

MANAGEMENT COMMITMENT TO QUALITY MANAGEMENT PRACTICES AND STUDENTS' PERFORMANCE IN TECHNICAL AND VOCATIONAL EDUCATION AND TRAINING INSTITUTIONS IN KIAMBU COUNTY

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ABSTRACT

The overall performance of students in Technical and Vocational Education and Training institution in Kenya and in particular Kiambu County has raised concerns due to continued decline in performance of students in Kenya national Examinations Council modular examinations and completion rate. It was noted that in 2015, Technical Training Institutions' mean grade was 68.7%, 57.9% in 2016, 50.2% in 2017, 43.7% in 2018, and 41.8% in 2019. Besides, completion rate in TVET has also been low, averaging 72.62% Per Annum compared to the global average of 82.13%. The situation is replicated in Kiambu County which has an average completion rate of 65% which is below the national average of 70%. This phenomenon has raised concerns about the commitment on the management of these institutions to implement quality management practices. Since the quality management practices in these institutions are implemented by the management, it implies that their commitment to implementation directly influences their adoption and institutions' performance. The aim of this study was to determine the correlation between management's commitment to quality management practices and students' performance in TVET institutions in Kiambu county, Kenya. The study was anchored on the Kaizens' theory. The study used a correlational research design with a population of 5285 respondents including 45 principals of TVET institutions, 45 examination officers, 145 head of departments, 250 trainers and 4800 students sampled across the 45 TVET

institutions. The Institutions were categorised as the Vocational Training Centres (VTCs), the Technical and Vocational Colleges (TVCs), and National Polytechnics (NPs). Nine institutions were selected through a stratified random sampling while simple random sampling technique was used to select a sample of 578 respondents among heads of departments and examination officers. Primary data was collected using questionnaires and analysed using descriptive statistics. Pearson correlation was used to determine the strength and direction of the relationship between the variables. From the findings, the study revealed a strong positive correlation between management commitment to quality management practices and students' performance 0.696 ($p < 0.05$). It was thus concluded that a highly committed management team would have a strong positive and significant influence on students' performance in TVET institutions in Kiambu County. This study therefore recommended that the government should enhance management commitment to quality management practices. This may include investing in leadership development programs, fostering a culture of participation and collaboration among staff, and implementing initiatives to improve stakeholder engagement and service delivery.

Key Words: Management Commitment; Quality Management Practices; Students' Performance; Completion Rate.

INTRODUCTION

Technical and Vocational Education and Training (TVET) institutions are crucial for economic growth and development as they equip individuals with practical skills for employment and self-reliance (UNESCO, 2016). In Kenya, the TVET Act of 2013 governs these institutions, emphasizing the importance of quality assurance, industry collaboration, and curriculum development to enhance skill transfer and employability. Despite government efforts to promote TVET as a driver of Vision 2030, student performance and completion rates remain low, particularly in Kiambu County, where the completion rate is below the national average (TVET Act, 2013). The declining student performance in national examinations and low employability rates highlight the need for effective quality management practices in TVET institutions.

Students' enrolment in public universities has been on the decline while the enrolment at technical and vocational colleges offering diploma and certificate courses increased by 22 percent (Mutua, 2022). The enrolment at TVET institutions was 265,095 in 2022 an increase from 217, 440 in 2021. Consequently, the number of accredited TVET institutions has risen to 1263 in 2022 (TVET, 2023). In Kiambu County, there are 149 registered TVET institutions. This means that 8.15% of the students enrolled in Kiambu County. This is a significant number of graduates expected to be released to the job market.

Though enrolment in TVET institutions has grown, the performance of student has been on a declining trajectory. Performance of students in these institutions (Measured through academic results, completion rates, and employability of graduates) has been poor as proved by their results in Kenya national Examinations Council (KNEC) examinations. Additionally, completion rate in TVET has been low, averaging 72.62% as compared to the global average of 82.13%. The situation is replicated in Kiambu County which has an average completion rate of 65% which is below the national average of 70% (Ministry of Education, 2023). This is despite the government's efforts of strategically putting TVET as one of the vehicles to achieve Vision 2030 and identifying TVET to produce highly qualified human resources and manpower that would drive Kenya to a mid-level economy by 2030. Even with the said effort by the government and other stakeholders, the quality grades have continued to diminish in TVET institutions which raises concerns on the critical investment by the government. Thus, management commitment to quality management practices by the institutions is paramount to ensure that the output of the training process, which is the graduate that can easily be absorbed into the job market.

