Teacher Support Systems and Quality of Pedagogical Practices in Uganda's Public Secondary Schools

PAUL NETALISILE MALUNDA

Uganda Management Institute pmalunda@umi.ac.ug

Abstract

This study explores the extent to which teacher support systems influence the quality of pedagogical practices in public secondary schools in Uganda. It specifically examines the extent to which supervision and evaluation of teachers explain variations in quality of pedagogical practices. It was triggered by the persistent criticisms about the deteriorating quality of teaching and learning in public secondary schools in the country. A descriptive cross-sectional survey research design was used to conduct the study. Data was collected from 76 head teachers and 934 teachers drawn from 95 public secondary schools and six officials from the Uganda's Ministry of Education and Sports (MoES) using survey, interview, observation and document analysis methods. Data collected from teachers was analysed using descriptive statistical analysis and ordered logistic regression, while content analysis was used to analyse qualitative data collected from lesson observations, document analysis, head teachers and ministry officials. The study findings revealed that first, teacher supervision (Odds ratio =1.89; p=0.000<0.05) and teacher evaluation (Odds ratio =1.54; p=0.000<0.05) have statistically significant influence on the quality of pedagogical practices in public secondary schools in Uganda. Second, the study established that teacher supervision was based majorly on fault-finding, schools lack appropriate teacher evaluation tools, and third, the study established that school administrators, in attempt to ensure quality of teaching and learning, used a 'monitoring tool' to supervise teacher punctuality and attendance, used previous national examination results to evaluate teacher performance and encouraged peer coaching. The study recommends that in order to enhance the quality of pedagogical practices, the Ministry of Education and Sports should (i) build the capacity of the schools to provide effective teacher support supervision; and (ii) develop standard formative evaluation tools that can be used for continuous teacher evaluation as well as train head teachers on how to effectively appraise their staff.

Keywords: teacher supervision, teacher evaluation, quality of pedagogical practice

Introduction

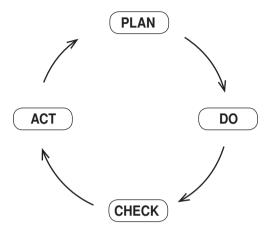
Public education is one of the primary duties of the state and over the last two decades, the Ugandan Government has invested heavily in improving access to and quality of education. The government recognises the fact that education is a powerful tool for transformation of society and plays a key role in a country's sustainable development and its competitiveness within the global society. Although access at both primary and secondary levels of education appears to have been achieved, quality remains a big challenge (The Education and Sports Sector Annual Performance Report (ESAPR), 2016/17; National Development Plan 2010/11-2014/15). According to the Directorate of Education Standards (DES) report (MoES, 2017b), this challenge is explained by low-quality pedagogical practices at the primary and secondary levels. The pedagogical practices in these schools are at variance with the expectation of the government and the curriculum planners. Teachers do not conform to the classroom standards set by the Directorate of Education Standards and National Curriculum Development Centre (CURASSE, 2007).

Historically, Uganda's education system was one of the best on the African continent in the 60s and early 70s (Government of Uganda, 1992). Teaching focused on developing learners' competencies and students were taught in a way that fostered higher order thinking skills. Graduates at different levels of education were equipped with adequate skills tailored to the job market. The wars and civil strife during the 70s and 80s led to the neglect of educational institutions and the erosion in the quality of education at all levels (Uganda Government, 1992). The quality of teaching suffered because several teachers fled the country while the morale of those teachers that remained declined. In order to re-establish the quality of education and as a strategy of accelerating development, government introduced and implemented major reforms in education in line with the Education White Paper (MoES, 2009). The reforms included implementation of Universal Primary and Secondary Education, among others. Universal Secondary Education has expanded access to secondary education for many Ugandans, including some of the vulnerable poor who would not have even attended secondary school. Despite the reforms, many students completing the secondary cycle are not able to speak and write good English given the fact that they are taught and assessed in English (Uganda National Examination Board [UNEB], 2018). There are also indications that all is not well with the quality of teaching at secondary school level, despite the increase in the numbers of first and second grades in the national examinations. Some of the indications include: increasing examinations malpractices, the rising levels of rote learning, holiday coaching of most of the students, examination-oriented teaching and part-time teaching by several teachers.

Theoretically, the study anchored on the Plan-Do-Check-Act (PDCA) model of quality enhancement that was popularised by the quality guru Edwards Deming. According to the model, a continuous feedback loop is essential in order to analyse, measure and identify sources of variation from customer requirements so as to act for continual quality improvement (Deming, 1986). As a result, the model emphasises and demonstrates that any improvement programmes must always start with careful planning. This, the model adds, must result in effective action, and

move on again to careful planning in a continuous cycle. Oakland (1993) refers to this pattern of quality improvement where the completion of one cycle continues with the beginning of the next – Deming's never-ending quality cycle. The PDCA cycle is illustrated as follows:

Figure 1: The PDCA cycle.



