December to May and between February and April every year (Ministry of Education, 2018).

## 3.4 Target Population

Studies conducted by Kothari (2007) revealed that research population is a large collection of individuals or objects known to have similar characteristics and is of interest to a researcher. Studies further done by Kothari indicate that research population represents the total group of people or entities from which information is required.

For this study, the target population for this study was 65 Head teachers, 65 deputy head teachers and a total of 500 assistant teachers. Data was collected in public primary schools only. This is because most private schools do not follow the performance appraisal demands by the Ministry of Education and the Teachers Service Commission since they have their own internal appraisal systems. This population encompasses three zones; Migori with a total of 18 public primary schools, God-Jope with a total of 24 public primary schools and Anjego zone with a total of 25 public primary schools

# 3.5 Sampling Procedure and Sample Size

According to (Mugenda, 2010), this study had a population 65 head teachers, 65 deputy head teachers and 500 assistant teachers. The researcher used Krejcie and Morgan (2009) formula to obtain a sample size of 56 Head teachers, 56 Deputy heads, and 217 Assistant teachers. It used stratified random sampling that gave each item in the population an equal chance of being selected to identify senior teachers and Assistant teachers. Each school of focus was considered as a stratum. A ratio of 0.4 was used to select a sample from each stratum. This was supported by Kothari (2007) in his studies done in New Delhi that talks about the method used to identify a sample within a population. For the head teachers and their deputies, purposive sampling technique was used. Purposive sampling in this case implied explicitly selecting head teachers and deputy head teachers who are likely to generate appropriate and useful data (Kazdin 2003). This was considered because they are considered to have the required information, like government circulars and policy

documents that guide teachers service delivery as far as teacher's appraisal is concerned. They are also the ones appraise and observe the rest of the teachers. The researcher used Krejcie and Morgan (2009) table to generate the required samples in table 3.1

**Table 3. 1: Population of Category of Respondents.** 

Respondents Population Krejcie & Morgan Table on Sample population						
	Population	Krejcie & Morgan	Sample			
Teachers	500	500	217			
Deputy Head teachers	65	65	56			
Head Teachers	65	65	56			
	630	630	329			

From table 3.1 when 65 head-teachers and deputy head-teachers were selected the population translated to a sample population of 56 head-teachers and 56 deputy head teachers which was done using simple random sampling. On the other hand when a population of 500 teachers was selected, a sample population of 217 was realized. The assistant teachers during this study was chosen using proportionate random sampling while the schools where this study was done was chosen using proportionate stratified random sampling, where population was divided into groups based on similar characteristics as is supported by Kothari (2007).

#### 3.6 Instruments of Data Collection

Research instruments are tools that a researcher will use in collecting data from the sampled research population. Quantitative survey data collection method was employed to collect primary data. Questionnaires and interview schedules were developed and used in this study according to Homets (2007).

#### 3.6.1 Questionnaires

A questionnaire is a research instrument consisting of a series of questions (or other types of prompts) for the purpose of gathering information from respondents. According to Richard (2002) questionnaires are chosen due to their ability to collect a large number of information in a reasonably quick span of time. The researcher used this instrument because it collected data from a controlled number of variables or unlimited number of variables. The questionnaires had both open and closed set of questions. Closed ended set of questions in the questionnaire was used to restrict respondents while open ended set of questions in the questionnaire will be used to get the opinion of the respondents.

Questionnaires for head teachers, deputy head teachers and teachers were issued by the researcher to seek information on influence of Teacher Performance appraisal and development on pupil's academic performance in primary schools in Suna East Sub-County, Migori County-Kenya. Since they are presented on paper form, there was no opportunity for interviewer's biasness. This is supported by Orodho (2002) in his studies done in Nairobi Kenya. In his work he further states that Questionnaires also enable the person administering them to explain the purpose of the study and the meaning of items that may not be clear. The researcher cooperated with the respondents to administer the questionnaires to the head/deputy head teachers and assistant teachers. The Questionnaires (Appendices I and II) was used to collect data from the sampled population. Questionnaires were used to collect demographic data. Also, questionnaires

were used to collect data to investigate the influence of teacher professional knowledge and application, to collect data to assist in determining effect of time management; Further, questionnaires were used to collect data to assess attitude of teachers towards Innovation and Creativity and to establish the influence of teacher professional development on pupil's academic performance. In addition, Likert scale was used to measure the attitude of the respondents in objective three. There were five responses that were checked and numerical score were assigned to each of the questions with responses ranging from strongly agree, agree, neutral, disagree and finally strongly disagree.

#### 3.6.2 Interview Schedules

According to the researcher, Interview schedules were administered to the respondents on face to face interviews. (Appendices III, IV and V) to enlist In-depth information from respondents of the same population to clarify what was not clear from the other respondents of the questionnaires. Focus interviews for respondents within the group of the research was conducted by the researcher after the questionnaires had been filled out. This was done deliberately so as so seek for more information and clarification from the interviews on the issues not adequately addressed in the questionnaires (Mugenda, 2010) Head teachers, Deputy Head teachers and assistant teachers within the sampled population were interviewed.

#### 3.7 Validity of Research Instruments

Validity is the appropriateness, meaningfulness and usefulness of a specific inference the researcher make on the data collected. According to Daniel (2009) it is the degree of success with which the results obtained from analysis of the data collected actually represent the phenomenon under study. Daniel further emphasized that validity is the degree of success with which the instrument measures what it is supposed to measure; the accurateness, correctness, true and meaningfulness a point supported by Jehn et al (2004).

In order to check the content and construct validity of the instruments, questionnaires were first scrutinized by the University Supervisors where they made necessary corrections incorporated in the study. In addition Content validity was established through discussions with Research Experts from Kisii University in the department of Education.

## 3.8 Reliability of the Instruments

Reliability is the measure of the degree to which a research instrument yields a consistent results or data after repeated trials. According to Kothari (2007) validity is the extent to which one's findings can be replicated. During this study reliability was established through test re-test method. The research questionnaire was administered to 15 respondents within the research area who are not included in the study. One month later, the questionnaires were administered to the same respondents. The major purpose of the pilot study was to check on the suitability and the clarity of the questions, relevance of the information being sought, the language to be used and the content validity of the instruments from the responses given. To ensure reliability, the researcher delivered the questionnaires to the sampled primary schools directly, administered them to the head teachers, deputy head teachers and teachers and clarified each item to ensure the respondents understood the choices under the rating of items. A split half correlation test for reliability was used whereby a coefficient of 0.79 or greater is good internal consistency. The piloted data for Head Teachers/Deputy Head Teachers was 0.82 and 0.79 for teachers. The researcher finally accepted a reliability of 0.82 for administrators and 0.79 for teachers as reliable using test re-test method through questionnaires results

#### 3.9 Data Collection Procedures

The researcher applied for a research permit to National Commission for Science, Technology, and Innovation (NACOSTI) before he proceed to the field to collect relevant data with permission from county director of education and county commissioner as was instructed by the director from National Commission for Science, Technology, and Innovation (NACOSTI).

Pilot questionnaires were prepared and administered to sampled respondents in 16 schools to ensure the clarity and objectivity of the items. This greatly assisted the researcher to make necessary adjustments in the original questionnaires due to some unavoidable demands from the piloted respondents. Questionnaires were pre-tested and suggestions for improvement encountered during the piloting process were in co-operated in the final questionnaires. Final questionnaires were distributed to the respondents by the researcher himself without the research assistants.

The researcher collected data from 56 head teachers, 56 deputy head teachers and 217 assistant teachers in the 65 public primary schools in Suna East Sub-County; though not all the questionnaires were returned as is explained in chapter four of the study. To improve the response rate, there was a cover letter explaining the reasons for the research from both the county Director of Education and county commissioner. This made respondents more comfortable to freely respond to the questionnaires.

## 3.10 Data Analysis

Data analysis has the main purpose of testing hypotheses and enabling generalization of results from sample to population. According to Kothari (2007) data collection from the respondents was processed using the data processing Operations which include editing to ensure accuracy and consistency, coding in order to put data into groups on the basis of common characteristics and finally tabulation in order to summarize and arrange the data in a concise and logical order.

Descriptive statistics was then used to compute the mean, frequencies and percentages along with the search for patterns of relationships that exists from the collected data. A study by Creswell (2013) further illustrated that Descriptive statistics was used because it deals with methods of organizing, summarizing and presenting data in a convenient and informative way. This was achieved by the use of tables and charts which allow presentation of data in ways that make it easier for readers to see information that may not be apparent to a casual observer.

In addition, graphical techniques enhance mental perception of the information; numerical techniques are used to give summation, frequency percentage and average or mean to consolidate data. Frequency tables and pie chart graphs will be used to analyze the relationship between the teacher performance appraisal and development on teaching outcomes. The descriptive statistics will then be presented using tables, graphs and charts. Statistical software package for social sciences (SPSS) version 21 was used to generate the required descriptive statistics. Frequency tables, charts and other simple statistical analytic techniques were also used to analyze the data that was generated.

## 3.10.1 Data Analysis Matrix

The data analysis matrix Table 3.2 shows pathways for data analysis. The objectives of the study are shown in column one, independent and dependent variables were shown in column two and three; instruments used for data collection are indicated in column four and Data analysis processes was shown in the last column.

**Table 3. 2: Data Analysis Matrix** 

Research objectives  Objective (i)	Independent variables Professional	Dependent variables Pupils	Research instruments	Data analysis techniques Frequency
To investigate the Influence of teacher professional knowledge and application on pupil's academic performance	knowledge and application	academic performance	Section 2 Questionnaires Interview schedules	tables Charts, Anova
Objective (ii)  To determine the effect of time management on pupil's academic performance	Time management	Pupils academic performance	Section 3 Questionnaires Interview schedules	Frequency tables charts
Objective (iii)  To assess the attitude of teachers towards innovation and creativity in teaching on pupil's academic performance	Innovation and creativity in teaching	Pupils academic performance	Section 4 Questionnaires Interview schedules	Frequency tables Charts
Objective (iv)  To establish the impact of teacher professional development on pupil's academic performance	Professional development	Pupils academic performance	Section 5 Questionnaires Interview schedules	Frequency tables, Chi-Square Charts

Table 3.2 Presents research objectives, independent and dependent variables of the study. It also presents research instruments and data analysis techniques which the researcher employed in his study to help find out the Influence of Teacher Performance Appraisal

and Development on Pupils Academic performance in public primary schools in Suna East sub-County Migori County

#### 3.11 Ethical Considerations

Ethics is the norm of conduct that distinguishes between an acceptable and unacceptable behavior in a given society. According to Homets (2007), this research was guided by the following ethics; openness, honesty, confidentiality and social responsibility. The study strived to ensure there was a lot of honesty in data presentation and analysis as is emphasized by Kothari (2007). It was open to any possible criticism as the researcher strived to upheld confidentiality of any form of information obtained from different respondents. Social responsibility during this study was aimed at promoting the social good and at the same time prevented any social harm through research, publication education and advocacy. Relevant laws, policies and rules were observed during this study. This was due to the fact that this kind of research was conducted in schools which are governed by different rules and policies created by the government and other relevant educational stakeholders.

Further, the participants participated on open and voluntary basis. Privacy of the respondents was highly upheld and none of the respondents was coerced into participation. The respondents were treated with respect and courtesy throughout the research period. Rules in research and publication including the rules on plagiarism were observed. The document was also subjected to anti plagiarism tests; where it was realized to have obeyed the set rules and regulations of the Kisii University.

#### **CHAPTER FOUR**

## DATA PRESENTATION, INTEPRETATION, ANALYSIS AND DISCUSSION

#### 4.1 Introduction

This chapter is a presentation and discussion of the research results of the primary data collected from the field using the questionnaires and interview schedules. The chapter represented results on the respondents' response rate of research instruments, demographic data of the respondents and findings for each objective. The chapter is divided into subsection where general characteristic of the respondent such as age, gender, highest level of qualification and experience are analyzed. The data is also analyzed around key variables surrounding factors influencing teacher performance appraisal and development on pupil's academic performance in public primary schools in Suna East Sub-County, Migori County – Kenya. The chapter presents findings of the study as per the research objectives which consisted the following;

- To investigate the influence of Teacher Professional Knowledge and Application on pupil's academic performance in Suna East Sub-County public Primary Schools Migori County, Kenya.
- ii. To determine the Effect of Time Management on pupils academic performance in Suna East Sub-County public Primary Schools Migori County Kenya
- iii. To assess the attitude of teachers towards Innovation and Creativity in Teaching on pupils academic performance in Suna East Sub-County public primary schools in Migori County, Kenya.
- iv. To establish the impact of Teacher Professional Development on pupil's academic performance in Suna East Sub-County public Primary Schools Migori County Kenya.

## 4.1.1 Questionnaire Return Rate

Questionnaire return rate is the proportion of the sample that participated as intended in all research procedures as is indicated in the table 4.1.

**Table 4. 1: Questionnaire Return Table** 

Questionnaire Return Table						
Respondents	Target respondents	Sampled Response population (Krejcie &		Response rate		
		Morgan table)				
Teachers	500	217	196	90.30%		
<b>Deputy Head</b>	65	56	51	91.07%		
Teachers						
Head teachers	65	56	51	91.07%		
TOTAL	630	329	283	89.02%		

From table 4.1, out of 217 teachers sampled, one hundred and ninety six (196) constituting 90.36 percent returned the questionnaire. Out of the 56 deputy head teachers sampled, fifty one (51) respondents constituting 91.07 percent returned the questionnaire. Out of the 56 head teachers sampled, fifty one (51) respondents constituting 91.07 percent returned questionnaires. The percentage return rate was two hundred and eighty three (283) respondents constituting 89.02 percent of the three hundred and twenty nine (329) expected sample population which according to Gay (2006) was deemed adequate for analysis and reporting. Studies done by Mugenda and Mugenda (2010) supports that a response rate of 50 percent is adequate for analysis. The study further asserts that

reporting rate of 60 percent is good and a response rate of 70 percent and over is excellent, so per Mugenda et al (2010) the response rate for this research was excellent.

# 4.1.2 Demographic Data of Respondents

Demographic data gives information about population structure and help create a mental picture of subgroup that exists in the population (Kothari, 2007). In this study the researcher investigated the age, gender, academic qualification and number of years one has served in a school. The study sought to determine the age of the respondents. Findings are summarized in table 4.2

**Table 4. 2: Descriptive Data for Respondents** 

Descriptive Statistics for ages of Head teachers , Deputy Head teachers and Teachers							
	N	Range	Minimum	Maximum	Mean	Std. Deviation	
H/ Trs age	56	12	45	57	51.08	3.52	
D/ HTrs age	56	17	38	55	45.81	4.675	
Teachers	217	24	30	54	42.52	5.674	

The average age of most head teachers is 52 year with maximum age being 57 years and minimum age being 45 years and standard deviation of 3.5 years. This indicates that most head teachers are almost retiring with retiring age being 55 years for voluntary retirement and 60 for compulsory retirement

The average age of deputy head teachers is 46 with maximum age being 55 and minimum being 48 with standard deviation of 4.5 year. According to TSC (2016) ,it implies some deputy have reached the voluntary retirement age with other being in their late career hence legible for appointment as head teachers. The mean age of teachers is 42.52 years with maximum age being 54 and minimum of 30 and standard deviation of 5.7 years.

According to Republic of Kenya (2012), the range is 24 which implied some teachers are in their initial stages of the teaching career. According to Letsoalo (2007), academic performance for individual learners and the organization can only be realized if there is ownership of the appraisal programmes by the entire human personnel in terms of age, personality, commitment, qualifications among other related factors at all academic levels. To attain this there is need for team work, tolerance and understanding from the teachers, the administration and other education stakeholders of varying ages and capacities in terms of responsibility with little emphasis on when one is expecting to exit from the service.

## 4.1.3 Gender of Respondents

The study sought to determine the gender of teachers, head teachers and deputy head teachers. The results are displayed in table 4.3.

