Influence of Teachers’ Content Delivery on Pupils’ Academic Performance in Public Primary Schools in Kenya

Emily Chepkoech
Ph.D. Candidate, Department of Curriculum and Instructional Technology, Kibabii University, Kenya
Edwin Masibo
Senior Lecturer, Department of Curriculum and Instructional Technology, Kibabii University, Kenya
Julius Maiyo
Professor, Department of Curriculum and Instructional Technology, Kibabii University, Kenya

Abstract:
The purpose of this study was to investigate the influence of teachers’ content delivery appraisal pupils’ academic performance in public primary schools in Trans Nzoia County. The study was anchored on management by objectives theory. The study adopted a descriptive survey research design with a target population of 3491 respondents, comprising of 5 Curriculum Support Officers (CSO’s), 314 Head teachers and 3162 teachers from public primary schools in Trans Nzoia County. The sample size was determined using Krejcie and Morgan table for determining sample sizes, where a sample 346 was achieved. The study employed purposive and simple random sampling techniques to draw the respondents. All the CSO’s were used in the study. The study used questionnaires, interview guides and Document analysis to collect data. The study established that incorporation ICT into teaching style helps to improve performance of the students. This study also provides recommendations the necessity of policies to get better academic results.

Keywords: Content delivery, academic performance and public primary schools

1. Introduction

As per Harzing and Pinnington (2011), performance appraisals are popularly used as a tool to cooperate organizations to assess their employees. However, this tool can’t act as ad-hoc but need supervision from staffs as well as various levels of management. As per Pulakos, Mueller-Hanson and O’Leary (2008), performance appraisal system always carry a significant impact for organizations. As per Deming (2000), if performance appraisal not used properly, it can able to create aggravation, annoyance and abridge inspiration. According to Cole (2004), to implement successfully, performance appraisal needs continuous involvement from managers. It is a complex process. The main aims of teaching are to provide true learning. The actual teaching is always focusing on the fact that what a student can learn. The outcome of teaching always directed towards the result of what student will learn. Not only mere learning, but the application power of students gets reflected through teaching. To judge the outcome of teaching various types of assessments are always helpful. To evaluate the actual learning methods, play a significant role (Danielson, 2011). As per Smith (1987), classroom activities give good assessment about the linkage between faculty and pupils. Various features of teaching get exposed through it. It is crucial to study the nature of classroom activities such that further discussions or decisions can be made from these (Richard, 2003).

For instance, assessment of faculties from schools in Shanghai, China is not a single day activity. Rather, data collected from many activities throughout the session. Task of teachers, evaluation procedure, observation of tasks provided by the faculties are some of the examples (Zhang & Ng, 2015).

Along with the assessment of teachers, evaluation of students has become an inseparable part. To understand the actual performance of students, teachers should check their understanding level, application-based capability. Not only judgment, but also providing feedback on a timely manner by faculties to students also creates an effective framework of assessment. Questioning technique has become a very popular way of assessing the understanding level of students. Some moderating factors like, perception or attitude of a pupil towards a teacher also effect the assessment. According to Colbeck, Cabrera, and Terenzini (2000), students who recognize gender equity from the teachers showed sense of responsibility towards self-learning methodology. They also succeeded in increasing their confidence level. Study conducted by Volkwein and Cabrera (1998), showed evidence that students with more interaction with faculties are showing high performance in assessment or evaluation techniques.
2. Methodology

This study adopted a descriptive survey research design because it allows for generalizations from a sample to a population so that inferences can be made about some characteristics of a population (Orodho, 2003). Descriptive analysis studies the relationship between different variables at a point in time. The target population for the study was 3491. This comprised of 5 Curriculum Support Officers (CSO’s). This study has used Krejcie and Morgan Table for determining sample size. A total of three hundred twenty-four head faculties and three thousand one hundred sixty-two faculties have taken participation in this study. Sample 346 was achieved. Simple random sampling technique was used to determine the 32 head teachers and 309 teachers to be used to in filling the questionnaires for the study. Additionally, the CSO’s of each of the five sub-counties in TransNzoia County was purposively selected to participate in the study.

