

# **A CRITICAL REFLECTION ON THE PRINCIPAL'S MONITORING OF STUDENTS' ACADEMIC PROGRESS AND ITS IMPACT ON THEIR PERFORMANCE IN CHEMISTRY IN PUBLIC SECONDARY SCHOOLS IN MACHAKOS COUNTY, KENYA**

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## **ABSTRACT**

This research aimed to investigate how principals' oversight of students' academic progress influences their performance in chemistry within public secondary schools in Machakos County, Kenya. Utilizing James MacGregor Burns' Transformational Leadership Theory (1978) as a framework, the study adopted a Convergent Parallel Mixed Methods Research Design, allowing for the concurrent collection of both qualitative and quantitative information. The study's target population included 545 chemistry teachers and 365 principals. A simple random sampling method was employed to select 109 chemistry teachers and 73 principals. Data collection techniques comprised interview schedules, document analysis and questionnaires.

Qualitative data from open-ended questions were examined through content analysis, while quantitative data were analyzed using inferential and descriptive statistics with the assistance of SPSS version 26. The findings revealed a significant positive correlation between principals' monitoring of students' academic progress and their performance in chemistry. It is recommended that principals delegate some instructional supervisory responsibilities to their deputies to ensure the smooth execution of supervisory tasks, especially when principals are occupied with managerial responsibilities.

**Key terms:** Monitoring, academic performance, Academic progress, principals, teaching, evaluation

## **INTRODUCTION**

Monitoring of students' progress by the principal reflects the work which has been evaluated by the teachers in the class. Sattar (2017) investigated the importance of the classroom monitoring on students' performance in Bangladeshi. Findings showed that majority of the teachers believed that monitoring as a strategy can help to make the lesson easy. The teachers acknowledged that the schools should provide training programmes for classroom monitoring which will help them to enhance learning. Motivation as monitoring tools was identified as effective in encouraging students to learn, keep them focused, overcome their faults and assist them to point out their mistakes through observing their errors. Poor performing students who were monitored closely by the principals and teachers develop a strong sense of belonging in the classroom as their participation skills improve.

Nunes et al. (2018) sought to identify importance of student monitoring in academic learning in Brazil. The findings show that in the years prior to the start of the monitoring Pharmacology subject had high levels of failure. However there is significant change first year after the monitoring of the subject. The study observed the reduction in the percentage of failure in the subject as compared to the previous year, when there was no monitoring activity. One student, who had failed the subject for five consecutive years was identified and given special attention

and approach. The study findings reveals that the student was motivated and achieved the approval he so longed for.

Kwasi (2021) carried out a study on impact of school monitoring on the academic performance of pupils in public junior high schools in the Akuapem North Municipality of Ghana. The findings of the study show that monitoring student's academic progress had a strong correlation with their academic performance. However, the study discovered that, teachers are unable to provide students with consistent and timely feedback on their performance due to lack of frequent assessment. In highly effective schools, teachers administer frequent test, hence the current study seeks not only to reveal the frequency of tests but other forms of monitoring students' academic progress like class work and students attendance.

Etshiano and Okello (2020) sought to establish effect of continuous monitoring on students achievement in Migori Sub-County. The study established that continuous assessment results to improved performance in mathematics. Majority of the respondents pointed out that, since Mathematics is a practice subject the more one does it the better they are likely to perform. The findings of the study established that frequent assessment reduces anxiety leading to high achievement in KCSE.

### **Statement of the problem**

Teachers must become proficient in utilizing diverse assessment methods, including self-assessment, peer assessment, observation, and portfolios. Research indicates that infrequent assessments hinder teachers from offering students regular and prompt feedback on their performance. This study seeks to explore principals' perceptions and practices regarding their role in overseeing students' academic progress.

### **Purpose of the study**

This study aimed to assess how principals' oversight of students' academic progress impacts their performance in chemistry within public secondary schools in Machakos County, Kenya.

### **Research hypothesis**

The hypothesis guiding this study was: H0: Principals' monitoring of students' academic progress does not have a statistically significant impact on students' academic performance in chemistry in public secondary schools in Machakos County, Kenya.

