



(RESEARCH ARTICLE)



Implementation of the hundred percent transition policy and infrastructural facilities in public secondary school in Bungoma North Sub County, Kenya

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International Journal of Science and Research Archive, 2023, 09(01), 106–114

Publication history: Received on 20 March 2023; revised on 30 April 2023; accepted on 03 May 2023

Article DOI: <https://doi.org/10.30574/ijrsra.2023.9.1.0337>

Abstract

The study's goal was to determine how well-prepared the public secondary schools in Bungoma North Sub County were to implement the 100% transition policy. Being completely equipped to implement transition policies so that access and quality are simultaneously improved is a quality of school readiness. In Kenya, a law known as the "100% policy" makes sure that every child enrolls in primary school and successfully completes secondary school. The purpose of the study was to determine the effect of implementation of the 100% transition policy on infrastructure in public secondary school in Bungoma North Sub County. The study adopted a descriptive survey design. The target population consisted of 126 teachers and 27 Directors of Studies from 27 schools. 38 teachers and 9 Directors of Studies were chosen from 9 schools using a purposeful sample method. After applying the Mugenda & Mugenda 30% algorithm to the population of teachers and principals, 126 teachers and 27 Directors of Studies were obtained, establishing the unit of analysis. Structured questionnaires for instructors and an interview schedule for school principals were used as data gathering tools. A pilot study using Cronbach's alpha was conducted in the neighboring county of Trans-Nzoia to evaluate the validity and reliability of the research tools. The Statistical Package for the Social Sciences (SPSS) version 27.0 was used to analyse the data. According to the report, schools that saw a significant rise in enrolment as a result of the program typically had inadequate infrastructural facilities. As a result, the study came to the conclusion that schools are not as ready to implement the 100% transition strategy. According to the report, in order to effectively implement the 100% policy, the government should ensure that the infrastructure, teaching and learning resources, and teachers are enough.

Keywords: Implementation; Infrastructural Facilities; Transition Policy

1. Introduction

A cornerstone of societal and economic advancement is acknowledged to be education. More recently, the World Bank has grown significantly in significance to the development process as a result of growing technological advancement and new manufacturing organizations that are altering the global economy (2001). Education is a torch that can help direct and illuminate children's lives, according to UNESCO (2015a). Governments prepare and increase their budgets to fund various educational projects each fiscal year because of this. On the other side, according to World Bank (2018), education is the cornerstone of every country's economic, social, and political development. Investments in education can support social equality, increase competitiveness, and contribute to national and social success. The government of Kenya has started policies that emphasize education as the essential driver of social development, political cohesion, and sustained economic progress, leading to a considerable expansion of the education sector (MOIST 2015). New ideas are implemented by being put into action (Fullan, 2001). Implementation in this study relates to how secondary schools are expected to accept students who have completed class eight in the previous year to form one in the following year. Due to reports that many students in the first year of secondary school declined in important areas of their education, educationists have been particularly interested in the effects of the transition from primary to secondary school (Galton, 2000).

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Nearly all industrialized nations in Western Europe and North America with Gross Enrollment Rates (GER) above 100% have achieved universal secondary school enrollment. Free education programs increase enrollment, however there are a number of implementation-related difficulties. Test scores that remained flat and achievement inequalities between the rich and the poor in the United States of America were indicators of problems with the quality of education there. The "No Child Left behind Act," which intended to bind the nation to commit to providing great education to every child regardless of background, was passed as a result of this. This open entry affirmation approach led to large enrollment and concomitant discipline issues. (2015 spelling). According to research on the factors influencing students' transition from primary to secondary school in Kitui Sub County, up to 40% of students encounter delays in their academic development in the first few months following the change of schools (Katiwa, 2016). These pauses could be the result of difficulties brought on by a lack of fundamental infrastructure as well as teaching and learning tools. The execution of the school's programs can be hampered by these disruptions.

In Kenya, a national assessment of schools' responses to the government's introduction of the 100 percent policy revealed that many were having trouble with crowding in dorms, lectures, labs, and dining halls. At the same time, other schools had shockingly low enrollment rates since some parents had a clear preference for more popular, crowded secondary schools, especially those that were closer to their homes (Nation Raporteur, Feb 2019). Achieving a 100% transition indicates that the majority of the kids who had been leaving the educational system are now participating. The government must commit funding for the creation of more teaching and learning infrastructure, the provision of suitable teaching and learning resources, and the hiring of additional teachers for public schools in order for the transition program to be implemented smoothly.

