Baraton Interdisciplinary Research Journal (2024), 10(Special Issue), pp 49-67
www.birj.ueab.ac.ke
ISSN:2789-3995
(Online)

SUSTAINING THE FUTURE: RESOURCE MANAGEMENT IN 100% TRANSITION POLICY IMPLEMENTATION IN PUBLIC SECONDARY SCHOOLS IN SIAYA COUNTY, KENYA

Isaiah Ouma*, Catherine Amimo & Millicent Ojwan'g
Department of Education
University of Eastern Africa, Baraton,
P.O. Box 2500-30100 Eldoret, Kenya
*Corresponding author email address: **oumais@ueab.ac.ke**

Abstract

This study examined the sustainability of resources in public secondary schools in Siaya County under the 100% transition policy. Drawing from System and Resource Based View Theories, 270 participants including Principals, teachers, and Form four students were surveyed using various sampling techniques. Data collection methods comprised questionnaires, interviews, observation, and document analysis. Analysis involved means, standard deviations, and ANOVA, T-test, and Times series. Results indicated a 99.8% transition rate from primary to secondary education, while promotion rate was at 98.2%. Extra-county schools demonstrated the highest transition and promotion rates. However, 301 students were unaccounted for from entry to graduation. Participants reported moderately adequate resources across teaching and learning materials, spaces, sports equipment, and sanitation facilities. Significant differences were observed among school categories regarding resource adequacy, particularly in Classrooms (p=0.015), science laboratories (p=0.006), school hall spaces (p=0.024) and hockey field (p=0.00).Notably, there was a significant difference between Extra County and Sub- County schools on space for exercise (p=0.23), football pitches (p=0.009) and athletic tracks (p=0.003); between County and Sub- County schools on netball pitches (p=0.23). While teachers expressed satisfaction with student-textbook ratio, they were dissatisfied with student-teacher ratio. The study recommends the Ministry of Education to develop strategies for tracking absent students and dropouts, expand particularly infrastructure in Sub-county schools, increase funds for resources and sports equipment, and recruit more teachers.

Keywords: 100% Transition Policy, Resource Sustainability, Educational Equity, Educational Resources.

Introduction

Globally, various countries have implemented policies to enhance access to secondary education, such as the No Child Left Behind Act in the United States and the 100% transition policy. The No Child Left Behind Act (2001) in the U.S. aimed to ensure that all students, irrespective of race or socioeconomic status, received quality education. This was achieved through increased state financing, non-

ISSN:2789-3995
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selective education, practical curricula, and decentralized school management, which collectively made secondary education more accessible. The Act provided additional funding to schools meeting specific standards, offered flexibility in resource utilization, and encouraged parental involvement. These strategies ensured adequate resources were available for smooth learning and achieving educational goals. The importance of educational resources for secondary schools to meet their goals is highlighted by UNESCO, emphasizing qualified teachers, active pedagogies, equitable resource distribution, and improved infrastructure. Successful examples, such as South Korea's rapid educational advancement through strategic public investment post-World War II, demonstrate how effective planning and political will can transform education systems, providing a model for developing countries like Kenya.

In Sub-Saharan Africa, however, the expansion of secondary education faces significant challenges. Due to limited schools and resources, countries like Senegal and Namibia struggle with low transition rates from primary to secondary education. In Kenya, the Basic Education Act (2013) guarantees free and compulsory education, but the implementation of the 100% transition policy has led to concerns about resource sustainability. While Free Primary Education (FPE) and Free Day Secondary Education (FDSE) have increased demand for education, studies by Ochieng' (2020) and Ogawa (2022) indicate that physical infrastructure and resources in Kenyan schools are overstretched. This study thus examines the resource sustainability of the 100% transition policy in public secondary schools in Siaya County, highlighting the need for improved teaching and learning resources, sports facilities, and sanitation to support the policy's successful implementation.

Statement of the problem

The government of the Republic of Kenya has embarked on the implementation of 100% transition policy from primary to secondary school as part of an international effort to provide all students with 12 years of continuous basic education. According to MoEST (2015), poor rate of transition from primary to secondary education was primarily due to the high expense of secondary education in Kenya. In order to reduce the cost of education and subsequently boost the rates of primary to secondary school transition, the government of the Republic of Kenya launched Free Tuition Secondary Education and Free Day Secondary Education (Ministry of Education, 2008). This move enabled all the students from diverse backgrounds to get access to basic education.

The Ministry of Education Sector Report (2019), had envisioned that increase in enrolment would require an equal increase of learning resources otherwise, there would be significant demand on teachers' resources, educational resources, and the participation of students in extracurricular activities. According to Ochieng' (2020), the increase in enrollment had already led to congestion and a severe lack of facilities for teaching and learning. For example, the standard requirement that a classroom measuring 8mx9m should hold only up to a maximum of 45 students is already defied in cases where the numbers supersede this requirement (Registration Guideline for Basic Education, 2021). Furthermore, Ogawa (2022), through his study on Emerging inequality in Kenyan secondary schools "Dilemmas of Educational Expansion and Quality Improvement", posited that there was unequal distribution of resources in different categories

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www.birj.ueab.ac.ke
ISSN:2789-3995
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of schools. This perpetuates inequalities and creates barriers for students from disadvantaged backgrounds to receive quality education.

Whereas previous studies on a hundred percent transition policy revealed a scarcity of resources and that respective schools developed strategic plans to address the challenge (Cheruiyot, 2019), subsequent studies have not made a follow up on this, instead endorsed a correlation between resources and transition rates (Chumba, Matere and Kapkiai,2021).

Consequently, this study sought to analyse resource sustainability of 100% transition policy implementation in public secondary schools with a focus on Teaching and Learning Resources; Teaching and Learning Spaces; Sanitation facilities; Sports facilities and equipment; Student-Teacher ratio; and Student -Textbook ratio; particularly teachers and students views on adequacy of the respective resources across different school categories in Siaya County, Kenya.