**Table 4. 3: Gender of Respondents** 

Sample Respondents by Gender								
Male Percent Female Total Percent								
Teachers	75	53	121	196	69			
<b>Head Teachers</b>	27	19	12	39	14			
<b>Deputy Head Teachers</b>	39	28	12	51	17			

**TOTAL** 141 142 283

Table 4.3 indicated that one hundred and twenty one 121 (85 percent) teachers are females while seventy five 75 (53 percent) are males. This demonstrates that more females have been recruited to teaching as compared to males. Majority 39 (81.1 percent) of deputy head teachers are males as compared to 12 (18.8 percent) who are females. The ratio of male to female deputy headteachers is not proportionate. There is need to encourage female teachers to compete with their male counterparts for deputy headship positions. Majority 27 (69.2 percent) of head teachers are males while 12 (30.8 percent) are females. According to Reeves (2004) this was fair unlike the percentage that had taken deputy headship.

According to Dooren (2006) performance appraisal and development can only be properly realized in an enabling learning environment which is supported by all stakeholders both political and public entities. To realize the potential of performance appraisal need to transform pupil's academic performance, there is need for fair recruitment of all gender to the administrative positions. This idea is supported by Key (2010) in the total quality management where emphasis is made on teams rather than individual as the focus of appraisal productivity in the realization of better academic performance of learners.

## 4.1.4 Academic Qualification of the Respondents

The study sought to determine the academic qualification of teachers, head teachers and deputy head teachers. The result is displayed in table 4.4

**Table 4. 4: Academic Qualification of the Respondents** 

# **Academic Qualification of Respondents**

		Teacl	iers	Head Teachers		
		Frequency Percent		Frequency	Percent	
Qualification	S1	16	7.4	11	19.6	
	Diploma	48	22.1	24	42.9	
	Degree	45	20.7	15	26.8	
	Masters	22	10.1	6	10.7	
	P1	86	39.6			
	Total	217	100.0	56	100.0	

Majority 86 (39.6 percent) of teachers are P1, 48 (22.1 percent) are diploma holder, 32 (16.3 percent) hold bachelor's degree, 20 (10.2%) are S1 teachers, 7 (3.6 percent) are 0-level teachers and 5 (2.6 percent) have master's degree. These results show that the teachers have the minimum required training to teach in primary schools. According to Teachers Service Commission (2016), the minimum required training for teachers is O-level and P1 level training.

Majority 21 (43.8 percent) of the deputy head teachers are diploma holder with 12 (25 percent) having degree, 5 (12.8 percent) having P1 and 2 (5.1 percent) being S1. Promotion is based on academic qualification and number of years served reason behind most deputy head teachers having diploma and above as their academic qualification

Most 20 (51.3 percent) of head teachers are diploma holder, 12 (30.8 percent) are degree holder while 5 (12.8 percent) and 2 (5.1 percent) are P1 and S1 holders respectively. This clearly demonstrates that the head teachers have the required academic qualification and have experience to lead schools. The idea of academic qualification is very important in appraisal issues. According to International Society for performance improvement (2006), it is noticed that though the respondents have the minimum qualification of p1 which is needed for one to teach at primary level, there is need to pay teachers according to their various academic qualifications and levels of production. This can help increase productivity as far as appraisal issues are concerned. SC image (2012) also asserts that promotion to administrative positions and even to higher teaching positions is majorly pegged on individual academic qualifications.

# **4.2 Influence of Teacher Professional Knowledge and Application on pupils academic performance**

The first research question was to investigate the influence of teacher's professional knowledge and application on learning outcome in Suna Eats Sub-County public primary schools Migori County Kenya.

#### 4.2.1 Lesson Observation in Schools

The first variable considered aspects of teacher professional knowledge. The table below summarizes the responses of teachers on different aspects of teachers' professional knowledge and application. Table 4.5 assessed teacher lesson observation in schools. This was based on how administrators conducted lesson observation in schools.

**Table 4. 5: Teacher Lesson Observation** 

	Teacher Le	esson Observa	ation	
	Frequency	Percent	Valid	Cumulative
			Percent	Percent
Daily	13	6.6	6.6	6.6
Monthly	62	31.6	31.6	38.3
None	14	7.2	7.2	45.4
Often	4	2.0	2.0	47.4
once a term	4	2.0	2.0	49.5
once in a while	4	2.0	2.0	51.5
Rarely	8	4.1	4.1	55.6
Termly	65	33.1	331	88.8
thrice a week	4	2.0	2.0	90.8
twice a month	6	3.1	3.1	93.9
Weekly	12	6.1	6.1	100.0
Total	196	100.0	100.0	

The analysis on Table 4.5 shows that a majority of 65 (33.1 percent) of teachers undertake individual lesson observation in the school termly, 62 (31.6 percent) undertake it on monthly basis, 14(7.2 percent) do not undertake at all. 12 (6.1 percent), 6 (3.1 percent), 4 (2.0 percent) undertake it weekly, twice a month and thrice a week, once in a while, often and once in a term respectively. The results indicate most teachers do not follow the laid down requirement of undertaking the lesson observation daily after every class (TSC, 2016).

Further, the study sought to understand the attitude of teachers on professional development. As far as teacher professional knowledge and application is concerned, individual teacher lesson observation is one of the requirements by teachers in complying

with the teaching standards. Every teacher must be observed at least once every term by the immediate supervisors. This is according to the laid down procedure in the teacher performance appraisal and development tool of two thousand and sixteen. According to this tool, teacher lesson observation assists in reducing cases of teacher absenteeism from school without any apparent reason thereby improving the overall lesson attendance and learners academic performance in their various learning assessments. In addition, According to Republic of Kenya (2012), this entrenches a culture of teacher relationship with the learners and other stakeholders hence helping the organization to achieve its mandate and the general academic performance of learners and the schools strategic plan.

#### **4.2.2** Professional Knowledge is Essential for Performance

The research further sought to gauge whether teacher professional knowledge was essential for enhancing learner academic performance in Primary School in Suna East Sub-County, Migori County Kenya.

Table 4.6 showed the responses of one hundred and ninety six (196) teacher respondents. They indicated their views on role of professional knowledge on achievement.

Table 4. 6: Professional Knowledge is Essential for Enhancing Performance

P	Professional Knowledge is essential for Performance					
		Frequency	Percent	Valid Percent		
n.	Yes	163	83.9	83.9		
Responses	No	33	16.1	16.1		
	Total	196	100	100.0		

Table 4.6 showed that one hundred and sixty three 163 (83.9 percent) of the teachers indicated that professional knowledge is essential in enhancing teaching for better academic performance, only 33 (16.1 percent) who did not agree. Professional knowledge is viewed as key in evaluating teachers and the pupil's academic performance. It includes all professional record kept by the teachers to enhance learning and pupil's academic performance. According to TSC Teacher Performance Appraisal and Development (TPAD) tool (2016), professional knowledge promotes performance index which enhances knowledge in subject content areas. It also helps in improving scores in tests and examinations. It further enhances ability of the teacher to recall learnt content and the application of knowledge learnt in solving practical problems for effective syllabus coverage and hence better pupil's academic performance.

Teacher respondent T-120 who was interviewed by the researcher on teacher professional knowledge gave the following comment:

Professional knowledge is the grit that runs within a teacher to be able to drive forward academic achievement among learners. Learners who have teachers who are not knowledgeable enough are destined to do poorly in tests.

T-120

Teacher respondent T-120 argued that professional knowledge is the engine that drives learning. T-120 underscores that professional knowledge is crucial to learner academic achievement and in the event that a teacher is not knowledgeable, the output will be poor. The above finding agrees with Ayeni (2010) who indicated that educational enterprise involves development of human intellect, technical skills, character and effective citizenship. Consequently the issue of quality assurance in education which has become a matter of great concern—for the government, educational institutions and other

stakeholders in order to meet expectations of the society. Teachers are expected to have sound knowledge of their subject areas to be able to select appropriate and adequate facts for the planning of lesson notes, effective delivery of lessons, proper monitoring and evaluation of students performance, providing regular feedback on students' performance, improvisation of instructional materials, adequate keeping of records and appropriate discipline of students.

# **4.2.3** Conducting Departmental panel Meetings in Schools

Teacher respondents were given opportunity to give views on whether they were involved in departmental panel meetings in schools. Table 4.7 shows their responses.

**Table 4.7: Conducting Departmental Panel Meetings in Schools** 

	Frequency	Percent	Valid	Cumulative
			Percent	Percent
None	107	55.7	55.7	55.7
Often	4	2.0	2.1	57.8
Once a Month	4	2.0	2.1	59.9
Once a Term	8	4.1	4.2	64.1
Rarely	22	11.2	11.5	75.5
Termly	39	19.9	20.3	95.8
Thrice a Month	4	2.0	2.1	97.9
When	4	2.0	2.1	100.0
Necessary				
Total	196	100.0		

Majority 107 (55.7 percent) of teachers suggested that they do not hold /conduct departmental/subject panel meetings towards enhancing teaching outcome in schools. 22 (11.5 percent) indicated rarely 39 (20.3 percent) said termly, and others indicated once in a term, when necessary and once in a month. Meeting to evaluate the teaching methodologies is encouraged to enhance teaching outcomes among teachers in school.

In an interview with teachers they revealed the reasons why they think teachers prefer teaching without approved professional records this include demoralization in terms of lack of promotion and too much writing, lack of knowledge and experience, inaccurate content delivery, it is time consuming, it is time wasting, lack of accountability, have knowledge and experience, poor coordination among teachers, lack of books, readymade schemes of work, laziness, lack of strictness by supervisors, poor planning, poor coordination among administrators, some teachers prefer teaching using old schemes, lack of commitment, and they have knowledge and experience having taught the same subject for long time. To avoid halo error, the administrators should remember that teachers are often strong in some areas and weak in others.

### 4.2.4 Availability of Current Syllabus

The variable availability of current syllabus was considered because syllabus are the overall guide for proper teaching which leads to learner academic performance in primary schools. Figure 4.1 captures the responses in percentages by Deputy Head teacher responses.

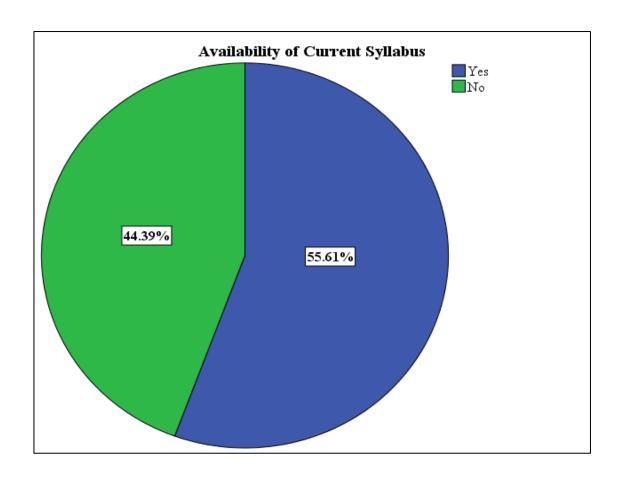


Figure 4. 1: Availability of Syllabuses

Figure 4.1 indicated that availability of syllabus was an issue in most schools. The data clearly indicated that 55.61 percent of teachers were able to access official ministry of education syllabuses. The remaining 44.39 percent were not in a position to access the syllabuses.

### 4.2.5 Challenges Leading to untimely Syllabus Coverage

The challenges leading to untimely syllabus coverage is numerous in most learning institutions. According to the research findings, untimely syllabus coverage is due to: First, a lot of work in school, second, lack of teaching and learning materials, third, some teachers use text books to teach, fourth lack of early preparation, fifth, absenteeism of learners and teachers, sixth, co-curriculum activities and sporting activities which come in

within the term and is not planned, and poor time management by both teachers and learners.

Further, untimely syllabus coverage is due to lateness by learners and teachers, lack of revision materials, teachers personal commitments, poor health problems of some teachers and learners, transfers in the course of the year, failure to follow timetable, high population that cannot be managed by the available teachers, lack of early preparation and lack of morale among teachers, some teachers go to school but fail to attend to their lessons appropriately. A Teacher respondent T-09 who was interviewed by the researcher on syllabus coverage gave the following comment:

Syllabus coverage is the ultimate for all systems in a school. Education officers, Head Teachers and teachers are the major stakeholders in the process of ensuring syllabuses are fully covered. However there are challenges hampering syllabus coverage. The challenges include time factor, extracurricular activities; of teacher preparation, facilities, and learner background.

T-09

Teacher T-09 summarized the views from other head teachers by supporting that the syllabus coverage implementers must work an extra mile to achieve their goals. T-09 identifies some challenges that may face syllabus coverage. They are time, extracurricular activities, lack of preparation among teachers and more so learner backgrounds. The argument is also supported by Letsoalo (2007). Teachers therefore need to take their work with a lot of seriousness following the laid down rules and regulations by the Teachers Service Commission (TSC) and the Ministry of Education (MOE) for a better pupils academic performance in schools.

# 4.2.6 School Mean Standard Score versus Teacher Qualification

To better gauge the relationship between teacher qualification and school performance, a cross-tabulation between the two variables was generated.

Table 4.8 shows the results of the tabulation of school Mean Standard Score (MSS) versus teacher qualification cross tabulation.

Table 4. 8: School Mean Score against Teacher Qualification

				T	eachers	Professio	onal Qua	lificatio	n		Tot
			B5	C1	C2	C3	C4	C5	D1	Other	
				(ATS	(S1)	(K)	(L)	(M	(M)		
				IV)				)			
MSS	160-	Count	0	0	1	4	0	0	0	0	4
in	179	%	0.0	0.0	1.8	9.8	0.0	0.0	0.0	0.0	2.0
KCPE		within									
2018	180-	Count	2	2	0	5	0	0	0	0	9
	199	%	13.	4.9	0.0	12.2	0.0	0.0	0.0	0.0	4.
			3								
	200-	Count	2	12	7	7	2	3	0	1	3
	219	%	13.	29.3	12.	17.1	10.5	27.	0.0	25.0	17.
			3		3			3			
	220-	Count	6	16	21	11	8	5	2	1	7
	239	%	40.	39.0	36.	26.8	42.1	45.	33.	25.0	36.
			0		8			5	3		
	240-	Count	1	6	12	9	6	1	2	1	3
	259	%	6.7	14.6	21.	22.0	31.6	9.1	33.	25.0	19.
					1				3		
	260-	Count	2	1	12	3	1	2	1	0	2
	279	%	13.	2.4	21.	7.3	5.3	18.	16.	0.0	11.
			3		1			2	7		
	280-	Count	2	2	4	1	2	0	1	1	1
	299	%	13.	4.9	7.0	2.4	10.5	0.0	16.	25.0	6.
			3						7		
	300	Count	0	2	0	1	0	0	0	0	
	and	%	0.0	4.9	0.0	2.4	0.0	0.0	0.0	0.0	1.:

	Abe										
Total		Count	15	41	57	41	19	11	6	4	194

The cross-tabulation between school mean score against teacher qualification on table 4.8 showed that between Mean Standard Score (MSS) and Teacher Qualification five (5) teachers which was overall 2.6 percent registered a mean score within the range of 160-179. The teachers who registered the mean score were one (1) teacher within C2 (S1) qualification and Four (4) teachers within the C3 (K). This result indicated that within higher qualification no teacher this range of 160-179 Mean Standard Score (MSS. In addition, the finding indicated that between Mean Standard Score (MSS) and Teacher Qualification nine (9) teachers which were 4.6 percent registered a mean score within the range of 180-199. The teachers who registered the mean score were two (2) teachers within B5 qualification, two (2) teachers within C1 (ATS IV) qualification, and FIVE (5) teachers within the C3 (K) qualification.

The result also showed that between Mean Standard Score (MSS) and Teacher Qualification thirty four (34) teachers constituting 17.5 percent registered a mean score within the range of 200-219. The teachers who registered the mean score were two (2) teachers within B5 qualification, twelve (12) teachers within C1 (ATS IV) qualification, seven (7) teachers within C2 (S1), seven (7) teachers within C3 (K), two (2) teachers within C4 (L), three (3) teachers within C5 (M) and one (1) teacher within the unspecified qualification.

