



Effectiveness of Public Employee Performance Management Information System in Management of Teachers' Professional Activities in Secondary Schools in Monduli District, Tanzania

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Abstract: This study was conducted to investigate effectiveness of public employee performance management information system (PEPMIS) in management of teachers' professional activities in secondary schools in Monduli district. Objectives were to; examine the role of PEPMIS in facilitating data-driven decision-making for teacher management and assess how effective was PEPMIS in monitoring teachers' performance. The study was guided by Management by Objectives Theory. The study employed convergent mixed design. The target population included 1 district education officer (DEO), 7 ward education officers (WEO), 7 school heads, 7 academic teachers and 105 teachers in public secondary schools in Monduli district with final size being 127. School heads, DEO, WEO and academic teachers were obtained by criterion purposive sampling and by simple random sampling. Validity was established through expert review. While reliability was measured using Cronbach's alpha and coefficient alpha value was 0.91. Qualitative data was presented in themes while the results from quantitative data were analyzed using descriptive statistics in SPSS version 22, the findings were presented in tables. The results show that PEPMIS was effective in enhancing punctuality, classroom attendance, and planning but faced challenges such as inconsistent use and delayed data entry. The study recommends that government should invest in improving infrastructure and ensuring reliable internet connectivity in public secondary schools, School administrators should implement regular monitoring systems, government should provide continuous digital literacy and training programs for teachers and school leaders, and head teachers should ensure that feedback provided through PEPMIS is clear, actionable, and specific.

Keywords: Performance, Monitoring, Teacher, Management, Professional, Tanzania

How to cite this work (APA):

Kweka, E. L. & Kitula, P. R. (2025). Effectiveness of Public Employee Performance Management Information System in Management of Teachers' Professional Activities in Secondary Schools in Monduli District, Tanzania. *Journal of Research Innovation and Implications in Education*, 9(4), 992 – 1004. <https://doi.org/10.59765/b5>.

1. Introduction

The performance of employees plays a crucial role in the success of any organization. This is because employees

contribute their skills, knowledge and abilities to meet the goals of the organization (Triansyah et al., 2023). It is therefore important for organizations to effectively manage the performance of their staff. Proper management of employee performance ensures that employees are

motivated and productive. Organizations that prioritize performance management tend to achieve better results and have a competitive advantage in the market. Effective performance management helps in identifying areas of improvement and providing necessary support to employees (Vuong and Vuong, 2022). Thus, many organizations, either public or private, have designed methods of managing the performance of their employees with the view of enhancing productivity.

Managing the employees' performance has become an interest of many organizations because how employees are managed throughout the performance management cycle significantly impacts the viability of an organization (Simpson and Simpson, 2022). Due to the advancement of science and technology, the integration of technology in performance management is becoming increasingly important as it offers tools to monitor, assess and improve employee performance efficiently. Technology streamlines the performance management process by making it easier to track progress and provide timely feedback (Widjaja, 2023). This adoption of technology not only improves performance management but also enhances employee engagement and satisfaction. As organizations continue to embrace technological advancements, managing employee performance becomes more data-driven and efficient (Radu, 2023). Thus, the use of technology has resulted in the emergency of employees' performance management systems.

Although technology is increasingly being integrated into performance management systems, the adoption rate is often higher in the private sector compared to the public sector. In some cases, public organizations still rely on traditional methods like pen and paper for record-keeping (Cakmak, 2023). Organizations which still use paper-based systems waste valuable time on manual data entry and often experience errors in reporting, which can compromise the accuracy of performance assessments (Bajpayi, 2022). In contrast, the use of employee management information systems has been shown to positively influence employee performance by providing timely and accurate information, as seen in the private sector (Sukmawan and Wahdiniwaty, 2020). The failure to embrace such systems can result in decreased productivity and a lack of transparency which may negatively impact the overall performance of an organization.

Information systems have also been employed to manage teachers' performance with the purpose of offering a structured approach to align teachers' goals with the broader objectives of education institutions (Siraj and Hagen, 2023). An effective teachers' management system should enable the collection of accurate data that informs decision-making processes and supports professional development while enhancing teaching quality. However, some systems such as the one in Saudi Arabia are

considered unsatisfactory because they fail to capture essential information needed by managers to make informed decisions about teachers' performance (Alshaikhi and Nada, 2024). Teachers have expressed concerns about such systems citing the lack of relevant data and insufficient feedback mechanisms. These concerns from teachers raise issues about the effectiveness of the systems on the management of teachers.

