

# INFLUENCE OF CONTINUOUS IMPROVEMENT ON THE PERFORMANCE OF PUBLIC SECONDARY SCHOOLS IN GARISSA COUNTY, KENYA

Ibrahim Dagane Sahal<sup>1</sup>, Mr. Shadrack Bett<sup>2</sup>

<sup>1,2</sup>Department of Business Administration, School of Business, Economics and Tourism, Kenyatta University, Kenya

DOI: <https://doi.org/10.5281/zenodo.7842046>

Published Date: 18-April-2023

---

**Abstract:** Many stakeholders expressed concerns about what they felt were missing or inappropriate planning practices in schools. In addition, most schools lack their goals and objectives, which is reflected in the poor academic performance of students. Garissa County has been backward in terms of education since independence. Like other organizations, schools are also subject to similar performance influences. The results of admission, retention and testing in the county have been consistently low compared to the national average. Therefore, this study sought to investigate the influence of continuous improvement on the performance of public secondary schools in Garissa County, Kenya. The study targeted 42 public secondary schools in Garissa County, Kenya. There were 84 respondents, including 42 principals and 42 deputy principals. The study was made with 84 respondents. Collection of data was done using questionnaires. Analysis of quantitative data using descriptive statistics such as mean and standard deviation was done. In addition, the inferential statistics included the use of multiple regression and correlation analysis. According to the findings, continual improvement has a good and significant impact on the performance of public secondary schools in Garissa County, Kenya. The study concluded that when a school is consistently improving, various little, slow improvements occur day by day and in ways that, over time, influence several parts of a school or educational system. The study recommended that the schools must have the staff knowledge, talents, and competence required for continuous improvement in order to improve educational results and sustain improvement over time.

**Keywords:** Continuous improvement, School performance.

---

## 1. INTRODUCTION

The performance of an organization largely depends on how it implements its strategy. Therefore, in order for schools to improve their performance, they must have targeted and practical programs (Kelchtermans, 2016). Wachira and Anyieni (2017) observed that every school strives to achieve success and good grades, but this proved difficult as only a small number of students were enrolled in the colleges each year, indicating that the strategic plan was not successfully implemented in most schools. Often internal school factors such as administrative regulations and teaching resources determine school performance. Therefore, putting strategies into practice can help schools set goals and achieve them.

Heyneman (2018) notes that improving the quality of education has become a global agenda at all levels of education. In addition to preparing people for higher education, the quality of primary education is essential to provide people with the basic life skills they need. Many international forums and manifestos are devoted to the improvement of education because it provides greater opportunities and equality, among other benefits. Somerset (2020) noted that improving the quality of

education has become a top priority in the education sector. Therefore, each country needs to implement the policy as intended and closely monitor its education system to improve standards and performance.

In the era of globalization, there is an urgent need for high-quality education, as it is believed that a quality education system can create a workforce with outstanding individual characteristics such as innovation, productivity, skills, competitiveness, resilience and creativity (Paul, 2019). In recent years, Prajogo and Mc Dermott (2021) have observed that educational institutions show interest and commitment to implementing TQM based on teaching quality, teacher quality and quality management, which is achieved through effective management strategies in the organization.

Rafiq, Fatima, Sohail, Saleem, and Khan (2018) note that Pakistan offers a wide range of public and private institutions. Private schools are becoming more popular and attractive to a wide range of students due to better education systems, testing requirements and standards for knowledge creation and evaluation, while relatively cheap but inefficient public schools are losing their appeal. Similarly, Farid and Akhtar (2020) observed that parents prefer to send their children to private schools and avoid public schools. Therefore, Pakistan's public education system must produce tolerant citizens who can compete in the labor market and support democratic norms at home and peace with the outside world. Public primary schools and private schools in Ghana operate differently. In order to successfully address the achievement gap, public elementary school principals must possess the leadership skills necessary to build effective schools (Zame, Hope & Respress, 2018). Dei (2019) states that principals should be prepared through leadership development to develop the necessary leadership skills; Ghana's education reform lacks this component. But Ghanaian school leaders who were willing to undergo rigorous leadership training rose to the challenge of leadership. Systemic education reforms that lead to a high-quality education system are likely to remain elusive without strong public school leadership.

