www.iiste.org

Implementation of Parent-related Interventions for Improving Learning Achievement among Low Achievers in Public Secondary Schools in Kajiado County, in Kenya

Mr. Robert Mose Mokamba: Postgraduate student in the Department of Educational Management, Policy and Curriculum Studies, School of Education and Lifelong Learning, Kenyatta University, Kenya

Dr. Elizabeth Katam: Supervisor, of Postgraduate student in the Department of Educational Management, Policy and Curriculum Studies, School of Education and Lifelong Learning, Kenyatta University, Kenya

Prof. John Aluko Orodho: Supervisor, mentor and corresponding author, of Postgraduate student in the Department of Educational Management, Policy and Curriculum Studies, School of Education and Lifelong Learning, Kenyatta University, Kenya: <u>orodhojohn@gmail.com</u> or <u>ORODHO.JOHN@ku.ac.ke</u>.

Abstract

This study examined the implementation of parent-related interventions designed to enhance academic achievement among low-performing students in public secondary schools in Kajiado County, Kenya. It further explored student responses to school-based academic support strategies that involve parents or guardians in academic processes. Anchored in Walberg's Theory of Educational Productivity, the study adopted a convergent parallel mixed methods design. Using Slovene's formula, a sample of 394 was drawn from a population of 972 stakeholders across 91 schools. Participants included 20 principals, 180 teachers, 154 students, 20 Board of Management members, and 20 Parents' Association chairpersons. Quantitative data were collected via questionnaires and analyzed using descriptive (means, standard deviations) and inferential (correlation, regression) statistics through SPSS; qualitative data were gathered through interviews and analyzed thematically. Findings revealed that parents actively collaborated with school administrators through support for academic programs, resource mobilization, and participation in academic clinics. However, despite principals' appreciation of parental engagement, its implementation remains constrained by contextual, perceptual, and systemic barriers. This study affirms that parental involvement is essential to student success, particularly for struggling learners. However, deeper engagement is often limited by socioeconomic challenges, passive parental roles, and cultural norms. Teachers, BoM, and PA leaders recognize the value of parental support, but schools must shift from viewing parents solely as fee payers to active education partners. Targeted parental sensitization forums, inclusive leadership training for BoM and PA, and flexible fee structures can enhance engagement. Establishing two-way communication-via SMS, home visits, and dialogue days-can build mutual trust. Schools should also involve parents in academic support initiatives and collaborate with BoM and PA representatives to design holistic interventions for vulnerable learners, ensuring more equitable and effective educational outcomes.

Keywords: Parental engagement, academic achievement, low-performing students, public secondary schools, Kajiado County, Kenya

DOI: 10.7176/JEP/16-6-06 **Publication date**: June 30th 2025

1. INTRODUCTION

1.1. Background and Context

Education remains an undisputed catalyst for sustainable development, human well-being, and social transformation. It is globally recognized as a fundamental human right, as articulated in Article 26 of the Universal Declaration of Human Rights (United Nations, 2015), and is central to the realization of the Sustainable Development Goals (SDGs), particularly SDG 4, which seeks to ensure inclusive and equitable quality education for all (UNESCO, 2022). Across the globe, investment in education is consistently linked to improved socio-economic outcomes, including better health, lower fertility rates, enhanced civic participation, and reduced poverty and inequality (OECD, 2023; World Bank, 2021).

Empirical evidence supports the assertion that high-functioning education systems correlate positively with key development indicators. For instance, Glewwe and Muralidharan (2016) found that educational attainment significantly influences individual employability, income levels, and social mobility. Similarly, the World Bank (2020) underscores that individuals with higher education tend to experience improved quality of life, greater resilience to economic shocks, and stronger intergenerational outcomes. Conversely, education systems that fail to support low-achieving learners often reinforce cycles of poverty and social exclusion, particularly among marginalized populations.

A comprehensive study by the Eurydice Network (2020) across 47 European countries confirmed that equitable education systems are critical in fostering inclusive societies. The report highlighted a persistent challenge: the strong association between socio-economic background and low academic achievement. It noted that learners who underperform academically often lack the foundational skills—literacy, numeracy, and critical thinking— necessary for effective participation in modern economies and civic life. In response, the European Union's Strategic Framework for Education and Training (ET 2020) set a target to reduce the proportion of 15-year-olds underperforming in reading, mathematics, and science to less than 15%. Yet by 2020, only a few countries such as Finland and Estonia had met this benchmark, indicating the scale and persistence of the problem.