Despite government's efforts to revive the TVET sector by considering it as a vehicle for transforming Kenya to a middle-level economy by the year 2030, there is still a low supply of qualified graduates with the right training and skills. Waiyaki (2022) noted that only forty percent (40%) of Kenyans who complete their courses at TVET institutions get employed. This shows that obtaining a certificate or a diploma is not a sufficient requirement to get employment. The graduate needs to have relevant skills and job experience. There is

therefore need to establish the bridge between Vocational Education and Training and skills development and the job requirement. The skills should be in tandem with the labour market demand (Sankale et al., 2017).

Learning institutions especially TVET have been undergoing process change to meet the increasing demand for quality skilled labour to as potential employees seek to irk competitors in the scramble for the few available employment opportunities. Further there is increased demand from practioners and employers for improvement in the quality of training to impact learners with requisite skill to fit in the dynamic business environment. This has caused enormous competition among TVET institutions to gain the numbers. As a result of the dynamic nature of learning institutions and globalization, has made Quality Management an ongoing concern in Higher education institutions (Becket & Brookes, 2008). As a result, numerous Quality Management Systems based on current industry models have been adopted.

As a management approach, ISO 9000 outlines the quality management principles that have led to the successful adoption, implementation, and maintenance of a quality management system (Quendangan et al., 2018). These principles include management commitment which requires that institution managers to create a direction for the institution. The top management should therefore provide leadership and a vision of the institution which should be clearly communicated and cascaded throughout the institution. It outlines the role of managers in the management system in ensuring that the management system's quality policy and objectives are defined, established, and communicated. The improvement process in any learning institution cannot be sustained without the commitment of leaders. Commitment to quality management practice (measured through leadership dedication, resource allocation, staff training) is therefore, a vital role to the management (Tribus 2010). According to Wanza et al. (2017), the three key principles that support continuous improvement are customer focus, staff involvement, and process involvement. To be at the forefront of the implementation of continuous improvement in TVET institutions, top management commitment and support are required.

Institutions should have an elaborate structure which can support all its operations and encourage collaboration among all staff in their varied functions. Continuous training is essential for employees to meet the performance standards that have been established. There should be an effective communication system established at the institutions, as well as an objective system for rewarding and recognizing top performers. TVET institutions must focus on customer satisfaction to remain relevant and to achieve continuous improvement. Section 38(b) of the TVET Act of 2013 spells out that every institution should establish, implement and manage a quality assurance system. The system would be different from the external TVET quality assurance mechanism. This makes the QMS a mandatory legal requirement for any TVET provider in Kenya.

The performance of TVET may be evaluated by metrics that show how well the institution performs in reaching its objectives. These indicators may be used to evaluate the quality of training programs and the overall performance of the institution in delivering these programs. Most institutions adopt various Quality Management practices to enhance their institutions' efficiency (Hatami-Marbini Kangi, 2017). Quality management practices, therefore, generate a competitive advantage when adopted and properly implemented by any institution. In this study, the academic performance of the students was measured through their performance in modular national examinations.

Statement of the Problem

Although there is a noted increase in enrolment in TVET institutions in Kenya, student performance and completion rates have been declining. In Kiambu County, there is consistent record of poor results in national examinations and low graduate employability in TVET institutions (Kenya National Examination Council, 2019) which indicates gaps in the quality of training. Macharia et al. (2020) noted that TVET institutions' performance in the examinations, particularly in modular and national examinations, within Kiambu County has been on the decline. In 2015, Technical Training Institutions' mean grade was 68.7%, 57.9% in 2016, 50.2% in 2017, 43.7% in 2018, and 41.8% in 2019 (Kenya National Examination Council, 2019). However, the performance of TVET institutions in examinations does not entirely reflect the quality of the training offered in these institutions in Kenya.

