

Teacher Evaluation and Quality of Pedagogical Practices

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Abstract. This study explored the extent to which teacher evaluation influences the quality of pedagogical practices in public secondary schools in Uganda. It was triggered by the persistent criticisms about the deteriorating quality of teaching and learning in secondary schools in the country. The study was approached from the positivist research paradigm. However, a descriptive cross-sectional survey research design was specifically used to conduct the study. Data were collected from 76 head teachers and 960 teachers drawn from 95 public secondary schools and two officials from the Uganda's Ministry of Education, Science, Technology and Sports (MoESTS) using survey and interview methods. Ordered logistic regression and content analysis methods of data analysis were used to establish the influence of teacher evaluation on the quality of pedagogical practices in the schools. Study findings revealed that both formative (coeff. =5.557; $p=0.000<.05$) and summative (coeff. =3.056; $p=0.000<.05$) teacher evaluations significantly influence the quality of pedagogical practices in school. Thus, it was concluded that the way teachers teach, is partly determined by how well and regularly they are evaluated, other factors notwithstanding. Therefore, the researchers recommended that in order to enhance the quality of pedagogical practices, MoESTS needs to 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 evaluation; pedagogical practices; quality; teachers; secondary schools.

Introduction

The provision of public education is one of the primary duties of any state. This explains why the Government of Uganda, over the last two decades, has been heavily investing in improving access to, and quality of public education. Although access at both primary and secondary levels of education appears to have been widened, the quality of education in the country generally seems to remain a big challenge (Ministry of Education, Science, Technology and Sports [MoESTS], 2014; National Planning Authority [NPA], 2010). For instance, according to the Directorate of Education Standards' (DES) report of 2012, the pedagogical practices in secondary schools in Uganda were at variance with the expectations of Government and the curriculum planners. In fact, even the

subsequent annual reports of the Directorate have repeatedly revealed that the way teachers working in the secondary schools in Uganda teach, does not conform to the classroom standards set by the Directorate as well as the National Curriculum Development Centre [NCDC] (Curriculum Assessment and Examination [CURASSE], 2007). According to these reports, most teachers in secondary schools in Uganda do not adequately prepare for lessons, and many still use mainly teacher-centred instead of the desired student-centred pedagogies. Besides, the teachers all seem bent on teaching students to cram subject materials for passing national examinations rather than to equip the students with high order thinking and life skills (Uganda National Examinations Board [UNEB], 2012). All these are happening amidst efforts by Government to introduce performance contracts that involve rigorous evaluations of how public servants - including teachers do their work. This study was conducted to explore the extent to which teacher evaluation influences the quality of pedagogical practices in public secondary schools in Uganda.

In this study, two key concepts were considered: teacher evaluation and quality of pedagogical practices. According to Darling-Hammond as cited by Zepeda (2010), teacher evaluation refers to the process of establishing whether teachers are conforming to set standards and procedures in the teaching and learning process or not so that corrective measures can be taken. Phillips, Balan and Manko (2014) meanwhile look at teacher evaluation as the means by which school administrators provide a review of what has been accomplished and what has to be done by teachers in the short and long-run. According to Orenaiya, Adenowo, Aroyeum and Odosoga (2014), teacher evaluation enhances accountability, motivates teachers, facilitates professional development, promotes teaching quality; and above all, it augments students' learning. In this study, teacher evaluation was looked at in terms of formative and summative evaluations. Formative evaluation - also known as developmental "appraisal, refers to a qualitative..." assessment "on the teacher's current practice, aimed at identifying strengths and weaknesses and providing adequate professional development opportunities..." to improve on their weaknesses (Isoré, 2009, p.7). It is carried out to determine the teacher's mastery of his/her subject content, and to identify areas in which a teacher is less competent (Harris, 1986) with the aim of providing support through continuous professional development and practice (Papay, 2012). In this study, formative evaluation was characterised by regular short-visits to classrooms, review of teaching artefacts, and the provision of feedback to teachers by head teachers. Summative teacher evaluation on the other hand, is an overall assessment of the teacher's performance, often used for accountability and making personnel decisions such as on promotions (or demotions) and salary increments (Elliott, 2015; OECD, 2013). In the case of Uganda, summative evaluation of teachers is often undertaken in form of annual performance appraisal, which according to the Public Service Standing Orders (Ministry of Public Service, 2010), is expected to be conducted at school level by head teachers who are the immediate supervisors of teachers by December 31st of every year. In the case of this study, summative evaluation was looked in terms of the evaluation conducted by respective public school head as prescribed by the Ministry of Public Service of Uganda