In sub-Saharan Africa, and Kenya in particular, national statistics often paint a promising picture of expanding access to education. However, a deeper analysis reveals stark disparities in academic performance across regions, school types, and socio-economic groups (Uwezo Kenya, 2021; Republic of Kenya, 2023). Despite high enrollment rates in secondary education, a significant proportion of learners continue to underachieve, especially in public schools located in underserved counties such as Kajiado. These students—often categorized as "low achievers"—struggle to meet curriculum benchmarks and are at heightened risk of school dropout, diminished life opportunities, and long-term economic vulnerability.

This persistent gap in academic achievement raises urgent questions about the effectiveness of current interventions, particularly the role of parental engagement. While numerous studies affirm the positive impact of parental involvement on student outcomes (Jeynes, 2018; Kim & Hill, 2021), there remains limited empirical evidence on how parent-led strategies are being implemented in practice within Kenyan public secondary schools, and how these efforts affect students who are academically at risk. This study, therefore, seeks to critically examine the implementation of parent-related interventions targeted at improving learning outcomes among low achievers in public secondary schools in Kajiado County, Kenya.

1.2. Problem Statement

Despite ongoing educational reforms and teacher-led efforts to improve academic outcomes, a significant proportion of students in Kenya—particularly in marginalized counties like Kajiado—continue to perform poorly in national examinations. Between 2016 and 2022, over 40% of KCSE candidates in Kajiado scored grades D and below, severely limiting their chances for further education and employment (KNEC, 2024). These outcomes persist despite widespread concern and repeated policy interventions.

Research indicates that teacher-driven strategies and parental involvement can significantly boost learner performance (Hattie, 2009; Epstein, 2005). However, most interventions are fragmented, not tailored to low

achievers, and rarely assessed for effectiveness in diverse contexts. Moreover, negative societal perceptions of low achievers further marginalize them. There is limited empirical evidence on how parent -based interventions can be optimized to support struggling learners. This study therefore seeks to examine the effectiveness of parental interventions in public secondary schools in Kajiado County.

1.3. The Purpose and Objectives of the Study

The purpose of this study was to analyse the perceptions of various stakeholders regarding the involvement of parents in school activities that enhance students' academic performance among low achievers in secondary schools in Kajiado County, Kenya. The specific objectives were to:

- 1. Determine the student's views on parental involvement in assisting low performing students to enhance their academic achievement.
- 2. Establish teachers' perceptions on parental involvement in assisting low performing students to enhance their academic achievement.
- 3. Determine the views of Board of Management on parental involvement in assisting low performing students to enhance their academic achievement.

1.4. Theoretical Framework

This study is anchored in Vygotsky's Sociocultural Theory of Learning and Epstein's Overlapping Spheres of Influence Theory, which together provide a robust lens for understanding how teacher practices, coupled with parental involvement, can influence academic outcomes among low-achieving students in public secondary schools. First, Vygotsky (1978) emphasized that learning is deeply embedded in social contexts, where cognitive development occurs through interaction with more knowledgeable others. These "others" are not limited to teachers or peers, but include parents and caregivers who form the child's earliest and most consistent learning environment. Through the concept of the Zone of Proximal Development (ZPD), Vygotsky highlights that children achieve more when guided by adults—suggesting that parental support at home, such as assisting with homework, setting routines, and modeling learning behaviors, plays a crucial role in facilitating academic success. For low achievers, such parental engagement becomes essential in bridging classroom instruction and home learning environments.

Secondly, employing Epstein's Overlapping Spheres of Influence Theory propounded by Joyce Epstein (2001) proposes that a child's education is shaped by *interactions across three overlapping spheres:* the family, the school, and the community. These spheres work best when *collaboration is strong and consistent*, supporting shared goals for student development. Epstein outlines six types of parental involvement—including parenting, communicating, volunteering, learning at home, decision-making, and collaborating with the community—as critical for reinforcing student achievement. In the context of Kajiado County, where many students struggle with low performance, engaging parents—particularly in learning at home and meaningful communication with schools—can strengthen student motivation, accountability, and achievement. This theory legitimizes the view that teacher interventions alone are insufficient without structured and intentional involvement of parents.

Together, Vygotsky and Epstein's theories underscore the importance of *teacher-parent synergy* in supporting low-performing learners. They justify a dual focus on instructional quality and home-based support structures, especially in marginalized regions where educational outcomes are suboptimal.

1.5 Conceptual Framework

The *conceptual framework* for this study, displayed as Figure 1, is based on the integration of Vygotsky's Sociocultural Theory of Learning and Epstein's Overlapping Spheres of Influence Theory, with a focus on how parental involvement influence academic performance among low-achieving students in Kajiado County, Kenya. This framework underscores the interplay between *teacher interventions, parental involvement*, and the *learning achievements* of students, considering moderating variables such as government policies and socio-economic conditions.