Research questions

This study set to address the following research questions:

1. To what extent has the 100% transition policy been implemented in public secondary schools in Siaya County in terms of:
   a. Students transitioning from primary to secondary.
   b. Promotion from one class to the next.
2. To what extent are resources in public secondary schools in Siaya County adequate in the implementation of 100% transition policy in terms of:
   a. Teaching and learning spaces
   b. Teaching and learning resources.
   c. Sports facilities and equipment
   d. Sanitation facilities.
3. Is there a significant difference in the adequacy of resources in the Implementation of 100% transition policy among different categories of schools in terms of:
   a. Teaching and learning spaces
   b. Teaching and learning resources.
   c. Sports facilities and equipment
   d. Sanitation facilities.
4. What is the level of satisfaction of teachers with 100% transition policy in terms of:
   a. Student-Teacher ratio.
   b. Student-Textbook ratio.
5. Is there significant difference in the level of satisfaction of teachers in different categories of schools with 100% transition policy based on:
   a. Student-Teacher ratio.
   b. Student-Textbook ratio.

Significance of the study

The findings of this study should provide critical information to all the educational stakeholders at all levels, including:

1. Education planners to allocate adequate funds for the expansion of public secondary school infrastructure in tandem with student enrolment.
2. The Ministry of Education officers to use the findings of this study for a close monitoring and supervision of how funds allocated by the ministry to the public secondary schools are spent on the infrastructural development of the schools.
3. School Principals and Boards of Management to use these study findings in decision- making processes concerning school infrastructural facilities development.
4. Secondary school teachers and students to use findings to develop coping strategies in areas where resources are scarce and use what is available effectively in order to realize smooth implementation of the 100% transition policy.

ISSN:2789-3995
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5. The Ministry of Education Quality Assurance and Standards Officers in Siaya County and beyond should ensure that the formulated policies in this regard are closely monitored and implemented.

Theoretical framework

Resource Based View Theory

The Resource Based View Theory, which Wernerfelt developed in 1984, served as a guide for this study. The resource-based theory focuses on internal resources that the business has at hand to compete in the market and attain dominance. The organization's Resource Based View (RBV), which is supported by Kraaijenbrink, Spender and Groen (2010), begins with the notion that the resources it has access to determine an institution's success. Likewise, the availability internal resources that are necessary for both teaching and learning determine the success of a school as an institution. These resources include those that are readily available, such as the number of classrooms, libraries, dormitories, restrooms, playgrounds, clean water, laboratories and those that require renovation. How these resources are used and organized, as advocated by Barney (2001), might influence how an institution functions and acquire a distinct competitive advantage. In this case when a new policy such as 100% transition is introduced, there should be subsequent policies and actions on the supply of educational resources to ensure effectiveness of policy implementation.

Learning and Teaching Resources Theory

Also used in the study is the learning and teaching resources theory which emphasizes on the critical role that adequate and effective educational resources play in facilitating student learning and improving academic outcomes. In the context of the study on "Sustaining the Future: Resource Management in 100% Transition Policy Implementation in Siaya County Public Secondary Schools, Kenya," this theory explains the importance of efficiently managing resources such as textbooks, classrooms, teaching materials, and qualified staff to ensure that the policy's objectives are met. The theory relates to the study by highlighting how well-managed resources can enhance the quality of education, accommodate the increased student enrollment, and address potential challenges in providing equitable and high-quality education to all students, thereby sustaining the long-term success and viability of the 100% transition policy.

Literature review

Implementation of the 100 Percent Transition Policy

The process of executing a plan or decision is referred to as implementation. Implementation in this research study relates to how secondary schools admit pupils who have completed class eight in the Kenyan system of education in the previous year to form one in the following year. Learning progression from one educational level to another is a gauge of a system's internal effectiveness in addition to its physical capabilities (Otieno & Colcloughn 2019). Secondary education is essential for guaranteeing that training and development are prerequisites for both social and economic progress in a nation (World Bank, 2011). This is the reason why governments all over the world, including Kenya, are dedicated to offer quality education to their people.

According to a study by Katiwa (2016) on "Factors influencing pupils' transition rate from primary to secondary school in Kitui County," the majority of students face delays in their academic development in the initial few

Baraton Interdisciplinary Research Journal (2024), 10(Special Issue), pp 49-67
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months following a change in schools. These interruptions could be brought on by difficulties related to inadequate fundamental infrastructure; instructional and learning resources. High-caliber school graduates with pertinent skills and knowledge are crucial for labor markets in order for nations to grow and compete effectively in a worldwide economy. Many people place a high value on secondary school since it influences their future life chances, raises their level of living when they find employment, and helps them escape poverty (Lewin, 2017). Transitioning to secondary education benefits more than just economic and social growth since it encourages civic engagement and improves social cohesiveness by fostering individual and group trust and tolerance (World Bank, 2015). Kenya is one of nations where secondary enrollment has expanded significantly, according to the EFA Monitoring Report (2012).

The majority of pupils who have been leaving the educational system are now in school as a testament to the implementation of 100% transition policy. The Cabinet Secretary of Education in Kenya, stated in his speech during the presentation of the 2022 Kenya Certificate of Primary Education (KCPE) examination results, that all the candidates, even those who received a score of 0 in some subjects, will be accepted to Form One under the 100% transition program. He further stressed that it is against the Constitutional necessity for any parent or guardian to retain their child at home when Form One admission is opened. However, according to a national study (Nation Reporter, February 2019), several schools are having trouble with crowding classrooms, laboratories and dining halls as a result of the government's establishment of the 100 percent program.