The dependent variable in this study was quality of pedagogical practices. First, pedagogical practices refer to teaching strategies that are used by teachers. Therefore, when we talk about quality of pedagogical practices, Kahsay (2012) says, they are teaching strategies that enhance learning and focus on the quality of learning outcomes. In that case, quality of pedagogical practices is about the effectiveness of teaching strategies used by teachers. For the case of Uganda, NCDC and DES have set standards that define quality pedagogical practices. The standards spell out what the teachers should be able to do in the process of teaching. In this study, these standards were the ones that were used as indicators of quality of pedagogical practices.

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 the country, the quality of pedagogical practices at secondary school level remains poor (MoES, 2013a). The poor quality of pedagogical practices has been manifested in diverse ways. For instance, there have been reportedly 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, 2011; MoES, 2012; Uganda National Council for Science and Technology Report [UNCST], 2012). Furthermore, assessments of students have been geared towards passing national examinations instead focusing at achieving other objectives of the curriculum like the uplifting of moral values, imparting of practical skills and engaging learners in social and cultural activities. 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, 2012). 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. This kind of scenario, Teacher Initiative in Sub-Saharan Africa (TISSA) advised in their 2013 report to be urgently addressed if the quality of Uganda's education system is to improve (MoES, 2013b). 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 in particular. This study was thus specifically designed to establish the extent to which formative and summative teacher evaluations explained variations in the quality of pedagogical practices in public secondary schools in Uganda.

Literature Review

Theoretical Review. This study was underpinned by the Plan-Do-Check-Act (PDCA) model of quality enhancement that was postulated in 1929 by Walter Shewhart (Chaffee & Sherr, 1992). This model was later in the 1950s 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 take action for continual quality improvement (Deming, 1986). As a result, the model indicates that any

improvement should always begin with systematic planning. This, the model adds, should lead affective action, and finally proceed to systematic planning in a cyclical manner. 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 in Figure 1:

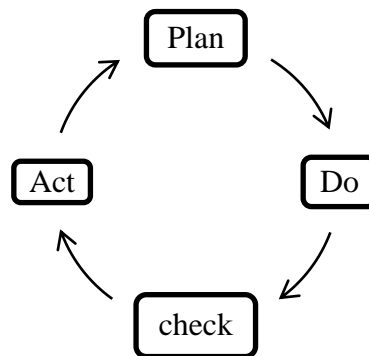


Figure 1: The PDCA cycle

Source: Deming (1986) 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.

Related Literature. Some earlier scholars have already attempted to investigate the linkage between evaluation and the performance of teachers in different settings. Some of these studies established the existence of a strong relationship between teacher evaluation and the quality of teaching and learning in schools. Milanowski (2011) and Marshall (2009) for instance examined how teacher evaluation influences the quality of pedagogical practices. They discovered that formative evaluation through regular classroom observations, review of classroom artefacts, and checking of learners' note books by school administrators lead to improved quality of teaching and learning. Pappy (2012)

did a similar study and concurred with Milanowski and Marshall - except she emphasised the fact that for formative teacher evaluation to enhance the quality of teaching and learning, it must be directly linked to teacher professional growth and development.