## **METHODOLOGY OF RESEARCH**

The study used a Convergent Parallel Mixed Methods Research Design. All five hundred and forty five chemistry teachers and three hundred and sixty five principals in public secondary schools in Machakos County were targeted. A simple random sampling method was employed to select one hundred and nine chemistry teachers and seventy three principals, resulting in a total sample size of one hundred and eighty two respondents. The instruments of research comprised of document analysis, questionnaires and interviews.

To maintain data reliability, errors were detected and removed during the cleaning process. Cleaned information was then coded by allocating numerical values to the responses, followed by both inferential and descriptive statistical analyses. Data coding was conducted using Statistical Package for the Social Sciences version 26. Descriptive statistics, including frequencies, means, standard deviations, and variances, were summarized in tables and graphs, accompanied by a statistical analysis of the findings. Interview responses were recorded and presented as narratives. The interview data was first transcribed and then thematically analyzed to integrate the main themes into a coherent narrative. Inferential statistics included correlation and regression analyses.

## **RESULTS AND DISCUSSIONS**

This section presents the study outcomes and analyzes the findings in relation to the study objective. This sub-section employs descriptive statistics, including percentages, means, and standard deviations, to illustrate the respondents' level of agreement with the statements regarding monitoring students' academic progress. The items measuring this variable were rated on a 5-point Likert scale, defined as follows: 1-Strongly Agree, 2-Agree, 3-Not Sure, 4-Disagree, 5-Strongly Disagree. Table 1 displays the findings.

### **The Frequency at which the Principal Monitors Students' Academic Progress**

The study sought to investigate the frequency at which the principal monitors students' academic progress. Table 1 lists the responses teachers of chemistry provided on this issue.

*Table 1: The frequency at which the Principal Monitors Students' Academic Progress (N=86)*

<b>Statement</b>	<b>W</b>	<b>F</b>	<b>M</b>	<b>O</b>	<b>N</b>
	<b>(%)</b>	<b>(%)</b>	<b>(%)</b>	<b>(%)</b>	<b>(%)</b>
1. Classwork	8 (9.3)	11 (12.79)	7 (8.14)	42 (48.84)	18 (20.93)
2. Completed assignments	2 (2.33)	13 (15.12)	25 (29.07)	37 (43.02)	9 (10.47)
3. Evaluation records	1 (1.16)	3 (3.49)	32 (37.21)	50 (58.14)	0 (0)
4. Students attendance and punctuality	38 (44.19)	36 (41.86)	8 (9.3)	4 (4.65)	0 (0)
5. Discuss students' progress	4 (4.65)	7 (8.14)	53 (61.63)	20 (23.26)	2 (2.33)
6. Peer assessment	5 (5.81)	12 (13.95)	3 (3.49)	2 (2.33)	64 (74.42)
7. Formative Assessment	3 (3.49)	10 (11.63)	9 (10.47)	17 (19.77)	47 (54.65)
8. Presentations	1 (1.16)	6 (6.98)	3 (3.49)	13 (15.12)	63 (73.26)

**NB: Weekly (W); Fortnightly (F); Monthly (M); Once per term (O); and Never (N)**  
**Source: Survey Data (2023)**

### **Classwork**

As tabulated in Table 1 majority of the respondents, that is 42 (48.84%) indicated that principal monitors students' classwork once per term, 11 (12.79%) fortnightly, eight (9.3%) weekly, seven (8.14%) monthly. However, 18(20.93) of the respondent were of the opinion that principals were non-committal on monitoring classwork. Kinyua (2013) observed that classwork is closely monitored by teachers and not the principals. In contrast to the findings, a study by Murithi (2015) revealed that principals from high performing schools make frequent and formal class visits to check students' classwork during prep times and free lessons. A study by Rezende (2017) established that regular monitoring of classwork contributes to significant improvement in students' final grades, better engagement and an effective transformation of classroom routine. As indicated by Nunes et al. (2018), monitoring is a learning space for student as it intensifies the cooperation between teachers and students in their academic activities. Idowu and Omotola (2020) opines that monitoring involves checking at a regular interval in order to find out how a programme is progressing and developing. Thus, the principals should be unrelenting in regular monitoring of classwork in their respective schools.