In Tanzania, the Public Employee Performance Management Information System (PEPMIS) was introduced to improve teachers' performance by integrating goal setting, monitoring and feedback processes within a centralized digital platform (Bakar et al., 2024). The system aims to enhance transparency and accountability by ensuring that performance is regularly monitored and feedback is provided for continuous improvement. Its introduction was prompted by challenges with the previous system Organization Performance Review Assessment S (OPRAS) where there were complaints about lack of participatory goal setting. As a result, fairness and integrity were often compromised which hindered the effectiveness of performance management (Mwita and Andrea, 2019). PEPMIS seeks to address these issues by promoting a more inclusive and transparent approach to performance management. However, it is not clear yet whether PEPMIS has resolved such problems.

In some public sectors in Tanzania, such as the judiciary, PEPMIS is perceived to be fair as employees feel they are skilled enough with the system, the assessment procedure is clear and it allows the provision of timely feedback (Dominic and Rutenge, 2024). However, in the education sector, PEPMIS faces several challenges, including issues with data integrity, insufficient training, and inconsistencies in aligning performance ratings with rewards (Bakar et al., 2024). Despite its contribution to administrative support, teachers have expressed concerns that PEPMIS is neither fair nor transparent (Komba, 2024). These concerns highlighted the need for a study to be conducted to evaluate the effectiveness of PEPMIS on the management of teachers' professional activities in the Tanzanian context whereby Monduli district was the study area.

1.1 Research Questions

The study investigated the following research questions:

1. What is the role of PEPMIS in facilitating data-driven decision-making for teacher management in Monduli District Council?
2. How effective is PEPMIS in monitoring teachers' performance in Monduli District Council?

2. Literature Review

2.1 Theoretical Review

The study reviewed the management by objective theory developed by Peter Drucker in 1954.

2.2 Management by Objectives (MBO)

The theory emphasizes setting clear and measurable objectives that guide employees toward achieving institutional goals. It assumes that when employees participate in goal setting, they develop a sense of responsibility and commitment to their tasks. The theory also highlights the importance of regular evaluation to assess progress and ensure continuous improvement. Performance assessment based on specific objectives allows organizations to measure success and address challenges affecting productivity (Smith, 2023). The approach requires active collaboration between administrators and employees to align individual goals with institutional expectations. In education, the theory suggests that teachers can improve their performance when they are involved in setting their professional targets and are regularly evaluated based on measurable outcomes.

2.2.1 Strengths of the Theory

One of the strengths of Management by Objectives is its structured approach to performance management (Ullah et al., 2021). The theory promotes efficiency by ensuring that tasks are aligned with institutional goals and that progress is regularly monitored. Research has shown that when individuals set specific objectives, they are more likely to remain focused on their responsibilities. The structured nature of the theory makes it useful for evaluating whether PEPMIS provides a clear system for goal setting and teacher performance assessment. It helps to determine whether administrators and teachers can use PEPMIS to track professional progress and identify areas that require improvement. The focus on measurable outcomes ensures that performance evaluation is based on specific achievements rather than general observations. The theory enhances accountability by ensuring that everyone takes responsibility for meeting performance targets. The study applied the theory to assess whether PEPMIS improves teacher performance management in Monduli District.

2.2.2 Application of the theory on the current study

Management by objectives remains useful in evaluating the role of PEPMIS in performance management. The theory provided a framework for assessing whether teachers and

administrators use PEPMIS to set and monitor professional goals. It allows the study to examine whether the system promotes structured performance tracking and accountability. Although external factors may affect goal achievement, the theory highlights the significance of clear objectives and regular evaluation. The study applied the theory to determine whether PEPMIS enhances professional development by ensuring that teachers receive regular assessments. The evaluation process is essential in identifying areas where teachers need support to improve their effectiveness. The study also considered whether the system encourages collaboration between teachers and administrators in setting realistic performance targets. The application of the theory allowed an examination of how well PEPMIS contributes to teacher performance in Monduli District.

2.3 Empirical Review

The empirical literature review related to this study was reviewed as per set objectives of the study.

2.3.1 Role of PEPMIS in facilitating data-driven decision-making for teacher management

Mandinach and Gummer (2020) conducted a study on data-driven decision-making (DDDM) in teacher management in the United States. The study used a mixed-methods approach, incorporating surveys and interviews with school administrators and teachers to examine how data-informed practices influence decision-making. The study found that DDDM improved teacher recruitment, performance evaluation, and professional development. Poortman and Schildkamp (2021) investigated the role of data teams in facilitating evidence-based decision-making for teacher management in the Netherlands. The study employed a quasi-experimental design with pre- and post-intervention assessments to measure changes in decision-making effectiveness. The study found that structured data teams improved teacher performance monitoring and instructional quality. Sun et al. (2022) examined the impact of digital platforms on data-driven decision-making for teacher management in China. The study employed a case study approach, analyzing the implementation of a national education data system across multiple provinces. The study found that digital platforms enhanced efficiency in teacher deployment and professional growth tracking.