Source: Deming (1993, p.134)

According to Figure 1, the PDCA cycle goes through four phases. Phase 1, Plan - it involves establishing the objectives and processes required to deliver results in agreement with the expected output. Phase 2, Do - it involves executing the plan or effecting the processes and making the product. Phase 3, Check - it involves studying the actual results and comparing them against the expected results. Finally, Phase 4, Act - it involves using the results to improve further what is being done. According to Phillips, Balan and Manko (2014), the PDCA model is relevant in ensuring quality improvement in different aspects of education, including the quality of pedagogical practices. The researchers agree with this observation. Thus, in this study, the model was opted for because the researchers also concurred with Ayeni (2011) who hypothesised that to ensure continuous improvement in the quality of education, the teaching and learning activities need to be regularly evaluated against the set objectives and standards, and corrective actions need to be taken to produce the desired changes with regard to efficiency, quality and satisfaction. As a result, it was believed that the quality of pedagogical practices in secondary schools in Uganda would be improved through the process of collecting data for evaluation purposes; making classroom observations, evaluating the teaching practices, analysing data to determine areas that need to be improved, and providing relevant professional development for teachers following the PDCA cycle.

The study focused on two main concepts: Teacher support systems and quality of pedagogical practices. According to Elfers, Stritikus, Calaff, Soo Von Esch, Lucero, Knapp, and Plecki (2009),

support systems in a school system refer to a set of intentional and differentiated efforts that are focused on the continuous improvement of student and teacher learning. These are programmes, services and activities designed to marginally assist and facilitate the achievement of instructional goals and objectives in a school system. Examples of such programmes, services and activities include teacher supervision, teacher evaluation (appraisal) and teacher professional development. These mechanisms are deliberately designed to support teachers in gaining the knowledge and competencies they need to implement services that result in positive outcomes for learners by the Ministry of Education and Sports or schools in which the teachers operate. The systems are meant to enhance performance of teachers in the delivery of quality education services (MOES, 2017). In this study, attention was paid to formal and informal support systems at both national and school levels focusing on teacher supervision, teacher evaluation and teacher professional development in Uganda.

Quality of pedagogical practices was used to mean the teaching strategies that enhance learning and focus on the quality of the learning outcomes (Kahsay, 2012). It was defined in this study as the teaching practices that conform to the guidelines issued by the Ministry of Education. Teachers in Uganda are expected to adhere to the National Curriculum Development Centre (NCDC) and the Directorate of Education Standards (DES) guidelines while executing their duties in the teaching and learning process. Teachers are expected to prepare and plan for lessons by making schemes of work, lesson plans and lesson notes. During the teaching process, teachers are expected to employ a range of appropriate methods to meet lesson objectives, use real-life examples to explain concepts, nurture a positive relationship with students, give and build on homework.

Contextually, this study was undertaken in public secondary schools in Uganda. It was prompted by the fact that despite Government's initiatives to improve the quality of education in Uganda, the quality of pedagogical practices at secondary school level remains poor (MoES, 2017). The poor quality of pedagogical practices has been manifested in diverse ways. For instance, there have reportedly been poor scheming and lesson planning by teachers; more use of teacher-centred rather than learner-centred pedagogies; and dominant application of theoretical rather than practical approaches to the teaching of sciences (UNEB, 2018; MoES, 2017; Uganda National Council for Science and Technology Report [UNCST], 2012). Furthermore, assessments of students have been geared towards passing national examinations while other objectives of the curriculum such as the promotion of moral values, practical skills and participation in social and cultural activities have been ignored, and many such practices that modern day educationalists consider undesirable. In fact, the decline in the conformance to guidelines laid down by NCDC by teachers in secondary schools has been attributed to the weak teacher supervision and evaluation systems (MoES, 2017). Kagolo (2014) earlier revealed that the evaluations of teachers in public secondary schools in Uganda have been badly conducted with very appalling feedback being given to the teachers. Teacher Initiative in Sub-Saharan Africa (TISSA) advised in their 2013 report to urgently address this kind of scenario if the quality of Uganda's education system

is to improve (MoES, 2017). Nagel (2003), in fact, counselled that neglecting the quality of pedagogical practices could have serious repercussions on the country's quality of education in general and its development. Therefore, the study investigated the extent to which teacher support systems explained quality of pedagogical practices in public secondary schools in Uganda since Government and specifically the extent to which supervision and evaluation of teachers explain quality of pedagogical practices in public secondary schools.