Meanwhile, a study conducted in three rural districts of Uganda on Teacher supervision practices by Kalule (2014) established that head teachers who are expected to conduct formative teacher evaluation lacked the required training and skills needed for the job. This implies that the benefits of teacher evaluation in Uganda may not be reaped as expected. Furthermore, analysis from a survey carried out in 10 districts of Uganda by DES in 2012 (MoES, 2012) revealed that only 20 percent of the school administrators often conduct classroom observations or review the classroom artefacts that the teachers in secondary schools in Uganda use during teaching. This means that many head teachers in the country do not know what could be happening in the classrooms in their schools. The DES report however, does not give the reasons for the administrators' failure to conduct formative evaluations as expected. In a study by Donaldson and Peske (2010) in five chartered schools in the USA, they found that failure of the school administrators to conduct formative evaluations, and lack of competencies and skills to effectively appraise and provide quality feedback on the evaluation of teachers that could inform professional growth was responsible for the ineffective teaching of several teachers. This scenario may not be any different from the Uganda's case.

Some studies have also been conducted on the linkage between summative evaluation and the quality of teaching and learning. For instance, Mpokosa and Ndaruhutse (2008) revealed that there is a significant relationship between summative evaluation and the quality of teaching and learning. But while the two authors assert that summative teacher evaluation plays a significant role in enhancing the quality of pedagogical practices, 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. Shorter (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" (p.ii). Therefore, such kind of appraisal can be harmful to the staff that are praised if it is not appropriated conducted. Musaaazi (2006) then advises that for summative evaluations to be effective, they must be frequently conducted in a cordial and collaborative manner. 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, in the Education and Sports Sector Annual Performance Report (ESAPR) of 2014/15, (MoESTS, 2015) indicated that several schools had not conducted annual teacher appraisals for the previous two years. Donald 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 teachers due 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 the Uganda's scenario where head teachers hardly conduct staff appraisals; yet, they are mandated to do so as part of their responsibilities. In addition, the Organization for Economic Co-operation and Development (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 percent in the criteria considered for promoting staff and does not have a direct influence on teacher salaries (World Bank, 2012). This de-link between results of performance appraisal and professional growth and remuneration renders teacher appraisal ineffective in the country.

Methodology

The study employed a descriptive cross-sectional sample survey design. The target population was comprised of teachers, head teachers and officials from the Directorate of Education Standards (DES). The study sample consisted of 934 teachers selected through multi-stage sampling technique, 95 head teachers, and two officials from DES who were purposively selected. Data were 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 of 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 was composed of seven questions aimed at finding out the respondents' opinions pertaining to teacher evaluation; and section C had 11 items aimed at collecting respondents' opinions on quality of pedagogical practices in public secondary schools. The items in sections B and C were measured on a 5-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 also 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 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 check-list was adopted from DES's 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 analyze quantitative data. Specifically, the logistic regression model was used to establish the extent to

which teacher evaluation influences 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 analyzed using content analysis method. In the next part of the paper, the findings of the study are presented.

Results

First, the researchers present herein the background characteristics of the respondents in order to portray that data were 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
Highest level of education	Diploma	208	22.3
	Bachelors	577	61.8
	Post-Graduate	149	15.9
Length of years in the school	Less than 3 years	175	18.7
	3 to 10 years	554	59.4
	10 years above	205	21.9

The results in Table 1 show that majority (71.1%) of the teachers were aged between 20 and 40 years, demonstrating that 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 majority (81.3%) of the teachers had spent more than three years in the sampled schools while 18.7 percent had spent less than three years, indicating that teachers had long standing cognate experience in serving as teachers.

Descriptive Results of on Teacher Evaluation

The researchers asked the teachers on how well they are evaluated by their head teachers. The results indicating their views are presented in Table 2.

Table 2: Distribution of teachers' views on evaluation in public secondary schools in Uganda

Teacher Evaluation	Disagree	Non-committal	Agree
Q5. The head of department assesses the way I teach	369 (39.5%)	51 (5.5%)	514 (55%)
Q6. I agree with my Head of Department on the teaching and learning targets at the beginning of every term.	391 (41.8%)	37 (3.9%)	507 (54.3%)
Q7. Evaluations by Heads of Department are based on the targets set and agreed upon at the beginning of the term.	391 (41.8%)	51 (5.5%)	492 (52.7%)
Q8. My head teacher annually appraises me.	148 (15.8%)	57 (6.1%)	729 (78.1%)
Q9. The head teacher discusses with me the results of the annual appraisal.	277 (29.7%)	67 (7.1%)	590 (63.2%)
Q10. 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%)
Q11. 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 2 indicate that slightly over 50 percent 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 percent 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. The pattern of the responses was maintained for all other questionnaire items concerning teacher evaluation.