Ford et al. (2023) explored elementary teachers' perceptions of data-driven decision-making in the United States. The study utilized a qualitative approach, conducting focus groups and in-depth interviews with teachers across various districts. The study found that while DDDM improved instructional planning and teacher

accountability, many teachers lacked the training to use data effectively. Okeke et al. (2022) conducted a study on the use of data-driven decision-making in teacher management in Nigeria. The study employed a qualitative approach using interviews with educational administrators and teachers to assess how data influences management decisions. The study found that data-driven decision-making helped improve teacher allocation and performance assessments but faced challenges due to inadequate data literacy among educators. In Tanzania, Mwaipopo (2021) explored the role of digital data systems in enhancing teacher management at the district level. The study used a case study design with interviews and document analysis, involving district education officers and school heads. The findings indicated that digital systems helped improve data tracking for teacher performance, but there were concerns about system reliability and user training. The limitation was its narrow focus on administrative perspectives. The current study addressed this by including teachers and ward education officers to understand the broader impact of PEPMIS on decision-making in Monduli district.

2.3.2 Effectiveness of PEPMIS in Monitoring Teachers' Performance

James (2021) conducted a study on the use of digital performance evaluation systems in monitoring teachers' effectiveness in the United Kingdom. The study adopted a mixed-methods design, involving 200 teachers and 50 school administrators, using surveys and interviews for data collection. The study found that digital platforms enhanced real-time tracking of teachers' lesson plans, student engagement, and classroom management. Chen (2022) conducted a study on the role of performance monitoring systems in improving teacher accountability in China. The study employed a qualitative approach, interviewing 30 education officers and analyzing official school records on teacher evaluations. The study found that electronic monitoring systems improved teachers' adherence to instructional schedules and increased accountability in lesson delivery.

Okafor (2024) investigated the effectiveness of electronic performance monitoring tools in evaluating teachers' classroom practices in Nigeria. The study adopted a survey research design, collecting data from 300 teachers and 40 school administrators across different states. The study found that electronic performance monitoring improved lesson documentation and facilitated timely feedback from administrators on teachers' instructional practices. However, the study relied solely on questionnaire responses, which may not have captured the depth of teachers' actual experiences with the system. Alhamad et al. (2022) studied the use of PEPMIS in public sector

organizations and its impact on employee performance. Using a case study approach, the research indicated that while PEPMIS improved the timeliness of performance assessments, it fell short in offering constructive feedback that could lead to actionable changes in performance. The study emphasized the importance of including qualitative feedback in performance management. In Monduli, addressing this gap could lead to a more effective use of PEPMIS, especially for teachers who require both timely and detailed feedback to improve classroom practices and achieve continuous professional growth.

3. Methodology

This study adopted a convergent design under the mixed methods approach to assess the effectiveness of the Public Employees Management Information System in managing teachers' professional activities in Monduli District Council. This design facilitated the simultaneous collection of quantitative and qualitative data so as to allow a detailed collection of data about the problem under investigation. The collection of numerical and narrative data leads into a deeper assessment on the evaluation of PEPMIS.

The study targeted 1 DEO, 7 WEOs, 7 heads of schools, 7 academic teachers and 105 teachers in public secondary schools in Monduli District. The district education officer was included because this officer oversees policy implementation and provides administrative support for the system at the district level. Ward education officers were involved since they coordinate education activities at the ward level and monitor the system effectiveness in school management. Head teachers were targeted as they are responsible for school leadership and directly engage with the system for teacher management. Academic teachers were included because they supervise curriculum implementation and can assess how the system supports academic planning. The teachers were involved to provide firsthand experiences regarding the system usability, efficiency, and challenges in managing their professional activities.

Sarwono (2022) stated that about 10% to 30% of the target population has statistical power of obtaining optimal sample size. Therefore, the sample size for the study included 1 DEO, 7 heads of schools, 7 academic teachers, 7 WEOs and 105 teachers to make a total number of 127 respondents. Simple random samplings were used to select 7 schools from the total population. The names of all schools were written on separate pieces of paper, folded, and placed in a container. One paper was picked at a time until the required number was reached. This method ensures that every school has an equal chance of being selected, reducing selection bias and increasing the representativeness of the sample. The study used

questionnaires and interview guides as tools for data collection.

To ensure validity, input from experts in research and system administration were sought in reviewing the data collection tools. These experts assessed the clarity, relevance, and appropriateness of the questions in capturing the intended information. The suggestions provided by the experts were incorporated to refine the tools, thereby enhancing their validity. Reliability was measured using Cronbach’s Alpha to assess the internal consistency of the questionnaire. The analysis was done by researcher using SPSS version 22 and reliability, $r = 0.91$ obtained was above the threshold of 0.7 which is acceptable as it has met the reliability requirements (Doval et al., 2023). For qualitative data, credibility was ensured through triangulation. This method involves using multiple sources of data to cross-check and validate the findings.