### **Monitoring Students Completed Assignments**

From the information provided in Table 1, it is apparent that 37 (43.02%) of the teachers of chemistry are of the view that principals monitor students completed assignment once per term; 25 (29.07%) monthly, 13 (15.12%) fortnightly and two (2.33%) weekly. On the other hand, the information in Table 4.8 shows that nine (10.47%) of the teachers of chemistry indicated that the principals never monitor students' completed assignments. The findings are in line with Mbae (2016) who observed that principals do not carry out instructional supervision very often as they are overwhelmed by other administrative responsibilities. To underscore the importance of monitoring completed assignments, Sharma and Rajesh (2018) notes that feedback from assignments helps teachers in analysing the levels of successful learning among students, as well as the pedagogical effectiveness of self-instructional material. Assignments play an important role as they convey students' individual levels of learning achievements, which in turn can help them iron out the negative aspects of the learning process while cementing the more positive aspects. According to Darling-Hammond, Flook, Cook-Harvey, Barron and Osher (2019), the use of curriculum embedded assessments strengthens teaching by providing teachers with models of good curriculum and assessment practice, allowing teachers to see and evaluate student learning in ways that can inform instructional supervision decisions. Thus, such assessments can build students' capacity to assess and guide their own learning through ownership in the learning process.

### **Evaluation Records**

From the information on Table 1, 50 (58.14%) of the principals check evaluation records once per term, 32 (37.21%) monthly, three (3.49%) fortnightly and one (1.165) weekly. These findings tends to be in agreement with Chappellear and Price (2012) who noted that teachers expected their principals to engage in discussing academic performance results with them frequently. Expressing a related view, Jeptarus (2014) found that principals in Kenyan secondary schools regularly discuss the progress of students with individual teachers in addition to checking assessment records. Similarly, Samoei (2014) observed that principals

frequently supervise testing of students through the heads of departments and check the spreadsheets to monitor each student's performance so as to discuss the results with the relevant teachers. The findings however negate Garba (2020) who established that the principals do not normally check students' evaluation records. The study findings implied that majority of principals had neglected their instructional supervisory role of examining how students were progressing academically in public secondary schools. In the same vein, Garba and Abdullahi (2022) and Hussen (2015) studies found that monitoring students' progress by principals of secondary schools was irregular and rarely organized as principals did not check students' assessment records regularly. Bambrick-Santayo (2010) asserts that in most of the high performing secondary schools, principals and teachers always make use of students' assessment records information to determine the school development.

### **Students' Class Attendance and Punctuality**

The results in Table 1 show that 38 (44.19%) of teachers of chemistry agreed that principals checked students' attendance weekly. While 36 (41.86%) of the teachers of chemistry indicated that principals monitors students' attendance fortnightly, eight (9.3%) monthly and four (4.65%) once per term. Supporting these findings, a study by Garba and Abdullahi (2022) show that principals checked students' attendance usually every week. These findings implied that principals in public secondary schools checked students' attendance in order to monitor teaching and learning progress.

### **Monitoring Students' Progress**

From the study findings in Table 1, 53 (61.63%) of the teachers of chemistry indicated that principals discuss students' progress monthly, 20 (23.26%) once per term, seven (8.14%) fortnightly and four (4.65%) weekly. While two (2.33%) of the teachers of chemistry indicated that the principals never engage in discussing students' progress. This finding agrees with Otieno's (2022) assertion that principal's regularly monitors student progress records. The study findings also aligns with earlier findings by Cheboi (2016) who established that principals monitor students' academic progress by regularly picking students notes to countercheck with schemes of work and records of work so as to monitor the extend of the syllabus covered. It also corroborates Al-Hosani (2015) whose study found the majority of teachers indicating that principals discussed the academic progress of students with relevant teachers. In contrast, the findings by Ndungu, Gathu and Bomett (2015) revealed that evaluation of students' progress by principals in every subject is not done regularly. They further noted that progress records for students are not even maintained. The current study findings also contradicts Garba (2020) who reported that the principals indicated that they do not hold formal discussions with individual teachers about the progress of their students. This is despite the fact that through talking with teachers about students' progress, the principals are able to acquire first-hand information on students' performance in their respective schools. Similarly studies by Hussen (2015) and Wenzare (2012) revealed that monitoring students' progress by principals of secondary schools was irregular and rarely organized as the principals always seemed busy with administrative work to the detriment of the students' academic progress.

