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Teachers' Instructional Supervision and Students' Academic Performance in Rwanda: A Case of Core Sciences Subjects in Lower Secondary Schools in Kayonza District

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Abstract

The effective instructional supervision performed by teachers in school setting, play a significant role based on improvement of students' academic performance.. Therefore, the objective of this paper was established the relationship between teachers' instructional supervision and students' academic performance in core science subjects in lower secondary schools. A correlational research design was applied. The target population was 1023 from whom a sample of 288 was chosen using simple random and purposive sampling techniques. Data collection tools used were interview, questionnaire. Statistical Package for Social Sciences (SPSS) version 22.0 was adopted for analyzing information. The findings revealed that 69.4% argue that always teachers are required to show evidences of the direct relationship between their teaching and their student progress; 53.1% reiterate that always teachers are requested to demonstrated the proper feedback they gave to students by showing how student have done, what they need to improve their learning and success; and 52.2% were asked to show their plan of actions. The findings also showed that 81.1% agreed that they participate in chemistry lesson, 70.0% agreed that they understand chemistry subject and 60.4% attend chemistry lesson. A Pearson correlation coefficient presented the relationship between observation of lessons and students' performance $r=0.493$, visiting classrooms and students' performance $r = 0.518$ and checking records and students' performance $r = 0.360$. This paper recommends that teachers must be equipped with skills that can help the students learn other than cram concepts. MINEDUC must provide funding and networking opportunity for schools and teachers in access modern training and materials for school management.

Key words: *Instruction supervision, Learning, School Performance, Students' academic performance, Supervision, Teaching.*

1.1 Introduction

Globally, low level of students' academic performance in core sciences in low secondary schools was the greatest concern for educational practitioners. Specifically, in Africa including Rwanda, students did not perform well in core sciences in lower secondary schools (Jibril & Nwanmou, 2012). Teachers' instructional supervision was revealed to contribute to academic performance through monitoring, observation and assisting their amelioration (Louis, 2012). These services are under critical situation due to the inability to attain a clear effect on quality of teaching and teach (Megan, 2011). This unsuccessful situation emanates from strategic obstacles: the mandate of service is more important than its assets and is stimulated by low level of management and planning process (UNESCO, 2014).

Education quality improved when teaching staff is supported but it is depreciated if they are not. Teaching staff is shining in the right context, with well-planned curricula and evaluation strategies to ameliorate teaching and learning practices. Instructional supervision supports teachers but also learners indirectly in their learning process (UNESCO, 2014). Teaching and learning are the main activities determining the status of education in any country (Neal, 2009). Teachers' instructional supervision is meaningful aspect for education sector. Supervision of teaching staff is the main achievement of objectives of the school. Supervision of the teachers is the accomplishment of their aims. The Rwandan policy on education had pinpointed in determined terms of intentions for instruction control for attaining suitable inspection from constant supervision, perennial control and further education (Olutola, 2008).

According to Penzer (2011), supervision progressed from accomplishment that researchers attained. There must be a general objective that members of the school are willing to do so. Secondary, a guideline is necessitated to channel the different and usually unorganized efforts of people into a focused steam of production to attain the share objectives (Simpson and Weiner, 2009). Another supervision technique is advanced through systematic study and adopted for realizing the maximum possible of all individuals operation in education (Fielding, 2010). Despite the central role of supervision in a well-managed education, it did not obtain special scrutiny than it merits (Ncube, *et al*, 2015). School as learning setting with core mission of leading teaching and learning has to strive for successful students learning outcomes. To achieve this mission, these activities are monitored so that the right way towards the expected outcomes is maintained and instructional supervision is one best tool to use to ensure the achievement of quality education in Rwanda.

UNESCO (2014) revealed that supervision services are delivered by qualified and experienced officers academically and professionally but there is a lack of in service training in form of induction. A poor working conditions and heavy workload result in fewer visits to school especially in rural areas where regrettably those services were needed most. On a more positive note it was observed that the external supervisor services still considered necessary and useful for schools (Okendu, 2012). The quality education implies quality teaching and learning processes (Isaac, Haastrup & Osalusi, 2011).