1.1. Trends of Transition to Secondary Education in Kenya

In order to increase access, transition, and retention in secondary education, the Kenyan government introduced the Subsidized Free Secondary Education (SFSE) policy in 2008. NESP (2015) reported that during the same time from 2013 to 2018, the percentage of kids transferring from elementary to secondary education increased from 57.3 percent to 73.3 percent, in part because of the Free Day Secondary School initiative. The government of Kenya implemented Free Day Secondary Education (FDSE) with the goal of raising the transition rates at the national level in order to address the poor transition rates from Primary School. From the present predicted transition level of 75%, the Ministry of Education stated that FDSE's goal was to attain a 100% transition from primary school to secondary school. However, by 2018, the government had not yet completely transitioned all students to secondary education. As a result, a strategic plan for the years 2018–2022 was created. The goal of the plan is a complete transfer to secondary schooling. The need for a Free Secondary Education (FSE) policy was revealed by research results from the African Population and Health Research Centre (APHRC), which highlighted four important issues as key barriers to secondary school enrollment rates in Sub-Saharan nations, including Kenya.

These included the cost of secondary education, the structure of families and households, the standard and applicability of secondary education, and the unequal distribution of secondary school possibilities among various Communities. According to a NESP (2018) report, there are several governance, management, and accountability challenges in the secondary sub-sector. APHRC also points out other factors that hinder students' transition to secondary education, such as inadequate interventions and poor safety nets. The gender-specific factors that primarily affect girls are parental low educational attainment, early marriages and pregnancies, the effects of HIV/AIDS and other population dynamics, long travel distances to schools, especially in underdeveloped remote areas, political factors such as political instability and lack of political comity, and other factors. This study intends to identify the educational aspects that affect how the 100% transition policy is implemented in Kenya's public secondary schools.

1.2. Effect of School Infrastructure on Implementation of the Hundred Percent Transition Policy

The number of kids who go on from one educational level to another is a vital indicator of how much access to education there is, and infrastructures are made to make teaching easier. Consequently, transition reflects the effectiveness of the educational system (Kimitei, 2010). Between 1970 and 2009, the secondary Gross Enrolment Rate increased globally, going from 43% to 68%. This indicates that 68% of the targeted school-age population was enrolled in secondary schools. However, there were significant regional and geographic variations in the situation (UNESCO, 2011).

In Western Europe and North America, secondary enrollment growth from 1970 to 2009 was rather moderate. Given the high secondary enrollment rates and the shrinking school-age population in this area, this is not at all surprising. While the number of people of school age decreased from 66 million, total secondary enrollment rose from 53 million to 62 million. The Gross enrolment rate increased as a result, rising from 80% in 1970 to 100% in 2009, the highest participation rate among all areas. There is evidence that the area has kept gender balance in secondary school (UNESCO, 2011). According to Karugu, Oanda, and Sifuna (2006), the educational systems of the majority of African

nations are substantially based on those of England and France. According to a comparison of the educational systems in the two nations, most English students transfer to secondary school between the ages of 11 and 16 or 18. There are no fees associated with enrolling students in publicly sponsored secondary schools. The majority of secondary schools are comprehensive, allowing students regardless of academic aptitude. In France, secondary school is required till the age of 16 just as primary education (Karugu et al, 2006). Primary education is free and required in both nations, which helps with the transfer rate.

In Sub-Saharan Africa, the gross enrollment ratio for secondary school in 2002 was 26% for both boys and girls. The majority of the relevant age groups in Africa cannot access secondary school due to the poor rates of transfer from elementary to secondary education for both boys and girls (Karugu, Oanda and Sifuna, 2006). Why has achieving Universal Primary Education been difficult in many African nations is a cause for concern. The Ministry of Education reported this when reviewing the development of access, retention, equity, transition, and quality since 2000. Enrollment has been gradually increasing over the years, in part because of measures involving Free Primary Education and Free Secondary Education legislation. The transition rate has also shown a favorable trend, rising from 43.3% (boys 43.8%, girls 42.6%) in 2000 to 56% (boys 57.2%, females 54.7%) in 2005, exceeding the goal of 70% by 2010 and currently standing at 72%. (Ministry of Education, 2012). The transition rate from primary to secondary increased, according to the Ministry of Education, from 45.8% in 2003 to 59.9% in 2008 and was predicted to reach 64.1% in 2009. This increase was ascribed to Free Secondary Tuition. 70% of students were still expected to transfer to secondary school (Ministry of Education, 2009).