Literature review

A number of studies in relation to teacher supervision and quality of pedagogical practices have, in the past, been conducted (Sule, Ameh and Egbai, 2015; Usman, 2015; Veloo, Komujji and Khalid, 2013). For example, a study on the relationship between supervision and the roles teachers play in ensuring effectiveness that was conducted in secondary schools in Nigeria by Sule, Ameh and Egbai (2015), revealed that teacher supervision through classroom observations positively contributed to teacher effectiveness in a school. Similarly, Veloo, Komujji and Khalid (2013), in their study about the effect of clinical supervision on the teaching performance of secondary school teachers in Malaysia, relatedly established that formal observations significantly contributed to improved teacher preparation, lesson development, learner assessment and classroom control. However, literature (e.g. Tesfaw and Hofman, 2014; Campbell, 2013; Milanowski, 2011; Marshall, 2009; Holland, 2004) argues that formal classroom observations have little effect on teaching practices. These scholars, meanwhile, advocate for more frequent, short, unannounced, informal classroom observations by school authorities to motivate teachers to adopt effective pedagogical practices. They contend that informal classroom observations actually provide a better picture of the teacher's competence and his or her pedagogical practices than the formal observations. Zepeda (2010), on the other hand, asserts that classroom observations can only positively influence teacher effectiveness when supervisors focus on strengthening the relationship between themselves and teachers by holding coaching discussions one-on-one after the observations but not on fault-finding. In congruence with Zepeda's assertion on the approach of giving feedback, findings in a study on the impact of instructional supervision on students' academic performance by Usman (2015) revealed that the manner in which supervisors give feedback to supervisees significantly impacts on the teachers' pedagogical practices and performance in classroom settings. Although these studies indicated that classroom observations impacted on the teachers' pedagogical practices, the studies were mainly conducted in the context of developed countries. This study was conducted to fill the contextual gap.

With regard to portfolio supervision, findings of several studies reveal that portfolio supervision significantly explains teacher effectiveness in the classroom (e.g. Peretomode, 2001, Sule et al., 2015, Usman, 2015). A study conducted on the impact of instructional supervision on academic performance of secondary school students in Nasarawa State, Nigeria by Usman (2015), for instance, revealed the existence of a significant positive relationship between portfolio supervision and teacher performance. Similarly, findings of Sule et al. (2015) and Peretomode (2001) also exposed the presence of a positive relationship between portfolio supervision and teacher effectiveness. However, unlike Usuman (2015) who took into consideration the review of lesson plans, lesson notes, students' notes and teachers' recordkeeping as important ingredients of portfolio supervision, Sule et al. and Peretomode concentrated their focus only on the review of the teachers' lesson notes. Orenaiya (2014) and Musaazi (2006) meanwhile counsel that it is imperative for supervisors to review teaching artefacts that include, among others: schemes of work, lesson plans, teachers' notes and students' work to establish relatedness, completeness of task and syllabus coverage. However, Zepeda (2010) thinks that what to include in the supervised portfolio should be based on the purpose of the supervision. Bird (1990), as cited by Zepeda (2010), emphasises that to improve students' learning, portfolio artefacts should focus on teaching tasks of planning and preparation, teaching in class and student evaluations.

In regard to teacher evaluation and quality of pedagogical practices, findings of some of the previous studies revealed a strong relationship between teacher evaluation and the quality of teaching and learning in schools. Milanowski (2011) and Marshall (2009), for example, established that formative evaluation through regular classroom observations, review of classroom artefacts, and checking of learners' notebooks by school administrators lead to improved quality of teaching and learning. Findings of a related study by Pappy (2012) concur with Milanowski and Marshall, however, the study emphasised linking results of the formative teacher evaluation to teacher professional growth and development for enhanced quality of pedagogy. Kalule (2014), in a study carried out in three rural districts of Uganda, asserts that for formative evaluation to be effective, the appraisers should have the competence to appraise. Kalule (2014) established that head teachers who are expected to conduct formative teacher evaluation lacked the required training and skills needed for the job.

In relation to summative evaluation, Mpokosa and Ndaruhutse (2008) assert that this type of evaluation significantly influence the quality of pedagogical practices. On the other hand, Mielke and Frontier (2012) are of the view that summative evaluations do not support teacher professional growth since the judgmental nature of the evaluation impacts negatively on the self-esteem of the teachers. In fact, they suggest that an evaluation system that allows teachers to appraise themselves and suggest areas for professional development is better than the one carried out at the end of the activity. Tanya (2013) further reiterates that summative evaluation contributes to the deterioration of collegial relationships, feelings of mistrust, fear, nervousness, and tension during the time of appraisal. Therefore, such a kind of appraisal can be harmful to the staff who are praised if it is not appropriated conducted. Musaazi (2006), like Tanya, advises that summative evaluations should be conducted in a cordial and collaborative manner in order to enhance the quality of pedagogical practices. However, this does not seem to be the case in most secondary schools in Uganda. A report from the Ministry of Education and Sports (MoES, 2013a) shows that summative teacher evaluations in Uganda are irregular and inconsistent. In fact, the Education and Sports Sector Annual Performance Report (ESAPR) of 2013 (MoES, 2013a) indicated that several schools had not conducted annual teacher appraisals for the previous two years. Donaldson and Peske (2010), in their study of schools in the USA, attributed failure of the school administrators to conduct regular teacher performance appraisals and provide quality feedback to lack of time. They observed that few school administrators had evaluation systems, competencies and skills to effectively appraise and provide quality feedback on the appraisals that could inform professional growth. This may partly explain Uganda's scenario. In addition, the Organization for Economic Co-operation and Development's (OECD) report (2013) also observes that summative teacher evaluation in the OECD countries influence career and remuneration and endorsements for under performance. However, in Uganda, teacher performance appraisal contributes only 20% in the criteria considered for promoting staff and does not have a direct influence on teacher salaries. This de-link between results of performance appraisal and professional growth and remuneration renders teacher appraisals ineffective in the country.