Information from the interviews demonstrated that public secondary schools did not have a systematic approach of evaluating teachers. Most schools evaluated teachers basing on the students' performance reflected in UNEB examination results. The teachers whom the students performed well in their subjects were rated as good performers and recognised with prizes! Furthermore, information from the head teachers demonstrated that annual performance appraisal of teachers in the majority of the selected secondary schools was not frequent despite its 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 percent of the interviewed USE school head teachers had conducted staff appraisals the previous year. Further analysis revealed that 42 percent of the head teachers in the Elgon and 38 percent of head teachers in West Nile sub-regions had not appraised their teachers for the previous two years.

Further 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 neighbouring 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 amongst head teachers could be responsible for the irregular teacher evaluation in secondary schools in Uganda.

Descriptive Results of Teachers' Opinions on Quality of Pedagogical Practices

Information on quality of pedagogical practices in public secondary schools was sought from teachers and the findings are also presented in Table 3 below.

Table 3: Descriptive results of teachers' perceptions on quality of pedagogical practices

Quality of Pedagogical Practices	Disagree	Non-committal	Agree
I make schemes of work at the beginning of every term	154 (16.5%)	2 (0.2%)	778 (83.3%)
I make lesson plans for all my lessons	527 (56.4%)	40 (4.3%)	367 (39.3%)
I prepare class exercises for students before the lessons.	257 (27.5%)	17 (1.8%)	660 (70.7%)
I assess the student's 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 find explaining concepts clearly to learners using real life examples a challenge.	374 (40%)	35 (3.7%)	525 (56.2%)
I mark the class exercises while in class	388 (41.5%)	32 (3.4%)	514 (55.0%)
I give homework at the end of each lesson.	89 (9.5%)	27 (2.9%)	818 (87.6%)
I 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%)
I make corrections when I return marked scripts to students.	111 (11.9%)	19 (2.0%)	804 (86.1%)

Table 3 shows that whereas 83.3 percent of the teachers agreed that they made schemes of work at the beginning of every term, 56.4 percent 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 lessons. Concerning the teaching and learning process, 89.5 percent of the teachers indicated that they assessed the students' prior knowledge and skills at the beginning of the lesson and 64.7 percent agreed that they used a variety of teaching methods to improve the quality of teaching. Results also indicate that 54.8 percent 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 percent of the teachers marked class exercises. Whereas 87.6 percent of the respondents agreed that they gave homework, only 56.5 percent agreed that they revised marked homework with the students. While 68.8 percent of the teachers gave at least two tests in the subjects they taught per academic term, 83.3 percent 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 other than the class exercises and homework. Despite a general pattern of teachers indicating that they were conforming to the set standard, interview 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 have been that teachers feared to give negative responses to items that examined their conformance to professional standards?

Although the majority of the teachers (83.3%) agreed that they made schemes of work at every beginning of the term, document review revealed that 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 NCDC guidelines that emphasised learner-based approaches of teaching and practical teaching of science subjects. The head teachers explained that teachers found it difficult to go by the guidelines because they would not be able to complete the syllabi in time for the national examinations. Results of lesson observation showed that of the 106 teachers that were observed only 36 (33.9%) used learner-based methods. Of the 33.9 percent teachers who used a variety of teaching methods, 86 percent were science or mathematics teachers. A review of 530 students' exercise books revealed that only 284 (53.5%) books had class exercises given and marked. These findings were in agreement with descriptive results of the teachers' responses in Table 3 where 56.5 percent of the teachers indicated that they gave and marked class exercises. Where class exercises or homework were marked, only 196 (36%) of the teachers made constructive comments after marking the students' work. Overall, these results indicate the existence of poor quality of pedagogical practices in the schools that were studied.

Factor analysis

Principal component factor analysis was conducted on the 7 variables related to teacher evaluation to extract factors for regression analysis. The Rotated Component Matrix showing factor loadings for each variable helped to identify

factors that each variable loaded most strongly on. The factor loading matrix is presented in Table 4 below.