Research methodology

The study used a mixed-methods approach. This approach combined both quantitative and qualitative research methods to provide a comprehensive analysis of the factors influencing the implementation of the 100% transition policy in public secondary schools in Siaya County. This study employed a descriptive and comparative research design to examine factors influencing the implementation of the 100% transition policy in public secondary schools in Siaya County. It aimed to describe the extent of policy implementation, resource adequacy, and satisfaction levels among teachers and students, comparing these aspects across different school categories. The sample included 24 schools selected through stratified sampling from six sub-counties, with specific respondents chosen via purposive and systematic random sampling to minimize bias. Data collection involved self-administered questionnaires, interviews, observations, and documentary sources. Quantitative data analysis utilized SPSS version 26, employing time series analysis, descriptive statistics, ANOVA, and T-tests to address various research questions, while qualitative data were analyzed thematically. The study's sample comprised 270 participants, including education officers, principals, teachers, and students.

Results and discussion

Demographic Characteristics

The researcher gathered data from teachers and students, focusing on their demographic profiles. Among teachers, 57.1% were male and 42.9% female, with the majority under 40 years old. Most teachers held a Bachelor's degree in Education (88.6%) and had 5-10 years of teaching experience (40%). In terms of tenure, 54.3% had been at their current schools for less than 5 years. Teachers predominantly served in County (30.9%) and

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ISSN:2789-3995
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Sub-County (26.5%) schools. Among students, 60% were female and 87% were aged 16-17 years. Most students (95.3%) joined form one in 2020, and 97.1% had not repeated any class. The majority of participating schools were Sub-County (36.3%) and Extra-County (31%) schools. The demographic data of teachers and students were crucial as they provided insights into characteristics influencing the 100% transition policy implementation in Siaya County. Understanding teachers' and students' profiles, including gender, age, qualifications, and school distribution, highlighted potential disparities and challenges, enabling a comprehensive analysis of the policy's effectiveness.

Extent of 100% Transition Policy Implementation in Public Secondary Schools

Introduction

The data from this section were analyzed using Times series to establish the transition rate of students from primary to secondary school and promotion from one class to the next across all the categories of schools in Siaya County.

In this section, the data analysis and discussion were structured to methodically address the research questions posed at the outset of the study. Each research question was examined individually, with relevant data presented and analyzed to draw meaningful insights. This systematic approach ensured that findings were clearly articulated and logically connected to the research objectives. By organizing the analysis and discussion in a sequential manner, the study provided a comprehensive understanding of the data, facilitating a coherent and cohesive interpretation of the results

In investigating the extent of promotion from one class to the next, the researcher analyzed Class Register entries using Times Series in the SPSS.

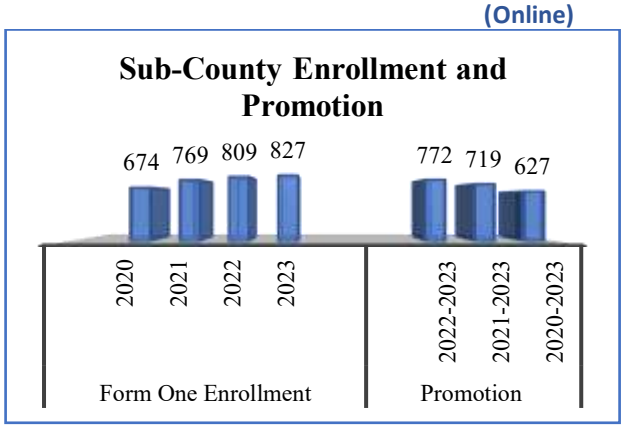

Figure 1:Sub-County Enrollment and Promotion

In figure 1, it is evident that from 2020 to 2023, form one enrollment in Sub-County schools in Siaya County has steadily increased, reaching 827 students in 2023 from 674 in 2020 across the ten sampled schools. This rise is attributed to the 100% transition policy, despite inadequate infrastructural improvements. However, the promotion rate from one class to the next has declined, with 134 students unaccounted for during this period. Principals through an interview schedule cited reasons for this decline, including student transfers due to guardian relocations, dropouts due to teenage pregnancies, and male students leaving to join the 'bodaboda' motorbike transport business.

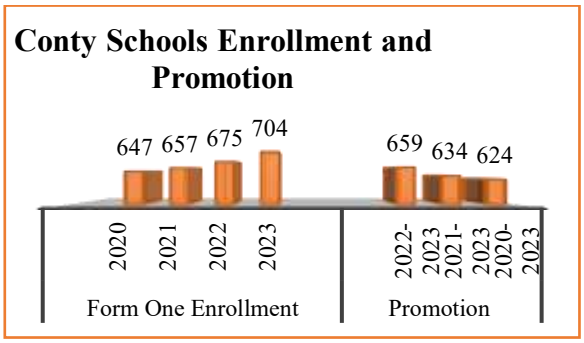

Figure 2: County Schools Enrollment and Promotion

As indicated in figure 2, there was an in increase in form one enrollment in County schools in Siaya from the year 2020 -2023.Out

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ISSN:2789-3995
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of the 24 sampled public secondary schools, six were county schools. From the registers, cumulatively, 647 students were enrolled in the six County schools in 2020. In 2021, the enrollment was 657 students, 675 students were enrolled in 2022 while 704 students were enrolled in 2023. Just like the Sub-County schools, the increase in enrollment has resulted from the implementation of 100% transition policy.

On the other hand, the promotion from one class to the next in County schools in Siaya County has been also decreasing over the years from 2020 to 2023.In total, 62 students could not be traced in the registers between 2020 and 2023.Some of these students transferred to other schools while others dropped out completely.