The Murang'a East District's transition rates from public elementary schools to secondary school level were studied by the School of Education, University of Nairobi. According to the survey, all respondents—principals, parents, and students in standard seven—perceived secondary school as being expensive and out of reach for many. They were motivated by the fact that many parents couldn't afford the secondary school tuition. The report advised that more funding be allocated to the education sector and that more emphasis be put on supporting secondary school education to cover not only the cost of tuition but also other related expenses (University of Nairobi, 2012).

Only little more than half of primary school graduates went on to attend high school, according to Saitoti (2004), who was presenting a presentation at the Council on Foreign Relations. He put the high expense of secondary education, the poor quality of some of the current secondary institutions, and the apparent lack of incentives for continuing education as the causes of this. Many secondary schools during this time period lacked textbooks and other supplies because the Free Secondary Education policy had not yet been implemented. The high student to teacher ratio and strict academic programs resulted in low quality instruction and poor performance. Transition was negatively impacted by this. What is the current situation, nevertheless, following the implementation of Free Secondary Education?

In an urban Kenyan setting, Ngware, Abuya, Admassu, and Oketch (2009) investigated the impact of household variables on educational choices. According to their research, the overall transition rate for all study sites was over 75%. Except in Nakuru, where rates were noticeably somewhat higher than the national level transition rate, which was estimated to be 73% in 2010, there was no discernible gender difference (Ministry of Education, 2012). The rate of transition is lowest for both sexes combined in Mombasa (66%) and greatest in Kisumu (83%). Both the household wealth index and the probability of the transfer, as well as the household head's educational degree, showed a substantial correlation. This is in line with findings from earlier research conducted by Ngware et al. in 2009 on the relationship between home socioeconomic status and educational outcomes. The following points are made by Ngware et al. One is that primary school leavers who come from high socioeconomic families are more likely to receive academic support from educated parents and to perform well on tests. Additionally, better-off homes have more financial resources to support children continuing their secondary school than do households with less financial means. However, significant variations in responses to the Free Secondary Education policy are evident when national data are broken down to the sub-county and school levels. For instance, the transfer rate in Suba sub-County in 2010 was 69% (72% boys and 62% girls). Since the transition rate for girls is so much lower, gender parity and regional discrepancies continue to be important issues that need to be addressed. In 2013, Suba and Mbita's transition rates were 69% and 46%, respectively, compared to the 72% transition rate for the country as a whole. The transition in Mbita and Suba sub-counties was not covered by the papers that were analyzed. This served as the foundation for the study that looked at how the free secondary education policy affected form to form transition in secondary schools in the Kenyan sub-counties of Mbita and Suba. learning. Classrooms, labs, libraries, desks in the restrooms, and dorms are all examples of infrastructure. The caliber and quantity of these resources will affect student motivation and performance by impacting admittance to the school, attendance, and staff development. Cheruiyot (2019). (2019). According to the UNESCO (2015) report, enrollment in rural schools in France increased as a result of the construction of attractive schools that had sufficient water and sanitary facilities.

According to Osahon (2010), a school's physical facilities include classrooms, laboratories, workshops, offices for the teaching staff and the school administration, restrooms, reading rooms, dispensaries, libraries, dining halls, and assembly halls. These buildings also serve as a shelter for educational activities. According to Ogunsaju and Oyedeki (2012), school infrastructures are the permanent structures inside of schools, such as labs, classrooms, and libraries. According to Abraham (2003), the school community may use any physical facilities on the campus. All of the school's physical facilities fall under the heading of school physical plants (Ehiemetalor, 2011). This suggests that the physical infrastructure of the school should be reviewed appropriately in order to ensure that pupils have the standard competencies required to complete academic tasks.