Since independence in 1963, Kenya has implemented a number of reforms that demonstrate its commitment to strengthening its education system. Various efforts have been made to improve the quantity and quality of formal education at all levels in Kenya. This is manifested by increasing the number of educational institutions, making primary school more accessible to all school-age children, creating more secondary schools and revising the curriculum.

Since Kenya's independence, the performance of the education sector has deteriorated, largely due to a governance system that emphasizes adherence to processes rather than outcomes. Kenya has recognized this integral role and has aligned its national and development goals with education (Ojiambo, 2019). The catalytic role in the development of human capacities that promote function and well-being is well described. In Kenya, the government introduced subsidized secondary education in 2008 to meet educational resource needs. The government also trains and hires university graduates who specialize in teaching dual subjects for quality purposes only (Ministry of Education, 2014).

Schools should strive to improve performance by introducing new rules, setting high standards, holding staff accountable, analyzing the latest data and introducing new levels of rigor in the classroom (Ngutu and Kavindah, 2019). According to Ayeni (2018), school performance indicators should be linked to school development goals and should focus on student performance and the internal context of the institution. In order to ensure the improvement of school performance, the Ministry of Education recommends hiring qualified teachers to assist in the implementation of the program. Therefore, changes in the organizational design of schools are needed to promote collaboration between stakeholders and strengthen relationships between students.

Anderson and Kumari (2018) note that continuous improvement is a process that can help education stakeholders implement and explore small changes to achieve lasting improvements. Continuous improvement helps educators solve specific problems by using iterative loops to test possible solutions to identified problems. According to Pineno (2021), continuous improvement begins with mission statement. Schools develop and issue a mission statement or similar statement to guide decision making. Therefore, continuous improvement should be systematically incorporated into daily work.

Under the Kenya Education Sector Support Plan (KESSP 2005-2010) to ensure quality education and training for all Kenyans, students are admitted to Kenyan secondary schools (secondary schools) based on the results of the Kenya Certificate of Secondary Education (KCPE). They need four years to prepare for higher education. Most students want to shape their future by studying subjects that will attract them to their careers. The Kenya Certificate of Secondary Education (KCSE) is awarded at the end of secondary education. There are two types of colleges – public colleges and private colleges. Public secondary schools are financed (financed) by the government in the form of tuition fees and teachers. Public schools are divided into public schools, out-of-county schools, county schools and county schools.

According to the Kenya Education and Training Master Plan 1997-2010, true quality is not only ensured by passing an exam or obtaining a diploma, but also the development of a person's independent, analytical and creative potential, as well as his spiritual, moral and ethical potential. values. This means generally accepted evaluation criteria (Republic of Kenya, 2015). According to Bunyi (2018), the most important factors affecting the delivery of quality education are course content, appropriate learning materials and equipment, physical facilities, supportive learning environment, quality of teaching staff, as well as assessment and monitoring of students' academic progress.

Garissa County has 239 teachers and 12,497 students studying in 42 secondary schools in Garissa County, 7,935 boys and 4,562 girls. This corresponds to 6% of high school students. Each teacher corresponds to 52 students. The high school net enrollment rate is 5.5%, with graduation and retention rates of 84% and 66%, respectively. 239 teachers and 12,497 students work in 42 secondary schools of the county, including 7,935 boys and 4,562 girls

### STATEMENT OF THE PROBLEM

In its strategic plan (2015-2019), TSC established a pillar of faculty competence, behavior and performance management to ensure the quality of teaching staff at induction, effectively onboard new teaching staff and support role adaptation, work planning, supervision and the reliability assessment system at all levels. . This pillar also aims to strengthen quality assurance and standards of education services at district and district level (TSC Strategic Plan 2015-2019). However, Garissa County lags behind in terms of education. Like other organizations, schools are also subject to similar performance influences. Garissa County has been backward in terms of education since independence. Compared to the national average, public high schools consistently underperform in admissions, retention and test scores. For example, only 27% of the 357,488 candidates who sat the 2022 Kenya Certificate of Secondary Education examination achieved an average grade of C+ and above, considered the minimum criteria for university admission. According to the 2022 report by the county TSC office, Garissa County has had a low teacher retention rate over the past five years, resulting in high teacher turnover due to low retention rates. In addition, enrollment and test results in the county have been consistently low compared to the national average. Ensure that every child's constitutional right to education is respected in accordance with the government's agenda.