Further, the cross-tabulation between Mean Standard Score (MSS) and Teacher Qualification, seventy (70) teachers constituting 36.1 percent registered a mean score

within the range of 220-239. The teachers who registered the mean score were six (6) teachers within B5 qualification, sixteen (16) teachers within C1 (ATS IV) qualification, twenty one (21) teachers within C2 (S1), eleven (11) teachers within C3 (K), eight (8) teachers within C4 (L), five (5) teachers within C5 (M), two (2) teachers within D1 (M) and one (1) teacher within the unspecified qualification.

Cross-tabulation between Mean Standard Score (MSS) and Teacher Qualification also showed that thirty eight (38) teachers constituting 19.6 percent registered a mean score within the range of 240-259. The teachers who registered the mean score were one (1) teacher within B5 qualification, six (6) teachers within C1 (ATS IV) qualification, twelve (12) teachers within C2 (S1), nine (9) teachers within C3 (K), six (6) teachers within C4 (L), one (1) teacher within C5 (M), two (2) teachers within D1 (M) and one (1) teacher within the unspecified qualification.

Furthermore, a cross-tabulation between Mean Standard Score (MSS) and Teacher Qualification further showed that twenty two (22) teachers constituting 11.3 percent registered a mean score within the range of 260-279. The teachers who registered the mean score were two (2) teacher within B5 qualification, one (1) teacher within C1 (ATS IV) qualification, twelve (12) teachers within C2 (S1), three (3) teachers within C3 (K), one (1) teacher within C4 (L), two (2) teacher within C5 (M), and two (1) teachers within D1 (M) qualification.

Cross-tabulation between Mean Standard Score (MSS) and Teacher Qualification also showed that thirteen (13) teachers constituting 6.7 percent registered a mean score within the range of 280-299. The teachers who registered the mean score were two (2) teacher within B5 qualification, two (2) teachers within C1 (ATS IV) qualification, four (4)

teachers within C2 (S1), one (1) teacher within C3 (K), two (2) teachers within C4 (L), one (1) teacher within D1 (M) and one (1) teacher within unspecified qualification.

In addition, Cross-tabulation between Mean Standard Score (MSS) and Teacher Qualification also showed that three (3) teachers constituting 1.5 percent registered a mean score within the range of 300 and above. The teachers who registered the mean score were two (2) teachers within C1 (ATS IV) qualification, and one (1) teacher within C3 (K). This result indicated that within higher qualification no teacher registered within the range of Mean Standard Score (MSS) of 300 and above.

The above analysis showed that higher grade qualification registered did not necessarily convert to higher school Mean Standard Score (MSS). The findings in table 4.8 is supported by studies done by Fullan (2002) who recommends that effective teacher professional knowledge requires that a teacher must develop positive attitude towards programmes that can assist in enhancing personal development including reading widely, maintaining professional credentials and effective usage of appraisal tools. Further studies done by Osamwonyi (2016) recommends that teachers professional knowledge can be enhanced through workshops, seminars, conferences, exhibitions to help sharpen their knowledge towards better pupil academic performance in schools.

#### 4.2.7 School Mean Standard Score versus approved Schemes of Work

The research was structured to gauge the influence of approved schemes of work on learner performance in primary schools in Suna East Sub-County, Migori County. The performance indices were cross-tabulated with respondents view on approved schemes of work.

The head-teachers were asked to respond on their schedule for approving schemes of work for teachers. The output was cross tabulated to understand impact of schemes of work approval on learner performance in primary schools in Suna East Sub-County.

Table 4.9 shows the results of the tabulation of school Mean Standard Score (MSS) versus approved schemes of work.

Table 4. 9: School Mean Score against Utilization of Approved Schemes of Work

				Schedule	for approving Sch	emes of Work		Total
			Before	Opening	Within the	2nd	Middle of	
			the	Day	Opening	Week of	The Term	
			Term		Week	Opening		
Mean	160-179	Count	Opens 0	1	1	0	0	2
Scores		% within	0.0	50.0	50.0	0.0	0.0	100
in	180-199	Count	0	0	2	1	0	3
KCPE		% within	0.0	0.0	66.7	33.3	0.0	100
2018	200-219	Count	1	0	7	1	0	9
2016		% within	11.1	0.0	77	11.1	0.0	100
	220-239	Count	1	6	6	1	1	15
		% within	6.7	40.0	40	6.7	6.7	100
	240-259	Count	1	6	4	2	0	13
		% within	7.7	46.2	30.8	15.4	0.0	100
	260-279	Count	0	2	1	1	1	5
		% within	0.0	40.0	20	20.0	20.0	100
	280-299	Count	0	2	1	0	0	3
		% within	0.0	66.7	33.3	0.0	0.0	100
	<b>300 and</b>	Count	0	1	0	0	0	1
	Above	% within	0.0	100.0	0.0	0.0	0.0	100
Total		Count	3	18	22	6	2	51
		% within	5.9	35.3	43.1	11.8	3.9	100.
		Mean						
		Scores in						
		KCPE						
		2018						

Table 4.9 indicated that among the fifty one (51) head teachers who returned the questionnaires only three (3) constituting 5.9 percent indicated that they approved teacher's schemes of work before the term begins. Among the three (3) teachers, one (1) teacher registered a Mean Standard Score (MSS) within the range of 200-229, one (1) teacher registered a Mean Standard Score (MSS) within the range of 230-239, and one (1) teacher registered a Mean Standard Score (MSS) within the range of 240-259.

The data further indicated that eighteen (18) constituting 35.3 percent indicated that they approved teacher's schemes of work on opening days. Among the eighteen (18) teachers, one (1) teacher registered a Mean Standard Score (MSS) within the range of 160-179, six (6) teachers registered a Mean Standard Score (MSS) within the range of 220-239, six (6) teachers registered a Mean Standard Score (MSS) within the range of 240-259, two (2) teachers registered a Mean Standard Score (MSS) within the range of 260-279, two (2) teachers registered a Mean Standard Score (MSS) within the range of 280-299 and one (1) teacher registered a Mean Standard Score (MSS) within the range of 300 and above.

The head teacher respondents showed that twenty two (22) responses constituting 43.1 percent indicated that they approved teacher's schemes of work within the opening week. Among the twenty two (22) teachers, one (1) teacher registered a Mean Standard Score (MSS) within the range of 160-179, two (2) teachers registered a Mean Standard Score (MSS) within the range of 180-199, seven (7) teachers registered a Mean Standard Score (MSS) within the range of 200-219, six (6) teachers registered a Mean Standard Score (MSS) within the range of 220-239, four (4) teachers registered a Mean Standard Score (MSS) within the range of 240-259, one (1) teacher registered a Mean Standard Score (MSS) within the range of 260-279, and one (1) teacher registered a Mean Standard Score (MSS) within the range of 280-299.

Further, the head teacher respondents showed that twenty six (6) responses constituting 11.8 percent indicated that they approved teacher's schemes of work within the opening week. Among the twenty six (6) teachers, one (1) teacher registered a Mean Standard Score (MSS) within the range of 180-199, one (1) teacher registered a Mean Standard Score (MSS) within the range of 200-219, one (1) teacher registered a Mean Standard Score (MSS) within the range of 220-239, two (2) teachers registered a Mean Standard Score (MSS) within the range of 240-259, and one (1) teacher registered a Mean Standard Score (MSS) within the range of 260-279.

Lastly, Table 4.9 indicated that among the fifty one (51) head teachers who returned the questionnaires only 2 (2) constituting 3.9 percent indicated that they approved teacher's schemes of work by the middle of the term. Among the two (2) teachers, one (1) teacher registered a Mean Standard Score (MSS) within the range of 220-239.

The result findings in table 4.9 showed that majority of schools had their schemes of work approved within the first week of the term. This finding does not show influence of the same on pupil's academic performance. This research finding is supported by Fullan (2002) who recommends that teachers who do not strictly adhere to their professional records may find themselves engaging learners in activities that are not core to teaching and learning leading to untimely syllabus coverage hence low or unpredictable pupils academic performance

### 4.2.8 Influence of approved Schemes of Work

The researcher used approved schemes of work to measure school performance in primary school education in Suna East Sub-County, Migori County Kenya.

Figure 4.2 shows the results of the tabulation of school Mean Standard Score (MSS) and exploitation of schemes of work that were approved by the school administrators. The

result indicated a curve that was normal which indicated good relationship between performance and relevant approved schemes of work.

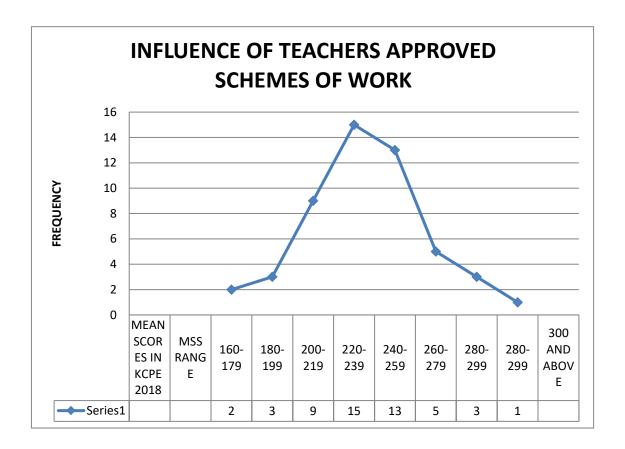


Figure 4. 2: Influence of Teachers Approved Schemes of Work.

The data recorded on Figure 4.2 shows a normal curve on the process of exploitation of schemes of work in improving learner performance. Among the approved schemes of work, two (2) respondents registered school Mean Standard Score of 160-179, three (3) respondents registered school Mean Standard Score of 180-199, nine (9) respondents registered school Mean Standard Score of 200-219, fifteen (15) respondents registered school Mean Standard Score of 220-239, thirteen (13) respondents registered school Mean Standard Score of 240-259, five (5) respondents registered school Mean Standard Score of 260-279, three (3) respondents registered school Mean Standard Score of 280-299, and one (1) respondents registered school Mean Standard Score of above 300.the research

study is supported by Ministry of Education (200) report which recommends that effective and efficient academic performance requires teachers to prepare for the lesson in advance having approved professional records like lesson plan and schemes of work among other records. The documents should be used during instructions to help cub the challenge of missing important points as per the syllabus, motivating the learners to master the contents for better academic performance.

# 4.2.9 Influence of Professional Knowledge on Performance

To ascertain the influence of professional knowledge on learner performance, a regression test was conducted. The output is indicated on Table 4.10.

**Table 4. 10: Regression analysis on Influence of Professional Knowledge on Performance** 

ANOVA TEST							
	Sum of	Df	Mean	F	Sig.		
	Squares		Square				
Regression	.030	1	.030	.121	.729		
Residual	47.954	192	.250				
Total	47.985	193					
Dependent Variable: Prof	essional Qualifica	tion					
Predictors: (Constant), M	ean Scores in KCI	PE 2018					

Table 4.10 specified a regression coefficient of 0.729 or seventy two point nine (72.9) percent. There is thus strong relationship between professional qualification and learner

academic achievement. In other words, primary school performance in schools can be explained by the prevailing teacher professional qualification. This research finding is supported by studies done by Hayes (2010) on professional knowledge which suggests that professional knowledge enables the teacher to meet the challenging demands of their work occasioned by technological innovations in upgrading their content knowledge, skills and attitudes necessary in enhancing learners' academic competencies

In summary the section supported studies done by Buytendijk (2007) which exhibited that conflict of interest constantly happens in any organization.one of the reasons for this is because of the practice of performance appraisal activities. Further studies done by Lin and Lee (2011) suggests that conflicts occur because of the disagreements of the teachers regarding the implementation of the performance appraisal process including desire for honest feedback versus desire for self-concept affirming feedback and recognition (Dooren & Thijs, 2007). Departmental meetings therefore assists in correcting appraisal related challenges towards enhancement of quality pupils academic performance in institutions of learning.

This research supports findings by Aronowitz (2008) underscores that in an information age, the head teacher is expected to provide quality orientation and capacity building for teachers towards keeping with the current thinking in curriculum planning by ensuring good organization of the lessons with sequence, continuity and integration of concepts to facilitate systematic implementation and assessment of the curriculum to achieve the set organizations targets.

#### 4.3 Effect of Time Management on Pupils Academic Performance.

The second research question was to determine the effect of time management on pupil's academic performance in Suna-East Sub-County public primary schools

**Migori County Kenya.** The variables under scrutiny were starting lessons late, effect of time management in meeting deadlines, assessing learners, strategies for syllabus coverage and criteria for capturing lesson attendance.

# 4.3.1 Starting Lessons Late

Starting lessons late was considered in this research because time is a very important asset. To better understand this variable, it was cross-tabulated with meeting deadlines on preparation of professional documents. Table 4.11below shows the output.

**Table 4. 11: Time management strategies versus Professional Records Preparation Deadlines** 

Starting	g Lesson	s Late * Meeting Deadlines on Cross-tabulation		Records Prepa	aration
		01000	Meeting Dea	dlines on	Total
			Professional	Records	
			Prepara	tion	
			Yes	No	
Starting	Yes	Count	23 <sub>a</sub>	23 <sub>a</sub>	46
Lessons		% within Starting Lessons	50.0%	50.0%	100.0
Late		Late			%
		% within Meeting	92.0%	88.5%	90.2%
		Deadlines on Professional			
		Records Preparation			
	No	Count	$2_{\rm a}$	$3_{\rm a}$	5
		% within Starting Lessons	40.0%	60.0%	100.0
		Late			%
		% within Meeting	8.0%	11.5%	9.8%
		Deadlines on Professional			
		Records Preparation			
Total		Count	25	26	51
		% within Starting Lessons	49.0%	51.0%	100.0
		Late			%
		% within Meeting	100.0%	100.0%	100.0
		Deadlines on Professional			%
		Records Preparation			
Each sub	script le	tter denotes a subset of Meeting	e Deadlines o	n Professional	Records

Table 4.11 indicated that within the internal count of 51 head-teacher respondents, 50 percent indicated that teachers started lessons late and 92 percent of the internal count sample met deadlines in preparation of professional documents. This indicated that most of the respondents despite starting lessons late, prepared professional documents. Further, the analysis above showed that internally, 49 percent did not start lessons late but did prepare professional documents.

This analysis showed that 50 percent of the respondents did start lessons late and in the same light did not prepare professional documents. Finally, the analysis exhibited that each subscript letter denoted a subset of meeting deadlines on professional records preparation categories whose column proportions did not differ significantly from each other at the .05 level. Hence, the teachers who started lessons late did not differ significantly from those who prepared professional records. This study is supported by Jehn et al (2004) who suggested that starting lessons late leads to feeling rushed exhausted and overwhelmed hence academic frictions in learning institutions. Teachers therefore need to create enough time in order to help pupils meet their academic goals, expectations and aspirations. The study was also supported by KEMI (2015)which proposes that the better you get a good time management, the more self-disciplined you learn in accomplishing tasks beforehand leaving enough room for other life or school activities

#### 4.3.2 Effect of Time Management in meeting deadlines on Pupils Performance.

Time management is very important in in improving performance. The researcher sought to understand effect of time management in primary schools in Suna East Sub-County.

The first variable which was considered was whether teachers assessed Learners and gave feedback. Sub-variables considered were whether learners were assessed daily, monthly or more frequently. The other items considered were whether learners were assessed once in two weeks, weekly or termly. The responses by teacher respondents are displayed in table 4.12.

Table 4. 12: Assessing Learners and giving feedback

# **Assessing Learners and giving feedback**

		F	%	Valid	Cumulative
				Percent	Percent
Regularity	Daily	48	24.5	24.5	24.5
	Monthly	43	21.9	21.9	46.4
	More Frequently	6	3.1	3.1	49.5
	Once in Two Weeks	4	2.0	2.0	51.5
	Termly	43	21.9	21.9	73.5
	Weekly	52	26.5	26.5	100
	Total	196			

Table 4.12 showed that fifty two (52) constituting 26.5 percent of teachers assessed learners on weekly basis to get the feedback in the areas taught, 48 (24.5 percent) evaluated on daily basis, 43(21.9 percent) assessed on monthly and termly basis while 10(5.1 percent) indicated to assess more frequently and once in two weeks. According to studies done by Simiyu (2012) assessment with feedback mechanism is ideal in

establishing whether students understood a concept or not. It helps teachers to identify areas that need emphasis hence giving it priority when doing revision. The study is supported by Merriam and Bierema (2014) who advocates for ways of bridging the theory learnt and practice essential for better pupil's academic performance.