Table 4: Factor loadings with communalities based on a principal component analysis with rotated factor loadings

Variable	Factor	
	Formative evaluation	Summative evaluation
Q5. The head of department assesses the way I teach	0.710	
Q6. I agree with my Head of Department on the teaching and learning targets at the beginning of every term.	0.853	
Q7. Evaluations by Heads of Department are based on the targets set and agreed upon at the beginning of the term.	0.851	
Q8. My head teacher annually appraises me.	0.443	0.734
Q9. The head teacher discusses with me the results of the annual appraisal.	0.467	0.700
Q10. Appraisal of my work is fair assessment of my performance as a teacher in this school.	0.819	
Q11. Appraisal of my performance has a great impact on the way I teach in the classroom.		0.786

Note: factor loadings < 0.3 were suppressed

Results in Table 4 indicate that two factors were extracted that were renamed formative evaluation and summative evaluation. Items Q5, Q6, Q7 and Q10 loaded heavily on factor 1 that was renamed formative evaluation. And items Q8, Q9, and Q11 loaded more on factor 2 that was renamed summative evaluation.

Verification of Research Hypotheses

The ordered logistic regression was conducted to test the following null hypotheses:

- i. Formative teacher evaluation does not significantly influence the quality of pedagogical practices; and
- ii. Summative teacher evaluation does not significantly influence the quality of pedagogical practices.

The results of the hypothesis tests are presented in Table 5.

Table 5: Ordered logistic regression results on quality of pedagogical practices

Quality of pedagogical practices	Coeff.	P> Z	95% interval	conf.
Formative evaluation	5.557	0.000	4.78	6.33
Summative evaluation	3.056	0.000	2.60	3.51
Sub-region	0.006	0.947	-0.18	0.19
School status	0.730	0.004	0.23	1.23
Age	-0.045	0.803	-0.40	0.31
Gender	-0.177	0.434	-0.62	0.27
Education level	-0.338	0.068	-0.70	0.03
Duration	-0.213	0.121	-0.52	0.06

Pseudo R² =0.7001, Number of respondents = 934, LR χ^2 (10) = 1403.92, Prob> χ^2 = 0.00

Results in Table 5 show that all the 934 observations were used in the analysis. The likelihood ratio chi-square of 1403.92 with a p-value of 0.000 ($p < 0.05$) indicated that the model as a whole was statistically significant compared to the null model with no predictors. Pseudo R² =0.7001 means that the explanatory variables in the model explained 70% variability in quality of pedagogical practices and 30% of the variability was explained by other unknown factors. In the model, formative evaluation, summative evaluation and school status significantly explained variations in quality of pedagogical practices ($p < 0.05$), whereas other demographic variables in the model (age, gender, marital status, level of education and duration of teaching in the school) did not. These results indicate that a unit increase in formative evaluation explained 6 unit increase in quality of pedagogical practices, whereas a unit change in summative evaluation explained 3 unit increase in quality of pedagogical practices. The results in Table 5 also show that a unit shift from USE (coded 1) to non-USE (coded 2) category resulted into a 0.73 unit increase in quality of pedagogical practices. This implies that the quality of pedagogical practices was better in non-USE schools compared to their USE counterpart. Thus, based on the findings in Table 5, the null hypotheses i and ii were rejected implying that:

- i. Formative teacher evaluation significantly influences the quality of pedagogical practices in public secondary schools in Uganda; and
- ii. Summative teacher evaluation significantly influences the quality of pedagogical practices in public secondary schools in Uganda.

Discussion of Findings

The findings of this study are in agreement with findings of earlier studies (Phillips, Balan & Manko, 2014; Orenaiye et al., 2014) that reveal that formative teacher evaluation plays a significant role in enhancing the quality of pedagogical practices. Despite the significant contribution of formative teacher evaluation to quality of pedagogical practices, several public secondary schools in Uganda did not have a system of continuous evaluation of teachers' output as indicated in the ESAPR report of 2013/14 (MoESTS, 2014). There was, 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). Finding 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 evaluation feedback that is oriented towards judging and control of teachers rather than professional growth and development cannot improve the 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 & Ndaruhutse, 2008).