For this reason, quality management systems can be implemented to ensure quality training and assessment and therefore, the efforts should be reflected in the performance in modular examinations and the quality of graduates. The key principle for quality assurance is fitness for purpose and timeliness and therefore there is a need to strengthen quality assurance and control in TVET institutions (Majid et al., 2024). The declining trend in national examination performance and lack of skill alignment with labour market provoked the research to find a need to assess the role of management commitment on quality education. Besides, while the government has mandated quality assurance mechanisms, their effectiveness in improving student performance remains uncertain. This study therefore will establish the link between management commitment to quality management and student outcomes.

Objective of the Study

The study aims to examine the correlation between management commitment to quality management practices and student performance in TVET institutions in Kiambu County.

LITERATURE REVIEW

This study was guided by the theory of continuous improvement popularly known as Kaizen proposed by Masaaki Imai. The main objective of the theory is the continuous improvement of the processes in an organisation through the small tasks performed by the employees (Gorska & Kosieradzka, 2007). The theory contends that every employee in the company is

involved in continual development. In the context of Kaizen, management primarily performs two tasks: improvement and maintenance. Activities aimed at upholding managerial, operational, and technical standards are referred to as maintenance. On the other hand, improvement refers to a variety of actions meant to raise the bar for the present standards (Imai, 2012). The Kaizen concept believes there is always room for improvement of the processes through small incremental changes aimed at improving the overall results (Saleem, 2012). The top management of every institution must be committed to the Kaizen implementation and must engage all employees in all the departments. The processes must be focused on continuous improvement of every department which realizes the overall improvement in the institution with a focus on customer satisfaction. The theory was therefore suitable for this study as it can be applied to improve student performance in modular examinations as well as pass rate.

Numerous studies have been conducted on the study constructs aimed at identifying literature gaps. For instance, Kesavan and Bernacchi (2015) conducted a study on the Australian SMEs. The study involved top leaders from 50 companies to assess the impact of management commitment on innovation performance. The study found that management commitment has a significant positive effect on innovation performance. Similarly, a study conducted by Krause et al. (2014) established that management commitment is positively associated with organizational performance in manufacturing firms. The study found that the commitment of top leaders to quality management practices significantly improved organizational performance.

Ngugi (2019) assessed the correlation between management's commitment to implementing strategic plans and the performance of TVET Centres in Kiambu County, Kenya. He begins by appreciating the role of strategic planning in effectively managing TVET institutions in Kenya. One way of enhancing management commitment is through prioritizing the key strategic plans of the TVET institutions. Ngugi (2019) links the low student intake in TVET institutions within Kiambu County and Kenya to the critical problems facing the institutions venturing into providing vocational education. Grounding the research on contingency theory, the resource-based theory, and the theory of strategic fit, Ngugi (2019) established a positive correlation between management's commitment to strategic planning and the performance of TVET institutions within Kiambu County. The study found a positive correlation between management's commitment to strategic planning and competent employees to the student's performance. The findings play an important role in grounding the current study and establishing a consensus of the study's objectives with the existing body of literature. The current study established the correlation between management's commitment and the performance of TVET institutions in Kiambu County.

Muthuri, Momanyi and Nduku (2019) highlight the lecturer's Performance Appraisal (PA) as one of the critical top management commitments in a TVET institution that is focused on performance. According to Muthuri et al. (2019), a lecturer's PA is one way of practicing management commitment. It allows the institutions' human resource managers to identify

critical responsibility areas that the lecturers should address to promote the students' professional development and improve performance. The study appreciates the role that critical practices of management's commitments, such as frequent lecturer performance appraisal play. Consistent lecturer's PA is positively correlated with improving the overall performance of TVET institutions in Kenya.

Management commitment is a broad area that encompasses the planning aspects of management practices, as underscored by Waithaka and Kilika (2019). Top management's commitment is a broad topic considering critical managerial aspects such as employee empowerment and the execution of the institution's strategic plans. The study found a positive correlation between management practices through the execution of strategic plans and the performance of TVET institutions in Kiambu County. Effective management commitment is critical to facilitating learning pathways in TVET institutions in Kiambu County. Their study plays a critical role as it acts as a reference point and informs future studies on the role of top management's commitment to improving the performance of TVET institutions within Kiambu County.