Descriptive statistics was used to analyze quantitative data to summarize and interpret patterns related to the effectiveness of PEPMIS in managing teachers’ professional activities in Monduli District Council. Data from quantitative instruments were entered according to various variables and research questions in the Statistical Package for Social Sciences (SPSS) version 22 computer software and the results were presented in tables of frequencies and percentages. For qualitative data, thematic analysis was employed to interpret responses from interviews. The data were transcribed accurately before being systematically coded to identify key patterns and recurring ideas. These codes were categorized into themes that align with the study objectives, allowing for an in-

depth examination of PEPMIS in teacher performance monitoring, decision-making, and feedback provision. s The study adhered to ethical research standards by ensuring confidentiality, voluntary participation, and data protection throughout the research process. Participants’ identities remained anonymous, and no personally identifiable information was disclosed in any reports. Additionally, data were securely stored and accessed only by the researcher to prevent unauthorized use. Ethical clearances were sought from relevant authorities to ensure compliance with research ethics and institutional guidelines. Finally, all the sources of information cited in the text were listed in the reference page following the recommended format.

4. Results and Discussion

The findings are discussed in accordance with the themes generated from the research questions that the study sought to answer.

4.1 Role of PEPMIS in Facilitating Data-Driven Decision-Making

The first objective of this study was to assess the role of PEPMIS in facilitating data-driven decision-making in public secondary schools in Monduli District. Teachers were provided with a rating scale containing 10 statements and asked to rate the effectiveness of PEPMIS in supporting various aspects of decision-making related to teacher performance. Their responses were quantified to generate frequencies and percentages, as presented in Table 1.

Table 1: Teachers’ Responses on the Role of PEPMIS in Facilitating Data-Driven Decision-Making

Statements	SA		A		N		D		SD	
	f	%	f	%	f	%	f	%	f	%
PEPMIS assists in tracking teachers’ progress over time.	20	19.05	50	47.62	6	5.71	19	18.10	10	9.52
PEPMIS facilitates identification of teachers’ strengths and weaknesses.	24	22.86	48	45.71	7	6.67	17	16.19	9	8.57
PEPMIS helps in planning professional development programs for teachers.	27	25.71	50	47.62	5	4.76	10	9.52	13	12.38
PEPMIS supports decision-making on staffing needs and resource allocation.	32	30.48	48	45.71	3	2.86	8	7.62	14	13.33
PEPMIS supports long-term teacher development strategies.	26	24.76	42	40.00	4	3.81	24	22.86	9	8.57
PEPMIS supports school management in making informed decisions regarding teachers.	30	28.57	46	43.81	4	3.81	17	16.19	8	7.62

The system contributes to informed decision-making regarding teacher promotions.	29	27.62	41	39.05	6	5.71	18	17.14	11	10.48
The system helps in the creation of individualized support plans for teachers.	19	18.10	45	42.86	5	4.76	21	20.00	15	14.29
The system provides insights into improving teaching strategies.	24	22.86	43	40.95	3	2.86	23	21.90	12	11.43
The system provides reliable data for evaluating teachers' performance.	26	24.76	43	40.95	4	3.81	22	20.95	10	9.52

Source: Field data (2025)

Regarding how PEPMIS assists in tracking teachers' progress over time, 19.05% of teachers strongly agreed, and 47.62% agreed with the statement. Only 5.71% remained neutral, while 18.10% disagreed, and 9.52% strongly disagreed. The majority of teachers (66.67%) expressed positive views, either strongly agreeing or agreeing, indicating that PEPMIS plays a role of tracking teachers' progress. However, a considerable portion (27.62%) disagreed or strongly disagreed, suggesting that some teachers face challenges in fully utilizing the system for progress tracking. These results are in line with Mandinach and Gummer (2020), who noted that while data-driven decision-making systems can effectively track performance, inconsistencies in data usage and engagement can hinder their full potential. This implies that while PEPMIS supports progress tracking, challenges remain regarding consistent use by teachers and full adoption of the system.

Findings from the teachers were further supported by an interview with a WEO, who stated:

PEPMIS has made tracking teachers' progress easier, but its effectiveness is still compromised by teachers who don't consistently update their data. This inconsistency makes it difficult for us to rely on the system for real-time decisions about teacher performance. We've had to supplement PEPMIS with traditional methods to make up for this (Personal Interview 22/05/2025).

Similarly, the head teacher mentioned:

PEPMIS has been useful in tracking teachers' progress over time, but not all teachers are regularly inputting their data. When teachers don't update their information, we can't make real-time decisions on their performance, which undermines the system's effectiveness. We have been encouraging teachers to

engage more with the system to ensure its proper functioning (Personal Interview 22/05/2025).

These responses imply that while PEPMIS aids in tracking teachers' progress, this system's role is compromised by inconsistent data input. Teachers and administrators recognize the tool's value, but it is clear that for it to function optimally, consistent engagement and timely data entry are crucial.