The study also established that summative teacher evaluation significantly contributed to increased quality of pedagogical practices. However, findings showed that several secondary schools in Uganda had not conducted annual teacher appraisals for the previous years in agreement with the ESAP report of 2013/14 (MoESTS, 2014). This practice is not in harmony with Uganda's public service standing orders (Ministry of Public Service, 2010). The failure to conduct regular annual appraisals is attributed to the inability of some head teachers to establish performance indicators, targets and outputs. Even where appraisals were consistent, only a few head teachers offered opportunities for teachers to set key performance indicators and targets that would be used for appraisal, and provided feedback on assessment of their performance. To enhance professional growth, it is imperative that head teachers agree with individual teachers at every beginning of the year on the performance targets (Musaazi, 2006) and then provide the support that the teachers need to achieve the set targets within the evaluation period (Taylor, 2003). And furthermore, the head teachers should give teachers feedback on assessment of their performance so that teachers get to know how well they are meeting the set objectives/targets, get a clear understanding of the quality of their work and what they need to change to improve on their delivery (Musaazi, 2006).

Conclusion and Recommendations

Quality of pedagogical practices is significantly anchored on both formative and summative teacher evaluation; 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 quality of pedagogical practices in public secondary schools, head teachers and subject heads of department should continuously 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 quality of pedagogical practices is to improve, the Ministry of Education, Science, Technology and Sports should put in place training programmes for all the newly appointed head teachers specifically in teacher performance appraisal and also provide them with the necessary support to use the appraisal tools more effectively. The Ministry should further develop a standard formative teacher evaluation tool for all secondary schools in Uganda for the continuous assessment of teachers' performance.

References

- Ayeni, A. J. (2011). Teacher professional development and quality assurance in Nigerian Secondary Schools. *World Journal of Education*, 20, 143-149.
- Chaffee, E., & Sherr, L. (1992). *Quality: transforming post-secondary education*. ASHE-ERIC Higher Education Report No. 3. Washington: George Washington University School of Education and Human Development.
- Curriculum Assessment and examination. (1992). *Uganda Secondary Education and Training: Curriculum Assessment and Examination Roadmap for Reform, 2007*. Dakar Framework for Action 2000.
- Deming, W. E. (1986). *Out of Crisis*. Cambridge: Cambridge University Press.
- Donaldson, M. L. & Peske, H.G. (2010). *Supporting Effective Teaching Through Teacher Evaluation*. Retrieved August 5, 2016, from <http://www.americanprogress.org>.
- Education Standards Agency. (n.d). *Handbook for School Inspectors*. Ministry of Education and Sports. Kampala: Uganda government
- Elliot, K. (2015). Teacher Performance Appraisal: More about Performance or Development? *Australian Journal of Teacher Education*, 40 (9): <http://dx.doi.org/10.14221/ajte.2015v40n9.6>
- Harris, B.M. (1986). *Developmental teacher evaluation*. Boston, MA: Allyn & Bacon.
- Isoré, M. (2009). *Teacher Evaluation: Current Practices in OECD Countries and a Literature Review*. OECD Education Working Papers, No. 23, OECD Publishing. Retrieve July 27, 2016 from <http://dx.doi.org/10.1787/223283631428>
- Kagolo, F. (2014, March 26). School inspectors: Where did they go? *The New Vision*. Retrieved May 17 2015 from www.newvision.co.ug
- Kahsay, N.M. (2012). *Quality and quality assurance in Ethiopian Higher Education: Critical issues and practical Implications*. Unpublished doctoral dissertation, University of Twente, the Netherlands.
- Kalule, L. (2014). *Perceptions Pratiques de supervision Du Personnel eiseignant en Ouganda*. Unpublished doctoral dissertation, Laval University Canada
- Marshall, K. (2009). *Rethinking teacher supervision and evaluation: How to work*