Methodology

The study adopted a descriptive cross-sectional survey research design. The target population comprised teachers, head teachers and officials from the Directorate of Education Standards (DES). The study sample consisted of 934 teachers selected through the multi-stage sampling technique, 95 head teachers, and two officials from DES who were purposively selected. Data was collected using three different data collection methods, namely survey, interview and observation methods. Three different instruments were also used to collect data. First, a questionnaire whose items were adopted and modified from the teaching and learning assessment instrument of DES comprised three sections: A, B and C was used to collect data from the teachers. Section A of the questionnaire had six questions pertaining to respondents' background information. Section B included 12 items that sought teachers' opinion on supervision. Section C was composed of seven questions aimed at finding out the respondents' opinions pertaining to teacher evaluation; and section D had 15 items aimed at collecting respondents' opinions on the quality of pedagogical practices in public secondary schools. The items in sections B, C and D were measured on a five-point Likert scale with the following categories: Strongly Agree (5), Agree (4), Non-committal (3), Disagree (2) and Strongly Disagree (1). The questionnaire was preferred in this case because the respondents were many but they could all read and write. This helped to save time and costs during the study. Second, to elicit the opinions of DES inspectors and head teachers of the selected schools on the contribution of teacher supervision and teacher evaluation to the quality of pedagogical practices, the interview method and its corresponding interview guide were used. The interview method was opted for because it enabled further probing of the issues that were being investigated. Third, the researchers used the observation method to collect data. An observation checklist was adopted from DES' teaching and learning quality instrument and used to conduct the observations. This method made it possible to triangulate the information obtained through the use of the other two methods described above. Overall, the instruments used were pre-tested before the actual data collection was carried out. Descriptive and inferential statistical methods were used to analyse quantitative data. Specifically, the logistic regression model was

used to establish the extent to which teacher support systems influence the quality of pedagogical practices. The tests of significance were performed at the probability level of p< 0.05. Qualitative data were, on the other hand, analysed using the content analysis method. In the next section, the researchers present the findings of the study.

Results

First, the researchers present herein the background characteristics of the respondents in order to portray that data was collected from an authentic group of subjects. The results are presented in Table 1.

Table 1: Demographic Characteristics of the Respondents

Variable	Category	Frequency	Percentage
Age	Less than 20 years	6	.6
	20-40 years	664	71.1
	40 years and above	264	28.3
Gender	Male	644	69.0
	Female	290	31.0
Qualification	Diploma	208	22.3
	Bachelors	577	61.8
	Postgraduate	149	15.9
Length of years in the school	Less than three years	175	18.7
	3-10 years	554	59.4
	10 years above	205	21.9

The results in Table 1 show that the majority (71.1%) of the teachers were aged between 20 and 40 years, demonstrating that the majority were young and energetic to effectively discharge instructional tasks. Results also suggest a gender disparity in employment of teachers in public secondary schools with more male teachers (69.0%) employed compared to their female counterparts (31.0%). The results also show that the majority (83%) of the teachers had the requisite qualification (at least a diploma) to teach at secondary school level, demonstrating that the teachers in the system have the necessary qualifications to offer quality teaching. In relation to numbers of years spent in the schools, findings in Table 1 show that the majority (81.3%) of the teachers had spent more than three years in the sampled schools while 18.7 per cent had spent less than three years, indicating that teachers had longstanding cognate experience in serving as teachers.

Teacher Supervision: The study sought views on teacher supervision in public secondary schools from teachers and head teachers. This sub-section presents the analysis of descriptive results of

the teachers' views on teacher supervision using frequencies and percentages, ordered logistical regression results and results of qualitative data on teacher supervision from head teachers. Table 2 below presents the frequency and percentage distribution of teachers' views on teacher supervision.