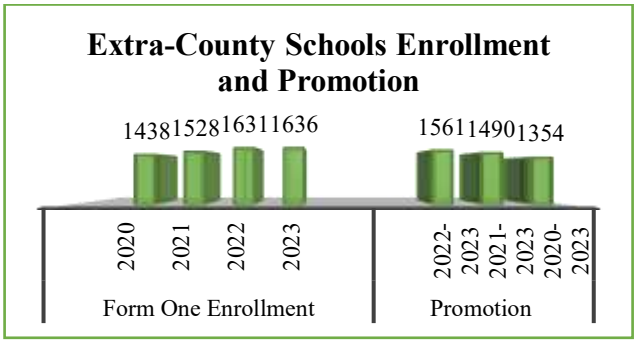
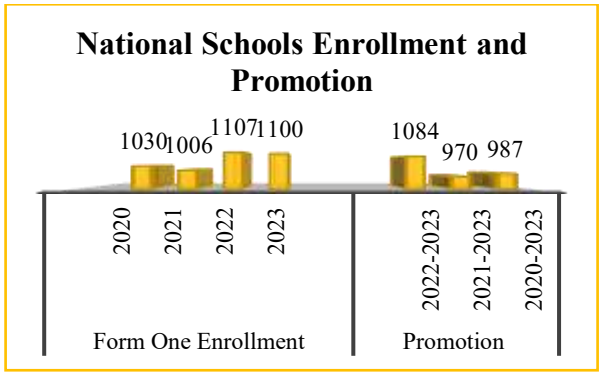


Figure 3:Extra-County Schools Enrollment and Promotion

In figure 3, from 2020 to 2023, form one enrollment in Extra-County schools in Siaya County increased from 1,438 to 1,636 students across six sampled schools, driven by the 100% transition policy. This category of schools saw higher enrollment compared to Sub-County and County schools, as they are preferred by many students. Despite this increase, promotions from one class to the next have been decreasing, with 192 students unaccounted for during this period. Reasons for this decline include transfers due to financial difficulties or indiscipline and complete dropouts.



In figure 4, from 2020 to 2023, enrollment in National schools in Siaya County fluctuated, starting with 1,030 students in 2020, dropping to 1,006 in 2021, peaking at 1,107 in 2022, and slightly reducing to 1,100 in 2023. This fluctuation, unlike the steady increases seen in Sub-County, County, and Extra-County schools, was attributed to the impact of the Covid-19 pandemic and parents' financial difficulties in 2021. National schools are fewer and more competitive, admitting students with top grades from the Kenya Certificate of Primary Education (K.C.P.E). Enrollment is influenced by performance in national exams and political factors, as noted by school principals. Across all 24 sampled schools, promotion rates from one class to the next decreased from 2020 to 2023, with 301 students unaccounted for, primarily due to transfers and dropouts.

Resource Adequacy for 100% Transition Policy Implementation in Public Secondary Schools

Teaching and Learning Spaces

The study sought to examine the adequacy of teaching and learning spaces for implementation of 100% transition policy in public secondary schools. Respondents were asked to indicate their level of agreement on a scale of 1 to 4 with 1 representing strongly disagree, 2 representing disagree, 3 representing agree and 4 representing strongly agree.

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ISSN:2789-3995
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Interpretation Scale
1.00-1.49= Not adequate at all;
1.50-2.49= Slightly adequate;
2.50-3.49= Moderately adequate;
3.50-4.00= Very adequate.

Table 3 ***Teaching and Learning Spaces***

Descriptive Statistics

Respondents		**N**	**Mean**	**Std. Dev**
Teachers	Classrooms have enough space that comfortably accommodate all our students	70	2.9	0.64
	There is enough space for free movement in class during class session	70	2.76	0.79
	The library has enough space for reading by students	70	2.26	0.86
	The science laboratory has enough space for practical and experiments by science students	70	2.8	0.77
	The school hall has enough space for co-curricular activities	69	2.09	1.0
	Average	**69**	**2.56**	**0.81**
Students	I have enough space that comfortably accommodates me in my class.	171	3.17	0.85
	There is enough space for free movement of our teacher in class during class session	171	3.1	0.94
	The library has enough space for reading.	170	2.44	1.08
	The science laboratory has enough space for practicals and experiments.	167	2.66	1.01
	The school hall has enough space for co-curricular activities	168	2.06	1.04
	Average	**169**	**2.68**	**0 .98**

From table 3, sixty-nine teachers participated in the study on the adequacy of teaching and learning resources, while three abstained, referring the researcher to their principals. Teachers generally agreed that classrooms had enough space (M=2.9; SD=0.64) due to additional classrooms built by the Ministry of Education. They also agreed on adequate space in science laboratories (M=2.8; SD=0.77), though some schools still faced space challenges. Teachers found classroom movement space sufficient (M=2.76; SD=0.79), but disagreed on the adequacy of library (M=2.26; SD=0.86) and school hall space (M=2.09; SD=1). Overall, teachers rated teaching and learning spaces as moderately adequate (M=2.56; SD=0.81). Students similarly found classroom space adequate (M=3.17; SD=0.85) and sufficient for movement (M=3.1; SD=0.94), with some agreeing on laboratory space (M=2.67; SD=1.01). However, they disagreed on library (M=2.44; SD=1.08) and school hall space (M=2.06; SD=1.04). On average, students also rated the spaces as moderately adequate (M=2.68; SD=0.98), aligning with teachers' perspectives. The findings of this study are in line with those by Otieno and Ochieng's (2020), through a study on the effects of the 100% transition policy on public secondary schools in Machakos Sub County, the majority of respondents (92.8%) agreed that they lacked enough classroom space to accommodate all of the pupils. they also found out that, in order to accommodate the large number of pupils, most schools had turned part of the existing facilities,

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including dining halls, staff rooms, sick bays, stores, and abandoned buildings, into classrooms.

Teaching and Learning Resources

The study sought to examine the adequacy of teaching and learning resources for implementation of 100% transition policy in public secondary schools. Respondents were asked to indicate their level of agreement on a scale of 1 to 4 with 1 representing strongly disagree, 2 representing disagree, 3 representing agree and 4 representing strongly agree.