3. Results

The primary objective of this study is to find the association between faculties’ content delivery appraisal practices and academic performance of students from public primary schools in TransNzoia County. Chi-square was the preferred statistic for analysis of this objective because the variables were either binary or categorical. This statistic helped establish whether there was a relationship between teachers’ content delivery appraisal practices and pupils’ academic performance in public primary schools. The analysis used the Cramer’s V statistic to determine the strength of the relationship. Thus, before running Chi-square test analysis to determine the significant difference between teachers’ content delivery appraisal practices and pupils’ academic performance, the researcher ran some preliminary descriptive statistics on the data collected to answer this objective (see Table 1 and Table 2). This was meant to make us understand the distribution of the variables under study in the total sample.

| Variable | Teachers | Head teachers | Total |
|----------|----------|---------------|-------|
|          | Yes F (%) | No F (%)      | Yes F (%) | No F (%) | Total F (%) |
| 1 | Ability to prepare appropriate teaching and learning aids | 37 (12.71%) | 254 (87.29%) | 22 (95.65%) | 1 (4.35%) | 314 (100.00%) |
| 2 | Ability to use appropriate teaching and learning aids | 291 (100.00%) | 0 (0.00%) | 19 (82.61%) | 4 (17.39%) | 314 (100.00%) |
| 3 | Ability to access appropriate ICT learning/ teaching materials | 44 (15.12%) | 247 (84.88%) | 2 (8.70%) | 21 (91.30%) | 314 (100.00%) |
| 4 | Ability to integrate appropriate ICT learning/ teaching materials to improve knowledge and stimulate learning | 188 (64.61%) | 103 (39.39%) | 16 (69.56%) | 7 (30.44%) | 314 (100.00%) |

Table 1: Teachers and Head Teachers’ Response on Whether the Following Variables Improve Pupils’ Academic Performance

Note: F = Frequency; % = Percentage

The findings in Table 1 show that majority of the teachers (87.29%) felt that a teacher’s ability to prepare appropriate teaching and learning aids does not influence pupils’ academic performance. Only a few of the teachers (12.71%) of the teachers felt otherwise. This was in contradiction with the head teachers’ response when asked whether a teacher’s ability to prepare appropriate teaching and learning aids does not influence pupils’ academic performance. A majority of the head teachers (95.65%) felt that it was important for teachers to be able to prepare appropriate teaching and learning aids so as to enhance pupils’ academic performance. This implies that many teachers do not take the use of teaching aids seriously as compared to their head teachers in public primary schools.

None of the teachers felt otherwise. Majority of the head teachers (82.61%) also felt that a teacher’s ability to use appropriate teaching and learning aids in class influences pupils’ academic performance. This finding was supported by one of the SCSOs who remarked that:

"For teachers to be able to perform in class they need to know how to make and use appropriately the teaching aids from their immediate environment. There are some teachers who keep on pestering their head teachers to buy for them commercial teaching aids when there are so many of them within their environment upon improvisation. Teachers need to keep off from commercial teaching aids, that is if they are serious with enhancing performance in their subjects, and use their immediate environment since the learners are more familiar with them...."

This implies that there is need to have a policy in public primary schools that each teacher should be able to prepare at least a certain number of teaching aids from their environment in order to enhance pupils’ academic performance.

According to Table 1, majority of the teachers (84.88%) and head teachers (91.30%) felt that most of the teachers in their schools lack the ability to access appropriate ICT learning/ teaching materials in all the public primary schools. This according to them has hampered pupils’ academic performance. It was also observed that majority of the teachers (57.73%) and head teachers (95.65%) were in agreement that most of the teachers in their schools do not have the ability to integrate appropriate ICT learning/ teaching materials in their lessons so as improve pupils' knowledge and stimulate learning. This finding was supported by one SCSO’s who observed that:
It is important that teachers integrate ICT in their lessons. This enhances learner’s ability to grasp concepts quickly and in so doing enhance their performance in schools. Lack of ICT integration in teaching might lead to poor performance in a school.

This implies that schools that have integrated ICT in the management of pupils and teaching performs better in academics than those that have not done so. A policy is therefore needed that can make integration of ICT in management of pupils and teaching in public primary schools a must. This will go a long way in enhancing academic performance.