When examining how PEPMIS facilitates the identification of teachers' strengths and weaknesses, 22.86% of teachers strongly agreed, and 45.71% agreed that the system is effective in this regard. Only 6.67% remained neutral, while 16.19% disagreed, and 8.57% strongly disagreed. A significant 68.57% of teachers viewed PEPMIS positively, suggesting it plays a key role in identifying performance strengths and weaknesses. However, 24.76% of teachers expressed concerns, either disagreeing or strongly disagreeing, signaling that there is room for improvement. These findings align with Poortman and Schildkamp (2021), who observed that while data systems could aid in identifying performance gaps, the lack of specific and depth in the data often limits their utility. This implies that while PEPMIS is valuable for identifying areas of strength and weakness, more detailed and actionable data would increase its effectiveness in supporting targeted interventions.

The academic master during the interviews mentioned that:

While PEPMIS helps to identify where teachers need support, it often lacks detailed information on specific areas of weakness. For example, it flags underperformance in general terms, but it doesn't always tell us whether the issue lies with lesson planning, classroom management, or something else. More granular data would allow us to tailor interventions better (Personal Interview 22/05/2025).

The ward education officer also remarked:

We can see the general areas where teachers need improvement, but the system doesn't always provide enough information to know the root cause. A teacher could be struggling with classroom engagement, but PEPMIS won't pinpoint that specifically. We still need other assessments to fill the gaps (Personal Interview 22/05/2025).

These responses indicate that while PEPMIS is effective in identifying performance gaps, both teachers and administrators believe the system could offer more detailed insights to enhance decision-making. This implies that while the system functions well for broad assessments, improvements are needed for more targeted, in-depth data analysis.

Concerning whether PEPMIS supports long-term teacher development strategies, the findings show that 24.76% of teachers strongly agreed, while 40.00% agreed with the statement. This gives a total of 64.76% of respondents who had a positive view of the system's role in long-term development planning. A small portion, 3.81%, remained neutral, whereas 22.86% disagreed and 8.57% strongly disagreed. This means that 31.43% of teachers expressed reservations or negative sentiments. The high level of agreement suggests that many teachers recognize PEPMIS as a useful tool for continuous professional growth. However, the considerable percentage of disagreement points to underlying challenges, possibly related to training, accessibility, or system understanding. The low neutrality indicates that most teachers had a definite opinion on the matter. These results align with findings by Sun et al. (2022), who argued that digital platforms can significantly contribute to long-term development planning when users are adequately supported. This implies that while PEPMIS has structural potential to guide long-term teacher growth, its full effectiveness may be constrained by uneven uptake and application at the school level.

Findings from teachers were further supported by qualitative data gathered through interviews. During one of the interviews, a head of school observed that:

We use PEPMIS to track patterns of teacher performance over time, which informs long-term development plans. However, some teachers are not consistent in updating their records, so we cannot fully rely on the system alone. It gives us a good overview but cannot replace follow-up conversations and classroom visits (Personal Interview 28/05/2025).

A similar view was expressed by the academic master, who noted:

PEPMIS helps to build a long-term picture of each teacher's growth, but sometimes the data is either too general or missing altogether. To design a meaningful professional development plan, we still need to combine PEPMIS reports with what we observe during actual classroom interactions (Personal Interview 28/05/2025).

These responses suggest that while PEPMIS is capable of supporting long-term planning, the quality of outcomes is heavily dependent on consistent data entry and teacher engagement. It implies that without a culture of regular usage, the potential of PEPMIS in fostering long-term teacher development remains only partially realized.

Regarding whether PEPMIS supports school management in making informed decisions about teachers, the findings show that 28.57% of the respondents strongly agreed and 43.81% agreed with the statement. Only 3.81% of respondents remained neutral. On the other hand, 16.19% disagreed and 7.62% strongly disagreed. This suggests that a significant majority (72.38%) believed that PEPMIS contributes meaningfully to informed decision-making by school leaders. The low percentage of neutrality suggests that most teachers had concrete opinions on the issue. The combination of agreement and strong agreement implies that the system has been integrated into school-level leadership processes. However, the presence of about one in four respondents disagreeing suggests that either the system is inconsistently used across schools, or there are challenges in how the data is interpreted. These findings are supported by Mandinach and Gummer (2020), who noted that the success of data-driven decision-making relies on user training and a culture of accountability. This implies that while PEPMIS provides the infrastructure for evidence-based management, its success depends on building school-wide trust and skills in using the system effectively.

Supporting this finding, a WEO stated:

We rely on the data from PEPMIS when deciding on teacher transfers, workload adjustments, or assigning responsibilities like heads of departments. But in some cases, the data is not updated regularly, or it does not capture the full picture. So, we always cross-check with heads of schools before finalizing anything (Personal Interview 22/05/2025).