Table 2: Distribution of Teachers' Views on Supervision in Public Secondary Schools

Teacher supervision	Diograp	Non-committal	Agraa
	Disagree		Agree
The head teacher reviews schemes of work at the beginning of the term	162 (17.3%)	29 (3.1%)	743(79.6%)
The head teacher regularly observes classroom teaching	401 (42.9%)	74(7.9%)	459(49.2%)
The head teacher notifies me before he/she observes me	578 (61.9%)	63 (6.7%)	293(31.4%)
The head teacher discusses with me how to improve on areas of my weakness after observing my teaching	467 (50%)	63 (6.7%)	40(43.3%)
The Heads of Department (HoDs) review schemes of work and lesson plans	100 (10.7%)	27(2.9%)	807(86.4%)
The HoDs monitor the setting and marking of tests/exams	122 (13.2%)	27 (2.9%)	812(86.9%)
The HoDs supervise the teaching process	300 (32.1%)	60 (6.4%)	574(61.5%)
I plan with my HoD for the lesson observation	482 (51.6%)	78 (8.4%)	374 (40%)
I hold discussions with my HoD after the classroom observation	484 (51.8%)	61 (6.5%)	389 (41.7%
Our school is inspected by officials from the Ministry of Education	394 (42.2%)	28(3%)	512(54.8%)
Inspectors from the Ministry of Education (MoE) supervise the way I teach in class whenever they visit the school	594 (63.6%)	108(11.6%)	232(24.8%)
I get feedback whenever MoE officials supervise me	639 (68.4%)	93 (10%)	202 (21.6)

The results in Table 2 show that there was an effort to conduct portfolio supervision by head teachers and HoDs in public secondary schools. Findings indicate that 79.6% of the respondents agreed that head teachers reviewed their schemes of work at the beginning of every term and similarly 86.4% respondents agreed that HoDs reviewed their schemes of work and lesson plans. There is significant evidence that HoDs supervise the setting and marking of tests and examinations. Results also suggest that lesson observations are mostly conducted by subject HoDs, probably because they have an in-depth understanding of the subject areas and head teachers were more

involved in regular short visits to classrooms (49.2%). Results further demonstrate that less than 50% of the teachers whose lessons were observed ever received feedback from the supervisors. Whenever classroom observations were carried out, supervisors hardly notified teachers of them or even held discussions with the teachers after the observations.

Analysis of interview data revealed that head teachers of non-USE schools did not see the necessity of conducting classroom observations unless students or parents complained about the quality of teaching of a particular teacher. When one head teacher of a non-USE school in Buganda region was asked how often he carried out classroom observation, she had this to say:

...the teachers posted to this school know exactly what is expected of them as per the posting instructions; and since they are all university graduates, they should be able to learn the culture of quality teaching that they have found here. I do not think it is really necessary to go and sit in their classes to observe how they teach. Maybe when students or their parents complain...

Yet, findings from interviews with head teachers of USE schools revealed that classroom observations were more pronounced in these schools because teachers taught in several schools or were engaged in other income-generating activities. One head teacher of a USE school in the Elgon sub-region, for instance, had this to say during an interview:

...our teachers earn only [a] government salary; we do not pay monthly allowances like our colleagues in the non-USE schools because we are not supported by parents through the Parents Teachers' Associations (PTA). And because of this, our teachers teach in several private schools to raise extra income and many times miss teaching learners in their 'mother' schools. As a head teacher, I have to closely monitor the teachers by walking around the school and conducting regular lesson observations in order to ensure that my students are taught well.

Teacher evaluation: The study also sought views on teacher evaluation in public secondary schools from teachers and head teachers. This sub-section presents the analysis of descriptive results of the teachers' views on teacher evaluation using frequencies and percentages, ordered logistical regression results and results of qualitative data on teacher evaluation from head teachers. Table 3 below presents the frequency and percentage distribution of teachers' views on teacher evaluation.

Table 3: Distribution of teachers' views on evaluation in public secondary schools in Uganda

Teacher Evaluation	Disagree	Non-committal	Agree
The head of department assesses the way I teach	369 (39.5%)	51 (5.5%)	514 (55%)
I agree with my HoD on the teaching and learning targets at the beginning of every term	391 (41.8%)	37 (3.9%)	507 (54.3%)
Evaluations by HoDs are based on the targets set and agreed upon at the beginning of the term	391 (41.8%)	51 (5.5%)	492 (52.7%)
My head teacher annually appraises me	148 (15.8%)	57 (6.1%)	729 (78.1%)
The head teacher discusses with me the results of the annual appraisal	277 (29.7%)	67 (7.1%)	590 (63.2%)
Appraisal of my work is fair assessment of my performance as a teacher in this school	359 (38.4%)	66 (7.1%)	509 (54.5%)
Appraisal of my performance has a great impact on the way I teach in the classroom	306 (32.8%)	77 (8.2%)	551 (59.0%)

The results in Table 3 indicate that slightly over 50% of the teachers agreed with their subject heads at the beginning of the academic term on the teaching and learning targets and were appraised basing on these targets. Although 78% of the teachers agreed that they were annually appraised by the head teachers, a lower percentage (63.2%) indicated that head teachers discussed with them the results of the appraisals. This implied that several teachers did not participate in setting performance targets and some head teachers did not give feedback on the appraisals undertaken.