The descriptive statistics and dispersion related results have been summarized in the Table 2.

| No | Variable                                      | Category          | Mean (mean) | Se (mean) | SD      | Variance | N  | Range | Min | Max |
|----|-----------------------------------------------|-------------------|-------------|-----------|---------|----------|----|-------|-----|-----|
| 1  | Ability to prepare appropriate teaching and learning aids | Teachers         | 0.326       | 0.064    | 0.228   | 0.052    | 291| 1     | 0   | 1   |
|    |                                               | Head teachers     | 0.389       | 0.023    | 0.251   | 0.063    | 23 | 1     | 0   | 1   |
| 2  | Ability to use appropriate teaching and learning aids | Teachers         | 0.868       | 0.039    | 0.201   | 0.040    | 291| 1     | 0   | 1   |
|    |                                               | Head teachers     | 0.821       | 0.019    | 0.123   | 0.015    | 23 | 1     | 0   | 1   |
| 3  | Ability to access appropriate ICT learning/ teaching materials | Teachers         | 0.553       | 0.043    | 0.246   | 0.061    | 291| 1     | 0   | 1   |
|    |                                               | Head teachers     | 0.752       | 0.014    | 0.171   | 0.029    | 23 | 1     | 0   | 1   |
| 4  | Ability to integrate appropriate ICT learning/ teaching materials to improve knowledge and stimulate learning | Teachers         | 0.721       | 0.025    | 0.503   | 0.253    | 291| 1     | 0   | 1   |
|    |                                               | Head teachers     | 0.822       | 0.046    | 0.553   | 0.306    | 23 | 1     | 0   | 1   |

Table 2: Descriptive Statistics on Teachers’ Content Delivery Appraisal Practices and Pupils’ Academic Performance
Source: Field Data, 2018

A majority of the respondents observed that teachers’ ability to prepare appropriate teaching and learning aids is not very useful in influencing pupils’ academic performance. This was demonstrated respectively by teachers (mean = 0.326, SD = 0.228) and head teachers (mean = 0.389; SD = 0.123). Despite that, majority of teachers and head teachers observed that teachers’ ability to use appropriate teaching and learning aids [teachers (mean = 0.868, SD = 0.201) and head teachers (mean = 0.821; SD = 0.123)]; teachers’ ability to access appropriate ICT learning/ teaching materials; teachers’ ability [teachers (mean = 0.553, SD = 0.246) and head teachers (mean = 0.752; SD = 0.171)] and teachers’ ability to integrate appropriate ICT learning/ teaching materials to improve knowledge and stimulate learning [teachers (mean = 0.721, SD = 0.503) and head teachers (mean = 0.822; SD = 0.553)] were very useful in influencing pupils’ academic performance.

Table 3 presents a chi-square test that was conducted to determine whether there is a significant relationship between teachers’ content delivery appraisal practices and pupils’ academic performance.

| Association Between                                      | Teachers         | $\chi^2$ | P     | Cramer’s V |
|----------------------------------------------------------|------------------|---------|-------|------------|
| Ability to prepare appropriate teaching and learning aids | Teachers         | 23.46   | 0.142 | 0.27       |
|                                                          | Head teachers    | 33.2    | 0.702 | 0.16       |
|                                                          | Total Sample     | 46.08   | 0.114 | 0.19       |
| Ability to use appropriate teaching and learning aids    | Teachers         | 21.44   | <.001 | 0.72       |
|                                                          | Head teachers    | 2.38    | 0.042 | 0.44       |
|                                                          | Total Sample     | 21.66   | <.001 | 0.61       |
| Ability to access appropriate ICT learning/ teaching materials | Teachers         | 5.33    | 0.023 | 0.18       |
|                                                          | Head teachers    | 1.36    | 0.851 | 0.12       |
|                                                          | Total Sample     | 22.33   | 0.031 | 0.16       |
| Ability to integrate appropriate ICT learning/ teaching materials to improve knowledge and stimulate learning | Teachers         | 43.33   | <.001 | 0.67       |
|                                                          | Head teachers    | 12.46   | <.001 | 0.42       |
|                                                          | Total Sample     | 23.66   | <.001 | 0.63       |