# **4.3.3** Teachers responses on Strategies for ensuring lessons are taught for timely syllabus coverage

Teacher T-76 was asked to highlight strategies employed to ensure all lessons are taught as per the school master timetable and timely syllabus coverage in school. The following are the comments given by T-76

The strategies employed should involve attending all lessons and remedial, giving assignment and homework for personal studies, adequate preparation by the teacher for lessons, recovering lost lesson, following progress records during teaching, carrying out remedial procedures, having lesson attendance records and lesson attendance register, maintaining punctuality and attending all lessons, following time table, preparation of professional records, and swapping classes with other colleagues to compensate lost time.

T-76

T-76 listed several strategies employed to ensure all lessons and remedial programmes are attended. The respondent gave several strategies which included giving assignments for personal studies. The respondent suggested teachers should make adequate preparations before attending any lesson. Also, another strategy should include proper maintained of teaching records. Respondent T-76 also argued that lesson attendance records and lesson attendance register are crucial strategies for ensuring lessons are attended to. In addition, Teacher respondent T-76 indicated that maintaining punctuality and attending all lessons, coupled with adherence to the time table, preparation of professional records, and swapping classes with among teacher colleagues to compensate lost time are good strategies for ensuring lessons are fully taught. In summary, this

qualitative data suggests that the above strategies could be used to resolve challenges arising from time management. This study was supported by Callaghan (2005) who proposed that good time management helps to avoid procrastination which is a big thief for any academic excellence.

# 4.3.4 Criteria for Capturing Lessons taught in Schools.

The variable criteria for capturing lesson attendance in schools were used in this research to assess which of the aspects for capturing lessons in schools was exploited.

Table 4.13 shows the output

**Table 4. 13: Teachers Responses on Criteria for capturing Lesson Attendance in Schools** 

	Criteria for captu	ring lesson	attendance in	n schools	
		F	%	Valid	Cumulative
				%	Percent
Criteria	Lesson attendance registers	92	46.9	46.9	46.9
	Checklist	6	3.1	3.1	50.0
	Lesson attendance	74	37.8	37.8	87.8
	registers				
	Lesson attendance,	4	2.0	2.0	89.8
	checking learners books				
	Mark register	4	2.0	2.0	91.8
	Monitor records	4	2.0	2.0	93.9
	Through TPAD	4	2.0	2.0	95.9
	Using records	4	2.0	2.0	98.0
	Variety of teaching	4	2.0	2.0	100.0

materials				
Total	196	100.0	100.0	

Table 4.13 indicated that ninety two (92) teacher respondents constituting 46.9 percent of respondent teachers used lesson attendance register to capture lesson attendance in schools; Seventy four (74) teacher respondents constituting 37.8 percent used lesson attendance register and Six (6) teacher respondents constituting 3.1 percent used checklist; Four (4) teacher respondents constituting 2.0 percent used lesson attendance and checking learners books, mark register, monitor records, Teacher Performance Appraisal and Development (TPAD), records and variety of teaching materials to asses and capture class attendance in schools.

In support, studies conducted by Ayeni (2010) supports that for effective time management, there should be increased contact hour, learners improved time management skills, improved learner performance, improved attendance to school activities by learners and teachers and acquisition of wide knowledge. The teacher should therefore ensure punctuality in reporting to duty and lesson attendance, ensure timely preparation of professional records and limit class absenteeism at all costs in ensuring better pupils academic performance in schools.

#### 4.3.5 Conducting Remedial Programmes for Missed Lessons

The variable conducting remedial programmes for missed lessons was considered in this research to ascertain whether lost time was recovered in public primary schools in Suna East Sub-County in Migori County.

The output was shown on table 4.14.

Table 4. 14: Conducting Remedial Class Programmes for Lessons missed

Remedial Class Programmes for Missed lessons							
		F	%	Valid	Cumulative Percent		
				Percent			
	Yes	96	49.0	49.0	49.0		
Responses	No	100	51.0	51.0	100.0		
	Total	196	100.0	100.0			

Table 4.14 indicated that one hundred (100) respondents constituting 51 percent of schools do not have remedial class programs for the lessons missed in schools. On the other hand ninety six (100) teacher respondents constituting 49 percent of schools do have remedial class programs for the lessons missed in schools.

Since remedial classes are important to both learners and teachers in compensating lost times and syllabus coverage in schools, the interventions in schools are not enough. This result supports findings by Kaushar (2013) who advanced that good time management is essential in enhancing better pupil's academic performance. A good teacher should therefore ensure there is a programme set to address the issues of missed lessons in order to help learners realize their full academic and learning potentials. This idea is also supported by the World Bank (2007) on management and accountability in the nature of work we do.

Having remedial class programmes makes the teacher to be directly accountable in terms of the work he does to the learners and the employer through the school administrators and representatives

# 4.3.6 Teachers Responses on Time Management Processes and Issues

To better understand the indicators of time management, several variables were put to test. Table 4.15 shows the results.

**Table 4. 15: Time Management Processes and Issues** 

Time Management processes and Issues							
1	Time Management Processes and Issues	f	Percent				
2	Starting Lessons late	136	69.4				
3	Meeting deadlines on professional records preparation	86	43.9				
4	Lessons are taught as per school time table	110	56.1				
5	Teachers class attendance records are kept	144	73.5				
6	Teachers conduct Remedial Teaching	102	52.0				
7	Teachers Attend to all Lessons	94	48.0				
8	Giving Assignments	118	60.2				
9	Giving Homework for Learner Personal Studies	108	55.1				
10	Teachers undertake adequate preparation	142	72.4				
11	Recovering Lost Lessons	96	49.0				
12	Swapping lessons with other colleagues	68	34.7				
13	Involving Learners	130	66.3				

Table 4.15 showed time management processes and issues. The result showed that one hundred and thirty six respondents (136) constituting 69.4 percent started lessons late. The data showed that eighty six (86) respondents constituting 43.9 percent met deadlines on professional records keeping. One hundred and ten (110) respondents which were 56.1 percent supported that lessons were taught as per school time table. In addition, respondents noted that one hundred and forty four (144) teachers' constituting 73.5 percent agreed class attendance records are kept in schools.

Further, the result showed that one hundred and two respondents (102) constituting 52.0 percent conducted remedial. The data further showed that ninety four (94) respondents constituting 48.0 percent attended all lessons. One hundred and eighteen (118) respondents which were 60.2 percent supported that assignments were given in schools. Respondents noted that one hundred and eight (108) teachers' constituting 55.1 percent agreed that giving learner personal studies were in place in primary schools.

Furthermore, the result showed that one hundred and forty two respondents (142) constituting 72.4 percent conducted adequate preparation for teaching. In addition, the data showed that ninety six (96) respondents constituting 49.0 percent showed recovery of lost lessons. Sixty eight (68) respondents which were 34.7 percent indicated that teachers swapped lessons with other colleagues. Lastly, respondents noted that one hundred and thirty (130) teachers' constituting 66.3 percent agreed that learners were involved in lessons.

This study was supported by Dewey (2009) who proposed that without performance appraisal, it is impossible for managers, supervisors, school administrators and other educational stakeholders to effectively manage educational organizations. Dewey

emphasized the need for those involved in educational issues to be well informed on how they perform and meet their assigned responsibilities and set targets aimed at assisting learners realize their academic obligations for better academic performance in schools.

Figure 4.3 was used to enable the research assess which variable had process with higher impact and issues that should be resolved to improve time management in public primary schools in Migori County, Kenya

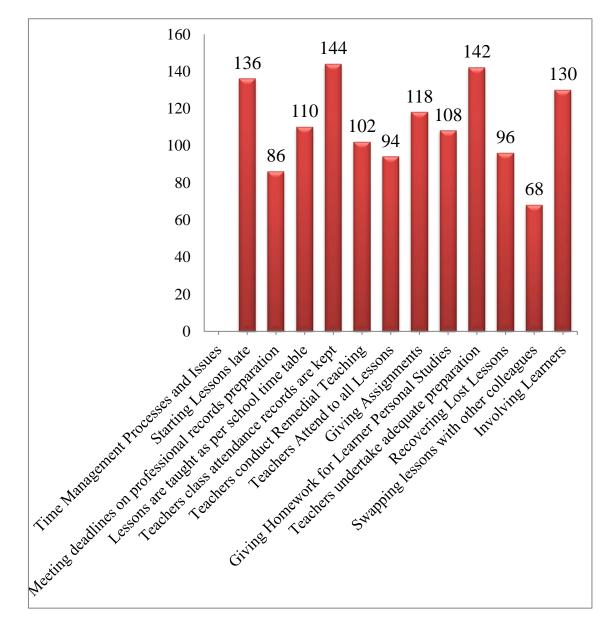


Figure 4. 3: Time Management Processes and Issues

Figure 4.3 shows the processes as discussed earlier. The result shows the number of teacher respondents who supported or noted the indicated processes and issues. The processes and issues were as follows: starting lessons late one hundred and thirty six (136) responents., meeting deadlines on proffessional documents eighty six (86) respondent, one hundred and ten (110) respondents' one hundred and forty four (144) teachers' agreed class attendance records are kept in schools, one hundred and two respondents (102) conducted remedial, ninety four (94) respondents attended all lessons. In addition, one hundred and eighteen (118) respondents supported that assignments were given in schools, one hundred and eight (108) teachers' agreed that giving learner personal studies, one hundred and forty two respondents (142) conducted adequate preparation for teaching, ninety six (96) respondents showed recovery of lost lessons. Sixty eight (68) respondents indicated that teachers swapped lessons with other colleagues while one hundred and thirty (130) teachers' agreed that learners were involved in lessons. This research finding was supported by Friesen et al (2010) who advocate for having relevant appraisal issues for critical management functions and planning for the future in making informed decisions about compensations and promotions.

# 4.4 Teachers Attitude towards Innovation and Creativity on pupil's academic Performance

The third research question considered how teachers' attitude towards innovation and creativity in teaching impact on pupil's academic performance in public primary schools in Suna East Sub-County, Migori County.

#### **4.4.1** Assessing Innovation and Creativity Measures

First, the variables under test were to assess if schools were innovative resource Centre; integration of information, communication and technology; Assess impact of programmes for learners to enable them improve ICT skills, innovation and creativity in

teaching, challenges facing integration of ICT in innovation and creativity and availability of digital materials in schools. This assessment enabled the researcher gauge teacher's attitude towards innovation and creativity on pupil's academic performance. At a scale of 1-5 the learners gave their views as is shown on Figure 4.4 to Figure 4.9. According to the analysis, a mean of 2.5 or less established that the respondents were in agreement that the outcome was purposeful in the sampled primary schools. Further, a mean of 2.6 to 3.5 indicated that the issue was not purposeful for the sampled primary schools. Lastly, a mean of above 3.5 indicated that the item of interaction needed a reworked strategy. This research finding was supported by Chen (2010) who saw technology as having greater impact on traditional pedagogies bringing transformational changes in learning hence the need for educators to ensure learning environments are relevant for instructions towards better pupil's academic performance.

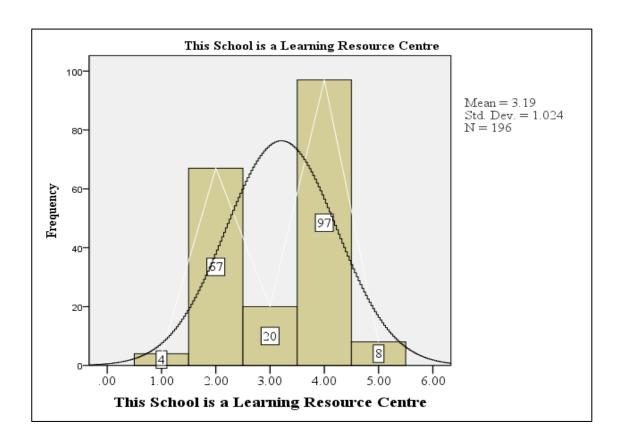
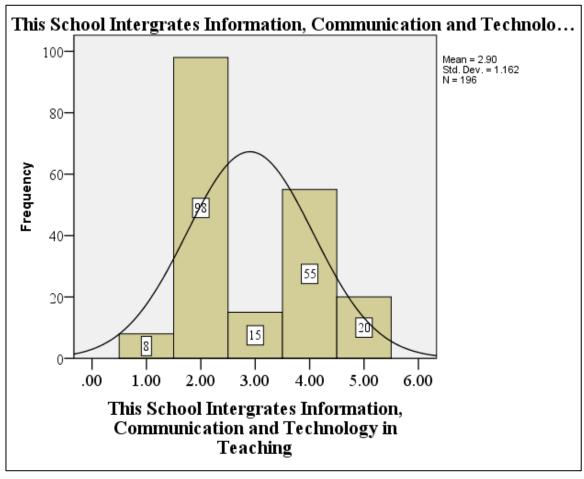


Figure 4. 4: The school is a Learning Resource Centre

In Figure 4.4, teachers were given an opportunity to respond whether schools were learning resource centers. The analysis has a standard deviation of 1.024 and a Mean of 3.19 which is negatively skewed whereby a majority of one hundred and twenty five (63.7 percent) out of one hundred and ninety six (196) teaches rated their school on a scale of 3-5, It was noted that teachers in the sampled schools did not consider their school as a leaning resource centers. The research findings was supported by Prensky (2010) who suggested that for teachers to manage the digital natives, they must be prepared to advance their technological knowledge and be more innovative and inventive; a point that requires educators to have a reflection on the current curricular and pedagogical approaches.



#### Figure 4. 5: Integrating Information, Communication and Technology in Teaching

In Figure 4.5, teachers were given an opportunity to respond whether schools were integrating information and technology in teaching. The analysis showed a standard deviation of 1.162 and a Mean of 2.90 which is positively skewed whereby a majority of one hundred and twenty one (61.7 percent) out of one hundred and ninety six (196) teaches rated their school on a scale of 1-3, It was noted that teachers in the sampled schools did consider their school to have put in place some measure on integrating information and technology but the process was not purposeful because the mean index was slightly over 2.5.

The research finding was supported by McWilliam (2008) who recommended that educators must move beyond the convergent –thinking tasks of multiple choice and recall assignments that are dominating educational practices but employ what is more relevant to the growing needs of modern global education for better pupil academic performance. It was further supported by Fresien et al (2010) who called on educators to remain responsive to the shifts in education in order to remain relevant to the ever growing educational demands in meeting the expectations of the 21st century learning demands and beyond.

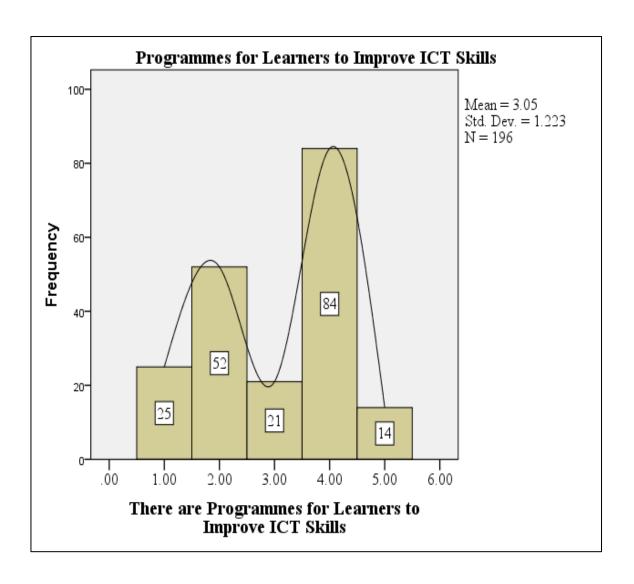


Figure 4. 6: Integrating Information, Communication and Technology in Teaching

In Figure 4.6, teachers were given an opportunity to respond whether schools were undertaking programmes for Learners to improve ICT Skills. The analysis showed a standard deviation of 1.223 and a Mean of 3.05 which is negatively skewed whereby a majority of one hundred and nineteen (60.7 percent) out of one hundred and ninety six (196) teaches rated their school on a scale of 3-5, It was noted that teachers in the sampled schools did consider their school to have undertaking programmes for Learners to improve ICT Skills. The research finding was supported by Prensky (2008) who asserted that in teaching a modern learner who is weaned in digital world of technology,

innovativeness and critical thinking is inevitable. The study is further supported by Kelly et al (2009) who suggested that learners must be trained to be thinkers and problem solvers due to the fact that technology and innovation are changing the way we work on a scale we never experienced before in the revolutionary world of academia.