The physical school facilities, such as the classrooms, libraries, labs, and staff housing, improve the physical learning environment, resulting in the development of technical skills and the provision of qualities and adequate elements that are required in the school setting (Maron & Brooth, 2007). housing instructors and students in accordance with the educational environment, which enhances student performance and gives teachers the chance to offer specific courses to those who teach practical subjects in school laboratories (Watson, 2013). Improved academic performance is a result of sanitation facilities that include garbage disposal, drainage, enough water for personal hygiene, clean restrooms, and other materials utilized in the construction of school infrastructures (Kinder, 2013). Sidhu (2012) asserts that school infrastructures support students' participation in the educational and extracurricular activities offered by the institution. Classroom size and shape are determined by the type and size of school infrastructure. The layout and size of the classrooms, as well as the accessibility of educational resources, affect how actively students engage in classroom instruction. Without science laboratories, practical courses for science students in the classroom could not be sustained (Sidhu, 2012). Therefore, parents and other educational stakeholders who can afford to do so should promote the provision of school facilities (Mgbodile, 2010). The interplay of many factors that result in the efficient management of school infrastructures determines how well school administrators carry out organizational goals (Obi, 2011).

According to the Ministry of Education (2008), these facilities include, among other things, buildings including classrooms, offices, restrooms, dorms, libraries, labs, kitchens, water tanks, and playground equipment. These facilities may be permanent or transient buildings. Such physical structures ought to be suitable, sufficient, and well-placed, with no dangers to users or others nearby. According to Adeogun (2001), learning experiences are successful when there are enough quantity and quality of physical resources available. Adeogun also claims that unattractive school buildings, crammed classrooms, a lack of play areas, and environments with no aesthetic beauty can all lead to poor academic performance. According to Taylor and Vlastor (2009), proper physical infrastructure supports and fosters schools' academic success. This is in line with Chiriswa's findings from 2002, who discovered that the availability of appropriate resources—such as books, labs, library materials, and other visual and auditory teaching aids—is essential for effective teaching and learning. The quality and applicability of the skills that are taught to students are improved by the provision of suitable learning facilities at all levels, including tools and personnel, according to Lumuli (2009). Hallak, 2000 highlights facilities as the primary element influencing academic achievement in the school system in support of this. The physical resources that are available at a school have a significant impact on the school's capacity to retain students.

According to a study by Muendo (2016) on the effect of the school environment on performance for the Kenya Certificate of Secondary Education in the Kibauni Division of Machakos County, Kenya, a protected school must have sanitation facilities that are developed in accordance with the necessary standards and kept clean using strict standards of cleanliness. He adds that learning activities are effective where the quality and quantity of physical resources are sufficient, and that unattractive school buildings, overcrowded study areas, a lack of access to play areas, as well as environmental factors that lack aesthetic elegance, may have a negative impact on academic performance. According to Stoner, Freeman, and Gilbert (2018), the way schools are set up and their physical surroundings can either encourage or impede the growth of a culture of achievement.

Findings from research conducted in Tanzania have demonstrated that increasing access to education without providing planned infrastructure has had a negative impact on enrollment in public schools. The introduction of the free primary education program brought a surge of students to the schools, but due to inadequate infrastructure, classes intended to hold 45 students ended up housing 80 students (Kitomary, 2016). This spread to other facilities, like restrooms, where 100 students shared one, contrary to WHO norms of one toilet for every 25–35 students. WHO document (2015). Aden (2011) noted that difficulties with FSDE implementation have prevented learning from proceeding smoothly.

Due to infrastructure difficulties, Kenyan secondary schools could only accommodate 80% of KCPE graduates to form one in 2016 (Sector Report on Education, 2016). A significant portion of the World Bank's education investment initiatives involves school infrastructure. Making schools work for all students is crucial, and the Bank's 2018 World

Development Report. Learning to Realize Education's Promise, emphasizes the need to guarantee the high quality of education. The paper focuses on the necessity of ensuring the effective use of public resources in order to provide all children with the greatest possible benefits from education. This report suggests that a broad range of questions need to be addressed in order to ensure that investments in school infrastructure have the greatest possible positive impact on learning. These questions include: Do all children actually have access to a place at school? Do the school buildings provide a safe and healthy environment? Are the current learning environments well-designed for learning? Does the school's layout encourage modern pedagogy and community involvement? How can the infrastructure of schools be planned to change sustainably over time?