The head of school also added:

PEPMIS helps us to make informed decisions, especially when it comes to appraising performance or recommending teachers for leadership roles. But if a teacher doesn't take the system seriously and fails to update their records, it affects the credibility of the information we use (Personal Interview 22/05/2025).

These narratives indicate that while PEPMIS offers a useful platform for informed decision-making, its success largely depends on how well and how consistently it is used. It implies that to fully realize its potential, there is a need for ongoing training, regular supervision, and system accountability.

In relation to whether the system contributes to informed decision-making regarding teacher promotions, 27.62% of teachers strongly agreed and 39.05% agreed with the statement. A small 5.71% remained neutral, while 17.14% disagreed and 10.48% strongly disagreed. The total of 66.67% agreement indicates that a majority believe PEPMIS contributes positively to promotion-related decisions. However, nearly 28% of respondents expressed doubt, either disagreeing or strongly disagreeing. This suggests that while the system is viewed favorably, it may not be fully trusted or consistently used across schools. The minimal neutrality shows that this is a topic of clear opinion among teachers. These findings align with Poortman and Schildkamp (2021), who emphasized that trust in the data system is essential for its acceptance in sensitive areas like promotions. This implies that although PEPMIS has potential in supporting promotion decisions, building confidence in the system's fairness and accuracy is essential for its success.

During interviews, a head of school said:

We often use the records in PEPMIS when recommending teachers for

promotions. It helps show who has been consistently performing well over time. But we also consider reports from department heads and classroom visits because sometimes PEPMIS data may not tell the full story (Personal Interview 26/05/2025).

A WEO echoed this by stating that:

The system gives us a base for recommending or rejecting a teacher's promotion. But there have been cases where good teachers lacked updated records, which affected their chances unfairly. So, we also ask for supporting evidence outside of the system before making any final decisions (Personal Interview 26/05/2025).

These views imply that while PEPMIS is a helpful decision-support tool, it should be supplemented with other sources of evidence to ensure fairness. Teachers need to be encouraged to maintain up-to-date and accurate data in the system to prevent misrepresentation during promotion evaluations.

4.2 Effectiveness of PEPMIS in Monitoring Teachers' Performance

The second objective of this study was aimed at evaluating the effectiveness of PEPMIS in monitoring teachers' performance in public secondary schools in Monduli District. Teachers were provided with a rating scale containing 10 statements, which they were asked to respond based on their experiences with the system. The responses were quantified and analyzed to generate frequencies and percentages, which are presented in Table 2.

Table 2: Teachers' Responses on the Effectiveness of PEPMIS in Monitoring Teacher Performance

Statements	VE		E		ME		LE		NE	
	f	%	f	%	f	%	f	%	f	%
Tracking teachers' punctuality.	11	10.5	41	39.0	28	26.7	18	17.1	7	6.7
Monitoring teachers' class attendance.	19	18.1	29	27.6	32	30.5	14	13.3	11	10.5
Following up on lesson preparation.	25	23.8	31	29.5	21	20.0	17	16.2	11	10.5
Observing lesson delivery.	12	11.4	46	43.8	26	24.8	13	12.4	8	7.6
Checking syllabus completion.	17	16.2	24	22.9	38	36.2	13	12.4	13	12.4
Verifying use of teaching methods.	21	20.0	38	36.2	19	18.1	17	16.2	10	9.5
Monitoring classroom management.	24	22.9	36	34.3	20	19.0	15	14.3	10	9.5
Reviewing achievement of lesson objectives.	13	12.4	33	31.4	26	24.8	18	17.1	15	14.3
Recording performance data.	15	14.3	41	39.0	24	22.9	12	11.4	13	12.4
Identifying performance gaps.	16	15.2	39	37.1	23	21.9	16	15.2	11	10.5

Source: Field data (2025)

Regarding the tracking of teachers' punctuality, the majority of respondents rated the system positively, with 39.0% marking it as efficient and 10.5% as very efficient. However, a notable 26.7% of teachers viewed the system as moderately efficient, with 17.1% rating it as less efficient and 6.7% considering it not efficient. This indicates that while PEPMIS is seen as effective by a majority, there are significant gaps in its effectiveness, particularly concerning timeliness and real-time tracking. The positive ratings combined (very efficient and efficient) for punctuality tracking making up 49.5%, suggesting that over half of the teachers believe the system is functioning well in this area. However, there is still a considerable portion of respondents who view the system as less effective, highlighting the need for improvement. These findings are consistent with previous studies, such as Mosha (2020), who found that digital tracking systems helped reduce absenteeism. This implies that PEPMIS plays a role in improving punctuality, but the inconsistencies in real-time updates show that further technical enhancements are needed to fully optimize the system's performance in tracking punctuality.