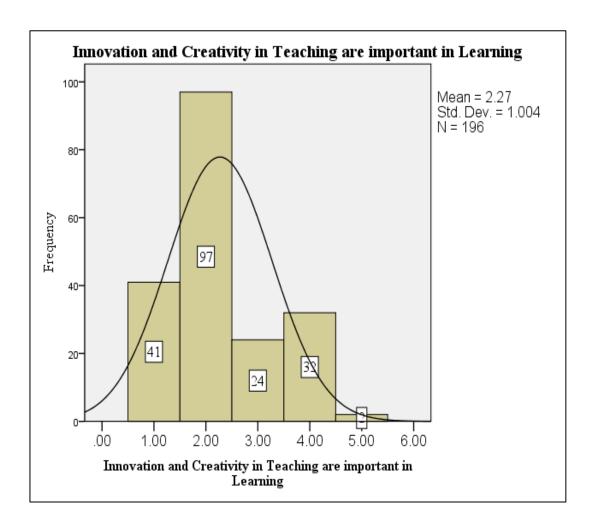


Figure 4. 7: Innovation and creativity are important in Learning

In Figure 4.7, teachers were given an opportunity to respond whether innovation and creativity are important in Learning. The analysis showed a standard deviation of 1.162 and a Mean of 2.25 which is negatively skewed whereby a majority of one hundred and sixty two (82.6 percent) out of one hundred and ninety six (196) teaches rated their school

on a scale of 1-3, It was noted that teachers in the sampled schools did consider their schools underscored the fact that innovation and creativity are important for learning. This research finding was supported by Kobia et al (2006) who emphasized the need for educators to focus more on offering a platform for understanding, experimenting and co-creating with technology. This would motivate the younger generation to be more innovative and creative making academic issues interesting and fun in enhancing pupil's academic performance in learning institutions especially in schools where this study was conducted.

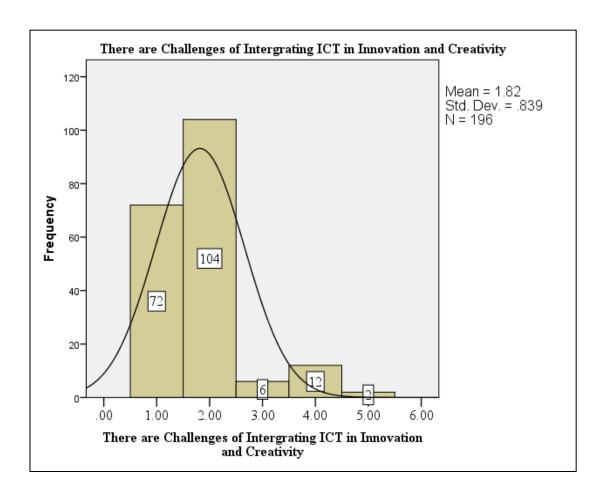


Figure 4. 8: Challenges facing Integration of ICT in Innovation and Creativity

In Figure 4.8, teachers were given an opportunity to respond whether there were challenges facing integration of ICT in innovation and creativity in teaching. The analysis

showed a standard deviation of 0.839 and a Mean of 1.82 which is negatively skewed whereby a majority of one hundred and sixty two (82.6 percent) out of one hundred and ninety six (196) teaches rated their school on a scale of 1-3, It was noted that teachers in the sampled schools did agreed that there were challenges facing integration of ICT in innovation and creativity in teaching. This research finding was supported by Reeves (2004) who called on teachers to re-examine their professional practice and their eventual impact on learners academic performance since professionals and schools whose curricular and pedagogies fails to engage younger generation as active learners and meaningful co-creators are not doing any justice to the nations development especially when knowledge has become a powerful tool in the globalized world of academics.

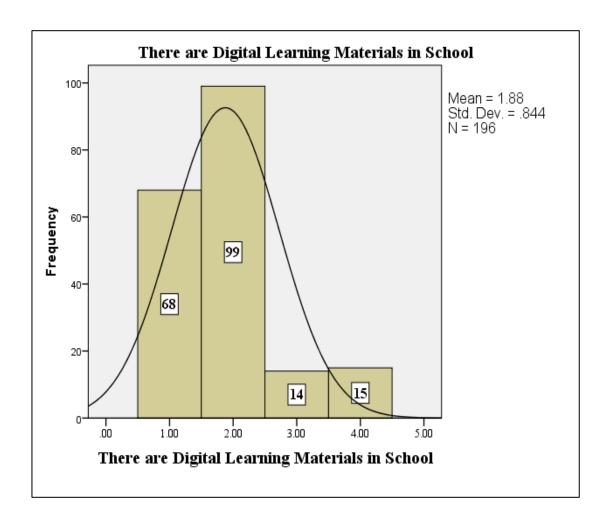


Figure 4. 9: Availability of Digital Materials in Schools

In Figure 4.9, teachers were given an opportunity to respond whether digital materials were available in their schools. The analysis showed a standard deviation of 0.844 and a Mean of 1.88 which is negatively skewed whereby a majority of one hundred and eighty one (92.3 percent) out of one hundred and ninety six (196) teaches rated their school on a scale of 1-3, It was noted that teachers in the sampled schools did agreed that there were digital materials available in their schools. However, the digital materials were rarely used since many teachers were ICT incompetent and were unable to explore the usage of the digital gadgets.

This research finding is supported by Gee (2003) who puts a plea on educators to build schools on better principles of learning. The study is further supported by Kelly et al (2009) who requested education stakeholders to rethink digital skills development, production, design and how they can ensure sustainable educational future for the next generations.

Education Officer O-2 was asked to highlight on role of Information Communication and Technology (ICT) in the process of enhancing learning. The following were the comments given in support of role of Information Communication and Technology (ICT) in supporting learning.

The following are the comments given by O-2

Information Communication and Technology (ICT) has become the continuum of learning. It has become the greatest innovation that supports learning. Some ICT experts argue that learning in informal schools may be useless sooner because all required knowledge is over the net. Schools that do not embrace Information

Communication and Technology (ICT) interventions may not do well in improving learner academic success. Information Communication and Technology (ICT) improves knowledge, creativity, and is a gateway to employment.

O-2

Respondent O-2 indicated Information Communication and Technology (ICT) has become the scale for learning. That Information Communication and Technology (ICT) has become the continuum of learning. HT-42 suggests that ICT has become the greatest innovation which is crucial for learning. Further, the respondent agree with some ICT experts who argue that learning in informal schools may be useless sooner because all required knowledge is over the net.

Respondent O-2 summarizes by saying that schools that fail to embrace Information Communication and Technology (ICT) interventions may not do well in improving pupils academic success because Information Communication and Technology (ICT) improves knowledge, creativity, and is a gateway to employment and modern living.

The research finding was supported by Gardner (2010) who highlighted a robust temperament and a personality unafraid of assuming risks in making the future creators who must be developed early in life by current educators and educational stakeholders investing more time in experimental and error-tolerant modes of engagements.

## 4.4.2 Learner Expectations and Ratings

The variable learner expectation and ratings were considered to assess ICT integration in education and teaching, innovation and creativity in teaching, improvisation of locally produced materials, and whether appraisal interventions needed improvement.

**Table 4. 16: ICT Learner Expectations and Ratings** 

	ICT Learner Expectations and Ratings								
	<b>Learning Expectations</b>		Ratings						
		Strongly Agree1	Agree	Neither Agree or Disagree	Disagree	Strongly Disagree			
1	I integrate ICT in education to promote innovation and creativity in learning and teaching.	25 (11.6%)	96 (50.8%	26 (12.7%	48 (24.9%)	0			
2	Innovation and creativity as a teaching standard is important in promotion of learning outcome in my school.	115 (59.4%)	72 (36.5%	9 (4.2%)	0	0			
3	Frequently I improvise and use locally available resources for effective teaching and learning outcome.	35 (17.9%)	90 (46.2%	20 (10.2%	36 (18.4%)	14 (7.1%)			
4	ICT integration in teaching and learning is important in promoting and improving knowledge content and curriculum delivery.	50 (25.3%)	75 (38.1%	17 (8.6%)	35 (17.7%)	20 (10.1%			
5	Many areas in performance appraisal should be improved to strengthen innovation and creativity in my school.	48 (24.9%)	96 (50.8%	26 (12.7%	25 (11.6%)	0			

In summary, as indicate on table 4.16, few teachers (25 percent) strongly integrate ICT in education to promote innovation and creativity in teaching and learning, 96 percent agree it is necessary, 26 percent neither agree nor disagree while 48 percent of the respondents disagree with it. On whether innovation and creativity as a teaching standard is important in promotion of learning, majority (59.4 percent) strongly agree, 36.5 percent agree while 4.2 percent neither agree nor disagree. Whether a teacher improvises and use locally

available resources for effective teaching and learning, only 17.9 percent strongly agreed, 46.2 percent agreed, 10.2 percent neither agreed nor disagreed, 18.4 percent disagreed while 7.1 percent strongly disagreed.

This was an indication that most teachers were either semi-illiterate or totally illiterate in issues related to ICT integration in education a finding supported by Homets (2007). This therefore was a major challenge in as far as using ICT to enhance teaching and academic performance in most schools which finally affected pupils academic performance. The study was further supported by Kelly et al (2009) who emphasized the need to develop ICT skills that will be compatible to the needs of the 21st century learners and beyond.

# **4.5** Impact of Teacher Professional Development (PD) on Pupil's Academic Performance.

The Fourth and last research question was geared towards establishing the impact of teacher professional development (PD) on pupil's academic performance in public primary schools in Suna East Sub-County, Migori County. The research assessed whether teachers are professionally developed in the area of study.

#### 4.5.1 Impact of Teacher Professional Development

The variables considered for analysis were; importance of teacher professional development, how interaction with professional educational bodies assist in enhancing PD, effective professional development processes and basis for teacher development process. The research analysis was geared towards ascertaining importance of professional development in enhancing learner performance in public primary schools in Suna East Sub-County, Migori County.

The result is indicated in Table 4.17

Table 4. 17: Importance of teacher Professional development

Importance of Teacher Professional Development							
	F % Valid				Cumulative		
				%	%		
TPAD is	No	117	59.7	59.7	59.7		
Important	Yes	79	40.3	40.3	100.0		
	Total	196	100	100			

Most respondents at one hundred and seventeen (117) respondents constituting 59.7 percent of teachers did not feel that Teacher Performance Appraisal and Development (TPAD) was an important professional development tool for empowerment of teachers while seventy nine (79) respondents which were 40.3 percent felt it is important. Teacher Professional advancement and development was introduced by the Teachers service Commission to evaluate and asses teachers performance in schools. This agrees with findings in the study done by Armstrong (2006) which suggests that performance appraisal management is concerned with encouraging behavior that leads to attainment of the organizational objectives. This therefore calls for professional development to help address the ever changing appraisal and educational issues in the world of academia especially in public primary schools. Through PD programmes, teachers are equipped with modern relevant skills and knowledge necessary in meeting the current and future educational demands.

# 4.5.2 Professional Education Enhances Learning

Further the researcher was interested in understanding whether professional development enhanced learning. Table 4.18 below showed the findings.

**Table 4. 18: Professional Development Enhances Learning** 

	Pro	fessional Development E	nhances Lea	arning	
				Statistic	Std.
					Error
Mean	Yes	Mean		4.3355	.11109
Scores in		95% Confidence	Lower	4.1160	
KCPE		Interval for Mean	Bound		
2018			Upper	4.5549	
			Bound		
		Variance		1.913	
		Std. Deviation		1.38300	
		Interquartile Range		2.00	
		Skewness		.198	.195
		Kurtosis		.204	.387
	No	Mean		4.3590	.24502
		95% Confidence	Lower	3.8629	
		Interval for Mean	Bound		
			Upper	4.8550	
			Bound		
		Variance		2.341	
		Std. Deviation		1.53017	
		Skewness		.282	.378
		Kurtosis		.100	.741

Table 4.18 shows that professional development enhances learning. With a positive skew of 0.198 the views were normally distributed. This indicated that professional development enhanced learning.

In addition, further analysis showed that a majority 78(95.1 percent) of teachers felt it was important to get involved in teacher professional development activities in their schools and at other relevant levels. This research finding agrees with the findings in the study conducted by Osamwonyi (2016) who emphasized the need for teachers to engage in PD programmes through seminars, workshops, exhibitions and conferences in order to enhance their professional competencies in education. Involving teachers in PD programmes increases their acceptability to the appraisal tool and reduces the resistance that came with it.

#### 4.5.3 Interaction with Professional Education bodies

Teachers were asked to state how best they can promote teacher professional development activities in schools to enhance learning and teaching outcomes. The researcher assessed whether teachers interacted with educational bodies.

The output of head-teachers and teacher respondents were captured on Table 4.19.

**Table 4. 19: Interaction with Education Bodies** 

		INTERACTION WITH EDUCATION BODIES					
		KNEC	KICD	KISE	NACOSTI	MOEST	TSC
<b>Teachers</b> f		172	154	56	41	77	165
	%	87.76	78.57	28.57	20.92	39.29	84.18
Deputy head teachers	f	49	40	14	4	38	50
	%	96.08	78.43	27.45	7.84	74.51	98.04

The analysis on Table 4.19 showed that head-teachers and teachers interacted with educational bodies at different levels. The professional bodies were Kenya National Examination Council (KNEC), Kenya Institute of Curriculum Development (KICD), Kenya Institute of Special Education (KISE), National Commission for Science, Technology and Innovation (NACOSTI), Ministry of Education, Science and Technology (MOEST) and Teachers Service Commission (TSC). Whereas teachers who interacted with Kenya National Examination Council (KNEC) were one hundred and seventy two (172) constituting 87.76 percent, deputy head teachers who interacted with the same professional body were forty nine (49) which constituted 96.08 percent. Further, teachers who interacted with Kenya Institute of Curriculum Development (KICD) were one hundred and fifty four (154) constituting 78.57 percent, deputy head teachers who interacted with the same professional body were forty nine (40) which constituted 78.45 percent.

In addition, teachers who interacted with Kenya Institute of Special Education (KISE) were fifty six (56) constituting 28.57 percent; deputy head teachers who interacted with the same professional body were fourteen (14) which constituted 27.45 percent. Also, teachers who interacted with National Commission for Science, Technology and Innovation (NACOSTI) were forty one (41) constituting 20.92 percent, deputy head teachers who interacted with the same professional body were only four (4) which constituted 7.84 percent. Lastly, teachers who interacted with Teachers Service Commission (TSC) were one hundred and sixty five (165) constituting 84.18 percent; deputy head teachers who interacted with the same professional body were fifty (50) which constituted 98.04 percent.

The analysis above does not show whether there was significant independence between head-teachers and teachers view on interaction with educational bodies. The analysis was further subjected to chi-square test to gauge whether deputy teachers interacted more with professional educational bodies than assistant teachers.