According to research carried out by Kamau et al. (2019), management commitment can be measured by how well the TVET institutions can transform under the social, environmental, and economic dimensions while paying attention to academic performance. The study further argues that management commitment is positively correlated to the overall performance of the TVET institutions, with the graduates acquiring holistic competencies in citizenship, work, and education-related areas. Therefore, management commitment has a strong positive correlation with the performance of TVET institutions in Kiambu County. Among its critical long-term goals, the Kenyan Government plans to enrol about 20 percent of the youths in TVET institutions by 2030, as established by Maina (2019). In his study, Maina (2019) investigated the influence of financing sources, a critical management commitment, on the performance of TVET institutions in Kenya. Specifically, the study assessed how donor funding and government funding through the Higher Education Loans Board (HELB) influences the performance of TVET programs. The study revealed that management commitment to financing sources such as HELB and donor funding strongly correlated with increased enrolment and performance of the institutions in Nairobi and Kiambu counties. The current study therefore explored the management's commitment to the provision of the required resources from the funds provided by the government and acquired from other sources. The availability of resources motivated the trainers and the performance of the students consequently improve.

The study established that although existing studies demonstrated that management commitment is positively associated with performance, the findings were based on data obtained from other sectors such as manufacturing and small and medium sized companies as opposed to education sector which made it difficult for the findings to be generalised in the current context. Moreover, the study determined that some of the reviewed studies were conducted in other countries such as Australian. The study thus determined that there existed

contextual gaps. The study also established that the existing studies in the current study contexts only focused on performance of TVET institutions as opposed to students' performance which was the focus of the current study. The study thus noted that there existed conceptual gaps. Besides, Previous studies carried out on how quality management practices relate to student performance have not given satisfactory answers as shown in the background of this study. Many concentrates on the component of managers performance. This study therefore deviated and carried out an in-depth investigation to determine the correlation between management's commitment to quality management practices and students' performance in TVET institutions in Kiambu county.

RESEARCH METHODOLOGY

The study applied the correlational research design. The design was used because it enables the researcher to determine the relationship and the strength of the relationship between two or more variables (Seeram, 2019). The research design was therefore sufficient in establishing the correlation between management's commitment to quality management practices and academic performance of students in TVET institutions in Kiambu County.

This study was conducted in TVET institutions within Kiambu County. Kiambu County was selected because it is peri-urban. According to TVET-CDACC (2023), Kiambu County is the second most populous county after Nairobi City County. Consequently, the number of youths seeking middle-level training in Kiambu is very high. There was a total of 149 public and private TVET-registered institutions in Kiambu County (TVET, 2023). This is the second largest concentration of TVET institutions after Nairobi County which has 338 TVET registered institutions. Kiambu County was preferred as the location for the current study due to the high youth population and the increasing number of TVET institutions. Most TVET institutions in the county have a Quality Management System in place and therefore it is the most appropriate locale.

The study therefore targeted 5285 respondents comprising of 45 principals from public TVET institutions, 45 Examination officers, 145 Head of Departments, 250 trainers and 4800 students. The principals were selected because they direct the strategic direction of the institution which is implemented by the trainers and the head of departments. The examination officers provided data on performance in the modular examinations. Stratified sampling technique was used to select a sample of 578 respondents comprising of 9 principals, 30 HODs, 9 examination officers, 50 trainers and 480 students. This sample size was adequate based on the recommendations of Snyder (2019) who noted that when the population is small, a sample size of 20% is a good representation and 10% when the population is quite large.

Structured questionnaires with close-ended questions were used to collect primary data. Closed ended questions were based on 5-point Likert scale where 5 represented strongly agree, 4-agree, 3- undecided, 2-disagree and 1 represented strongly disagree. In addition,

the study utilized a secondary data collection sheet to obtain data on performance of students in modular examinations as well as modular completion rates.