As Orodho (2017) contents, the components of a conceptual framework should illustrate the relationships between the three key components of the framework, namely; the independent variables, the dependent variables and the moderating or intervening variables of the study. In this study there were two intervening variables: the teacher based interventions that include specific strategies such as differentiated instruction, individualized support, and formative assessments. Teacher interventions also involve creating a supportive learning environment that accommodates the needs of low achievers. According to Vygotsky's theory, such interventions facilitate learning within the students' Zone of Proximal Development (ZPD) (Vygotsky, 1978). The other key one was the parental involvement which according to Epstein's model emphasizes the importance of parental engagement in the learning process, such as assisting with homework, fostering a learning-friendly home environment, and maintaining open communication with the school (Epstein, 2001). Parental involvement is seen as an essential support mechanism that complements the interventions provided by teachers (Orodho, Nzabalirwa, Odundo, Waweru & Ndayambaje,2016).

The dependent variable was the Student Learning Achievement. This was measured by the academic performance of low-achieving students in national examinations (e.g., KCSE) is the outcome being measured. Improvement in learning achievement is expected when teacher and parental interventions are harmonized. The moderating variable in this study were the Government policies and the socio-economic factors influencing the teacher and parental involvement in teaching learning process. The **Kenya Government's policy** on extra tuition and regulations regarding hidden school costs can moderate the implementation of interventions. These policies may either facilitate or hinder the execution of teacher-based and parental interventions due to their impact on school resources and affordability for parents. The socio-economic status of students' families can also influence the effectiveness of interventions; as low-income families may struggle to fully engage in the academic processes due to lack of resources or time.

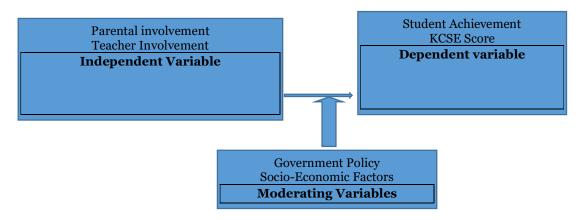


Figure 1: The interrelations between parental-teacher, student achievement and Policy as well as socio-economic factors

Teacher-based interventions (such as differentiated instruction and individual support) directly influence student learning achievements by providing tailored academic support. The Parental involvement strengthens these interventions, providing additional home-based support and reinforcing school-based learning, which leads to improved student performance. The moderating variables such as Government policies (such as the regulation on extra tuition) moderate the implementation of both teacher interventions and parental involvement by influencing the resources available for educational activities. Additionally, Socio-economic factors affect both the extent to which parents can be involved in their children's education and the types of teacher interventions that can be implemented effectively, thus impacting student achievement. This framework draws on the theoretical foundations of Vygotsky and Epstein and suggests that improving student performance among low achievers requires a holistic approach involving both teacher interventions and parental support, while being mindful of external factors like government policies and socio-economic constraints. This conceptual framework integrates parental involvement into teacher-based interventions to provide a holistic approach to improving academic outcomes among low achievers, contextualized within local and national policy constraints.

2. Research Design and Methodology

2.1 Research Design

This study adopted a convergent parallel mixed methods design, which enabled the researcher to collect and analyze both qualitative and quantitative data concurrently. This approach allowed for the triangulation of findings, enhancing the depth and validity of insights into the nature and impact of parental involvement in secondary schools (Creswell & Plano Clark, 2018). The target population consisted of 24,958 individuals from 91 public secondary schools in Kajiado County, including 91 principals, 685 teachers, 24,000 students, 91 Board of Management (BoM) chairpersons, and 91 Parents' Association (PA) chairpersons. A total of 394 participants were selected through a combination of random and purposive sampling techniques, ensuring both representativeness and relevance. The final sample included 20 principals, 180 teachers, 154 students, 20 BoM chairpersons, and 20 PA chairpersons, providing a balanced perspective from key education stakeholders.

2.2. Methodology

2.2.1. Research Instruments

The study utilized *questionnaires, interview guides, and focus group discussions (FGDs)*. Questionnaires targeted principals, teachers, and students for the quantitative phase, while interviews and FGDs gathered indepth qualitative data from principals, BOM and PA chairpersons, and student groups. Interviews and FGDs captured perceptions and lived experiences, translating spoken views into analyzable narratives (Strauss & Corbin, 1998, as cited in Kelly, 2003). The selection of mixed instruments was guided by the need to triangulate data sources and enhance validity (Orodho et al., 2016a; Creswell & Plano Clark, 2018).

2.2.2. Pilot Testing and Validation of Instruments

A **pilot study** was conducted in 8 public secondary schools in Kajiado County not included in the main study. Piloting helped identify and correct ambiguities in the instruments and ensured clarity and relevance (Creswell & Miller, 2000). Content validity was established through expert review by five specialists who rated questionnaire items for relevance. Items were revised or removed based on expert feedback. In quantitative strands, validity was enhanced through representative sampling and appropriate statistical treatments. For qualitative data, credibility was ensured through depth, triangulation, and reflective interpretation (Winter, 2000, as cited in Louis, Lawrence, & Keith, 2011).