Findings from the teachers were also supported by insights gathered from key informants. During the interviews, one head teacher noted that:

PEPMIS has played a crucial role in helping us track teacher punctuality. While it helps us monitor arrivals, there are still instances where the data may not be updated instantly, and this causes

some confusion. The teachers know they are being monitored, so this has improved overall punctuality, but there are times when the system lags behind. It's crucial that we get real-time updates to take immediate actions on punctuality issues (Personal interview, 14.05.2025).

Additionally, the academic master highlighted the system impact, adding:

While the system has encouraged teachers to be more punctual, sometimes it takes longer for the data to reflect their actual arrival times. However, it has certainly instilled a sense of discipline, and we are now more aware of who is consistently late (personal interview 21/05/2025).

In relation to checking syllabus completion, 16.2% of teachers rated PEPMIS as very efficient, and 22.9% marked it as efficient. A notable 36.2% of teachers considered the system moderately efficient, while 12.4% rated it as less efficient and another 12.4% as not efficient. The majority of teachers, 39.1%, considered the system to be efficient or very efficient in tracking syllabus completion, yet the remaining portion expressed concerns, with a combined total of 48.6% of respondents viewing it as moderately efficient or below. This indicates that while PEPMIS is somewhat effective in this area, a significant number of teachers still feel that the system could improve.

These findings are consistent with Okafor (2024), who observed that while digital performance systems helped in tracking in syllabus, teachers still faced challenges in consistent use. This implies that while PEPMIS is beneficial in tracking syllabus completion, more attention is needed to address the variability in how teachers use the system.

During the interview, one head teacher explained:

PEPMIS has been helpful in monitoring whether teachers are completing the syllabus on time, but sometimes it doesn't capture the smaller adjustments teachers make to the syllabus. Teachers are often more flexible in their approach, so it can be difficult to track these changes accurately (Personal Interview 30/05/2025).

Another academic master noted:

We have noticed improvements in syllabus completion, but there are still teachers who don't consistently upload their progress, and this makes it hard to have a complete picture (Personal Interview 28/05/2025).

These statements highlight that while PEPMIS supports syllabus completion monitoring, challenges remain regarding how teachers input data into the system. The responses suggest that the system's effectiveness is partly hindered by inconsistent usage and the flexibility of syllabus implementation. This implies that more comprehensive and consistent use of the system, along with additional training for teachers, could enhance the effectiveness of PEPMIS in monitoring syllabus completion.

In the case of verifying the use of teaching methods, 20.0% of teachers rated PEPMIS as very efficient, and 36.2% rated it as efficient. However, 18.1% considered it moderately efficient, 16.2% saw it as less efficient, and 9.5% rated it as not efficient. These findings show that PEPMIS is regarded as relatively effective in tracking teaching methods, with nearly 56.2% of teachers considering it very efficient or efficient. However, there is still a significant portion (25.7%) of teachers who feel that the system is only moderately efficient or less efficient. This pattern indicates that while the system is useful for monitoring teaching methods, there are areas in which it could be further improved, particularly in capturing a broader range of instructional strategies. These findings are consistent with Okafor (2024), who reported that digital performance systems helped evaluate teaching practices but noted limitations in their ability to capture the diversity of teaching methods. This implies that PEPMIS is effective

but could benefit from enhancements to better reflect various teaching styles and strategies.

To further understand the impact of the system on monitoring teaching methods, one academic master commented:

PEPMIS has certainly helped us track whether teachers are following the prescribed methods, but some teachers are more flexible with their approach. The system doesn't always reflect the nuances in teaching that some teachers incorporate into their lessons. It's important for us to provide support for teachers who might need to adjust their approach based on student needs (Personal Interview 26/05/2025).

A head teacher elaborated:

While the system works well for tracking the use of standardized methods, we find it difficult to capture those who deviate from the prescribed approaches. Some teachers adapt their methods based on the class dynamics, which the system does not always account for (Personal Interview 26/05/2025).

The feedback from both teachers and key informants indicates that PEPMIS has proven helpful in tracking standardized teaching methods but falls short in capturing diverse instructional approaches. The responses suggest that the system may need to be more flexible in accommodating different teaching methods to enhance its overall effectiveness. This implies that while the system has a role in monitoring teaching practices, it needs to be improved to better reflect the realities of varied teaching techniques used in classrooms.

Concerning monitoring classroom management, the responses show that 22.9% of teachers considered the system very efficient, and 34.3% rated it as efficient. A total of 19.0% rated it as moderately efficient, with 14.3% considering it less efficient, and 9.5% rating it as not efficient. These results suggest that while PEPMIS is generally effective in tracking classroom management, there is still a noticeable percentage of teachers (about 23.8%) who feel the system could be improved. The majority of teachers, however, rate it positively, with nearly 57.2% considering it efficient or very efficient. This reflects a broader agreement that PEPMIS is a useful tool for monitoring classroom management. These findings align with James (2021), who found that digital monitoring systems enhanced the ability to track classroom management, though issues with data capture and accuracy persisted. This implies that while PEPMIS is an effective

tool for classroom management monitoring, further improvements in its capabilities, particularly in data accuracy, are needed to enhance its overall effectiveness.