## 2. LITERATURE REVIEW

### Theoretical Literature Review

Deming theory was created by Deming in 1966. Deming's management system was philosophical, based on the ideal of continuous improvement to perfection, and believed that a commitment to quality necessitated an organizational transformation. Deming emphasized customer research, consulting line workers to help with quality issues, and teamwork. Deming saw business as a cornerstone of society - just like churches and schools. Only when business leaders value the contributions of their employees can businesses achieve long-term success. If organizations use the minds of their employees, they will increase their efficiency and productivity (Deming, 1966). According to Noguchi (2015), Deming's theory is a systems-based management philosophy framework that "represents a holistic approach to leadership and management." Deming outlined the management changes he believed were necessary to improve quality. Simply put, when a system is executed, it continuously improves people and organizations.

This study relies heavily on Deming's theory because it demonstrates that a system's operation always has a solution. For instance, school performance ought to concentrate on enhancing the organization as a whole, its processes, and its systems. Additionally, a management philosophy based on systems theory is Deming's theory of deep knowledge. It is based on the idea that every organization is made up of parts, which are people and processes that are connected to each other. Deming's insights into leadership, quality, and productivity provide a path to transform educational systems that foster students' innate curiosity and drive.

### Empirical Literature Review

Al-Mekhlafi and Osman's 2019 study looked at how a continuous improvement model improved Oman's school effectiveness. A quasi-experimental research design was used to investigate the effect of a holistic school improvement model on school effectiveness improvement as part of a four-year longitudinal research project. general education in Oman. There were a total of 2378 students in the sample, including 157 students from ninth grade classes and 1221 students from

seventh grade classes, spread across four experimental and four control groups. Over the course of four years, the experimental school's overall academic performance was found to be significantly better than the control school's.

In their 2018 study, Mahmood and Ismail looked at how continuous improvement affected public school performance in Pakistan. The study's research design was a descriptive survey. Data was gathered from principals, teachers, and students through the use of questionnaires. The review shrouded all government funded schools in Pakistan. A delineated irregular examining strategy was utilized to choose every respondent. The study sample consisted of 384 principals, teachers, and students from 167 public secondary schools. The study's findings indicate that the most important aspect of the educational system is continuous improvement as part of quality management.

In a 2016 study, Kandie, Kemboi, and Oloko looked at how continuous improvement affected the performance of Kenya's public universities. The review utilized an unmistakable cross-sectional exploration plan to decide the directing impact of consistent enhancement for the exhibition of state funded colleges in Kenya. A census was taken as the 22 public universities in Kenya were surveyed. The overall findings demonstrated a significant linear relationship between CI and OP at Kenya's public universities.

In their 2018 study, Mahmood and Ismail examined the impact of continuous improvement on the performance of public schools in Pakistan. The research design of the study was descriptive. Data was collected from school principals, teachers and students by means of questionnaires. The review involved all government funded schools in Pakistan. An irregularly outlined survey strategy was used to choose each respondent. A total of 384 principals, teachers and students from 167 public high schools were included in the research sample. According to the survey results, continuous improvement as part of quality management is considered to be the most important aspect of the education system. However, the focus of the study was on the performance of Pakistani schools.

Fareo's (2020) study looked at how continuous assessment affected high school biology students' academic performance in the Hong Governorate of Adamawa State, Nigeria. A stratified sampling method was used to select a sample of 200 public high school teachers from Hong Local Government Area in Adamawa state, making up the sole student population. The biology students' academic performance was significantly correlated with the outcomes of the continuous assessment. Male and female teachers' perceptions of students' attitudes toward continuous assessment were not significantly different.

### 3. RESEARCH METHODOLOGY

The study used a descriptive research design. The study targeted 42 public secondary schools in Garissa County, Kenya. There were 84 respondents, including 42 principals and 42 deputy principals. The count was made with 84 respondents. Collect data using questionnaires. The questionnaire was piloted in two secondary schools in Garissa County with 8 respondents. The validity of the questionnaire was assessed using content validity, construct validity and criterion validity. Chrobach's alpha test is used to determine the reliability of the instruments. Analysis of quantitative data using descriptive statistics such as mean and standard deviation was done. Multiple regression analysis was carried out in determining the influence of one variable to the other.

### 4. FINDINGS

The descriptive statistics results of continuous improvement are presented in Table 1.