Instrument reliability was tested using the *split-half technique and test-retest* method with the same pilot participants over a two-week interval. The *Pearson Product-Moment Correlation Coefficient* was used to determine internal consistency. These values exceed the 0.80 threshold, indicating high reliability (Guilford & Fruchter, 1978; Orodho, 2017).

2.2.3. Data Collection Procedures

Prior to the commencement of data collection, the researcher sought and obtained formal authorization in accordance with national research regulations. A research permit was secured from the **National Commission** for Science, Technology and Innovation (NACOSTI), which is the official body mandated to oversee and regulate research activities in Kenya. This permit was issued upon submission and approval of a comprehensive research proposal, and after obtaining an official introductory letter from Kenyatta University, affirming the researcher's academic affiliation and purpose of study.

Following the issuance of the NACOSTI permit, the researcher presented it to the **County Commissioner** and the **County Director of Education (CDE)** in **Kajiado County**. These administrative steps were crucial to gain access to the selected public secondary schools and to ensure local authorities were fully informed and supportive of the research process.

The data collection exercise took place over a period of **four weeks**, strategically scheduled during the regular school term to ensure the availability of participants—teachers, students, and school administrators. The researcher personally administered all data collection instruments, including questionnaires, interview guides, and observation schedules. This hands-on approach was adopted to maintain uniformity in data collection

procedures, ensure the integrity of responses, and to address any questions or issues that arose from respondents in real-time. Personal administration also helped in building trust with participants and ensuring ethical standards were upheld throughout the research process.

2.2.4. Data Analysis

Quantitative data were analyzed using *descriptive statistics* (means, frequencies, standard deviations) and **inferential statistics** (correlation and regression analysis) using **SPSS software**. Results were presented in tables, graphs, and charts. Qualitative data from interviews and FGDs were *analyzed thematically*, and findings were reported in *narrative form*, ensuring alignment with research objectives (Best & Kahn, 2006; Orodho, 2019; Tashakkori & Teddlie, 2003).

2.3 Logistical and Ethical Considerations

Ethical clearance was obtained through the university and NACOSTI, ensuring the study adhered to ethical research standards. Participants provided **informed consent**, and their confidentiality, privacy, and autonomy were upheld. Ethical practices guided every stage—from planning and data collection to analysis and reporting (Free, 2013, as cited in Njue, 2015; Orodho, 2017).

3. FINDING AND DISCUSSION

The findings are provided along the thematic areas of the objectives. The themes are the student's views on parental involvement in assisting low performing students to enhance their academic achievement; teachers' views on parental involvement in assisting low performing students to enhance their academic achievement and views of Board of Management on parental involvement in assisting low performing students to enhance their academic their academic their academic achievement.

3.1. Students views on parental involvement in assisting low performers

Parental involvement not only influences students' academic achievement and behavior but also determines whether students continue with their schooling or not. The views of students on how parental involvement assists low performers improve their learning outcomes are presented in Table 1.

Statements of opinion	Strongly Agree Agree		Neutral		Disagree		Strongly Disagree			
	#	%	#	%	#	%	#	%	#	%
My parents freely participate in school meetings and activities when called	191	61.7	86	27.9	23	7.4	4	1.4	5	1.7
My parents are involved in my academic progress in your school personally come to see my teachers	111	36	84	27.1	55	17.9	33	10.7	26	8.3
My parents encourage me to study while at home and provide for my academic needs	213	69	61	19.5	24	7.9	5	1.7	6	2
My parents check and sign my academic report every term and reward me when I do well	135	43.6	81	26.2	43	14	28	9	22	7.1
My parents organize for my remedial lessons to help me do better.	125	40.5	72	23.3	54	17.4	37	12.1	21	6.7
My parents have high expectations of me and motivate me to have high targets	236	76.4	57	18.3	8	2.6	2	0.5	6	2.1
My parents pay fees and do everything to ensure I don't miss school	231	74.8	46	14.8	21	6.7	8	2.6	3	1.2

Table 1 : Students views on how parents are involved in assisting low performers

The study sought to examine students' perceptions regarding the role of parents in school activities and academic support. Table 1 illustrates a high level of parental involvement as perceived by the learners. A majority of students, 277 (89.6%), agreed that their parents actively participated in school meetings and events when called upon. Similarly, 274 (88.5%) reported that their parents not only encouraged them to study at home but also provided essential academic support, such as learning materials. Furthermore, 216 students (69.9%) affirmed that their parents consistently checked and signed their academic reports each term and provided rewards for good performance. However, 50 students (16.1%) disagreed with this statement, indicating variability in this aspect of parental engagement. Notably, 195 students (63.1%) agreed that their parents personally visited schools to engage with teachers regarding their academic progress, signifying a level of direct parental-school interaction. Additionally, 293 students (94.8%) reported that their parents had high academic expectations and consistently motivated them to achieve academic excellence. A comparable proportion, 277 (89.6%), affirmed that their parents ensured timely fee payments and other forms of support to prevent school absenteeism.