Rwanda is struggling for quality education achievement. In this regard, different strategies have been put in place; including establishment basic infrastructure (classrooms, laboratories, electricity, professional development of teachers and all educational officials, curriculum change

from knowledge based to competence based one; provision of necessary instructional materials through capitation grant (MINEDUC, 2008). However, the supervision has to be effective to ensure that all set plans are achieved efficiently (Rwanda, 2014). The government has put in place the inspectors of education including regional inspectors, district educational officers, sector educational officers; these officials work hand in hand with deputy head teachers in charge of studies (DHS) and head teachers (HT) as school leaders (Muvunyi,2016). The fact that there is decentralization of school supervision, teaching and learning processes should be successful as an outcome from the work of these officials(government of Rwanda, 2014). Some schools in Kayonza District did not perform well especially in national exams, to some extent this means that teaching and learning are not done effectively (Umutoni, 2015). It is in that line this paper assessed the relationship teachers' instructional supervision and students' learning outcome in selected lower secondary schools of Kayonza District.

1.2 Problem Statement

The Ministry of Education reported that between 2007 and 2013 in senior three living examination, students did not perform well in core sciences because results indicated that, people in division I was only 5% in 2007 while in 2013, the rate was 9.2%. According to MINEDUC (2020), students in division I was 13%, however, the scenario was not different in the Eastern providence. Moreover, the 2020 Kayonza District National examination in ordinary level demonstrated a low performance in core sciences when consider results obtained in every day homework, tests and internal exams, where 63% of students in lower secondary schools in Kayonza District are reluctant to study this core sciences with happiness (MINEDUC, 2020). This shows that there is problem in this education sector which causes poor performance for many years. In search of way to improve leaning outcome in core sciences in lower secondary schools, the Ministry of Education adopted teachers' instructional supervision as a suitable approach to attain high level of students' academic in core science subjects (Muvunyi, 2016). Whereby, classroom visits, interactive and collaborative professional trust between school supervisors and teaching staff members, regular supervision would contribute to the improvement of academic performance (MINEDUC, 2010). Furthermore, Kayonza organizes an instructional supervision carried out by sector education officers, director of education and Vice- mayor in charge of social affairs. This paper therefore, sought to evaluate if and how teachers' instructional supervision has contributed to students' academic performance in core sciences in selected lower secondary schools located in Kayonza District-Rwanda since 2014 till 2019.

1.3 Objective of the Paper

The objective of this paper was to establish the relationship between teachers' instructional supervision and students' academic performance in core science subjects in lower secondary schools in Kayonza District – Rwanda

2.1 Literature Review

Nakpodia, *et al.*, (2012) working towards execution of instruction inspection: models, projections or issues in Ethiopian resource for instruction in modern time centers on amelioration of teaching-learning condition for and as arguing that control of education proves was guided in the direction of preserving and improving education process (Donkoh & Dwamena, 2014). Enaigbe (2009), the general objective of instruction supervision is to support the improvement of teachers and this can be based on their knowledge, teaching skills, and their competency in making professional

decisions. Donkoh (2014) assessed the impact of education inspection on professional advancement: observation of government fundamental school teaching staff members at Winneba, Ghana and evidenced that current needs of teaching necessitate employees to have long time improvement in their proficiency to inform and promote their knowledge to ameliorate their teaching services.

Adewale (2014) examined positive effects of designated strategies of instruction on pupils' educational accomplishment in secondary schools and evidenced that the quality and assessment of any degree of education system are the success of teaching staff and numbers of favorable grades achieved by pupils in subjects assessed at the end of final classes known as academic performance on the management of student assessment. Results evidenced a positive impact on class visits by head of department on the success of pupils is agreed with Blaise & Blaise (2009), times of vesting classroom support in boosting teacher more, put them on alter to render adequate utilization of instruction time and comments from visits are helpful to execute new opinion, design, plan and attaining researchable objectives of teaching and learning. In this regards, Sergiovanni (2009) evidenced that informal visit and formal lessons are able to evaluate and support teaching staff members. Usman (2015) in journal of education and practice assessing the effects of instruction supervision on education success of secondary schools pupils in Narasawa state, Nigeria showed that instruction process and inspection is helpful enough in ameliorating the success of learners.