**Table 1: Continuous Improvement**

	M	SD
Effective systems and processes allow schools to cut costs,	4.58	0.42
Properly established systems and processes strengthen the school's image for long-term benefits.	4.05	0.95
Curriculum development has aided training in determining what students need to know.	4.30	0.70
Curriculum development has enabled schools to embrace change, which is deemed vital for the school.	4.12	0.88
In public secondary schools, appropriate measures are used to improve the quality of teaching and learning.	4.55	0.45
Different sets of requirements for teacher empowerment have a well-established quality.	4.52	0.48

The statements that the respondents strongly concurred with were: There is a well-established quality of various sets of standards for teacher empowerment (M=4.52, SD=0.48), appropriate measures are used to improve the quality of teaching and learning in public secondary schools (M=4.55, SD=0.45), and effective systems and processes enable schools to reduce costs (M=4.58, SD=0.42). The finding is consistent with Anderson and Kumari's (2018) observation that continuous improvement is a process that can assist educational stakeholders in implementing and studying small changes with the goal of making long-term improvements.

The respondents strongly agreed on the following statements: Effective systems and processes enable schools to reduce costs (M=4.58, SD=0.42), appropriate measures are used to improve the quality of teaching and learning in public secondary schools (M=4.55, SD=0.45), and there is a well-established quality of different sets of standards for teacher empowerment (M=4.52, SD=0.48). According to Anderson and Kumari (2018), continuous improvement is a strategy that can assist educational stakeholders in adopting and studying modest adjustments with the purpose of making long-term improvements.

### Results of Inferential Statistics

#### Correlation analysis

**Table 2: Correlation Analysis**

		Continuous improvement	School performance
School performance	Pearson Correlation	.863*	1
	Sig. (2-tailed)	.000	
	N	78	78

The findings in Table 2 reveal that continuous improvement has a very high link with school achievement, as evidenced by a Pearson r value of 0.863 and a significance value of 0.000, which is less than 0.05. The findings are consistent with the findings of Mwhandi (2016), who investigated the impact of continuous improvement on the performance of public secondary schools in Kenya's Kajiado North subcounty. According to the study, the strongest association between school achievement and continual development was identified. The findings are also consistent with the findings of Mahmood and Ismail (2018), who investigated the effects of continual improvement on the performance of public schools in Pakistan. According to the survey, the most significant aspect in the education system is constant improvement as part of quality management.

#### Results of Regression Analysis

**Table 3: Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.714 <sup>a</sup>	0.861	0.854	1.003

The modified R square value in Table 3 was 0.854, indicating the extent to which continuous improvement influenced the performance of public secondary schools in Garissa County, Kenya. This suggests that additional variables not explored contribute 0.146 to school success

**Table 4: Analysis of Variance**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	204.521	1	204.521	784.894	.001 <sup>a</sup>
	Residual	20.064	76	.261		
	Total	224.585	77			

The results in Table 4 show that the statistical value of F was 784.894, which is higher than the statistical value of mean value, which was 204.521. The level of significance was at 0.01 below 0.05. As a result, it was concluded that the model was significant.

**Table 5: Coefficients**

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1 (Constant)	0.672	.236		2.847	.000
Continuous improvement	0.734	.314	2.364	2.338	.001

The study observed that continuous improvement would lead to the increase in school performance when improved by a single unit. Also, without the influence of continuous improvement, school performance was at 0.67 factor of 67.2%. In addition, Table 5 shows that continuous improvement had a positive significant influence on the performance of public secondary schools in Garissa County, Kenya, as evidenced by a beta value of 2.364 and a level of significance of 0.001. The findings are consistent with the findings of Al-Mekhlafi and Osman's (2019) study, which investigated the effect of a continuous improvement strategy on improving school effectiveness in Oman. The study found substantial changes in overall school performance between the control and experimental schools over the course of four years, favoring the experimental group.

## 5. CONCLUSIONS

The study stated that when a school is consistently improving, various little, slow improvements occur day by day and in ways that, over time, influence several parts of a school or educational system. Continuous development in the classroom may imply using current, reliable data on a regular basis to inform and improve teaching practice. Continuous improvement at the school level may refer to continual attempts to improve operational methods and procedures that increase student outcomes, effectiveness, and efficiency.