### **Peer Assessment**

Table 1 shows that regarding peer assessment, 64 (74.42%) of the teachers of chemistry indicated that principals are never involved in peer assessment. Table 4.8 indicates further that 12 (13.95%) of the teachers of chemistry indicated that principals are involved in peer assessment fortnightly, five (5.81%) weekly, three (3.49%) monthly and two (2.33%) once per term. The findings clearly reveal that majority of the principals have not embraced peer assessment a part of their instructional supervision roles. A study by Nyaga (2020) confirmed that peer assessment was a commonly used classroom assessment tool among secondary school teachers. The study further revealed that peer assessment makes students autonomous which is useful in assisting them to think more and become analytical. Ndoye (2017) observes that peer assessment can positively affect student learning by helping them develop their reflective and critical thinking skills, as well as their self-confidence as learners. Similarly, Singerin (2021) study results revealed that the implementation of the collaboration-based academic supervision model with the peer assessment approach was able to increase pedagogic competence moderated by the principal's motivation. Renata, Wardiah and Kristiawan (2018) posit that, it is time for instructional supervisors to pay attention to the application of peer assessment to be developed and applied, so that the implementation of instructional supervision does not only function as a tool to measure student learning achievement, but also to improve the learning process and quality.

### **Formative Assessment**

Table 1 indicates that three (3.49%) of teachers of chemistry agree that principals monitor formative assessment weekly, 10 (11.63%) fortnightly, nine (10.475) monthly and 17 (19.77%) once per term. However, a significant number of the teachers of chemistry numbering 47 (54.65%) indicated that principals were never involved in formative assessment. The current study results seem to be supported by Yasar (2016) whose findings suggested that science teachers do get adequate levels of education on purposes to use formative assessment approaches. Therefore, they do not possess a deep perception and understanding of formative assessment approaches. Similarly, Şaşmaz-Ören, Ormancı & Evrekli (2014) study findings suggested that science teachers have moderate levels of self-sufficiency related to formative assessment approaches. This finding also supports Chumo (2020) who reported that teachers do not plan for formative assessment in physics to the required standard and that this has a significant influence on students' performance in KCSE in physics in public secondary schools. According to Al Kadri, Al-Moamary, Magzoub, Roberts and Vleuten (2011), formative assessments provoke authentic and multidimensional learning. Andersson (2015) asserts that formative assessment is a strategy of instruction, where assessment is used with a main purpose of supporting learning and a function of using the information from the assessment to adjust teaching to better meet the needs of the students.

### **Presentations**

As seen in Table 1, according to the teachers of chemistry, one (1.16%) stated that principals monitor presentations weekly, six (6.98%) fortnightly, three (3.49%) monthly and 13(15.12%) once per term. A majority of the teachers of chemistry 63 (73.26%) felt that principals never monitor presentations. This means that majority of the principals never pay attention to

presentations. Archibong (2012) cites that presentation involves a prearranged series of events to a group for their view and it stimulates teachers' growth and group discussion. Xu, Chen, Wang and Suhadolc (2021) opines that presentation skills are essential for employability and academic study because they lead students to enter into debate and sustained reasoning.

## **CONCLUSION AND RECOMMENDATION**

### **Conclusion**

Principal have somewhat embraced the role of monitoring students' academic progress as part of their instructional supervision. However, they have not wholly integrated presentations, peer and formative assessments into their supervisory practices. The study concludes that there is a statistically significant relationship between principals' monitoring of students' academic progress and students' academic performance in chemistry in public secondary schools in Machakos County, Kenya.

### **Recommendation**

Principals should delegate some instructional supervisory responsibilities to their deputies. The delegation will make sure that supervisory undertakings in public secondary schools are conducted smoothly, irrespective of whether principals are burdened with other essential administrative responsibilities.

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