#### 4.5.4 Independence Test on Interaction with Education Professional Bodies

The researcher assessed the relationship between deputy head teachers and teacher's interaction with educational bodies. The results from Deputy Head Teachers were subjected to chi-square test to assess independence. The output of head-teachers and teacher respondent's responses chi-square test is captured on Table 4.18 below

**Table 4. 20: Interaction with Education Bodies Independence Test** 

	INTERACTION WITH EDUCATION BODIES							
	KNEC	KICD	KISE	NACOSTI	MOEST	TSC		
Teachers	172	154	56	41	77	165		
	(170.89)	(150.02)	(53.35)	(35.57)	(88.93)	(166.26)		
	[0.03]	[0.11]	[0.13]	[0.83]	[1.59]	[0.01]		
Deputy	49	40	13	5	38	50		
head	(50.11)	(43.99)	(15.64)	(10.43)	(26.08)	(48.75)		
teachers	[0.03]	[0.36]	[0.45]	[2.83]	[5.45]	[0.03]		

 $<sup>\</sup>chi^2$  (Degree of Freedom 5, N=247)  $\chi^2$  Statistics value is 11.82 [Critical Value 11.07]

In Table 4.20, the outcome of  $\chi^2$  (Degree of Freedom 5, N=247)  $\chi^2$  Statistics value is 11.82 [Critical Value 11.07] shows that the null hypothesis was not rejected. This was because in Table 4.19 above the computed value of chi-square is less than the critical value of chi square. The critical value of chi-square at df = 5 is 11.07 while the calculated chi-square value is 11.82. According to Corder & Foreman, (2014), when the computed value of the chi-square is less than the critical value of the chi-square, then it is not significant and consequently the null hypothesis is not rejected. The finding showed that there was no dependence between Deputy Head Teachers and teacher's interaction with professional bodies. They stated the following change of attitude towards work, having more meetings to understand the tool, creation of conducive atmosphere that promotes learning in schools, involving teachers in its designs, retraining the teachers, organizing workshops and seminar for training the teachers, engaging in termly appraisal process and evaluation, being involved in peer learning at zonal, cluster levels and interacting with educational specialists, networking with educational bodies like MOEST, provision of teaching and learning resources and starting short courses on the same.

This research finding was supported by Buytendijk (2009) who suggested that teacher professional development activities should create a shared understanding towards enhancing learning outcomes. To improve learning outcome, stakeholders in education must agree on what needs to be done and how the achievements of the set goals will be measured. The study further argues that good performance appraisal system must focus on outcomes. This calls for acquisition of relevant skills and knowledge through further trainings and developments which may be determined on the job of off the job. Effective professional development activities should ensure ones knowledge and expertise is always at the highest possible limit (Wango, 2009).

## 4.5.5 Effective Professional Development Process

The researcher in cooperated the variable effective professional development process to assess which activities were important indicators of professional development. This research assessed exploitation of workshops, focus group discussions, knowledge support and strategic collaboration. Figure 4.10 showed the responses by the 51 head teachers

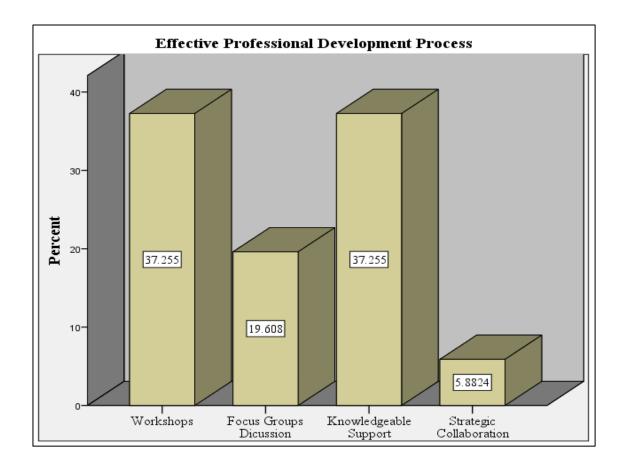


Figure 4. 10: Effective Professional Development Process

Figure 4.10 showed that nineteen (19) respondents constituting 37.3 percent supported that workshop was effective professional process. Ten (10) respondents constituting 19.6 percent supported that focus group discussion was the only effective professional process.

Further, nineteen (19) respondents constituting 37.3 percent supported that knowledgeable support was effective. Lastly, strategic cooperation was supported by only three (3) respondents constituting 5.9 percent as effective professional process.

# 4.5.6 Basis for Teacher Development Process

The researcher also co-operated the variable basis for teacher professional development process to assess which activities were basic indicators of teacher professional development. This research assessed team teaching, individual knowledge, performance appraisal, team collaboration and growth; and teacher preparation. Figure 4.11 showed the responses by the 51 head teachers

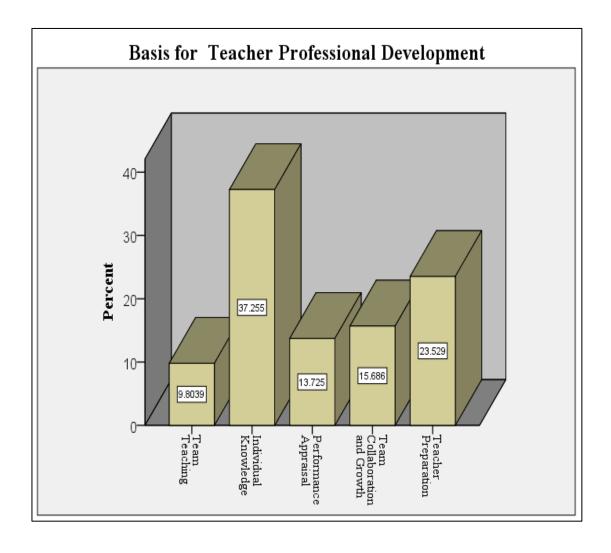


Figure 4. 11: Basis for Teacher Professional Development.

Figure 4.11 showed that five (5) respondents constituting 9.8 percent supported that team teaching was a basis for professional development. Also, nineteen (19) respondents constituting 37.3 percent supported individual knowledge was a crucial basis for professional development. Further, seven (7) respondents constituting 13.7 percent supported performance appraisal was a basis for professional development. Eight (8) respondents constituting 15.7 percent suggested that team collaboration was a basis for professional development and lastly Twelve (12) respondents constituting 23.5 percent agreed that teacher preparation is basis for professional development.

Tables 4.10 and 4.11 showed that workshops and knowledge support were the most effective professional development process and that individual knowledge was the most effective basis for professional development. The study was supported by Dewey (2009) who recommended that experience is educative when useful knowledge is developed through collaborative enquiry in an authentic context within a community of practice

## **4.6 Chapter Summary**

The study found out that whereas teacher lesson observation was conducted once a term in most schools, monthly observation of lessons by head teachers were also evidenced. Cumulatively, lessons which were evaluated once a term and on monthly basis were 64.7 percent. Further, the analysis concluded that professional knowledge was essential for learner performance in primary schools in Suna East Sub-County of Migori County. This analysis also noted that departmental panel meetings in schools were rarely conducted. Cumulatively, 66.9 percent of the schools did not evidence subject panel meetings in their schools. Interestingly, when a question was put to find out if syllabuses were in schools, 44.39 percent responded that the syllabuses were not available in schools. In the above light, there were challenges which were considered to hinder syllabus coverage in primary

schools. The challenges were lack of teaching materials, lack of preparation, co-curricular activities, and poor time management; lateness among learners and teachers, lack of commitment and health issues did hinder syllabus coverage in primary schools in Suna East Sub-County, Migori County, Kenya. However, qualitative analysis stressed that the importance of syllabus coverage by indicating that it is latitude of learning.

In addition, this section showed that higher grade score did not necessarily convert to higher Mean Standard Score (MSS) or better academic performance. On the other hand, the analysis in chapter four research question one indicated that approved schemes of work was related to good performance in Kenya Certificate of Primary Education (KCPE) in primary schools. Furthermore, an ANOVA Test indicated there was a strong relationship between teacher professional qualification and learner academic performance in primary schools in Suna East Sub-County. The section clearly exhibited in the analysis for research question two that those teachers who started their lessons late were more likely to fail in meeting deadlines for preparation of professional records. Further, the analysis showed that several strategies were useful for ensuring that all lessons and remedial programmes were not attended to. The analysis showed that giving assignments, proper preparation, recovery of lost lessons, keeping progress records, having lesson attendance registers, punctuality, and swapping lessons within prescribed time frames (time table) was useful for ensuring that time is well utilized in primary schools.

In addition, issues that hindered proper utilization of time were late commencement of lessons, lack of preparedness, failure to recover lost time, lack of homework, missing lessons, failure to keep class attendance records and failure to adhere to time allocation schedule as captured in the school timetable. Further, the result of analysis for research question three showed that most respondents did not consider their schools as learning

resource centers and integration of information and technology was not purposeful. Further, the analysis showed that there were some interventions to improve Information and Communication Technology (ICT) skills in schools. In addition, there was minimal attention to innovation and creativity despite general agreement that innovation and creativity was important for learning in primary schools in Suna East Sub-County.

Despite availability of digital materials in schools, the analysis exhibited that there were several challenges facing integration of Information and Communication Technology (ICT) in innovation and creativity. Also, qualitative data also supplemented the findings by exhibiting that schools needed to embrace Information and Communication Technology (ICT) interventions to able them do well in improving learner academic performance. The Analysis on research question three exhibited through preliminary analysis that Teacher Performance Appraisal and Development (TPAD) was supported by only 40.3 percent. This means that 59.7 percent of teacher respondents felt that Teacher Performance Appraisal and Development (TPAD) were not useful for teacher professional development. The analysis further showed that professional development enhanced learning whereby up to 95 percent of the respondents argued that teachers should be involved in teacher professional development activities. Using chi-square, the study exhibited that both head teachers and teachers interacted with educational professional bodies. The professional bodies were Kenya National Examination Council (KNEC), Kenya Institute of Curriculum Development (KICD), Kenya Institute of Special Education (KISE), National Commission for Science, Technology and Innovation (NACOSTI), Ministry of Education, Science and Technology (MOEST) and Teachers Service Commission (TSC).

In addition, the study showed that team teaching, individual knowledge (most important), performance appraisal, team collaboration and growth; and teacher preparation were basic for proper Teacher Professional Development. Further, the analysis showed that effective professional development process should involve workshops and knowledge support processes. However, focus group discussions and strategic collaboration should also be employed.

#### **CHAPTER FIVE**

### SUMMARY OF FINDINGS, CONCLUSIONS, AND RECOMMENDATIONS

#### 5.1 Introduction

This chapter focused on the summary of the findings of the study, it also concluded and recommended actions and solutions appropriate to the study findings based on the study objectives. Finally, it suggested areas for further study.

# 5.2 Summary of Findings of the Study

The summary of the study findings were based on study objectives which were:-

- To investigate the influence of Teacher Professional Knowledge and Application on pupils academic performance in Suna East Sub-County public Primary Schools Migori County, Kenya
- ii. To determine the Effect of Time Management on pupils academic performance in Suna East Sub-County public Primary Schools Migori County Kenya
- iii. To assess the attitude of teachers towards Innovation and Creativity in Teaching on pupils academic performance in Suna East Sub-County public primary schools in Migori County, Kenya.
- iv. To establish the impact of Teacher Professional Development(PD) on pupils academic performance in Suna East Sub-County public Primary Schools Migori County Kenya

## 5.2.1. Influence of Teacher Professional Knowledge and Application

In table 4.5 Majority 65(33.1%) of teachers undertake individual lesson observation in the school termly, 62 (31.6%) undertake it on monthly basis, 14(7.2%) do not undertake at all. 12(6.1%), 6(3.1%), 4(2.0%) undertake it weekly, twice a month and thrice a week, once in a while, often and once in a term respectively. Most 163(83.9%) of the teachers indicated that they think professional knowledge is essential in enhancing teaching

outcomes, only 33(16.1%) who did not agree. Majority 107(55.7%) of teachers suggested that they do not hold /conduct departmental/subject panel meetings towards enhancing teaching outcome in schools.22(11.5%) indicated rarely 39(20.3%) said termly, and others indicated once in a term, when necessary and once in a month. Teachers prefer teaching without approved professional records this include demoralization in terms of lack of promotion and too much writing, lack of knowledge and experience, inaccurate content delivery, it is time consuming, it is time wasting, it leads to lack of accountability, have knowledge and experience, poor coordination among teachers, lack of books, ready-made schemes of work, laziness, lack of strictness by supervisors, poor planning, poor coordination among administrators, some teachers prefer teaching using old schemes, lack of commitment, and they have knowledge and experience having taught the same subject for long time. lateness lack of revision materials, personal commitment, , curricular activities, half term, health problems, transfers in the course of the year, failure to follow timetable, absenteeism of teachers, inadequate learning materials, high population, lack of early preparation and lack of morale among teachers.

### **5.2.2.** Effect of Time Management on Pupils Academic Performance.

Most 52 (26.5 percent) of teachers assessed learners on weekly basis to get the feedback in the areas taught, 48 (24.5 percent) evaluated on daily basis, 43 (21.9 percent) assessed on monthly and termly basis while 10 (5.1 percent) indicated to asses more frequently and once in two weeks. Majority 92 (46.9 percent) of teachers use lesson attendance register to capture lesson attendance in schools, 74 (37.8 percent) use lesson attendance register and 6 (3.1 percent) use checklist. 4 (2.0 percent) used lesson attendance and checking learners books, mark register, monitor records, Teacher Performance Appraisal and Development (TPAD), records and variety of teaching materials to asses to capture class attendance in schools

Most (51 percent) schools do not have remedial class programs for the lessons missed in schools. 96 (49 percent) do have. Remedial class are important to both learners and teachers in compensating lost times and syllabus coverage.

#### 5.2.3 Teacher Attitude towards Innovation and Creativity in Teaching

Most teachers did not have good attitude towards the innovation ways of teaching they feared use of computer and other electronic devices to enhance their teaching. Though 115 (59.4 percent) strongly agree innovation and creativity is important in promotion of learning outcome, 72 (36.5 percent) agree while 9 (4.2 percent) neither agree nor disagree.

#### 5.2.4 Influence of Teacher PD on Academic Performance.

Majority 78 (95.1 percent) of teachers felt it is important to get involved in teacher professional development activities in their schools and other relevant levels. It was also noted that 44 (53.7 percent) teachers did not feel that Teacher Professional Development (TPD) was an important activity for empowerment of teachers while 38(46.3 percent) did not have a very clear stand on professional development issues. Involving teachers in teacher professional development programmes can increase acceptability of the tool and reduce the resistance that has come with it. Teacher felt more changes to be done for Teacher Performance Appraisal and Development (TPAD) to work like: - having more meetings to understand the tool, creation of conducive atmosphere that promotes learning in schools, involving teachers in its designs, retraining the teachers, organizing workshops and seminar for training the teachers in the acquisition of new concepts, provision of teaching and learning resources and starting short courses on the same.

#### **5.3 Conclusions**

The primary goal of the study was to investigate the influence of teacher performance appraisal and development on learning outcome in Suna East Sub-County public primary schools in Migori County. From the findings;

## 5.3.1 Teacher Performance Appraisal And Development

It can be concluded that there are still a lot of challenges as far as teacher professional knowledge and application is concerned. This is due to the fact that most teachers do not follow the laid down requirements of undertaking lesson observation, teaching with approved professional records timely prepared, laxity as far as syllabus coverage is concerned. Some teachers also still go to class without approved professional records which are essential in enhancing learning and teaching outcomes. Lack of timely transfers and promotions among the teachers from this study affects learning outcome since it makes many teachers to be demoralized in their work. This affects syllabus coverage and learning outcome.

## **5.3.2** Teacher Professional Knowledge and Application

Most of the research evidence shows that a teacher should ensure there is effective syllabus coverage by attending all lessons as per the school timetable. All the lessons missed must be recovered and the recovery records maintained. He must ensure timely preparation and submission of all professional records as per the school and ministry requirements as a professional he must attend to all the school activities and staff meetings where issues concerning ways of enhancing learning and teaching outcomes are discussed.