## 6. RECOMMENDATIONS

The schools must have the staff knowledge, talents, and competence required for continuous improvement in order to improve educational results and sustain improvement over time. The study also recommended that a persistent commitment to gradual, continuing improvements be maintained rather than the installation of quickly deployed, game-changing innovations that produce the intended results in a predictable manner.

## REFERENCES

- [1] Al-Mekhlafi, A. M., & Osman, M. E. T. (2019). The effect of a holistic school improvement model in enhancing school effectiveness in Oman. *Malaysian Journal of Learning and Instruction*, 16(2), 187-200
- [2] Anderson, S., & Kumari, R. (2018). Continuous improvement in schools: Understanding the practice. *International journal of educational development*, 29(3), 281-292
- [3] Bunyi, G. W. (2018). The quest for quality education: the case of curriculum innovations in Kenya. *European Journal of Training and Development*, 5(1), 9 – 17
- [4] Deming, W. E. (1966). *Some theory of sampling*. Courier Corporation
- [5] Fareo, D. O. (2020). Influence of continuous assessment on academic performance of secondary school students in Biology in Hong local government area of Adamawa State, Nigeria. *International Journal of Research and Scientific Innovation*, 7(1), 190 - 196
- [6] Farid, M. F., & Akhtar, M. (2020). Self-esteem of secondary school students in Pakistan. *Middle-East Journal of Scientific Research*, 14(10), 1325-1330
- [7] Heyneman, S. (2018). Improving the quality of education in developing countries. *Finance and development*, 20(1), 18 – 26

- [8] Kandie, K., Kemboi, A., & Oloko, M. A. (2016). Effect of continuous improvement on performance of public universities in Kenya. *IOSR journal of humanities and social science*, 2(5), 6 – 13
- [9] Kelchtermans, G. (2016). Teachers' emotions in educational reforms: Self-understanding, vulnerable commitment and micropolitical literacy. *Teaching and teacher education*, 21(8), 995-1006
- [10] Mahmood, W., & Ismail, S. N. (2018). The effects of total quality management as teaching innovation and job satisfaction on performance of public schools in Pakistan. *Journal of Business and Social Review in Emerging Economies*, 4(1), 107 – 116
- [11] Ngutu, F. & Kavindah, L. (2019). Strategic Management Practices and Performance of Public Secondary Schools in Awendo Sub-County, Migori County, Kenya. *International Academic Journal of Human Resource and Business Administration*, 3(7), 383 – 397
- [12] Noguchi, J. (2015). The legacy of w. edwards deming. *Quality Progress*, 28(12), 35 - 41
- [13] Paul, C. L. (2019). *The relationship between the principles of TQM and school climate, school culture and teacher empowerment* (Doctoral dissertation, University of Missouri, Columbia)
- [14] Pineno, C. J. (2021). The business school strategy: continuous improvement by implementing the balanced scorecard. *Research in Higher Education Journal*, 1(68), 77 – 85
- [15] Prajogo, D. I., & Mc Dermott, C. M. (2021). The relationship between TQM practices and organizational culture. *International Journal of Operations & Production Management*, 25(11), 1101–1122.
- [16] Rafiq, H. M. W., Fatima, T., Sohail, M. M., Saleem, M., & Khan, M. A. (2018). Parental involvement and academic achievement: A study on secondary school students of Lahore, Pakistan. *International Journal of Humanities and Social Science*, 3(8), 209-223
- [17] Somerset, A. (2020). Strengthening educational quality in developing countries: the role of national examinations and international assessment systems. *Compare*, 41(1), 141-144
- [18] Tirozzi, G. N., & Uro, G. (2017). Education reform in the United States: National policy in support of local efforts for school improvement. *American Psychologist*, 52(3), 241 – 256
- [19] Tirozzi, G. N., & Uro, G. (2017). Education reform in the United States: National policy in support of local efforts for school improvement. *American Psychologist*, 52(3), 241 – 256
- [20] Wachira L. N., & Anyieni, A. G. (2017). Effect of Change Management Practices on Performance of Teachers Service Commission. *International Journal of Science and Research*, 6(5), 4 – 12
- [21] Zame, M. Y., Hope, W. C., & Respress, T. (2018). Educational reform in Ghana: the leadership challenge. *International journal of educational management*, 4(1), 5 – 14