3.2. Views of teachers on how parents are involved in assisting low performers

Parents who choose to involve themselves in school programs influence positively their children's academic achievement (Mphale & Mhlauli, 2015). The views of teachers on how parental involvement assist low performers improve their learning outcomes are presented in Table 2.

Table 2 : Teachers views on how parents are involved in assisting low performers improve their learning
outcomes.

Statements of opinion	Strongly Agree		Agree		Neutral		Disagree		Strongly Disagree	
	#	%	#	%	#	%	#	%	#	%
Parents freely participate in school meetings and activities when called.	66	35	68	36.3	37	19.7	12	6.4	5	2.5
Parents are involved in the academic progress of their children in my school and personally come to see the teachers.	74	39.6	65	34.8	27	14	14	7.6	8	4
Parents encourage their children to study while at home and provide for their academic needs.	45	24.2	62	33.1	55	29.3	16	8.3	10	5.1
Parents check and sign academic report every term and motivate them when they do well.	42	22.3	66	35	32	17.2	26	14	22	11.5
Parents organize for remedial lessons to help low achievers do better.	45	24.2	62	33.1	32	17.2	28	14.6	21	10.8
Parents have high expectations of their children and motivate them to set high targets.	44	23.6	49	26.1	54	28.7	31	16.6	10	5.1
Parents pay fees and do everything to ensure their children don't miss school.	65	34.4	52	27.4	31	16.6	26	14	14	7.6

Table 2 presents teachers' perceptions regarding the extent of parental involvement in school activities and support for learners' academic development. A clear majority of the teachers, 134 (71.3%), agreed that parents readily attend school meetings and participate in school-related activities when invited. However, 17 teachers (9.0%) disagreed, indicating that while general participation is perceived positively, a small segment of parents may remain disengaged. Similarly, 139 teachers (73.9%) affirmed that parents are involved in monitoring the academic progress of their children, with some parents personally visiting schools to confer with teachers. Notably, 27 teachers (14.4%) were neutral, suggesting that perceptions vary depending on context or parental consistency in engagement.

In terms of academic reinforcement, 108 teachers (57.4%) agreed that parents regularly check and sign their children's academic reports and motivate them through recognition or rewards when they perform well. However, 48 teachers (25.5%) disagreed, indicating that a substantial proportion of parents may not actively track academic performance.

Regarding parental expectations, 93 teachers (49.5%) believed that parents have high academic expectations of their children and motivate them to set and strive for ambitious targets. On the other hand, 41 teachers (21.8%) disagreed with this view, and 54 (28.7%) remained neutral. This division reveals that while some parents foster aspirational mindsets, others may lack the same level of engagement or belief in academic potential.

Additionally, 107 teachers (56.9%) observed that parents make arrangements for remedial lessons, particularly for learners who are struggling academically. This proactive role suggests a growing awareness among parents of the importance of individualized academic support.

3.3. Board of Management members' opinions on parents' role in helping low achievers

Society considers academic achievement as a means to better social and economic gain. The opinions of BOMs on roles of parents in helping low achievers are presented in Table 3

The data shows that a significant majority of the BoM members, 17 (89.4%), agreed that parents of lowachieving students express concern about their children's academic performance. Similarly, 17 respondents (89.5%) affirmed that parents are supportive of academic programs implemented within the schools. Furthermore, over half of the BoM members, 11 (57.9%), agreed that parents strive to pay school fees on time to prevent student absenteeism. However, it was noted that in this arid and semi-arid region, fee payment becomes inconsistent, particularly during dry seasons when economic hardships intensify.