- smart, build collaboration and close the achievement gap*. Retrieved November 20, 2014 from www.TheMainIdea.net
- Mielke, P., & Frontier, T. (2012). Keeping improvement in mind. *Educational Leadership*, 70(3), 10-13.
- Milanowski, A. (2011). Measuring Teacher Performance for Strategic Human Capital Management. In A. Odden (ed). *Strategic Management in Education*, (pp.67-90). New York, NY: Routledge
- Ministry of Education and Sports (2012). *Annual report of the Directorate of Education Standards*. Kampala: The Government of Uganda.
- Ministry of Education and Sports (2013a). *The Education and Sports Sector Annual Performance Report (ESAPR) (FY 2013/14)*. Kampala: The Government of Uganda.
- Ministry of Education and Sports (2013b). *Teacher Initiative in Sub-Saharan Africa (2014). Teacher issues in Uganda. A shared vision for an effective teachers' policy*. Kampala: The Government of Uganda.
- Ministry of Education, Science, Technology and Sports (2014). *The Education and Sports Sector Annual Performance Report (ESAPR) (FY 2014/15)*. Kampala: The Government of Uganda.
- Ministry of Education, Science, Technology and Sports (2015). *The Education and Sports Sector Annual Performance Report (ESAPR) (FY 2015/16)*. Kampala: The Government of Uganda.
- Ministry of Public Service (2010). *The Uganda Public Service Standing Orders*. Kampala: The Government of Uganda
- Mpokosa, C. & Ndaruhutse, S. (2008). *Managing Teachers. The centrality of teacher management to Quality education. Lessons from developing countries*. London/Reading: VSO International CfBT.
- Musaazi, J.C.S. (2006). *Educational Planning. Principles, Tools and Applications in the Developing World*. Kampala: Makerere University Printery.
- Nagel, T. (2003). *What is quality of education and why is it important for development?* Keynote address. International Conference on Quality in Education. 11-13 June 2003. Oslo Norway.
- National Planning Authority (2010). *National Development Plan 2010/11-2014/15*. Kampala: The Government of Uganda
- Oakland J.S. (1993). *Total Quality Management: The route to improving performance*, (2nd ed.). New York: Nicholas Pub Co.
- OECD (2013). *Teachers for the 21st century using evaluation to improve teaching*. Paris: OECD publishing.
- Orenaiya, S. A., Adenowo, E.A., Aroyeum, F.T., & Odosoga, R. (2014). School Inspection or, and Supervision Effects in Public Secondary Schools in Ogun State, Nigeria: Where are we and where do we go? *International Journal of Humanities and Social Science Invention*, 3 (6), 74-80.
- Papay, J.P. (2012). Refocusing the debate: Assessing the purpose and tools of teacher evaluation. *Harvard Educational Review*, 82 (1), 123-141.
- Phillips, K.F., Balan, R.M., & Manko, T.P (2014). Teacher evaluation. Improving the process. *Teaching and learning Journal*, 7. Retrieved September 20, 2015 from <https://www.kpu.ca/sites/default/files/transformativ>
- Shorter, T. (2013). *Teacher appraisal - its relationship to motivation, collegial relationships, and pedagogical change in an early childhood context in Aotearoa New Zealand*. Unpublished Masters' degree thesis of University of Waikato, New Zealand. Retrieved August 4, 2015 from <http://researchcommons.waikato.ac.nz/>
- Taylor, R. (2003). An indigenous perspective on evaluations in the intercultural context: how far can one throw a more boomerang? *Evaluation Journal of Australasia*, 3 (2), 44-52.

- Uganda National Council for Science and Technology. (2012). *The quality of Science Education in Uganda*. Kampala: The Government of Uganda.
- Uganda National Examination Board. (2011). *The Achievement of S2 Students and Teachers in English Language, Mathematics and Biology*. Kampala: Uganda National Examination Board
- Uganda National Examination Board. (2012). *The Achievement of S2 Students and Teachers in English Language, Mathematics and Biology*. Kampala: Uganda National Examination Board
- World Bank. (2012). *Systems approach for better education results. SABER Country report*. Washington D.C
- Zepeda, S.J. (2010). *Instructional supervision: applying tools and concepts* (3rd ed.). New York: Eye on Education.