During the interview, the academic master shared:

PEPMIS has definitely improved how we record track teacher performance, especially in terms of attendance and lesson preparation. However, there are still gaps in how the data is processed. Sometimes, performance records are delayed, and teachers don't always see updates immediately, which affects how quickly we can act (Personal Interview 27/05/2025).

The head teacher added:

The system is useful for capturing data, but it doesn't always reflect the full range of performance indicators we track. We rely on PEPMIS for some key data, but the delays in updates mean we have to check other sources for the most current information (Personal Interview 27/05/2025).

These responses reflect a shared acknowledgment of PEPMIS's potential in performance data recording, but there is concern over the system's speed and data accuracy. This implies that while PEPMIS is a useful tool, the delays and occasional gaps in data processing limit its full effectiveness in monitoring teacher performance. Addressing these delays would ensure that performance data is accurate, timely, and actionable.

When analyzing the identification of performance gaps, 15.2% of teachers rated PEPMIS as very efficient, and 37.1% rated it as efficient. A total of 21.9% viewed it as moderately efficient, while 15.2% rated it as less efficient, and 10.5% rated it as not efficient. These findings indicate that PEPMIS is somewhat effective in identifying performance gaps, with 52.3% of teachers considering it efficient or very efficient. However, a considerable portion (32.4%) rated it as moderately efficient or less efficient, suggesting that there are limitations in how well the system can identify performance gaps. This aligns with Mosha (2020), who highlighted that digital performance tracking systems have the potential to identify gaps but often fail to provide the detailed insights needed for targeted interventions. This implies that while PEPMIS can identify broad performance gaps, further improvements are necessary to enhance its ability to provide actionable, detailed feedback.

In the interviews, the WEO remarked that:

PEPMIS is good for identifying general performance issues, but it doesn't always provide specific insights into what needs to be improved. We can see where there are problems, but the system doesn't always give us the detailed information we need to address those issues effectively (Personal Interview 26/05/2025).

The academic master further noted:

The system helps us pinpoint areas where teachers may be struggling, but it lacks the depth to tell us exactly where improvements are needed. It's useful for broad assessments, but we often have to follow up with other methods to get the specific areas of concern (Personal Interview 26/05/2025).

These responses suggest that PEPMIS has value in identifying performance gaps but is limited in its ability to provide detailed, actionable feedback. This implies that while the system can be used for general performance monitoring, it needs refinement to ensure that it delivers more granular insights that can guide targeted interventions.

5. Conclusion and Recommendations

5.1 Conclusion

The study concluded that PEPMIS plays a crucial role in facilitating data-driven decision-making in public secondary schools in Monduli District. Teachers recognized the system's value in tracking their progress, identifying strengths and weaknesses, and guiding professional development planning. The system also supported staffing decisions, resource allocation, and teacher promotions. However, the study revealed that PEPMIS was limited in providing detailed, personalized support for teachers. Interviews with school leaders supported these findings, pointing to issues such as inconsistent data entry and delayed updates.

The study also concluded that PEPMIS is an effective tool for monitoring teachers' performance in public secondary schools in Monduli District, contributing to enhanced accountability, punctuality, and classroom management. Teachers reported better consistency in lesson preparation and teaching methods when their performance was tracked using PEPMIS. However, the study also highlighted challenges related to delays in data entry and inconsistent use, which impacted the system's overall effectiveness. Interviews with school leaders emphasized that while

PEPMIS was beneficial, there were still concerns about the timeliness and clarity of performance data.

5.2 Recommendations

Based on the conclusion of the study, the researcher recommended the following:

1. The government should invest in improving infrastructure and ensuring reliable internet connectivity in public secondary schools. This can be done by allocating resources for internet access and technological upgrades in schools, particularly in remote areas, so as to minimize delays and ensure that PEPMIS functions smoothly, supporting timely data entry and feedback.
2. School administrators should implement regular monitoring systems to ensure that teachers consistently update their data on PEPMIS. This can be done by incorporating data entry as part of teachers' performance evaluation criteria, to make sure that teachers stay engaged with the system and maintain accurate and up-to-date records.
3. The government should provide continuous digital literacy and training programs for teachers and school leaders to enhance their skills in using PEPMIS effectively. This can be done by organizing workshops and offering professional development opportunities, so as to ensure that teachers and administrators are equipped to maximize the system's potential in supporting performance monitoring and decision-making.
4. Head teachers should ensure that feedback provided through PEPMIS is clear, actionable, and specific to each teacher's development needs. This can be done by encouraging one-on-one discussions between teachers and administrators to review the feedback, so as to offer personalized guidance and ensure the feedback is applied effectively for professional growth.

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