Statements of opinion	Strongly		Agree		Neutral		Disagree		Strongly	
	Agr	ee							Disa	agree
	#	%	#	%	#	%	#	%	#	%
Parents of low achievers get concerned	10	52.6	7	36.8	2	10.5				
over their performance.										
Parents support academic programs	5	26.3	12	63.2	2	10.5				
Parents pay fees on time to avoid student	5	26.3	6	31.6	4	21.1	2	10.5	2	10.5
absenteeism.										
Parents provide remedial help for their	3	15.8	6	31.6	5	26.3	4	21.1	1	5.3
children while at home										
Parent support school development	5	26.3	11	57.9	2	10.5	1	5.3		
Parents support motivational programs to	5	26.3	11	57.9	1	5.3			2	10.5
uplift low achievers										
Parents visit school voluntarily to check	3	15.8	11	57.9	3	15.8	2	10.5		
learners progress										

Table 3 : BOM members' opinions on parents' role in helping low achievers do well

The findings also reveal that 16 BoM members (84.2%) agreed that parents actively support motivational programs aimed at uplifting the performance of low-achieving learners. Additionally, 14 members (73.7%) noted that some parents voluntarily visit schools to follow up on their children's academic progress, demonstrating a proactive approach to engagement.

3.4. Chairpersons of Parents Association (PA) and Parents Involvement

Table 4 presents the perceptions of Parents' Association (PA) chairpersons regarding the role of parents in supporting learners' academic performance, particularly low achievers.

Statements of opinion	Strongly Agree		Agree		Neutral		Disagree			ongly agree
	#	%	#	%	#	%	#	%	#	%
Parents of low achievers get concerned over their performance.	8	44.4	5	27.8	5	27.8				
Parents support academic programs	7	38.9	7	38.9	4	22.2				
Parents pay fees on time to avoid student absenteeism.	5	27.8	4	22.2	4	22.2	2	11.1	2	11.1
Parents provide remedial help for their children while at home	3	16.7	4	22.2	5	27.8	4	22.2	1	5.5
Parent support school development	3	16.7	11	61.1	2	11.1	1	5.5		
Parents support motivational programs to uplift low achievers	5	27.8	9	50.0	1	5.5			2	11.1
Parents visit school voluntarily to check learners progress	2	11.1	10	55.5	3	16.7	2	11.1		

Table 3 : PA Chairpersons' opinions on parents' role in helping low achievers do well

The data indicates that nearly three-quarters of PA chairpersons, 13 (72.2%), agreed that parents of lowperforming learners express concern about their children's academic outcomes. A larger proportion—14 chairpersons (77.7%)—affirmed that parents actively support academic programs in their respective schools. In terms of financial commitment, half of the respondents, 9 (50.0%), agreed that parents strive to pay school fees on time to prevent absenteeism. However, it was noted that due to the economic vulnerabilities typical of arid and semi-arid regions, timely fee payment becomes a significant challenge during dry seasons. Additionally, 14 PA chairpersons (77.8%) agreed that parents support motivational programs aimed at improving the performance of low achievers, while 12 respondents (66.7%) noted that some parents voluntarily visit the school to monitor their children's academic progress.

Summary of Discussion and Interpretation

The study reveals that teachers, BoM members, and PA chairpersons generally hold moderately positive perceptions of parental involvement, especially in areas of school participation and academic support for struggling learners. Teachers acknowledged parental contributions to student performance and teacher morale, affirming existing literature that highlights parental engagement as a critical factor in educational outcomes (Mphale & Mhlauli, 2015; Houtenville & Conway, 2008). However, they also pointed to gaps in proactive parental action and expectations, often shaped by socioeconomic challenges and limited parental education, echoing Jeynes (2012).

BoM members demonstrated high appreciation for parents' support, particularly in educational programs, but noted recurring challenges such as delayed fee payments during economic hardship. This underscores the need for context-sensitive strategies, such as flexible fee structures or community-based safety nets, especially in arid and semi-arid regions. Importantly, BoM members' proactive leadership and competence were seen as influential in mobilizing parental engagement, aligning with Ngugi and Mumiukha (2016) on the role of governance in enhancing school-community collaboration.

PA chairpersons expressed generally positive views on parental concern, especially towards low-performing students, but similarly noted economic barriers to full involvement. Their active leadership emerged as a catalyst for encouraging broader parental participation and advocacy, supporting Mutua and Thinguri's (2016) findings on the importance of Parents' Associations in fostering school-home linkages.

When synthesized with broader literature, the findings align with Epstein's theory of overlapping spheres, highlighting the value of school-family-community synergy. Yet, the study also reflects enduring tensions—such as one-way communication, limited cognitive involvement from parents, and the cultural expectation of adolescent autonomy in education—highlighted by Hornby & Lafaele (2011), Oketch & Rolleston (2007), and Desforges & Abouchaar (2003).

Ultimately, while the study underscores growing awareness of the importance of parental roles, it calls for targeted strategies, leadership empowerment, and responsive policies to address participation gaps and ensure sustained, meaningful engagement—particularly for vulnerable learners.

Conclusion

This study underscores a growing consensus among teachers, Boards of Management (BoM), and Parents' Association (PA) chairpersons that parental involvement plays a vital role in supporting student achievement and school effectiveness, especially for learners at risk of underperforming. While there is broad appreciation for parental contributions—particularly in academic support and participation in school programs—persistent socioeconomic barriers, passive engagement, and cultural assumptions about adolescent self-management continue to limit deeper and sustained parental involvement.