Table 4 *Teaching and Learning Resources*

Descriptive Statistics[a]

Respondents		N	Mean	Std. Dev
Teachers	All the students have enough chairs/desks for individual use in classroom	69	3.36	0.69
	All the students have enough text books in all subjects for individual use in classroom	69	2.97	0.75
	The laboratory has enough laboratory apparatus for the practical sessions by science students	69	2.81	0.65
	The students have enough exercise books for each subject	68	2.91	0.81
	There are enough teaching and learning charts for teaching in classroom	69	2.59	0.77
	There are enough teaching and learning maps in our classroom	67	2.6	0.76
	There are enough chalk boards/white boards in our classroom	69	3.2	0.74
	There is enough chalk for use during our lesson	65	3.38	0.55
	The classroom has enough dusters for cleaning the chalk/white boards	69	3.28	0.64
	The library has enough chairs for reading by our students	69	2.28	0.87
	The library has enough read tables	69	2.29	0.91
	Students have enough lockers in the classroom	68	3.32	0.74
	There are enough pictures for teaching in the classroom	69	2.48	0.8
	Average	**68**	**2.88**	**0 .74**
Students	There are enough chairs/desks for individual use in classroom	165	3.55	0.51
	There are enough text books for each one of us in class	171	3.15	0.92
	There is enough laboratory apparatus during the practical sessions	171	2.68	1.03
	I have enough exercise books for each subject	169	2.89	0.97
	There are enough charts for use in my classroom	171	2.25	0.87
	There are enough maps for use in my classroom	171	2.33	1
	There are enough chalk boards/white boards in my classroom	165	3.32	0.77
	There are enough chalk for use during the lesson	168	3.18	0.85
	The classroom has enough dusters for cleaning the chalk/white boards	171	3.08	1
	The library has enough chairs for reading	171	2.43	1.02

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	The library has enough read tables	168	2.51	1
	The students have enough lockers in their classroom	165	3.74	0.52
	There are enough pictures for teaching in the classroom	168	2.24	0.94
	Average	**169**	**2.87**	**0 .88**

From table 4, teachers assessed the adequacy of teaching and learning resources, with most agreeing that classrooms, chairs, lockers, and chalk/whiteboards were sufficient (means above 2.5), likely due to government funding for additional resources. However, teachers noted that libraries and school halls were often inadequate (means below 2.5). Overall, teachers found resources moderately adequate (M=2.88; SD=0.74). Students' responses aligned with teachers, agreeing on classroom space, chairs, desks, and textbooks (means above 2.5), but expressing dissatisfaction with library resources, maps, charts, and pictures (means below 2.5). Students' overall assessment was also moderately adequate (M=2.87; SD=0.88). The consistency in responses from both groups highlights areas needing improvement, particularly in library and additional teaching resources.The findings of this study aligned with those by Orodho, Waweru, Ndichu and Nthinguri (2013) ,who discovered that a teacher's capacity to effectively apply instructional methods and concentrate on individual learners is severely impacted by the challenges of the availability and sufficiency of learning textbooks, charts, maps and many other resources.

Sports Facilities and Equipment

The study sought to examine the adequacy of sports facilities and equipment for implementation of 100% transition policy in public secondary schools. Respondents were asked to indicate their level of agreement on a scale of 1 to 4 with 1 representing strongly disagree, 2 representing disagree, 3 representing agree and 4 representing strongly agree.

Table 5 *Sports Facilities and Equipment*

Descriptive Statistics[a]

Respondents		**N**	**Mean**	**Std. Dev**
Teachers	There is enough space for doing exercise in the field	70	2.74	0.96
	The football pitch has enough space for all students to play	70	2.67	1.02
	The field has enough athletic tracks space for all students to play	70	2.41	0.91
	There are enough balls for various games	70	2.64	0.9
	The netball pitch has enough space for all students to play	66	2.53	0.95
	The hockey field has enough space for all students to play	67	2.03	1.03
	Average	**69**	**2.51**	**0 .96**
Students	There is enough space for doing exercise in the field	171	2.94	0.97
	Footbal pitches has enough space for all students to play	171	2.85	0.98
	The field has enough athletic tracks space for all students to play	171	2.6	1.07
	There are enough balls for various games	169	2.92	0.93

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ISSN:2789-3995
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	The netball pitch has enough space for all students to play	171	2.54	1.01
	The hockey field has enough space for all students to play	171	1.91	0.85
	Average	**170**	**2.63**	**0 .97**

From table 5, both students and teachers agreed on the moderate adequacy of sports facilities and equipment in public secondary schools in Siaya County, with all items having a mean above 2.5. Teachers generally found the exercise space, football pitch, and balls sufficient, although they noted challenges with the size of netball and hockey fields. The standard deviations indicate variability in satisfaction among schools, with hockey fields being particularly inadequate. Similarly, students found exercise space, football pitches, and balls mostly adequate, but expressed concerns about the athletic tracks and netball pitches, and were particularly dissatisfied with the hockey fields. Overall, both groups rated sports facilities and equipment as moderately adequate, reflecting some disparities and areas needing improvement. According to Abasa et al (2022), sports are essential to a child's education and help them develop character traits including friendliness, health, and discipline.

Sanitation Facilities

The study sought to examine the adequacy of sanitation facilities for implementation of 100% transition policy in public secondary schools. Respondents were asked to indicate their level of agreement on a scale of 1 to 4 with 1 representing strongly disagree, 2 representing disagree, 3 representing agree and 4 representing strongly agree.