The number of places available in secondary schools in Kenya is typically used to determine when students shift from primary to secondary education. Due to the shortage of schools, around 50% of primary school graduates are unable to enroll in secondary education. Marwa (2015) also argued that more classrooms will be needed as a result of the anticipated surge in secondary school enrollment. Based on the results of the simulation and the anticipated gross enrollment rates. According to KESSP's simulated replica from 2005, completion rates would rise to 80% in elementary schools if dropout and repeat rates were reduced to less than 1% and 5%, respectively. In addition, assuming secondary schools have adequate physical infrastructure, the transition rate would rise to 65 to 70 percent during the following five to ten years. New classrooms are needed to achieve the government's goal of a 100% transition rate to secondary schools. An infrastructure that supports high-quality education is necessary for universal education. The requirements for accessible, gender-sensitive education go beyond the actual design of a building or the subject matter covered in the classroom. If kids must travel on dangerous or non-existent roads or schools are located distant from communities, innovative solutions must be discovered (Eileen, 2004).

A nationwide survey on the infrastructure needs of secondary schools is being conducted in order to address infrastructure difficulties and enable planning and budgeting. A minimum of three streams are being added to single-stream secondary schools in high-potential areas, additional secondary schools are being established in already-existing urban primary schools, and tuition blocks as well as more classrooms, libraries, labs, and Water and Sanitation Hygiene (WASH) facilities are being built in boarding schools to accommodate day scholars. Counties take part in infrastructure development as well by allocating Constituency Development Funds to improving educational facilities.

2. Material and Methods

This chapter dealt with the research methodology and procedures that were used to assess school preparedness in implementing the 100% transition policy in public secondary schools in Bungoma North Sub County. The main methods for gathering data for this study were questionnaires and interview schedules.

2.1. Research Design

In this study, a descriptive survey design was used. This design is suitable because it enables the researcher to gather data and information through questionnaire and administration of interviews (Mugenda & Mugenda, 2003). As a result, it makes it possible for the researcher to gather, examine, and present data exactly as it is found in the field.

2.2. Study Area

The study was conducted in public secondary schools located in Bungoma North subcounty, within Bungoma county, Kenya. It is located in Bungoma's northern region. The sub county has a population of 100,343 people, occupying a territory of 186.2 square Kilometres (Kenya National Bureau, 2020). Given that it placed 11th out of 12 in the KCSE 2020 rankings, it has not been performing sufficiently academically when compared to other sub counties in the county (Bungoma CDE,2020). Mixed farming and small businesses are the main economic activity in the region. 27 public secondary schools serving a total of 11779 students are located in the study area (Mukuyuni SCDE office, 2021). Only seven of the schools are exclusively for one sex gender, making mixed-day schools the majority. Given that the Ministry of Education's policy of establishing 100% transition is required of all secondary schools in the area, this location is suitable.

2.3. Target Population

A target population, according to Creswell (2012), is a collection of people or things that share some traits and that the researcher intends to study in order to generalize the results about the target population. All individuals who are a part of actual or fictitious groups of subjects, events, or persons to whom a researcher seeks to apply the findings of the study are referred to as the target population by Borg &Gall (1996). The population will comprise of 126 class teachers and 27 Director of Studies from the 27 public secondary schools in the sub-county.

2.4. Sample Size and Sampling Procedure

The distribution of respondents is displayed in Table 1 as follows;

Table 1 Sample Size of the Study

Participants	Target Population (N)	Sample Size (n)	Sample Proportion	Sampling Technique
Class Teachers	126	38	30	Purposive
Directors of Studies	27	9	30	Purposive

Source: Bungoma County Directors' Office (2022)

3. Results and Discussion

3.1. Effect of Implementation of the 100% Transition Policy on Infrastructure in Public Secondary School

The objective of the current study was to determine the effect of implementation of the 100% transition policy on infrastructure in public secondary school. In order to achieve the objective, the class teachers in the sampled schools were required to rate their opinions against six (6) statements on a likert scale with the following values:

- Strongly Disagree
- Disagree
- Not Sure
- Agree
- Strongly Agree

The findings were presented in table 2

Table 2 Class Teachers' Responses on Effect of Implementation of 100% Transition Policy in Bungoma North Sub County

Statement	SA	A	NS	D	SD	Σfi	$\Sigma fiwi$	$\frac{\Sigma fiwi}{\Sigma fi}$
Classroom space is enough for all students	4	19	2	7	6	38	122	3.21
There is enough space for the teacher to move around freely	8	19	1	5	5	38	134	3.53
There is enough space in the library for students to study	5	9	5	10	9		102	2.76
The Science Lab has enough space for students	8	14	4	4	8		124	3.26
The computer Lab is well equipped	4	14	4	11	5	38	115	3.16
Infrastructure is enough in school	7	15	0	9	7	38	120	2.97