The findings affirm that effective leadership from BoM and PA representatives can catalyze broader parental engagement, especially when such leaders are informed, motivated, and inclusive. However, parental roles often remain narrowly defined by financial obligations, with limited emphasis on academic or cognitive engagement—reflecting a need to reframe and support parental involvement as a shared, multidimensional responsibility. To truly realize the promise of parental participation, schools must foster two-way communication, redefine parental roles beyond fee payment, and accommodate the diverse realities of families, particularly in resource-constrained settings.

Actionable Recommendations

- Establish Parental Education Programs: Schools, in partnership with the Ministry of Education and local community organizations, should provide regular sessions to sensitize parents—especially those who are illiterate or semi-literate—on how to support their children's education both at school and at home.
- Reinforce Accountability Structures: Schools should implement follow-up mechanisms that hold parents accountable for participating in academic clinics, reviewing report cards, and attending meetings, with a focus on parents of low achievers.

- 3. **Promote Context-Sensitive Communication Channels:** Use flexible and localized means such as home visits, vernacular radio announcements, or SMS-based academic updates to reach parents who may not attend physical meetings due to work or distance.
- 4. **Review the Ban on Remedial Charges:** The Ministry of Education should re-examine blanket bans on remedial levies. Instead, they should establish a regulatory framework that permits targeted, transparent support initiatives for academically struggling learners, especially in under-resourced schools.
- Strengthen Home-School Collaboration Models: Schools should develop structured platforms such as Parent Academic Support Committees for Low Achievers to co-create solutions for learners' academic challenges.

Limitations of the Study

The study had three key limitations. First, contextual boundaries: It was limited to public secondary schools in selected counties, which may not accurately represent practices or experiences in private schools or other regions. Second, social desirability bias: Some principals may have described idealized forms of parental involvement to align with perceived expectations of the researchers. Finally, lack of student and parent perspectives: The study primarily relied on principals' viewpoints; incorporating voices of students and parents could have provided a more holistic understanding of parental engagement dynamics.

Conflict of Interest

The researchers declare **no conflict of interest** in the conduct, analysis, or reporting of this study. All data were collected ethically and with informed consent from participants, and the analysis was conducted independently without external influence or sponsorship.

REFERENCES

- Abdi, K., M. (2017). Institutional factors and student performance: A survey of public sec, schools in Hargeisa city, Somaliland. *International Journal of Education and Research, Vol.5, No.3, March 2017*
- Adhiambo, W., Odwar, A. & Mildred, A. (2011). *The relationship among school adjustment, gender and academic achievement among secondary school students in Kisumu District:* Maseno University: Kenya
- Adika, B. (2020) Perceived Teacher Related Factors Influencing Academic Performance Among Public Secondary School Students In Suba Sub-County, Homa Bay County, Kenya (Unpublished Thesis) Maseno University.
- Ahmad, S., Shaari, M., Hashim, R. & Kariminia, S. (2015). *Conducive attributes of physical learning environment at preschool level for slow learners*. Retrieved from www.sciencedirect.com.
- Akinyi, E.L., Orodho, J.A. & Ruggah, T.O. (2022). Per-student expenditure and learning output in Science and Mathematics in public secondary schools in Siaya Counties., *Kenya. Research on humanities and Social Sciences*, Vol.12, No.4, 2022. Pp.51-65.
- Annah, J.& Dorothy, N. (2015). Teachers' classroom strategy for enhancing students' performance in public secondary schools in Nandi County, Kenya. Nairobi: Kenyatta University. IOSR Journal of Humanities and Social Science Vol.20, Issue 7, Ver11, pp 51-73
- Balitilla, M. (2017). The impact of working conditions on teacher attrition in secondary schools in the South West region of Cameroon. Cameroon: University of Beua. *International Journal of Education and Research Vol. 5 No.6 June 2017*