Okendu (2012) conducted a research on academic performance of students in secondary schools reveal that the success of students in secondary schools was measured using mocks, homework marks, assignment, school internal exams and continuing assessment tests, and assignment (Wanzare, 2011). A study carried out in Nigeria on the level of academic success of students in secondary schools demonstrated that with the progress in ensuring school discipline, educational for all and other training in north school and national exams.

Poor performance continues to be apparent among secondary schools in the country. The low level of learning outcomes in secondary schools in public examination in Oyo state, in the present days render education system impotent to achieve its expected outcomes. The study shows the decrease of the level of achievement in the state of Kano in Nigeria (Zimmerman & Kitsantas, 2014). A study conducted by Penzer (2011) revealed that there is no doubt that good academic performance is linked to the positive teachers' instructional supervision. It has been proved that positive teachers' instructional supervision is associated with a range of important outcomes for studies (Panigrahi, 2012). Akhtar (2010) conducted a study in western providence of Pakistan on technology based teachers' instructional supervision and students' academic achievement in English as foreign language in Pakistan and noted that school supervision practices such observation of lessons, visits to classroom, checking of records and following up of students' learning advancement are vital to performance in national exams. OECD (2011) noted the need to identify what motivates teachers so that they execute syllabus on time.

Study conducted by Isaac, Akyeampong(2009) titled teachers' instructional supervision and school effectiveness in Ghana's population for the research was made up of all teaching staff and head teachers of public secondary school settings in south western Ghana with a sample of 1200 members of teaching staff and 60 head teachers adopting different stage, simple and stratified random sampling technique techniques. Findings demonstrated a positive correlation between teachers' instructional supervision and students' academic performance in secondary schools.

Samani, (2011) focused on entire Nigeria, the current study focused on Taraba State and the two studies differ in subject areas. Results from a research carried out on the influence of light on pupil’s school performance in teachers’ instructional supervision. The result from the study showed that it is very important to enhance lightening in teachers’ instructional supervision. It could be seen that the present study, just like the former, seeks to assess the role of educational aspects, teachers’ instructional supervision which has significant effect on the academic success of students die to the former revealed how lightening as an aspect of teachers’ instructional supervision influenced the academic performance of students. Simpson & Weiner (2009) was located in Malaysia while the current study is located in Taraba State, Nigeria. One of the important factors for consideration again is that this study unlike the former focused on specific subject area.

Teacher’s instructional supervision construct operationalized.

In this paper, teachers’ instructional supervision is a sequence of four phases: observation of lessons, visits to classroom, checking of records and monitoring of students’ academic progress. When measuring the above terms we asked respondents about their degree of dis/agreement about changes from 2015 to 2019 in selected items.

Table 1: Operationalization of Teachers instructional supervision construct.

Measurement variables	Items
<ul style="list-style-type: none"> • Observation of lessons 	<ul style="list-style-type: none"> • Relationship between teaching and student progress • How student have done, what they need to do to improve and how they can improve • Ongoing assessment to adjust teaching as the lesson develops • Update timetable and scheme of work • Plan of actions to be done
<ul style="list-style-type: none"> • Visits to classroom 	<ul style="list-style-type: none"> ▪ Visiting classroom for observing lesson ▪ Monitor student educational improvement ▪ Providing feedbacks for teaching staff later classroom inspection ▪ Protection of instruction time for regularity ▪ Visiting classroom for observing lesson
<ul style="list-style-type: none"> • Checking of records 	<ul style="list-style-type: none"> ▪ Inspecting schemes of work ▪ Checking teachers working records ▪ Making visit for inspecting lesson given by teachers ▪ providing comments after inspection ▪ Inspecting schemes of work
<ul style="list-style-type: none"> • Monitoring of students’ academic progress 	<ul style="list-style-type: none"> ▪ Using standardized tests that include all the materials ▪ Observation and interaction can just observe your students as well. ▪ Frequent evaluations ▪ Formative assessment

Students’ Academic Performances operationalized.