#### **5.3.3** Time Management

The study concludes that a teacher must report to duty in time and be punctual for all lessons. The school timetable should guide all the teachers in executing their teaching duties and in case of any changes the administration should be informed to give authority for such changes. Feedback on learning outcomes should also be given to the relevant authorities as per the set deadlines. Teacher Performance Appraisal and Development (TPAD) form the basis for the reward system, including promotion and deployment to positions of higher authority. The use of teacher performance appraisal will enable educational sectors to improve on time management in every learning institution especially in helping TSC realize its vision of excellence in the provision of efficient and effective service for understanding of teacher's roles by clarifying duties and responsibilities.

## 5.3.4 Attitude of Teachers towards Innovation and Creativity in teaching

The study concludes that teachers should ensure they acquire and use relevant ICT skills to access educational materials which are essential in enhancing learning outcomes. They must prepare relevant teaching and learning aids to make teaching and learning more interactive and enjoyable. This gives a better understanding of personal strengths and weaknesses in relation to expected performance targets. It also improves communication and enhances feedback between the teacher and the supervisors thus enhancing interpersonal relations in ensuring better learning outcome in various learning institutions. ICT knowledge should be appropriately used to retrieve e-learning materials from the internet as a professional the teacher must strive to use a variety of teaching methods by demonstrating relevant knowledge of ICT integration in teaching and learning as per the syllabus and ministry requirements. He must be willing to improvise teaching resources aimed at enhancing learners learning outcomes e.g. use of smart phones in learning,

charts, and photographs where appropriate. The teacher should help learners to develop their own learning materials through creative thinking and active participation during the lessons.

## **5.3.5** Teacher Professional Development

From this study and the findings there is need for professional development. Teachers should use professional development materials in their daily teaching activities to enhance effective learning. They should use innovative ways of teaching and evaluating learners like the use of computers and projectors to demonstrate an aspect in lesson delivery hence enhancing interaction between the teacher and the learners as professionals they should enroll for refresher courses aimed at enhancing their professional competence in filling and submitting appraisal reports as is required by the TSC. Teachers should also strive to be part of Teacher Performance Appraisal and Development (TPAD) design process and be trained in its use and effectiveness for universal acceptability by all stakeholders. They should ensure they participate in subject oriented activities such as drama, seminars, debates etc. the government should invest in teacher performance appraisal to build on better understanding of the tool and better relationship between supervisors and the teachers for the benefit of the general education system. The study noticed that teacher performance appraisal has to some extent been embraced in most school since majority of the teachers had the ability to respond to most questions regarding appraisal issues. Teachers should also encourage peer learning at school, zonal and cluster levels in addition to active participation in training of marking of examinations aimed at enhancing learning outcomes at different levels. They should interact with educational specialists and bodies such as Kenya National Examination Council (KNEC), MOEST and KICD through networking and collaboration with an aim of enhancing learning outcomes in learners at various levels.

#### 5.4 Recommendations

This study recommended the following based on the basis of the findings;-

- i. As far as Teacher professional knowledge and application is concerned, performance appraisal should ensure teachers prepare schemes of work and lesson plans derived from the syllabus and the curriculum. They should plan ahead to meet deadlines and submit the professional documents for approval by the administrators. It should not only be conducted to take promotional decisions for teachers as is suggested by the TSC rather it should focus on improving teachers performance and to develop teachers professional development for better learning outcomes in schools. Learners classwork should be regularly checked to ensure all learners have done the assignments and have written notes.it should also ensure learner's progress records are maintained. This requires the teacher to set marks and revise continuous assessment tests and analyze results. It's important to find out the value added progress and plan for remedial lessons. As the teacher sets his targets at the beginning of the term, he should involve the learners by ensuring he prepares and use teaching aids and varied teaching approaches which are learner centered.
- ii. The government and other relevant stakeholders in school management should ensure that all required resources are availed on time for better achievement of educational goals and learning outcomes. The teachers service commission and the ministry of education and other relevant educational stakeholders should ensure that there is time to time training of head teachers, deputy head teachers and teachers on the best ways of handling teacher performance appraisal and development tools so that they can be well equipped with the necessary prerequisite knowledge on appraisal issues and build their capacity for better learning outcome. This will promote good syllabus coverage among the teachers, timely preparation and submission of all professional records and

ensuring lessons missed recovered and recovery records maintained. Training must focus on helping head teachers and deputy head teachers and teachers develop specific appraisal skills and confidence in their ability to effectively evaluate their work. Appraisal skills should include; goal setting; communicating learning outcomes; observing teaching and learning outcome; completing the rating form and conducting the appraisal review. In addition to that, teachers also should be given enough education on the purpose and importance of setting goals at the beginning of every term.

- iii. Headteachers, Deputy headteachers and teachers should be innovative and creative in teaching. They should access and integrate appropriate ICT learning and teaching materials to improve knowledge and stimulate learning. This can be done by offering different rewards to them and by ensuring learners are able to develop their own learning materials which enhance their creativity in the application of ICT in the learning process. Such rewards can be monetary incentives, excellence awards, teacher of the year and public praises. When this is done teachers get more motivated to perform better in their teaching career; resulting in improved creative thinking, development of new concepts towards enhancing pupil's academic performance in schools.
- iv. Teacher performance appraisal should be future oriented. It should not be conducted only to rate the learning outcome and performance of teachers in the past period. It should focus on the question of how the performance of teachers can be enhanced through teacher professional development programmes for better future learning outcomes. They should engage in peer learning and other teacher professional development activities at different levels and this must involve a lot of planning. Teacher performance appraisal planning should be conducted before the performance

period. During this planning, teachers should be allowed to set goals and objectives for themselves. They should be encouraged to identify their strengths and weaknesses so that they can determine their key performance areas and set goals for future performance in ensuring learning outcomes are realized. With such planning, the head teacher and the deputy head teacher should conduct meetings with each teacher for discussion on the planning of teacher's performance, where each teacher presents his/her performance development plan. In addition to this, continuous dialogue sessions should be conducted between the teacher and supervisors. If during the performance period, the supervisor feels that a teacher is not working up towards the teaching standards, he should communicate immediately rather than wait to file appraisal results to the TSC by the end of the term or year after low learning outcome has been registered.

# 5.5 Suggestions for further Studies

- Contribution of teacher performance appraisal and development on implementation of competency based curriculum in public primary schools in Suna East Sub-County, Migori County, Kenya
- Challenges facing institutional time management in primary schools in Suna Sub-County, Migori County, Kenya.
- iii. Perceptions of Innovation and Creativity interventions on transition to secondary schools in Suna East Sub-County, Migori County.
- iv. Contributions of Teacher Professional Development on achievement of competency based curriculum in lower primary in Suna East Sub-County, Migori County.

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## **APPENDICES**

# Appendix I: Head/Deputy Head Teachers Questionnaire

This Questionnaire seeks your opinion on Influence of Teacher Performance Appraisal on pupil's academic performance in Suna East constituency Public Primary Schools, Migori County. The data collected will be kept confidential and used for the purpose of this research only.

# **SECTION A: Demographic Information**

1.	Indicate Your Ge	nder (T	ick Appropriate	e one)			
Ma	ile [ ]		Female	[	[	]	
2.	What is your high	nest Aca	ademic Qualific	cation?			
P1	[] O- Level []	S1 [	] Diploma [	] Degree [	] M	lasters	[ ] others [ ]
3.	If Others spec	cify	• • • • • • • • • • • • • • • • • • • •				
4.	How many ye	ears hav	e you served as	a teacher?	?		
5.	What is your	present	Professional G	rade?			
В5	[ ] C1(ATS IV)	[ ] C2	2(S1) [ ] C3(F	Κ)[] C4(I	L) [	] C5(N	M)[] D1(M)[]
SE	CTION 2. Teach	er Prof	essional Know	ledge and	App	licatio	n
a.	Do you conduct I	Lessons	observation in	this school	l		
	Yes	[	]	No		[	1
b.	Are you involved	in subj	ect panel activi	ties			
	Yes	[	]	No		[	1
c.	Do you get time	to endo	orse schemes o	f work for	teac	hers, in	dicate the time they are
	approved						

	APPROVAL	YES	NO
	Before terms open		
	Opening Day		
	First week of opening		
	2 <sup>nd</sup> week of opening		
	Middle of the term		
d. H	ave you availed the current syllabi n	needed for preparat	
e. If	NO, Why?		
f. In	dicate if your teachers have the follow	owing teaching too	ols
S/N	TOOL	YES	NO
2/1			
1	Personal Timetable		
	Personal Timetable  Lesson Plans		
1			
1 2	Lesson Plans		
1 2 3 4	Lesson Plans Lesson Notes	panel meetings	
1 2 3 4	Lesson Plans Lesson Notes Mark Books		
1 2 3 4 Yes	Lesson Plans  Lesson Notes  Mark Books  o you have copies of departmental p		
1 2 3 4 g. Do	Lesson Plans  Lesson Notes  Mark Books  o you have copies of departmental property of the prop	[	
1 2 3 4 g. Do	Lesson Plans  Lesson Notes  Mark Books  o you have copies of departmental plans  [ ] No  on 3. Time Management  o teachers occasionally start lessons	[ late	
g. Do Yes Section Yes	Lesson Plans  Lesson Notes  Mark Books  o you have copies of departmental plans  [ ] No  on 3. Time Management  o teachers occasionally start lessons	[ late	]

c. If	f NO. Why		•••••	• • • • • • • • • • • • • • • • • • • •		
		••••••			•••••	
			•••••		•••••	
d. D	o you ensure al	ll lessons a	re taught as p	er school tin	netable.	
Yes	[	]	No	]	]	
e. If	f No, Why					
f. A	are Records of to	eacher atte	endance in cla	ss kept in th	is school	
Yes	[	]	No	[	]	
g. If	f Yes, Who Tak	es the Rec	ords			
Takii	ng Records of T	Teacher Le	esson Attenda	ınce		
S/N	Person Taking	g Records		YE	S	NO
i.	Class Prefects	S				
ii.	Class Teacher	<u> </u>				
iii.	Deputy Head-	-Teacher				
iv.	Head Teacher	•				
v.	Community N	/Iember				

h. Criteria for capturing lesson attendance in schools

	Criteria	Yes	No
1	Lesson attendance registers		
2	Checklist		
3	Lesson attendance registers		
4	Lesson attendance, checking learners books		
5	Mark register		

6	Monitor records	
7	Through TPAD	
8	Using records	
9	Variety of teaching materials	

i. Do teach	ners coi	nduct reme	edial classes in this	s school		
Yes	[	]	No	]	]	
j. Strategie	es for ti	me manag	ement			

S/N	Strategy for Time Management	YES	NO
i.	Attending all lessons and remedial		
ii.	Giving assignments		
iii.	Giving Homework for learner personal studies		
iv.	Adequate preparations		
v.	Recovering Lost Items		
vi.	Having Lessons attendance records		
vii.	Preparation of professional documents		
viii.	Swapping lessons with other colleagues		
ix.	Compensating lost time		

# Section 4. Innovation and Creativity

a.	Do you ha	ve ICT	laboratory in th	nis school		
Ye	S	[	]	No	[	]
b.	Do you ha	ve Elec	tricity in your s	chool		
Ye	S	[	]	No	[	]
c.	Do you acc	cess on	line educational	l resources		
Ye	S	[	]	No	[	]
d.	What appr	oach do	you use to cre	ate innovative	teaching	<u>y</u>

е. 1	e. Do you explore use of locally available resources to enhance learning								
	f YES above, name some of the locally available resource chool for teaching?	es whi	ch ar	e utili	zed i	n this			
Attit	tude of Head teachers towards Innovation and creativit	v in T	······ 'each	ing		•••			
	e 1=Strongly Agree, 2=Agree, 3=Neither Agree no	-			=Disa	agree.			
	rongly Disagree			- 4		<i>B</i> ,			
	Indicators	1	2	3	4	5			
1	My school has a learning resource centre								
2	We integrate information, communication and								
	technology in teaching and learning in my school?								
3	There are programmes for learners in my school to								
	improve the ICT skills.								
4	I feel innovation and creativity in teaching is important								
	in ensuring a better learning outcome								
5	There are challenges of innovation and creativity in								
	integrating ICT and education in learning in my school								
6	There are digital learning materials available in my								
	school								
Sect	ion 5: Professional Development								
a. 7	Teacher Professional Development enhances learning								
Yes	[ ] No [ ]								
b. I	Have you interacted with educational bodies for seminars								
Yes	[ ] No [ ]								
c. I	f Yes tick the educational bodies you have interacted with?	•							
KNE	EC [ ] KICD [ ] MOEST [ ] TSC [ ] KISE [ ] N.	ACOS	STI [	]					
d. I	Oo you engage in peer learning								

Υe	es	Ĺ	J		No	[ ]				
e.	Do you i	nteract	with ec	lucation	n speciali	sts				
Υe	es	[	]		No	[ ]				
f.	Do you e	ngage	in appra	aisal an	d evalua	tion processes				
Υe	es	[	]		No	[ ]				
g.	Teacher 1	Profess	sional D	evelop	ment enh	ances student's acad	lemic acl	hieveme	ent?	
	YES		[	]		NO [	]			
h.	If NO, at	ove E	xplain .			• • • • • • • • • • • • • • • • • • • •				•••
i.	Teachers	profes	ssional c	levelop	ment sho	ould be based on: (Cl	hoose 2)			
Co	ombined te	aching	,	[	]	Team growth		[	]	
In	dividual K	nowled	dge	[	]	Teacher Preparation	on	]	]	
Pe	rformance	Appra	isal	[	]					
j.	Tick the	profess	sional d	evelopi	ment prod	cess which you have	interacte	ed with.		
W	orkshops			[	]	Seminars		[	]	
Fo	cus Works	shop		[	]	Collaboration		[	]	
Kı	nowledgea	ble Suj	pport	[	]	Response		[	]	
171	10 w icazca	$D_{1C} D_{G}$	μροιι	L	J	Response		L	1	

# **Appendix II: Teachers Questionnaire (TQ)**

I am Onyango David from Nyabisawa Primary School. I am a Master's Degree Student in the Faculty of Education and Human Resource Development Kisii University. This Questionnaire seeks your opinion on Influence of Teacher Performance Appraisal on pupil's academic performance in Suna East constituency Public Primary Schools, Migori County.