Information from the interviews demonstrated that public secondary schools did not have a systematic approach of evaluating teachers. Most schools evaluated teachers based on the students' performance reflected in UNEB examination results. The teachers of students who performed well in their subjects were rated as good performers and recognised with prizes! Furthermore, information from the head teachers demonstrated that annual performance appraisals of teachers in the majority of the selected secondary schools were not frequent despite it being a requirement by the Ministry of Public Service. The inconsistency in the annual appraisal of teachers was more pronounced in the Universal Secondary Education (USE) schools than non-USE schools. Only 32% of the interviewed USE school head teachers conducted the appraisals the previous year. Further analysis revealed that 42 percent of the head teachers in the Elgon and 38% head teachers in West Nile sub-regions had not appraised their teachers for the previous two years.

Findings showed that some head teachers lacked the competency to effectively appraise the teachers. Head teachers in the districts of Bulambuli, Manafwa and Ntungamo acknowledged

failure to determine the key performance indicators and targets that would be used to appraise teachers. According to one head teacher, "the design of the appraisal form was general for all civil servants and tailoring the format to teacher appraisal was our big challenge". Some head teachers from West Nile Sub-region confessed that they invited "senior head teachers from neighboring schools towards the end of the year to help in the appraisal of their teachers. However, some of those head teachers were unwilling to help junior ones." This means that lack of evaluation skills among head teachers could be responsible for the irregular teacher evaluation in secondary schools in Uganda.

Quality of Pedagogical Practices: The study sought the teachers' and head teachers' perceptions on the quality of pedagogical practices in public secondary schools as well. Furthermore, evidence of the quality of pedagogy was sought from documents, analysed and presented in this sub-section.

Table 4: Distribution of Teachers' Views on Quality of Pedagogical Practices in Public Secondary Schools in Uganda

Quality of Pedagogical Practices	Disagree	Non-committal	Agree
I make a scheme of work at the beginning of every term to make my teaching better	154 (16.5%)	2 (0.2%)	778 (83.3%)
Using a lesson plan during teaching is a waste of time	367 (39.3%)	40 (4.3%)	527 (56.4%)
I always prepare class exercises for students before the lessons	257 (27.5%)	17 (1.8%)	660 (70.7%)
I assess the students' prior knowledge and skills at the start of a lesson	82 (8.8%)	16 (1.7%)	836 (89.5%)
I use a variety of teaching methods to improve the quality of teaching	325 (34.8%)	5 (5%)	604 (64.7%)
I use clear and purposeful questions during lessons	89 (9.5%)	12 (1.3%)	833(89.2%)
I give class exercises while teaching to make my teaching easy	401(42.9%)	21 (2.2%)	512 (54.8%
Students learn best by finding solutions to problems on their own	281 (30.1%)	35 (3.7%)	618 (66.2%)
I always mark the class exercises while in class to help me teach better	388 (41.5%)	32 (3.4%)	514 (55.0%)
I regularly give homework at the end of each lesson	89 (9.5%)	27 (2.9%)	818 (87.6%
I usually go through marked homework exercises with the students at the start of the lesson	353 (37.8%)	53 (5.7%)	528 (56.5%)
I give at least two tests in my subject per term	260 (27.8%)	31 (3.3%)	643 (68.8%)
I return marked scripts in time before the next test	134 (14.3%)	22 (2.4%)	778 (83.3%)

Quality of Pedagogical Practices	Disagree	Non-committal	Agree
I make corrections when I return marked scripts to students	111 (11.9%)	19 (2.0%)	804 (86.1%)
I find explaining concepts clearly to learners using real life examples a challenge	374 (40%)	35 (3.7%)	525 (56.2%)
I give remedial lessons to correct students' areas of weakness	361 (38.7%)	54 (5.8%)	519 (55.5%)

Results in Table 4 show that whereas 83.3% of the teachers agreed that they made schemes of work at the beginning of every term, 56.4% perceived making lesson plans a waste of time and 70.7% indicated that they prepared class exercises before their lessons. Other than making lesson plans, results indicate that there is an effort made by teachers to prepare for lesson notes. Concerning the teaching and learning process, 89.5% of the teachers indicated that they assessed the students' prior knowledge and skills at the beginning of the lesson and 64.7% agreed that they used a variety of teaching methods to improve the quality of teaching. Results also indicate that 54.8% of the teachers gave class exercises while teaching. The majority (56.2%) of the teachers indicated that they had challenges with explaining concepts using real-life examples. Regarding evaluation of students, 55.0% of the teachers marked class exercises. Whereas 87.6% of the respondents agreed that they gave homework, only 56.5% agreed that they revised marked homework with the students. While 68.8% of the teachers gave at least two tests in the subjects they taught per academic term, 83.3% returned marked scripts before giving the next test. The majority (86.1%) of the respondents agreed that they made corrections whenever they returned marked scripts. These results show that teachers put more emphasis on marking tests rather than the class exercises and homework.