In this paper, the Students’ Academic Performances is characterized by National examinations, Tests grades and Homework. When measuring the above terms we asked respondents about their degree of dis/agreement about changes from 2015 to 2019 in selected items.

Table 2: Operationalization of Students’ Academic Performances constructs.

Measurement variables	Items
<ul style="list-style-type: none"> • National examinations 	<ul style="list-style-type: none"> ▪ Division ▪ Attendance rate ▪ Entering tertiary education
<ul style="list-style-type: none"> • Tests grades 	<ul style="list-style-type: none"> ▪ High grade ▪ Repetition rate ▪ Completion rate
<ul style="list-style-type: none"> • Homework 	<ul style="list-style-type: none"> ▪ Group of work ▪ Quiz ▪ End term

3.1 Methodology

This paper employed both a descriptive and correlational research designs. A descriptive research design took into account the description of nature of general information without relying on the reasons of appearance of some cases while correlation research design was employed to indicate an association between variables. The target population was 1023 people comprising 59 head teachers, 1 director of education, 12 sector education officers, 59 director of studies and 892 teachers. The sample size was 288 respondents got by using solvin’s formula such as 1 director of education at district level, 12 sector education officers, 20 deputy head teachers in charge of studies, 20 head teachers and 235 teachers sampled by using purposive and simple random sampling technique and also stratified sampling technique . The findings were collected by using questionnaire and interview guide. To maintain the validity of the research instrument was maintained by distributing the research instruments to the expert respondents in the area of the study while reliability was maintained by making pilot study that provided reliability of the research instrument and got 91.9% using alpha and considered to be reliable as it was greater than 70% as recommended. The data management of this study was maintained by using SPSS software version 22.

4.1 Findings

Results were analysed based on three specific objectives. These objectives were: to determine teachers’ instructional supervision practices adopted for core science subjects in lower secondary schools in Kayonza District-Rwanda; to assess students’ academic performance in core subjects in lower secondary schools in Kayonza District – Rwanda; and to establish the relationship between teachers’ instructional supervision and students’ academic performance in core science subjects in lower secondary schools in Kayonza District – Rwanda.

Analysis of Teacher Instructional supervision adopted in core science in Lower Secondary Schools in Kayonza District

Table 3: Observation of lessons

Observation of lessons	Never		Rarely		Sometimes		Often		Always		Total		Standard Deviation
	N	%	N	%	N	%	N	%	N	%	N	Mean	
Relationship between teaching and student progress	3	1.0	1	0.2	26	9.0	58	20.4	200	69.4	288	3.79	.43
How student have done, what they need to do to improve and how they can improve	0	0.0	5	1.6	58	20.0	73	25.3	153	53.1	288	3.72	.50
Ongoing assessment to adjust teaching as the lesson develops	0	0.0	9	3.0	55	19.0	84	29.0	141	49.0	288	3.69	.50
Update timetable and scheme of work	3	1.2	30	10.4	79	27.5	58	20.0	118	40.9	288	3.61	.51
Plan of actions to be done	5	1.6	18	6.4	43	15.0	74	25.8	150	52.2	288	3.51	.54

Results indicated that 69.4% argue that teachers are required to show evidences of the direct relationship between their teaching and their student progress,53.1% reiterate that teachers are requested to demonstrated the proper feedback they gave to students by showing how student have done, what they need to do to improve and how they can improve their learning and performance in term of success. Thus, 49.2 % felt to the responses related to always by showing that teachers are required to show how they prepare and give ongoing assessment to adjust teaching as the lesson develops. Results show that 40.0 % evidenced that teachers are always required to show an update timetable and scheme of work. Finally, 52.2% felt to demonstrate that they always asked to show their plan of actions that they will take when school receive notice of inspection. The finding shows that the respondents agreed that activities of observation of lessons in Kayonza District were used in the school where teachers must have a clear checklist aimed at helping them to reflect on their practice and to prepare for themselves for an ousted visit. Needless to say that the observation checklist is also of common use for teachers, perhaps to ensure their readiness for success and performance management or internal observation institutional procedures.