Source: Field Data, 2022

A majority of the class teachers represented by 23(60.5%) agree that classroom space is enough for all students while 13(34.2%). Only 2(5.3%) were uncertain about the statement. The weighted mean was 3.21 which generally imply the schools in the sub county have enough classrooms for all students. The findings agreed with the study by Maron and Brooth (2007) who asserted that good school physical infrastructure enhances learning. This seemed to had been observed by many schools included in the study.

The study sought to establish whether there is enough space for the teacher to move around freely. Majority of the respondents represented by 27(71.1%) agreed with the statement while only 10(26.3%) disagreed. Only 1(2.6%) indicated not being sure about the statement. The statement had a weighted value of 3.53, which imply that generally, there was enough space for teacher movement in classrooms.

The class teachers were required to give opinion on whether there is enough space in the library for students to study, 19(50.0%) disagreed with the statement while only 14(36.8%) agreed with the statement and 5 (13.2%) were

uncertain. The opinion ratings posted a weighted mean of 2.76 which imply that generally the library space was inadequate in most schools. This can be attributed to the fact that many schools lack libraries. These findings concurred with the interview with the principals in which most of them pointed out that there was inadequate space in the library. The findings also supported Adegun (2001) who argued that learning experiences are fruitful when there is adequate quantity and quality of physical resources. This therefore indicated that most sampled schools did not offer adequate services to students in library.

The researcher sought opinion on the statement that the Science Lab has enough space for students. A large proportion of the class teachers represented by 22(57.9%) agreed with the statement while 12(31.6%) disagreed. Only 4(10.5%) were uncertain which made the statement to attain a high weighted mean of 3.26, indicating general agreement among the respondents that the Science Lab has enough space for students. This meant that science subjects were being handled adequately. The findings contradicted Sidhul (2012) who found that most learning institutions did not have sufficient laboratories. The study recommended mobilisation of resources by all stakeholders to improve school infrastructure. This seemed to have been embraced by majority of the schools within the study area.

The respondents were further required to rate their opinion on the statement that the computer Lab was well equipped. There was a fairly divided opinion with 18(47.4%) having agreed with the statement while 16(42.1%) disagreed with the statement. A smaller proportion of 4(10.5%) were uncertain hence the weighted mean was 3.16, indicating a divided opinion over the statement. It was therefore not certain that Computer labs were well equipped. But that could be attributed to absence of such labs in several schools.

Finally, the class teachers' opinions were sought on the statement that Infrastructure is enough in school. A larger proportion of 22(57.9%) agreed that actually infrastructure was enough while 16(42.1%) disagreed with the statement. None of the respondents was uncertain hence the weighted mean was 2.97, indicating that generally on average, infrastructure was not adequate for the sampled schools. The findings were in agreement with the study by Chiriswa (2002) who argued that effective teaching and learning depended on availability of adequate resources. It could therefore be argued that there was effective learning in a majority of sampled schools within the study area based on the findings from the field.

3.2. Aggregation of the Variable (Adequacy of Infrastructure)

The ratings for each respondent were summed up to develop an index which measured the levels of adequacy of infrastructure basing on class teacher ratings. The index ranged from 6 to 30. An index of more than 18 indicates high levels of adequacy of infrastructure in the schools while an index of less than 18 indicates low levels of adequacy. The descriptive statistics for the Infrastructure Adequacy Index are reported in the Table 3.

Table 3 Descriptive Statistics for Infrastructure Adequacy Index

Enrolment Category	N	Mean	Minimum	Maximum	Std. Deviation
Low	13	24.3846	18.00	28.00	2.90225
Moderate	12	18.6667	7.00	26.00	4.79267
High	13	13.7692	6.00	24.00	6.09855
Total	38	18.9474	6.00	28.00	6.43868

Source: SPSS Output

Results in Table 3 shows that the mean for the Infrastructure Adequacy Index was higher in the low and moderate enrolment category $m = 24.3846$, $sd = 2.9022$ and $m = 18.6667$, $sd = 4.79267$ respectively which were values higher than the average value of 18 on a 6 to 30 scale. This indicates that generally, the levels of infrastructure Adequacy were higher in low and moderate enrolments category of schools. On the other hand, the high enrolment category recorded $m = 13.7692$, $sd = 6.09855$ which imply that the levels of adequacy were low in such schools due to increased levels on enrolment associated with the 100% transition. From the descriptive statistics in table 3, the school with low and moderate enrolment had high levels of infrastructure adequacy with mean more than 18 while those high enrolment had low infrastructure adequacy with a mean of less than 18.