Despite a general pattern of teachers indicating that they were conforming to the set standard, the majority (60.6%) of the respondents indicated that were not satisfied with the performance of their schools, and also interviews with the head teachers, lesson observation, and document review results demonstrated otherwise. This cast doubt on the teachers' positive responses to items on quality of pedagogical practices. Could it be that teachers feared to give negative responses to items that examined their conformance to professional standards? Further analysis of data was conducted using ordered logistic regression analysis to establish the variability in the overall quality of pedagogical practices accounted for by factors of quality of pedagogical practices and demographic characteristics.

During document analysis, it was discovered that although schemes of work were made at every beginning of the term, most schemes of work lacked evidence of planning for teaching or

learning aids and use of learner-based methods of teaching. Scrutiny of the schemes of work revealed that most teachers did not refer to the NCDC guidelines that emphasised learner-based approaches of teaching and practical teaching of science subjects. In fact, with regard to making lesson plans, analysis of interview data revealed that teachers perceived making lesson plans as a waste of time; hence, many of them relied mainly on lesson notes and text books in order to teach. As one head teacher observed, "Teachers only make lesson plans during their teaching practice and when they expect inspectors from DES. To them, making lesson plans only wastes their time. It is an unfortunate practice – but one that we have learnt to cope with."

With regard to using a variety of teaching methods and specifically learner-based methods of teaching, the head teachers explained that teachers often find it difficult to go by the NCDC guidelines because they would not be able to complete the syllabi in time for the national examinations. Results of the lesson observation showed that of the 106 lessons that were observed, only 36 (33.9%) of the teachers varied methods of teaching, and of these, 31 (86%) were science or mathematics teachers. One head teacher from West Nile sub-region described the situation as:

Teachers shun learner-based methods of teaching because these methods consume a lot of time. The teachers cannot complete the syllabi if they are to follow the NCDC guidelines. However, mathematics and science teachers, to a certain extent, use learner-based methods of teaching since these subjects are practical in nature.

These meant that the teachers' pedagogical practices were skewed towards doing what could be considered undesirable, thus ineffective practices.

Verification of the hypotheses

The data collected from teachers was subjected to ordered logistic multiple regression to test the following null hypotheses:

- i) Teacher supervision does not in any way explain variations in the quality of pedagogical practices
- ii) Teacher evaluation does not in any way explain variations in the quality of pedagogical practices

Results of the multiple regression analysis are presented in Table 5 below.

Table 5: Multiple Regression Results on Teacher Support Systems and Quality of Pedagogical Practices

Quality of Pedagogical Practices	Co-efficient	P-value	95% Conf. Interval	
Teacher supervision	1.89	0.000	1.495	2.279
Teacher evaluation	1.54	0.000	1.225	1.846
Sub-region	0.001	0.946	-0.153	0.164
School status	0.15	0.481	-0.272	0.578
Age	0.48	0.003	0.161	0.801
Gender	-0.08	0.669	-0.453	0.291
Marital status	-0.05	0.702	-0.288	0.194
Education level	-0.45	0.005	-0.771	-0.136
Duration	-0.36	0.005	-0.604	-0.107
Subject type	0.35	0.071	-0.030	0.728

Pseudo R² = 0.5047, Number of obs = 934, LR χ^2 (10) = 890.10, Prob. > χ^2 = 0.0000

Results in Table 5 show that all the 934 observations were used in the analysis. The likelihood ratio chi-square of 890.10 with a p-value of 0.000 indicated that the model as a whole was statistically significant compared to the null model with no predictors. Pseudo $R^2 = 0.5047$ means that the explanatory variables in the model explained 50.5% variability in the overall quality of pedagogical practices. In the model, teacher supervision, teacher evaluation, age, highest level of education and the number of years a teacher taught in the school were found to be statistically significant at 5% level of significance. The null hypotheses that teacher supervision does not in any way explain quality of pedagogical practices, and teacher evaluation does not in any way explain quality of pedagogical practices is rejected. The results mean that with the other explanatory variables held constant in the model, the quality of pedagogical practices would significantly improve with increased teacher supervision and evaluation. Other variables in the model that included sub-regions, school status (USE/non-USE), gender and category of subject taught did not significantly explain variations in the quality of pedagogical practices. Teacher supervision with the highest coefficient of 1.89 significantly explained variation in quality of pedagogical practices the most in public secondary schools.