Table 3: Chi-Square Results for the Association between Selected Variables and Pupils’ Academic Performance
Note: Degrees of Freedom = 1, Teachers (N) = 291, Head Teachers (N) = 23, Sample (N) = 314, Cramer’s V: Weak Association = .00-.19, Moderate Association = .20-.49; Strong Association = .50-1.00

According to the findings in Table 3, the results were significant for teachers, $\chi^2 (1) = 21.44, p=.001$, Cramer’s $V=.72, N=291$, and head teachers, $\chi^2 (1) = 12.46, p=0.042$, Cramer’s $V=.44, N=23$ for the relationship between teachers’ ability to use appropriate teaching and learning aids and pupils’ academic performance. It can also be observed that apart from the results of the association being significant, the magnitude of the effect of the teachers’ ability to use appropriate teaching and learning aids on pupils’ academic performance among the teachers and head teachers in TransNzoia County...
was strong \( \chi^2(1) = 23.66, p = .001, \text{Cramer's } V = .61, N = 314 \). This implies that there is a need for a policy on teaching use of teaching aids in public primary schools in order to enhance pupils’ academic performance.

It can also be observed from Table 3 that the results for the relationship between teachers’ ability to access appropriate ICT learning/teaching materials and pupils’ academic performance were significant for teachers, \( \chi^2(1) = 5.33, p = .023, \text{Cramer's } V = .18, N = 291 \), but not for head teachers, \( \chi^2(1) = 1.36, p = .851, \text{Cramer's } V = .12, N = 23 \). Despite this, it can be observed that in the total sample, the results for the relationship between teachers’ ability to access appropriate ICT learning/teaching materials and pupils’ academic performance was significant, with the magnitude of the influence being weak \( \chi^2(1) = 22.33, p = .031, \text{Cramer's } V = .16, N = 314 \). This implies that though there was a feeling among teachers that their ability to access appropriate ICT learning/teaching materials significantly influenced pupils’ academic performance, many of those in management felt otherwise. This might be due to their responsibility of availing some of the teaching aids to their teachers, which is a big burden to them given the limited resources in public primary schools.

According to the findings in Table 3, the results were significant for teachers, \( \chi^2(1) = 43.33, p = .001, \text{Cramer's } V = .67, N = 291 \), and head teachers, \( \chi^2(1) = 2.38, p = .001, \text{Cramer's } V = .42, N = 23 \) for the relationship between teachers’ ability to integrate appropriate ICT learning/teaching materials to improve knowledge and stimulate learning and pupils’ academic performance. It can also be observed that apart from the results of the association being significant, the magnitude of the effect of the teachers’ ability to integrate appropriate ICT learning/teaching materials to improve knowledge and stimulate learning on pupils’ academic performance among the teachers and head teachers in TransNzoia County was strong \( \chi^2(1) = 21.66, p = .001, \text{Cramer's } V = .63, N = 314 \). This implies that it is crucial that for teachers to have the ability to integrate appropriate ICT learning/teaching materials into their lessons if they want to improve knowledge and stimulate learning among pupils. If this is not done then it will result into low academic performance among pupils in public primary schools.

From the Table 3, it can be noticed that use and access to ICT in teaching helps to improve performance of students from public primary schools in TransNzoia County. Integration of ICT along with proper teaching materials is always helpful for improving the recital of students.

4. Conclusions

In conclusion, the study established that there was a statistically significant relationship between the following variables and pupils’ academic performance: teachers’ ability to use appropriate teaching and learning aids, teacher’s ability to use appropriate teaching and learning aids and teacher’s ability to access appropriate ICT learning/teaching materials. This implied that the mentioned variables are of significant importance in our schools in relation to teachers’ content delivery practices that enhance pupils’ academic performance in public primary schools in TransNzoia Sub-County.

5. Recommendations

The study made the following recommendations in relation to the findings of the study.

- Schools should generously invest in teaching aids and ICT, and encourage teachers to use them in their lessons in order to enhance quality education.
- The head teachers and TSC official should make impromptu visits to classes to ensure that teachers are constantly using teaching aids and ICT in their lessons in both primary and secondary schools.

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