# **SECTION A: Demographic Information**

BE	SECTION A. Demographic information									
3.	3. Indicate Your Gender (Tick Appropriate one)									
Ma	ale	[	]			Female		[	]	
4.	Wł	nat is yo	our high	iest Ac	ademic	Qualific	ation?			
P1	[]	O-Lev	el [ ]	S1 [	] Diplo	oma [ ]	Degree	[ ] <b>N</b>	lasters	[ ] others [ ]
3.		If Othe	ers spec	ify	•••••		• • • • • • • • • • • • • • • • • • • •			
4.		How n	nany ye	ars hav	ve you s	erved as	a teache	er?		
5.		What i	s your <sub>l</sub>	present	t Profess	sional G	rade?			
В5	[ ]	] C1(A'	ΓS IV)	[ ] C	2(S1) [	] C3(K	S)[] C	4(L) [	] C5(	M)[] D1 (M)[]
SE	CT	ION 2.	Teach	er Pro	fessiona	al Know	ledge an	ıd Apj	plicatio	n
h.	Ar	e Lesson	ns obse	rvation	ı conduc	cted in th	nis schoo	ol		
	Ye	S		[	]		No		[	]
i.	Ar	e you in	volved	in sub	ject pan	el activit	ties			
	Ye	S		[	]		No		[	]
j.	j. If your schemes of work are approved, indicate the time they are approved									
	APPROVAL YES NO									
i.		Before	terms	open						
ii.		Openii	ng Day							

iv.	2 <sup>nd</sup> week o	f opening						
V.	Middle of	the term						
k. Do	you have th	ne current s	syllabus for the	subjects you	teach in	n in this s	chool	
Ye	S	[	]	No	[	]		
1. If 1	NO, Why?.				• • • • • • • •			
m. Do	you mark a	and check lo	earners exercis	e books? Yes	[	] No	]	]
Do you	ı have copie	es of depart	mental panel n	neetings Yes	[	] No	[	]
Section	n 3. Time M	<b>Ianageme</b>	nt					
k. Do	you occasio	onally start	your lessons la	ate				
Yes	[	]	No	[	]			
l. Do	you meet d	eadline on	preparation of	professional r	ecords			
Yes	[	]	No	[	]			
m. If l	NO. Why	• • • • • • • • • • • • • • • • • • • •				•••••		•••••
	•••••	•••••				•••••		
n. Do	you ensure	all lessons	are taught as p	er school time	etable.			
Yes	[	]	No	]	]			
o. If l	No, Why							
					• • • • • • •			
p. Ar	p. Are Records of teacher attendance in class kept in this school							
Yes	[	]	No	[	]			
a If Y	Yes Who T	akes the Re	ecords					

iii. First week of opening

# Taking Records of Teacher Lesson Attendance

S/N	Person Taking Records	YES	NO
i.	Class Prefects		
ii.	Class Teacher		
iii.	Deputy Head-Teacher		
iv.	Head Teacher		
v.	Community Member		

r. Do you conduct remedial classes in this school								
Yes	[	]	No	[	]			
s. Strategies for time management								

S/N	Strategy for Time Management	YES	NO
i.	Attending all lessons and remedial		
ii.	Giving assignments		
iii.	Giving Homework for learner personal studies		
iv.	Adequate preparations		
v.	Recovering Lost Items		
vi.	Having Lessons attendance records		
vii.	Preparation of professional documents		
viii.	Swapping lessons with other colleagues		
ix.	Compensating lost time		

# **Section 4: Innovation and Creativity**

a.	Do you have ICT laboratory in this school? Yes [ ]	No [	]
b.	Do you have Electricity in your school? Yes [ ]	No [	]
c.	Do you access online educational resources Yes [	No f	1

d.	What approach do you use to create innovative teaching								
Ye	s [ ] No [ ]								
e.	Do you use locally available resources to enhance learning								
Ye	s [ ] No [ ]								
g.	If YES above, name some of the locally available resour-	ces	which	you	utili	ze in			
_	teaching?			•					
•••		• • • • •	• • • • • •	• • • • • •	• • • • • •	• • • • •			
Atı	titude of teachers towards Innovation and creativity in Tea	chir	ıg						
	ale 1=Strongly Agree, 2=Agree, 3=Neither Agree nor			<b>-</b> Δ-	-Dies	oree			
	Strongly Disagree	Di	sagro	·, <del>-</del> -	-D130	igice,			
	Indicators	1	2	3	4	5			
1	My school has a learning resource centre	1		3	7				
2	I integrate information, communication and technology in teaching and learning in my school?								
3	There are programmes for learners in my school to								
	improve the ICT skills.								
4	I feel innovation and creativity in teaching is important								
	in ensuring a better learning outcome								
5	There are challenges of innovation and creativity in								
	integrating ICT and education in learning in my school								
6	There are digital learning materials available in my								
	school								
Sec	ction 5: Professional Development								
0	Teacher Professional Development enhances learning? Yes	ſ	1	No [	]				
			-	_	_				
	Have you interacted with educational bodies for seminars? You	es [	. ]	No [	]				
c.	If Yes tick the educational bodies you have interacted with?								
KN	IEC [ ] KICD [ ] MOEST [ ] TSC [ ] KISE [ ] NACO	STI	[]						
d.	Do you engage in peer learning? Yes [ ] No [		]						
^	Do you interact with education specialists Ves [ ]	N	10	1					

f.	Do you engage in appraisal and evaluation processes										
Yε	es	[	]		No		]	]			
g.	Teacher Pro	ofessio	nal Dev	elopme	nt enhai	nces stu	dent's a	academ	ic achie	vement	?
	YES		[	]		NO		[	]		
h.	If NO, abov	ve Expl	ain								
					•••••						
					•••••						
					•••••						
i.	Teachers p	rofessio	nal dev	elopme	ent shou	ld be ba	ised on:	(Choo	se 2)		
Co	ombined teac	hing		]	]	Team g	growth			]	]
Ind	dividual Kno	wledge		[	]	Teache	r Prepa	ration		[	]
Pe	rformance A	ppraisa	1	[	]						
j.	Tick the pro	ofessio	nal deve	elopme	nt proce	ss whic	h you h	ave into	eracted	with.	
W	orkshops			[	]	Semina	urs			]	]
Fo	cus Worksho	ор		[	]	Collabo	oration			]	]
Kr	nowledgeable	e Suppo	ort	[	]	Respon	ise			[	]

## **Appendix III: Interview Schedule for Teachers**

Thank you for accepting to participate in this interview. I assure you that the details of this interview will remain confidential and will not be passed on to a third party.

- i. How are you always appraised?
- ii. How often is the appraisal conducted if you are appraised?
- iii. Based on your experience in this school, in your opinion do you believe that performance appraisal is an important tool?
- iv. Do you think that performance appraisal methods applied serve its purpose in stimulating teachers to work towards better teaching outcomes?
- v. How often do you sit with your appraisers to review the set targets for better teaching outcomes?
- vi. Having gone through performance appraisal for more than two years, what are some of the challenges you have faced in terms of the teaching standards and the appraisers that can affect the teaching outcomes?
- vii. As regards professional knowledge and application, do you think it is an essential teaching standard towards better teaching outcomes?
- viii. In your opinion does performance appraisal promote good time management, creativity and innovation in teaching and professional development towards better teaching outcomes?

### **Appendix IV: Interview Schedule for Education Officers**

Thank you for accepting to participate in this interview. I assure you that the details of this interview will remain confidential and will not be passed on to a third party.

- i. How are you do you monitor appraisal?
- ii. How often is the appraisal conducted if you are appraised?
- iii. Based on your experience in this school, in your opinion do you believe that performance appraisal is an important tool?
- iv. Do you think that performance appraisal methods applied serve its purpose in stimulating teachers to work towards better teaching outcomes?
- v. Having gone through performance appraisal for more than two years, what are some of the challenges you have faced in terms of the teaching standards and the appraisers that can affect the teaching outcomes?
- vi. As regards professional knowledge and application, do you think it is an essential teaching standard towards better teaching outcomes?
- vii. What factors hamper proper utilization of time
- viii. In your opinion does performance appraisal promote good time management, creativity and innovation in teaching and professional development towards better teaching outcomes?
- ix. What method are there to improve innovation and creativity among teachers

Appendix V: Krejcie and Morgan Table for Determining Sample

KREJCIE AND MORGAN TABLE FOR DETERMINING SAMPLE									
N	S	N	S	N	S	N	S	N	S
10	10	100	80	280	162	800	260	2800	338
15	14	110	86	290	156	850	265	3000	341
20	19	120	92	300	169	900	269	3500	346
25	24	130	97	320	175	950	274	4000	351
30	28	140	103	340	181	1000	278	4500	354
35	32	150	108	360	186	1100	285	5000	357
40	36	160	113	380	191	1200	291	6000	361
45	40	170	118	400	196	1300	297	7000	364
50	44	180	123	420	201	1400	302	8000	367
55	48	190	127	440	205	1500	306	9000	368
60	52	200	132	460	210	1600	310	10000	370
65	56	210	136	480	214	1700	313	15000	375
70	59	220	140	500	217	1800	317	20000	377
75	63	230	144	550	226	1900	320	30000	379
80	66	240	148	600	234	2000	322	40000	380
85	70	250	152	650	242	2200	327	50000	381
90	73	260	155	700	248	2400	331	75000	382
95	76	270	159	750	254	2600	335	1000000	384

N= Population, S=Sample

# **Appendix VI: Research Authorization (County Director of Education)**



# MINISTRY OF EDUCATION State Department of Early Learning and Basic Education

Telephone: (059) 20420 Fax: 05920420 When replying please quote

REF: MIG/CDE/ADMN./73/VOL.I/ 52

COUNTY DIRECTOR OF EDUCATION MIGORI COUNTY P.O. Box 466-40400 SUNA – MIGORI

DATE: 17th June, 2019

David Onyango Dianga Kisii University P.O. Box 408 – 40200 KISII

#### RE: RESEARCH AUTHORIZATION

Following your application for authority to carry out research on "Influence of teacher performance appraisal and development on learning outcome in Suna East Sub-County Public Primary Schools, Migori County, Kenya." and subsequent approval by NACOSTI vide letter Ref: NACOSTI/P/19/44076/30752. I am pleased to inform you that you have been authorized to undertake research in Migori County for a period ending 7th June, 2020.

During the research, you are expected to exercise high levels of research integrity.

Elizabeth Otieno (Mrs.)

County Director of Education

**MIGORI COUNTY** 

## **Appendix VII: Research Authorization (County Commissioner)**

## OFFICE OF THEPRESIDENT

# MINISTRY OF INTERIOR AND COORDINATION OF NATIONAL GOVERNMENT

Telephone: (059) 20511 FAX (059)20361 Email:

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.12/19 VOL.II/383

Date: 17th June, 2019

### **TO WHOM IT MAY CONCERN**

### **RE: RESEARCH AUTHORIZATION**

This is to confirm that **David Onyange Dianga** of Kisii University, NACOSTI/P/19/44076//30752 has been authorized to carry out research on "Influence of teacher performance appraisal and development on learning outcome in Suna East Sub county Public PrimarySchools, Migori County, Kenya". I'm pleased to inform you that you have been authorized to undertake this research within Suna East Sub County, for the period ending **7**th **June**, **2020**.

Accord him the necessary assistance.



MAGGIE T. MWANYUNGU FOR: COUNTY COMMISSIONER MIGORI COUNTY

CC

-The County Director of Education

Migori County

### **Appendix VIII: Research License (NACOSTI)**

# THE SCIENCE, TECHNOLOGY AND INNOVATION ACT, 2013

The Grant of Research Licenses is guided by the Science, Technology and Innovation (Research Licensing) Regulations, 2014.

#### CONDITIONS

- The License is valid for the proposed research, location and specified period.
- 2. The License and any rights thereunder are non-transferable.
- 3. The Licensee shall inform the County Governor before commencement of the research.
- 4. Excavation, filming and collection of specimens are subject to further necessary clearance from relevant Government Agencies.
- 5. The License does not give authority to transfer research materials.
- 6. NACOSTI may monitor and evaluate the licensed research project.
- The Licensee shall submit one hard copy and upload a soft copy of their final report within one year of completion of the research.
- 8. NACOSTI reserves the right to modify the conditions of the License including cancellation without prior notice.

National Commission for Science, Technology and innovation
P.O. Box 30623 - 00100, Nairobi, Kenya
TEL: 020 400 7000, 0713 788787, 0735 404245
Email: dg@nacosti.go.ke, registry@nacosti.go.ke
Website: www.nacosti.go.ke



REPUBLIC OF KENYA



National Commission for Science, Technology and Innovation

RESEARCH LICENSE

Serial No.A 25207

CONDITIONS: see back page

THIS IS TO CERTIFY THAT:

MR. DAVID ONYANGO DIANGA

of KISII UNIVERSITY, 0-40400

Suna-Migori,has been permitted to
conduct research in Migori County

on the topic: INFLUENCE OF TEACHER
PERFORMANCE APPRAISAL AND
DEVELOPMENT ON LEARNING OUTCOME
IN SUNA EAST SUB-COUNTY PUBLIC
PRIMARY SCHOOLS, MIGORI
COUNTY, KENYA

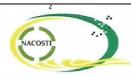
for the period ending: 7th June,2020

Applicant's Signature Permit No: NACOSTI/P/19/44076/30752 Date Of Issue: 7th June,2019 Fee Recieved: Ksh 1000



National Commission for Science, Technology & Innovation

## **Appendix IX: Research Authorization (NACOSTI)**



## NATIONAL COMMISSION FOR SCIENCE, TECHNOLOGY AND INNOVATION

Telephone:+254-20-2213471, 2241349,3310571,2219420 Fax:+254-20-318245,318249 Email: dg@nacosti.go.ke Website: 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/19/44076/30752

Date: 7th June, 2019.

David Onyango Dianga Kisii University P.O. Box 408-40200 **KISII.** 

#### **RE: RESEARCH AUTHORIZATION**

Following your application for authority to carry out research on "Influence of teacher performance appraisal and development on learning outcome in Suna East Sub-County Public Primary Schools, Migori County, Kenya." I am pleased to inform you that you have been authorized to undertake research in Migori County for the period ending 7<sup>th</sup> June, 2020.

You are advised to report to the County Commissioner, and the County Director of Education, Migori County 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.

BONFACE WANYAMA

FOR: DIRECTOR-GENERAL/CEO

mmille

Copy to:

The County Commissioner Migori County.

The County Director of Education Migori County.

Appendix X: Descriptive Data on Teacher Professional Qualification

# **Descriptive on Teacher Professional Qualification**

	Mean	Scores in KCPE 2018	3	Statistic	Std. Error
Teachers	160-	Mean		3.8000	.20000
Professional	179	95% Confidence	Lower	3.2447	
Qualification		Interval for	Bound		
		Mean	Upper	4.3553	
			Bound		
		5% Trimmed Mea	n	3.8333	
		Median		4.0000	
		Variance		.200	
		Std. Deviation		0.44721	
		Interquartile Range	e	.50	
		Skewness		-2.236	.913
		Kurtosis		5.000	2.000
	180-	Mean		2.8889	.45474
	199	95% Confidence	Lower	1.8403	
		Interval for	Bound		
		Mean	Upper	3.9375	
			Bound		
		5% Trimmed Mean		2.9321	
		Median		4.0000	
		Variance		1.861	
		Std. Deviation		1.36423	
		Interquartile Range	e	2.50	
		Skewness		508	.717
		Kurtosis		-1.917	1.400
	200-	Mean		3.2647	.27462
	219	95% Confidence	Lower	2.7060	
		Interval for	Bound		
		Mean	Upper	3.8234	
			Bound		
		5% Trimmed Mea	n	3.1732	
		Median		3.0000	
		Variance		2.564	
		Std. Deviation		1.60130	
		Interquartile Range	e	2.00	
		Skewness		1.044	.403
		Kurtosis		.987	.788

220-	Mean		3.3857	.19012
239	95% Confidence	Lower	3.0064	.17012
20)	Interval for	Bound	3.0004	
	Mean	Upper	3.7650	
	TVICALI	Bound	3.7030	
	5% Trimmed Mea		3.3095	
	Median	11	3.0000	
	Variance		2.530	
	Std. Deviation		1.59067	
	Interquartile Range		2.00	
	Skewness	<u> </u>	.715	.287
	Kurtosis		.169	.566
240-	Mean		3.7632	.24856
2 <del>5</del> 9	95% Confidence	Lower	3.7632	.24630
239	Interval for	Bound	3.2393	
	Mean		4.2668	
	Mean	Upper Bound	4.2008	
	5% Trimmed Mea		2 6012	
		1	3.6813	
	Median		3.5000	
	Variance		2.348	
	Std. Deviation	1.53225		
	Interquartile Range	e	2.00	
	Skewness		.850	.383
	Kurtosis		.785	.750
260-	Mean		3.4545	.31367
279	95% Confidence	Lower	2.8022	
	Interval for	Bound		
	Mean	Upper	4.1068	
		Bound		
	5% Trimmed Mea	n	3.3990	
	Median		3.0000	
	Variance		2.165	
	Std. Deviation		1.47122	
	Interquartile Range	e	1.00	
	Skewness		.789	.491
	Kurtosis		.924	.953
280-	Mean		3.6154	.59419
299	95% Confidence	Lower	2.3208	
	Interval for	Bound		
	Mean	Upper	4.9100	
		Bound		
	5% Trimmed Mea		3.5171	

	Median		3.0000	
	Variance		4.590	
	Std. Deviation		2.14237	
	Interquartile Range	e	3.00	
	Skewness		.834	.616
	Kurtosis		.104	1.191
300	Mean		2.6667	.66667
and	95% Confidence	Lower	2018	
Above	Interval for	Bound		
	Mean	Upper	5.5351	
		Bound		
	5% Trimmed Mean	1		
	Median		2.0000	
	Variance		1.333	
	Std. Deviation		1.15470	
	Interquartile Range	e	•	
	Skewness		1.732	1.225
	Kurtosis			

Appendix XI: Suna East Sub-County Map