Table 6 *Sanitation Facilities*

Descriptive Statistics[a]

Respondents		**N**	**Mean**	**Std. Dev**
Teachers	School has enough toilets for use	70	2.71	0.74
	Students queue for long to use the toilet	70	2.27	0.70
	Students queue for long to use the water point	68	2.43	0.83
	The school has enough dustbins	70	2.80	0.83
	The school has regular supply of water	69	2.80	0.87
	Average	**69**	**2.6**	**0 .79**
Students	School has enough toilets for use	171	2.9	0.89
	Students queue for long to use the toilet	171	2.42	1.08
	Students queue for long to use the water point	167	2.37	1.11
	The school has enough dustbins	171	2.81	0.96
	The school has regular supply of water	168	2.98	0.94
	Valid N (listwise)	**167**	**2.69**	**0.99**

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From table 6, both teachers and students agreed that sanitation facilities in public secondary schools in Siaya County were moderately adequate. Teachers found that schools had sufficient dustbins, regular water supply, and enough toilets, with minimal queuing for water points and toilets, resulting in an overall mean of 2.6 (SD=0.79). Similarly, students agreed on the adequacy of dustbins and toilets, though they slightly disagreed on the regular water supply and noted some queuing for water points and toilets, leading to an overall mean of 2.69 (SD=0.99). These findings indicate a general satisfaction with the availability and adequacy of sanitation facilities from both perspectives.

Difference in the Adequacy of Resources in the Implementation of 100% Transition Policy among Different Categories of Schools

When examining whether there was a significant difference in the adequacy of resources for the implementation of 100% transition policy among different categories of schools, One Way ANOVA was used. The significant level was set at 0.05. A significance value ≤ 0.05 indicates significant difference while a significance value > 0.05 indicates no significant difference.

Table 7 *Significant Difference between Teaching and Learning Spaces*

ANOVA

		Sum of Squares	df	Mean Square	F	Sig.
Classrooms have enough space that comfortably accommodate all our students	Between Groups	4.260	3	1.420	3.784	.015
	Within Groups	24.019	64	.375		
	Total	28.279	67			
There is enough space for free movement in class during class session	Between Groups	7.587	3	2.529	4.603	.006
	Within Groups	35.163	64	.549		
	Total	42.750	67			
The library has enough space for reading by students	Between Groups	.656	3	.219	.286	.836
	Within Groups	49.035	64	.766		
	Total	49.691	67			
The science laboratory has enough space for practical and experiments by science students	Between Groups	5.443	3	1.814	3.371	.024
	Within Groups	34.440	64	.538		
	Total	39.882	67			
The school hall has enough space for co-curricular activities	Between Groups	16.013	3	5.338	6.536	.001
	Within Groups	51.450	63	.817		
	Total	67.463	66			

From table 7, there was a significant difference in the adequacy of resources for implementing the 100% transition policy among different categories of schools in Siaya County, specifically in classroom, science laboratories, and school hall spaces, with significance values less than 0.05 (0.015, 0.006, 0.024, and 0.001 respectively). A Post Hoc test revealed

ISSN:2789-3995
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significant differences in classroom space between Extra-County and County schools, this is probably due to higher enrollment in Extra-County schools. Additionally, there was a significant difference in library space between Extra-County and Sub-County schools, likely because many Sub-County schools lacked libraries. Significant differences were also found in school hall spaces across Extra-County, County, and Sub-County schools, but no significant difference in library spacing, indicating widespread issues with library space across all school categories.

Table 8 *Significant Difference between Teaching and Learning Resources*

ANOVA

		Sum of Squares	Df	Mean Square	F	Sig.
There are enough chairs/desks for individual use in classroom	Between Groups	2.971	3	.990	2.198	.097
	Within Groups	28.838	64	.451		
	Total	31.809	67			
There are enough text books for each on of us in class	Between Groups	3.413	3	1.138	2.108	.108
	Within Groups	34.529	64	.540		
	Total	37.941	67			
There are enough laboratory apparatus during the practical sessions	Between Groups	3.443	3	1.148	2.930	.040
	Within Groups	25.071	64	.392		
	Total	28.515	67			
I have enough exercise books for each subject	Between Groups	6.398	3	2.133	3.625	.018
	Within Groups	37.064	63	.588		
	Total	43.463	66			
There are enough charts for use in my classroom	Between Groups	7.911	3	2.637	5.214	.003
	Within Groups	32.368	64	.506		
	Total	40.279	67			
There are enough maps for use in my classroom	Between Groups	6.970	3	2.323	4.679	.005
	Within Groups	30.787	62	.497		
	Total	37.758	65			
There are enough chalk boards/white boards in my classroom	Between Groups	3.505	3	1.168	2.323	.083
	Within Groups	32.186	64	.503		
	Total	35.691	67			
There are enough chalk for use during the lesson	Between Groups	3.723	3	1.241	5.430	.002
	Within Groups	13.714	60	.229		
	Total	17.438	63			
The classroom has enough dusters for cleaning the chalk/white boards	Between Groups	2.702	3	.901	2.461	.071
	Within Groups	23.416	64	.366		
	Total	26.118	67			
The library has enough chairs for reading	Between Groups	1.413	3	.471	.600	.618

	Within Groups	50.278	64	.786		
	Total	51.691	67			
The library has enough reading tables	Between Groups	1.604	3	.535	.633	.597
	Within Groups	54.087	64	.845		
	Total	55.691	67			
I have a locker to myself in the classroom	Between Groups	3.181	3	1.060	1.988	.125
	Within Groups	33.595	63	.533		
	Total	36.776	66			
There are enough pictures for use in my classroom	Between Groups	6.540	3	2.180	3.833	.014
	Within Groups	36.402	64	.569		
	Total	42.941	67			

Table 8 reveals significant differences in the adequacy of laboratory apparatus, exercise books, charts, maps, chalks, and pictures among different school categories in Siaya County, with significance values all below 0.05 (0.04, 0.018, 0.003, 0.005, 0.002, and 0.014 respectively). A Post Hoc test revealed that these differences were specifically between National and Sub-County schools for laboratory apparatus, Extra-County and County schools for exercise books, and national, County, and Sub-County schools for charts. For maps, the difference was between County and Sub-County schools, and for chalks, between national, Extra-County, County, and Sub-County schools. Additionally, County schools had more pictures than Sub-County schools. However, there were no significant differences in the adequacy of chairs and reading tables in libraries across the four school categories, indicating widespread challenges in providing sufficient library textbooks due to increasing student numbers.