Table 4: Visits to classroom

Visits to classroom	Never		Rarely		Sometimes		Often		Always		Total		Standard Deviation
	N	%	N	%	N	%	N	%	N	%	N	Mean	
Visiting classroom for observing lesson	6	2.1	9	3.2	58	20.2	95	33.0	200	41.5	288	3.36	.57
Monitor student educational improvement	8	2.8	4	1.4	33	11.4	107	37.0	142	49.4	288	4.01	.56
Providing feedbacks for teaching staff later classroom inspection	0	0.0	7	2.4	30	10.4	88	30.5	163	56.7	288	4.20	.55
Protection of instruction time for regularity	3	1.5	9	3.2	53	18.3	86	30.0	135	47.0	288	3.22	.58
Visiting classroom for observing lesson	0	0.0	15	5.2	43	14.8	80	27.7	151	52.3	288	3.14	5.2

Results show that 41.5% confirmed that visiting classroom for observing lesson were done to see the progress. It was confirmed that by 49.4% that teacher always monitor student educational improvement, and according to 56.7% that teachers always are providing feedbacks for teaching staff later classroom inspection. Furthermore, 47.0%, evidenced that they always for protection of instruction time for regularity. Finally, 52.3% confirmed that they are always visiting classroom for observing lesson. The finding shows that teachers used visits to classroom in their teaching and the evidence was characterized by the visiting classroom for observing lesson, monitor student educational improvement, providing feedbacks for teaching staff later classroom inspection, protection of instruction time for regularity and visiting classroom for observing lesson.

Table 5: Checking of Records

Checking of records	Never		Rarely		Sometimes		Often		Always		Total		Standard Deviation
	N	%	N	%	N	%	N	%	N	%	N	Mean	
Inspecting schemes of work	2	0.8	23	7.9	34	11.9	86	30.0	142	49.4	288	1.01	.67
Checking teachers working records	1	0.4	32	11.1	35	12.1	84	29.2	136	47.2	288	1.32	.69
Making visit for inspecting lesson given by teachers	2	0.8	0	0.0	43	15.0	41	14.2	202	70.0	288	1.04	.43
providing comments after inspection	5	1.6	0	12.6	36	10.8	72	25.0	144	50.0	288	2.31	.41
Inspecting schemes of work	2	0.8	23	7.9	58	20.0	63	21.9	142	49.4	288	1.01	.67

A reflected, 49.4% felt that inspecting schemes of work is always than in secondary schools located in Kayonza District, also 47.2% confirmed that checking teachers working records is always adopted among secondary schools located in Kayonza District. Moreover, 70.0% evidenced that making visit for inspecting lesson given by teachers is always happened in secondary schools located in Kayonza District while 50.0% confirmed that providing comments after inspection.

Table 6: Monitoring of students’ academic progress

Monitoring of students’ academic progress	Never		Rarely		Sometimes		Often		Always		Total		Standard Deviation
	N	%	N	%	N	%	N	%	N	%	N	Mean	
Using standardized tests that include all the materials	8	2.8	18	6.2	29	10.0	113	39.3	120	41.7	288	2.45	.831
Observation and interaction can just observe your students as well.	0	0.0	9	3.0	43	15.0	90	31.4	146	50.6	288	2.24	.641
Frequent evaluations	3	1.2	12	4.0	29	10.0	90	31.3	151	52.5	288	2.74	.635
Formative assessment	5	1.7	10	3.4	43	14.9	102	35.3	129	44.7	288	2.22	.599

Results indicated that the teaching staff members adopt standardized assessments that comprises of all materials considering the mean of 2.84 which is interpreted as high mean. On the other side the Using standardized tests that contains all materials considering a mean of 2.45 which is interpreted as low mean, Observation and interaction can just observe your students as well considering the mean of 2.24 which is interpreted as low mean, and Formative assessment considering the mean of 2.22 which is interpreted as low mean.