3.3. Hypothesis Testing

In order to determine the effect of 100% transition on infrastructure in the sub county, the study sought to test the hypothesis stating:

3.3.1. *H01: There is no statistically significant effect of the 100% transition policy on infrastructure in public secondary schools in Bungoma County*

The study considered the effects of the 100% transition policy across the categories of school (High, Moderate and Low Enrolment categories). The study therefore sought to establish whether the levels adequacy of infrastructure could be attributed to the 100% transition policy. The inferential statistical technique of One-Way Analysis of Variance (ANOVA) was computed to determine the effects across the categories. The results were presented in Table 4.

Table 4 ANOVA of Adequacy of Infrastructure Across School Categories

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	733.843	2	366.922	16.052	0.000
Within Groups	800.051	35	22.859		
Total	1533.895	37			

Source: SPSS Output

Table 4 shows that the ANOVA computed established a significant effect with $F_{(2,35)} = 16.052$, $p < 0.05$. The null hypothesis stating that there is no statistically significant effect of the 100% transition policy on Infrastructure in public secondary schools in Bungoma County was rejected. A One-Way Analysis of Variance computed to determine the effect of 100% transition policy on Adequacy of infrastructure found a significant effect. Levels of infrastructure adequacy were found to be significantly higher in low enrolment but very low in higher enrolment schools. Hence, the 100% transition policy was found to have decimated infrastructure in schools sampled. Schools that experienced large increase in enrolment due to the policy generally had limited infrastructure than those that experienced lower increases in enrolment had better infrastructure. The findings were further supported by interview data from interviews held with directors of studies. When required to comment on whether there were enough infrastructures to sustain teaching and learning in your school, most of the directors of studies gave contrary opinions.

Directors of studies D1, D3, D4 and D7 from higher enrolment schools noted;

"We use tents to accommodate some classes, especially the optional subjects. There are no rooms in the school where such lessons can be undertaken"

Director of studies D5 commented that:

"We had to put up mabati structures in order to accommodate the form ones"

But Directors D2, D6 and D9 from lower enrolment category of schools had a contrary opinion. They noted that:

"There are few students in class than we expected. The school require more students in order to utilize the classrooms fully"

The findings in table 4 shows that the availability of adequate infrastructure is fundamental for secondary schools to realize the objectives of education UNESCO (2016). Adequacy of infrastructure is at the heart of education, a fundamental determinant of enrolment, retention and achievement. In addition, the findings in Table 4, supports Uwimana & Andala (2020) who investigated the relationship between school infrastructure and students' academic performance in twelve years basic education in Rwanda. However, Uwimana & Andala (2020) carried out a study in Rwanda where schools operate in a different environment from Kenya.

4. Conclusion

According to the study's conclusions, the infrastructure at the tested schools had been decimated by the 100% changeover policy. Schools that had significant increases in enrolment as a result of the program typically had less

developed infrastructure than schools that saw smaller increases in enrolment. The analysis came to the conclusion that the implementation of the 100% transition policy was only partially prepared.

Recommendations

The government should ensure that schools have an adequate infrastructure in order to be ready for the effective execution of the 100% transition strategy. In order to accommodate the constantly growing number of pupils, the government should collaborate with non-governmental organizations that can help create classrooms, laboratories, and other physical aspects inside the school environment.

Compliance With Ethical Standards

Acknowledgments

I would like to express my profound gratitude to my co-authors; Prof. Julius Maiyo and Dr. Sarah Likoko for their insightful advice provided in the composition of this article.

Disclosure of conflict of interest

The authors declared no interests.

Statement of informed consent

The goal of the study was explained to the respondents, and the researcher promised them that the information they provided would be kept private. The researcher assured the respondents that their information would only be utilized for scholarly purposes. Respondents chose to participate voluntarily, and there were no incentives.

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