Discussion of Results/Findings

The research findings indicate that both teacher supervision and teacher evaluation significantly explain variations in the quality of pedagogical practices. The findings are consistent with earlier studies (Sule, Ameh and Egbai, 2015; Veloo, Komujji and Khalid, 2013; Peretomode, 2001). Also, in agreement with Usman's findings in Nigerian schools, findings of the study demonstrate

that teacher supervision significantly contributes to teachers' conformance to teaching standards. The findings were, however, in contrast to the findings of Wilcox (1995) and Kogan and Maden (1999), which revealed that instructional supervision generally brings about little improvement in the quality of teaching and learning within schools.

Despite the significant contribution of teacher supervision to conformance of standards, results indicate that teacher supervision in public secondary schools faces a number of challenges. The Directorate of Education Standards that is responsible for monitoring and evaluating the quality of teaching and learning at national level lacks an adequate workforce and logistical support to effectively supervise the teaching and learning process. The head teachers, as affirmed in the Education and Sports Sector Annual Performance Report (ESAPR) (FY 2013/14), focus on fault-finding and criticising teachers rather than helping teachers to improve on their teaching competencies (MoES, 2017). For effective instructional supervision, supervisors are expected to monitor the teaching and learning process and give feedback to teachers on their performance in the classroom through pointing out errors or commending the teachers for good work done (Mulkeen, 2010).

The study discovered that the head teachers found the use of the 'monitoring tool' an effective instructional supervision method because it kept them well informed about the teachers' practices in the classroom. The form is designed to monitor teacher attendance, punctuality, teaching and time on task. However, this form had shortfalls because the class monitors only ticked the column of lessons taught or not taught, other columns of arrival and departure time were rarely ticked, which made determining teachers' time on task difficult. This form would be more effective if teachers were signing their time in and out of the classroom. Supervision of schemes of work appeared to be conducted as a ritual to comply with the Ministry of Education policy. Supervisors hardly checked for whether the preparation of the schemes of work is in adherence to NCDC guidelines. The guidelines emphasise planning for teaching aids, clearly spelling out objectives for teaching specific topics and indicating a variety of teaching methods. Findings also demonstrated that head teachers and subject heads rarely checked students' notes to determine relatedness of what was being taught with what was planned in the schemes of work. Monitoring the relatedness of students' notes to the schemes of work and coverage of instruction form a basis of purposeful guidance and support to teachers' classroom teaching (Orenaiya, 2014).

In regard to teacher evaluation, findings agree with those of previous studies (Phillips, Balan and Manko, 2014; Orenaiye et al., (2014) that revealed a positive correlation between teacher evaluation and quality of pedagogical practices. However, several public secondary schools in Uganda do not have a system of continuous evaluation of teachers' output as indicated in the ESAP report of 2013/14 (MoES, 2013). There is, in fact, no evidence of formative evaluation systems that focused on classroom activities or specifically pedagogical practices such as teacher preparation, the teaching and learning process, and assessment of learners on a continuous basis. Lack of such systems is detrimental to teacher professional development and quality of teaching (Papay, 2012). Findings of this study also demonstrated that teacher performance was

gauged by the students' performance reflected in UNEB examination results. Use of national examination results may not measure teachers' conformance to standard pedagogical practices. The study further established that in the few schools where formative evaluations were conducted, the approach was not for the purpose of continuous professional development, but rather for punishing individuals with poor performance. For example, the head teachers' transfer of teachers to lower classes after establishing their low performance levels without addressing the areas that needed to be improved could be interpreted as punitive by the affected teachers. The OECD (2013) asserts that feedback that is oriented towards judging and control of teachers rather than professional growth and development cannot improve quality of pedagogical practices. Teacher evaluation systems should be used to help teachers to know how they are teaching and how they can improve on their teaching (Mpokosa and Ndaruhutse, 2008).

Conclusion and Recommendations

Quality of pedagogical practices is significantly anchored on teacher support systems, yet the formative evaluation systems are barely in place and summative teacher evaluation is irregular in public secondary schools in Uganda. Head teachers of several public secondary schools lack the competence in teacher performance appraisal. To improve the quality of pedagogical practices in public secondary schools, head teachers and subject heads of department should continuously supervise and evaluate teacher performance in the classroom and provide constructive feedback for professional growth and development that will lead to improved quality of pedagogical practice. This implies that if the quality of pedagogical practices is to improve, the Ministry of Education should put in place training programmes for all the newly appointed head teachers, specifically in teacher performance appraisal and providing necessary support in the area of instructional supervision and effective use of the appraisal tools. The Ministry should further develop a standard formative teacher evaluation tool for all secondary schools in Uganda for the continuous assessment of teachers' performance. The 'monitoring tool' is an efficient approach of instructional supervision, however, the administrators, together with the teachers, need to train students how best to manage these forms.

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