Table 9 *Sports Facilities and Equipment*

ANOVA

		Sum of Squares	Df	Mean Square	F	Sig.
There is enough space for doing exercise in the field	Between Groups	7.682	3	2.561	2.976	.038
	Within Groups	55.068	64	0.860		
	Total	62.750	67			
Football pitches has enough space for all students to play	Between Groups	10.737	3	3.579	3.832	.014
	Within Groups	59.778	64	0.934		
	Total	70.515	67			
The field has enough athletic tracks space for all students	Between Groups	11.913	3	3.971	5.683	.002
	Within Groups	44.719	64	0.699		
	Total	56.632	67			
There are enough balls for various games	Between Groups	3.621	3	1.207	1.497	.224
	Within Groups	51.600	64	0.806		

	Total	55.221	67			
The netball pitch has enough space for all students playing the game	Between Groups	7.529	3	2.510	2.992	.038
	Within Groups	50.330	60	0.839		
	Total	57.859	63			
The hockey field has enough space for all students playing the game	Between Groups	21.518	3	7.173	9.036	.000
	Within Groups	48.421	61	0.794		
	Total	69.938	64			

Table 9 indicates significant differences in the adequacy of field space, football pitches, athletic tracks, netball pitches, and hockey fields among different school categories in Siaya County, with significance values all below 0.05 (0.038, 0.014, 0.002, 0.038, and 0.000 respectively). A Post Hoc test revealed that significant differences exist between Extra County and Sub-County schools for exercise space, football pitches, and athletic tracks. Differences in netball pitches were noted between County and Sub-County schools, while hockey fields showed significant differences across national, Extra County, County, and Sub-County schools. These variations highlight disparities in space adequacy for exercise and sports facilities among school categories. However, there was no significant difference in the adequacy of balls for all games across the schools, indicating a widespread challenge in providing sufficient sports equipment, as corroborated by principals who noted that the ministry no longer provides activity fees for such equipment.

Table 10 *Sanitation Facilities*

ANOVA

		Sum of Squares	df	Mean Square	F	Sig.
School has enough toilets for use	Between Groups	6.765	3	2.255	4.603	.006
	Within Groups	31.352	64	.490		
	Total	38.118	67			
Students queue for long to use the toilet	Between Groups	6.218	3	2.073	4.829	.004
	Within Groups	27.473	64	.429		
	Total	33.691	67			
Students queue for long to use the water point	Between Groups	8.364	3	2.788	4.561	.006
	Within Groups	37.894	62	.611		
	Total	46.258	65			
The school has enough dustbins	Between Groups	16.773	3	5.591	11.792	.000
	Within Groups	30.344	64	.474		
	Total	47.118	67			
The school has regular supply of water	Between Groups	17.737	3	5.912	11.172	.000
	Within Groups	33.338	63	.529		
	Total	51.075	66			

Baraton Interdisciplinary Research Journal (2024), 10(Special Issue), pp 49-67
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ISSN:2789-3995
(Online)

Table 10 indicates significant differences in the adequacy of resources related to the implementation of the 100% transition policy across different school categories in Siaya County, with significance values all below 0.05 (0.006, 0.004, 0.006, 0.000, and 0.000 respectively). A Post Hoc Test revealed that the number of toilets differed significantly between Sub-county, County, and National schools. Queueing for toilets showed significant differences among national, County, and Sub-county schools. Similarly, queueing for water points varied significantly between national and Sub-county schools. The number of dustbins and regular water supply also exhibited significant differences across national, Extra-County, County, and Sub-county schools. These findings underscore disparities in sanitation facilities and water supply among school categories, with Sub-county schools facing more challenges due to lower student numbers and consequently less funding compared to higher-tier schools.

Level of Satisfaction of Teachers with 100% Transition Policy

The study sought to examine the level of satisfaction of teachers with 100% transition policy. Respondents were asked to indicate their level of satisfaction on a scale of 1 to 4 with 1 representing completely dissatisfied, 2 representing mostly dissatisfied, 3 mostly satisfied and 4 representing completely satisfied.

Table 10 *Level of Satisfaction*

Descriptive Statistics

	N	Mean	Std. Deviation
Student-Teacher ratio	70	2.19	0.84
Student-Textbook ratio	67	2.73	0.93
Average	**69**	**2.49**	**0.88**

From table 10, teachers expressed dissatisfaction with the student-teacher ratio (M=2.19; SD=0.839), reflecting findings consistent with previous research by Otieno et al. (2020) highlighting insufficient government-appointed teachers for the growing student population in public secondary schools. This shortage may be attributed to inadequate hiring of teachers to match the increasing number of students. Conversely, teachers were generally satisfied with the student-textbook ratio (M=2.73; SD=0.93), although the high standard deviation suggests variability among schools, with some experiencing shortages, particularly in Sub-county schools. Overall, teachers in Siaya County public secondary schools reported moderate dissatisfaction (M=2.49, SD=0.88) with both the student-teacher and student-textbook ratios.

Significant Difference in the Level of Satisfaction of Teachers in Different Categories of Schools with 100% Transition Policy

When examining the significant difference in the level of satisfaction of teachers in different categories of schools with 100% transition policy, One Way ANOVA was used. The significant difference was set at 0.05 significance level. A sig value ≤ 0.05 indicates significant difference while a value > 0.05 no significant difference.