Data analysis was conducted via the Statistical Package for Social Sciences (SPSS) software V25. Both descriptive and inferential analysis were used in analysing data. Descriptive analysis was applied to provide an extensive summary of the data set to examine how top management's commitment correlates to the overall performance of TVET institutions. The data was presented in the form of mean score and standard deviation. Inferential statistical analysis through correlation analysis was also used to determine the correlation between management's commitment to quality management practices and students' performance in TVET institutions in Kiambu county. Data was then presented in the form of tables. Correlation values of $r = \pm 0.1$ to ± 0.29 show that the relationship between the two variables is small, while correlation values of $r = \pm 0.3$ to ± 0.49 shows the relationship is medium. If the correlation value $r = \pm 0.5$ and above then there is a strong relationship between the two variables under consideration. The significance of the relationship was based on P-values at 0.05 significance level. The results obtained from the study was compared with the reviewed literature to establish how quality management practices correlate to the performance of TVET institutions in Kiambu County.

RESULTS AND DISCUSSIONS

This section presents a summary of the results obtained in the analysis. The section is divided into two sections for descriptive analysis and correlation analysis.

Descriptive Analysis

The objective of the study was to determine the correlation between management's commitment to quality management practices and student performance of TVET institutions in Kiambu County. Respondents were requested to indicate their level of agreement/disagreement with the following statements regarding leadership commitment. Table 1 presents a summary of the findings obtained.

Table 1: Descriptive Statistics on Management Commitment

Staff	Mean	Std. Dev.
Managers at senior level are committed to quality	4.120	1.116
The commitment of management is critical for the success of Quality management practice implementation	4.096	0.843
The institution has a strategic plan	3.979	0.621
Institution's processes and operations are Standardized and documented	3.877	0.913
Selection, promotion and appointment of staff in the institution is by merit	3.866	0.678
The institution mission and vision are well communicated	3.849	0.98
Support of quality policies by Senior level management	3.843	0.97
There is commitment to provision of resources necessary to maintain quality operations by the top management.	3.776	1.119
Students	Mean	Std. Dev.
The leadership ensures there are enough trainers in the institution	4.020	0.841
The institutions mission and vision are well communicated	3.884	0.580
The leadership ensures the curriculum delivery is in line with market needs	3.674	0.928
The leadership involves students in the decision making	3.094	0.864

From the findings, the staff were in agreement that management is committed to quality (M= 4.12, SD= 1.116); the commitment of management is critical for the success of quality management practice implementation (M= 4.096, SD= 0.843); that the institution has a strategic plan (M= 3.979, SD= 0.621); and that the mission and vision are well communicated (M= 3.849, SD= 0.98). They also agreed that there is support of quality policies by the management (M= 3.843, SD= 0.97); that selection, promotion and appointment of staff in the institution is by merit (M= 3.866, SD= 0.678). The high standard deviation of 1.116 suggests that there were high variations in management commitment such that while some management TVET institutions were highly committed, respondents perceived others to be less committed. They further agreed that there is a commitment to the provision of resources necessary to maintain quality operations by the management (M= 3.776, SD= 1.119). Similarly, there was a high standard variation in this attribute suggesting that there were discrepancies in the level of management commitment suggesting that while some TVET institutions had committed management staff, others had very little commitment. There was also agreement that institution processes and operations are standardized and documented (M= 3.877, SD= 0.913).

The findings indicate that staff members perceive a high level of management commitment and support for quality management practices within the institution. This is evidenced by their agreement that the institution has a strategic plan, clear communication of mission and vision, and support for quality policies by senior-level management. The findings agree with the literature that emphasize the importance of management commitment in driving institutional performance. Ngugi (2019) found a significant positive correlation between management's commitment to strategic planning and the performance of TVET institutions, highlighting the role of strategic plans in enhancing management commitment and

organizational success. Similarly, Muthuri et al. (2019) underscore the importance of top management commitment, particularly in practices such as lecturer performance appraisal, which contributes to improved overall performance. Additionally, Castro (2019) argues that management commitment positively correlates with the overall performance of institutions, emphasizing the role of senior-level support in transforming institutions under various dimensions. These findings collectively suggest that strong management commitment, as evidenced by clear strategic plans, effective communication, and support for quality policies, is crucial for the successful implementation of Quality management practices and overall institutional success.