Ascertaining Students’ Academic performance in Core Sciences in Lower Secondary Schools in Kayonza District

Academic performance was evaluated according to score grades, national examinations, tests grades and homework. The study measured by academic performance of students in secondary schools through class participation, comprehension of chemistry, regular attendance, students coming in time, completing homework and improving in chemistry grade.

Table 7: Student Academic Performance in core sciences Subjects

Student Academic Performance	SD		D		A		SA		Total		Std. Dev
	N	%	N	%	N	%	N	%	N	Mean	
Class Participation	0	0.0	0	0.0	54	18.9	234	81.1	288	3.81	.39
Comprehension of Chemistry Subject	5	1.8	9	3.2	202	70.0	72	24.9	288	3.18	.57
Regular attendance	45	15.7	36	12.4	33	11.5	174	60.4	288	3.17	1.15
Punctuality	0	0.0	0	0.0	3	0.9	285	99.1	288	3.99	.10
Completion of Homework	39	13.4	28	9.7	174	64.1	31	12.9	288	2.76	.84
Improvement of Grades	39	13.4	44	15.2	161	55.8	45	15.7	288	2.74	.88

Finding indicated that 81.1 % agreed that students participated in chemistry lesson,70.0%, agreed that students understood chemistry, and 60.4% and standard deviation of 1.15 agreed that students attended chemistry lesson regularly. Asked whether students went to chemistry class on time, 99.1% agreed, 64.1% agreed that students completed chemistry homework. The mean showed that 55.8% disagreed with this and also that chemistry grades improved. From the finding, the performance of students in chemistry as far as class participation, comprehension, regular attendance as well as coming to chemistry class on time was good. The students however did not perform well in completion of homework and their grades did not improve according to the respondents.

Table 8: National examination Grades and Scores in Kayonza District

Categories	N	Range	Minimum	Maximum	Mean	Std. Deviation
Group work	9210	19	11	30	21.38	5.686
Quiz	9210	17	13	30	21.76	5.209
End of Term Test	9210	65	5	70	38.03	19.426

According to the study, the performance of the 9210 students as shown by their record book indicated that the minimum score in group work after the end of term was 11 and the highest 30. On average majority had 21.38 as shown by the low standard deviation of 5.69. Concerning the

quiz, the minimum was 13 and the maximum 30 and again the mean by the majority was 21.76. The performance at the end of term shows that the minimum was 5 and the maximum was 70. The mean score was 38.03 however with a very high standard deviation of 19.426, many students did not score this mean. From the finding, the students performed well in quiz and group work however the performance was poor at the end of term.

Table 9: Attendance rate in core science in Lower secondary in Kayonza District-Rwanda

Year	Enrolment	Attendance	Trends
2014	6780	5648	83.3
2015	7920	6494	82
2016	7992	5874	73.5
2017	8917	5680	63.7
2018	9210	5636	61.2

Findings show that from 2014 to 2018 primary schools in the context located in Kayonza district recognized school enrolment at the high level. The table show a trend in attending schools and the attendance rates. According to an interview held between the researcher District Education Officer of Kayonza District. He says school attendance was not low compared to those who enrolled from 2014 to 2018 and the high trends for attendance rates was evidenced between 2017 and 2018 decreased for every Public primary school depending on the trends of school enrolment. Information given in this research concurs with results observed in a study undertaken by Samani (2011) on the effects of strategic planning on academic success: a case of public primary schools in Kimilili-Bungoma District evidenced that the attendance was higher than 12% compared to those who remained at schools. In light to objective t two, the researcher concludes that in enrolment in primary school increased and even the attendance rates increased also. Therefore, there is a need to make appropriate strategies to overcome high absenteeism rates.