ISSN:2789-3995
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Table 11 *Difference in Level of Satisfaction with 100% Transition Policy Implementation*

ANOVA

		Sum of Squares	df	Mean Square	F	Sig.
Student-Teacher ratio	Between Groups	.742	3	.247	.331	.803
	Within Groups	47.773	64	.746		
	Total	48.515	67			
Student-Textbook ratio	Between Groups	10.504	3	3.501	4.928	.004
	Within Groups	43.342	61	.711		
	Total	53.846	64			

From table 11, there was a significant difference in the adequacy of resources in the implementation of 100% transition policy among different categories of schools in terms of student-text book ratio with significance values less than 0.05 (0.004). There was no significant difference between student-teacher ratio with a significance value of 0.803 which was greater than 0.05. This means that student-teacher ratio remained to be a big challenge across the four categories of schools in Siaya County. To determine the category of schools that had significant difference, a Post Hoc Test was used.The Post Hoc test determined that there was significant difference on student-text book ratio between the national and extra County schools. This means that student-textbook ratio varies across the four categories of schools with some schools especially Sub-County schools experiencing a bigger shortfall in the number of textbooks required for the teaching-learning process.

Conclusions and Recommendations

Based on the findings drawn from this study, the conclusions are organized into four key sets corresponding to the research questions. Firstly, the transition rate from primary to secondary schools in Siaya County was reported at 99.8%, indicating near-full implementation of the 100% transition policy, with minimal cases of class repetition noted among students. Secondly, teaching and learning spaces, resources, sports facilities, and sanitation facilities were found to be moderately adequate across public secondary schools in Siaya County. Thirdly, all categories of schools demonstrated only moderate levels of resources required for implementing the 100% transition policy. Fourthly, teachers expressed dissatisfaction with the student-teacher ratio across all school categories but generally showed satisfaction with the student-textbook ratio. Based on these findings, the researchers recommend that the Ministry of Education should improve tracking strategies for students' attendance and dropout rates, increase funding for infrastructure and resources, implement effective resource sharing strategies, establish resource centers for educational equity, and optimize teacher employment and distribution to align with student-teacher ratios across school categories. Lastly, the school administration should come up with remedial plans to ensure that students move from grade to grade with requisite knowledge and skills.

References

Asongu, S. A., Orim, S. M. I., & Nting, R. T. (2019). Inequality, information technology and inclusive education in sub-Saharan Africa. *Technological Forecasting and Social Change*, 146, 380-389.

ISSN:2789-3995
(Online)

Barney, J. B. (2001). Resource-based theories of competitive advantage: A ten-year retrospective on the resource-based view. *Journal of Management*, 27(6), 643-650.

Cheruiyot, K. F. (2019). Secondary schools' readiness on a hundred percent transition rate of pupils from primary level in Sigowet Sub-county, Kericho County [Doctoral dissertation, University of Nairobi].

Chumba, E. J., Matere, A., & Kapkiai, M. (2021). The influence of secondary school learning resources preparedness on the optimal primary school pupils' transition in Nandi North Sub County, Kenya. *Journal of Research Innovation and Implications in Education*, 5(4), 142-151.

Mackatiani, C. I., Mackatiani, N. I., & Owino, M. A. (2022). Transition in education: Perspectives on girls' drop-out rates in secondary schools in Kenya. *Journal of Education and Practice*, 13(2), 87-94.

MoEST. (2015). *Education sector performance report*. Lilongwe: Ministry of Education.

Muendo, J. K. (2016). Influence of school infrastructural environment on performance in Kenya Certificate of Secondary Education in Kibauni Division of Machakos County, Kenya [Master's thesis, University of Nairobi].

NESCO-UNEVOC. (2018). *UNESCO-UNEVOC TVET Country Profiles: Republic of Korea*. https://unevoc.unesco.org/wtdb/worldtvetdatabase_kor_en.pdf.

Ochieng, V. (2023, January 23). Think again of consequences of abolishing boarding schools. *Daily Nation*. Nairobi: Nation Media Group.

Ogawa, M. (2022). Emerging inequality in Kenyan secondary schools: Dilemmas of educational expansion and quality improvement. *Prospects*, 52(3-4), 453-468.

Otieno, M. A., & Colclough, C. (2019). Financing education in Kenya: Expenditures, outcomes and the role of international aid. Kenyatta University and University of Cambridge.

Otieno, M. A., & Ochieng, J. A. (2020). Impact of 100 per cent transition policy on public secondary schools in Machakos Sub-county, Kenya: Focusing on coping strategies. *Journal of Education and Practice*, 11(24), 69-77.

Owens, J. S., Holdaway, A. S., Smith, J., Evans, S. W., Himawan, L. K., Coles, E. K., ... & Dawson, A. E. (2018). Rates of common classroom behavior management strategies and their associations with challenging student behavior in elementary school. *Journal of Emotional and Behavioral Disorders*, 26(3), 156-179.

ISSN:2789-3995
(Online)

Republic of Kenya. (2013). *The Basic Education Act*. Nairobi: The Government Printer.

Republic of Kenya. (2019). *Millennium Development Goals - Status Report for Kenya 2018*. Nairobi: The Government Printer.

Republic of Kenya (GOK). (2014). *Draft Technical and Vocational Education and Training (TVET) Policy*. Nairobi: The Government Printer.

Singh, A. (2014). Global economic changes, skills and international competitiveness. *International Labour Review*, 133, 167.

UNESCO. (2016). *Fact Book on Education for All (EFA)*. Nairobi: UNESCO Office.

UNESCO. (2015). *General secondary school education in the twenty-first century: Trends, challenges, and priorities*. Beijing, China: UNESCO International Expert Meeting on Secondary Schooling.

Wolfgang, H. (2005). Ludwig von Bertalanffy: Forerunner of evolutionary systems theory. *Systems Research and Behavioral Science*, 22(6), 505-514.

World Bank. (2011). *World Bank support to education since 2001*. Washington, DC: The World Bank.

World Bank. (2018). *Transitions in secondary education in sub-Saharan Africa: Equity and efficiency issues* (Working Paper No. 125). Washington, DC: The World Bank.