Students also agreed on average that the institution's mission and vision are well communicated ($M= 3.884$, $SD= 0.58$); that the leadership ensures there are enough trainers in the institution ($M= 4.02$, $SD= 0.841$); and that the leadership ensure the curriculum delivery is in line with market needs ($M= 3.674$, $SD= 0.928$). However, the students were neutral on the statement that the leadership involves students in the decision making ($M= 3.094$, $SD= 0.864$). The findings suggest that students perceive effective communication of the institution's mission and vision, as well as leadership efforts to ensure an adequate number of trainers and alignment of curriculum delivery with market needs. These perceptions resonate with literature emphasizing the importance of leadership communication and strategic alignment with industry demands in enhancing institutional performance. Donna and Wanjira (2018) highlight the impact of strategic leadership and communication on the overall performance of academic institutions, emphasizing the need for clear communication of organizational goals and strategies. Additionally, Mbolonzi's (2021) study underscores the significance of effective communication channels in promoting the adoption of TVET programs, highlighting the role of leadership in ensuring alignment with market needs. However, the finding that students were neutral regarding leadership involvement in decision-making reflects a gap between student expectations and institutional practices, which could impact overall student satisfaction and engagement. However, Ngugi (2019) noted that TVET institutions in Kenya have critical problems facing the institutions venturing into providing vocational education which are often associated with low student intake in institutions.

Correlation Analysis Between Management Commitment and Students' Academic Performance

The direction of the association between management commitment and students' academic achievement was ascertained using Pearson's correlation coefficient. Correlation values of $r = \pm 0.1$ to ± 0.29 show that the relationship between the two variables is small, while correlation values of $r = \pm 0.3$ to ± 0.49 shows the relationship is medium. If the correlation value $r = \pm 0.5$ and above then there is a strong relationship between the two variables under consideration. The results were summarised in Table 2.

Table 2: Correlation Between Management Commitment and Students' Academic Performance

		Students' Academic Performance	Management commitment
	Pearson Correlation	1	
Students' Academic Performance	Sig. (2-tailed)		
	N	475	
	Pearson Correlation	.696**	1
Management commitment	Sig. (2-tailed)	.000	
	N	475	475

The analysis revealed a strong positive correlation between management commitment and the performance of TVET institutions, with a Pearson correlation coefficient of 0.696 ($p < 0.05$). Hypothesis 1 (H_{01}) which postulated that there is no significant correlation between management commitment and the students' performance at TVET institutions in Kiambu County is therefore rejected. This indicates that as management commitment increases, there is a corresponding improvement in student performance. This finding agrees with other studies that emphasize the critical role of management commitment in enhancing organizational performance. Studies such as Kesavan and Bernacchi (2015) and Castro (2019) have demonstrated the positive impact of management commitment on innovation performance and overall institutional success, respectively.

Conclusion

Management commitment emerged as a crucial factor affecting the academic performance of students in TVET institutions within Kiambu County. The study found that institutions where top management demonstrated a strong commitment to quality management practices tended to exhibit higher levels of performance. This suggests that the leadership's dedication to fostering a culture of excellence and continuous improvement positively influences overall institutional outcomes. Additionally, the study also emphasized on the importance of management buy-in and active participation in quality management processes to foster a conducive environment for quality improvement and innovation within TVET institutions. The study therefore concluded that there is a significant correlation between management commitment and the performance of TVET institutions in Kiambu County.

Recommendations

The study recommends that educational policymakers and institutional leaders prioritize initiatives aimed at fostering a culture of strong leadership commitment. This can be achieved through the development and implementation of robust strategic planning processes that align institutional goals with the vision and mission of TVET institutions. Additionally, efforts should be made to invest in leadership development programs and training opportunities for senior management staff to enhance their capacity to effectively lead and inspire their teams. Moreover, policymakers should consider incentivizing and

recognizing institutions that demonstrate exemplary leadership commitment, thereby encouraging a positive shift towards more accountable and proactive leadership practices within the TVET sector.

Suggestions for Further Research

Further research could delve deeper into exploring the specific mechanisms through which management commitment, employee involvement, and customer focus influence the performance of TVET institutions.

The study also suggests that, longitudinal studies tracking the impact of interventions aimed at enhancing these factors over time could provide valuable insights into their long-term effects on student performance.

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