Table10: Repetition rate in selected primary schools of Kayonza District-Rwanda

Year	Enrolment	Attendance	Trends
2014	6780	417	6.2
2015	7920	451	5.6
2016	7992	487	6.9
2017	8917	1129	12.6
2018	9210	1206	13.1

Findings indicate that from 2014 to 2018 primary schools in the context located in Kayonza district recognized school enrolment at the high level. The table shows a trend in repetition schools and the repletion rates. According to an interview held between the researcher District Education

Officer of Kayonza District. He says school repetition was not low compared to those who enrolled from 2014 to 2018 and the high trends for repetition rates was evidenced between 2017 and 2018 decreased for every primary school depending on the trends of school enrolment. A study conducted by Sariola (2011) on common practicality, skills and community of education: combinations of the mind in United Kingdom did not observe the trend in increasing states. Therefore, the findings contradict with evidences of present research which recognized increasing trends of school repetition rates from 2014 till 2018 This connection between teachers’ instructional supervision (observation of lessons, visits to classroom, checking of records and monitoring of students’ academic progress) was established by correlation of national examinations, tests grades and homework. Results were reflected by Table 4.13

Table 11: Correlation between teachers’ instructional supervision and students’ academic Performance

		Observation of lessons	Visits to classroom	Checking of records	Monitoring of students’ academic progress
Performance	Pearson Correlation	.493**	.518**	.360**	.348**
	Sig.(2-tailed)	.000	.000	.000	.000
	N	288	288	288	288

****Correlation is significant at the 0.005 Level (2-tailed).**

As presented, a correlation a correlation coefficient of 0.493 was produced between observation of lessons and student’s performance, 0.518 between visits to classroom and students’ performance and 0.360 between checking of records and students’ performance, .348** between monitoring of students’ academic progress and academic performance. All the relationships were statistically significant and positive. This implied that all the strategies significantly affected student’s performance in a positive way. Results of this research concurred with that of Osakwe (2010) who found that teaching strategies such monitoring of students’ academic progress had positively influenced students’ success.

5.0 Summary of findings

The objective of this paper focused on establishing the relationship between teachers’ instructional supervision and students’ academic performance in core science subjects in lower secondary schools in Kayonza District – Rwanda. A correlation coefficient of 0.493 was produced between observation of lessons and student’s performance, 0.518 between visiting classrooms and students’ performance and 0.360 between checking records and students’ performance. All the relationships were statistically significant and positive. This implied that all the strategies significantly affected student’s performance in a positive way.

6.0 Conclusion

School inspection is considered as independent follow up for ameliorating the academic performance that was given to students and it always aim to make improvement where weakness is found. School inspection could be used as the main tool to be used by government stakeholders in drawing long terms strategies for quality education. The stakeholders may consider different variables mainly the ability of teachers and the existence of other variables that may have an influence on education outcome. Furthermore, a consistent methodical inspection intended to appraise and evaluate the quality and standards of education in school in systematic way.

7.0 Recommendations

This paper indicates the following recommendations

- i. To the schools, more training should be given to teachers in order to give them more diverse skills for teaching.
- ii. Lecture method is what most teachers find comfortable given the setting of most schools. However, the ability of lecture methods to enhance long term memorization of concepts so that learning takes place has been found lacking. Teachers must therefore be equipped with skills that can help the students learn other than cram concepts.
- iii. The teachers should enhance their skills by being creative in acquiring more training past just the professional training they acquired at their training colleges.
- iv. While the MINEDUC must provide funding and networking opportunity for schools and teachers in access modern training and materials for school management. They could network with other Ministries and exchange with them for the improvement of their teachers.
- v. Inspectors should deliver feedback to teachers where this may help them to make improvement on how the perform their job, for better inspection, all should be involved and this would help in making satisfactory decision from inspection, and the training and development should be initiated to inspectors of education on sector level.
- vi. To this training for teachers and adequate software are needed for accelerating the role of teachers' instructional in education.

Suggestion for further study

The further study can be conducted to analyse the implementation level of inspections reports and quality of education in secondary schools, analysing challenges facing stakeholders in education for the effectiveness of inspection in Rwandan education.

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