- Bellon, E, Ngware, M. & Almassu, K. (2017). The role of parental leadership in academic performance: A case of pupils in the free primary education program in Kenya. *Education and Urban Society 2017, vol.49* (1) 110-130
- Bernardi, F. (2014). Compensatory advantage as a mechanism of educational inequality: A regression discontinuity based on month of birth. *Sociology of Education, Vol.87/2, pp 74-88*
- Best, W. & Kahn, J. (2006). Research in education (10th edit.). USA: Pearson Education Inc.
- Bett, D. (2018). Relationship between selected head teachers' leadership skills and academic performance of public primary schools in Tinderet sub-county, Nandi County, Kenya.
- Birte S., Gallagher E., Philips D., Martina V., Eyers J., Skaldiou D., Stevenson J., & Bhalvasar P. (2017). Education interventions for improving the access to and quality of education in low- and middle-income countries. A systematic Review. International Development.
- Biswas, S. (2015). Study orientation of high and low achievers at secondary level. *International Journal on New Trends in Education and their Implications Vol.6 Issue 4 Article 03 ISSN1309-6249*
- CERI (2015). Learning in the 21st Century: Research, Innovation and Policy
- Chui, M. & Ogola, J. (2017). Critical analysis of influence of teacher management on learners academic performance in public primary schools in Kenya. *International Journal of Education and Research*, *Vol.5, No.2, February 2017.*
- Creswell, J.W., & Clark, V. L (2011) *Designing and Conducting Mixed Methods* (2nded.). Thousand Oaks.CA: Sage
- Creswell, J. & Miller, D. (2000). Determining validity in qualitative inquiry: Theory in practice, 39 (3),1-130
- Dessalegn, F., Bekalu, F. & Frew, A. (2015). Principals perceived leadership effectiveness and its relationship with academic achievement among students in secondary schools: The Ethiopian experience. Ethiopia: Jimma University.
- Donald, A., Jacobs, C. & Chris, S. (2010). *Introduction to research in education (8thed.)*. USA: Wadsworth Cengage Learning
- Duruji, M., Azuh, D. & Oviasogie, F. (2014). Learning environment and academic performance of secondary school students in external examinations: A study of selected schools in OTA. Nigeria: Covenant University.
- Emmanuel, O., Moses, W. & Kassahun, A. (2016). *The role of parental leadership in academic performance: A case of pupils in the Free Primary Education program in Kenya*. Nairobi: Kenya.
- European Commission/EACEA/Eurydice, (2020). Equity in school education in Europe: Structures, policies and student performance. Eurydice report. Luxembourg: Publications Office of the European Union
- European Union. (2013). Thematic working group on Mathematics, Science, and Technology: Addressing low achievement in Mathematics and Science. Directorate-General for education and culture.
- Gary, D. (2015). *The effect of self-efficacy on parental involvement at the secondary school level.* USA: University of Pittsburgh.
- Glewwe, P. (2013). What educational policies work best to increase student learning? Lessons from three recent reviews of the evidence. Health and Education Advice and Resource Team (HEART)
- Gustafsson, M. (2011). The when and how of leaving school: The policy implications of new evidence on secondary schooling in South Africa. *Stellenbosch Economic Working Papers No. 09/11*
- Hafeez, M. (2021). Impact of Teacher's Training on Interest and Academic Achievements of Students by Multiple Teaching Methods. Pedagogical Research, 6(3), em0102. https://doi.org/10.29333/pr/11088
- Hanushek, E. & Woesmann, L. (2011). The economics of international differences in educational achievement. *Hand book of the Economics of Education, Vol.3, pp89-192.*
- Hao, L., Hu, A. & Lo, J. (2014). Two aspects of the rural-urban divide and educational stratification in China: A trajectory analysis. *Comparative Educational Review, Vol. 58/3, pp 509-536.*
- Higgins, S., Baumfield, V. & Hall, E. (2009). Learning skills and the development of learning capabilities: Report in research evidence in education library. London: EPPI -Centre, Social Science Research Unit, Institute of Education: University of London.
- Igbo, J., Onu, V. & Obiyo, N. (2015). Impact of gender stereotype on secondary school students self-concept and academic achievement. *Sage open, January-March 2015:1-10*
- Jerrim, J. (2015). Why do East Asia children perform well in PISA? An investigation of Westernbom children of East Asia descent. Oxford Review of Education, Vol.41/3, pp 310-333. Retrieved from http://dx.do.org/10/1080/03034985.2015.1028525 on 4th July, 2017
- John, W. & James, V. (2006). Research in education (10th ed.). USA: Pearson Education Inc.
- Johnson, A. (2018) Meeting the Needs of Low-Achieving Students in Sweden: An Interview Study.

Front. Educ.3: 63.doi:10.3389/feduc.2018.000663

- Judith, S. & Johnson, R. (2017). How to construct a mixed method research design. *Kolnz Soziol (2017) (Suppl2)* 69:107-131
- Katamei, J. & Omwono, G. (2015) Intervention strategies to improve student's academic performance in public Secondary Schools in Arid and Semi-Arid Lands in Kenya. *International Journal of social Science Studies*. 3.10.11114/ijcs. v3i4.796.
- Kelei, B. (2003). Distance learning special needs education module 29: Curriculum development and adaptation (1st edit.) Nairobi: KISE.
- Keller, L. (2015). Low achieving students' perspectives regarding their experiences as recipients of instructional support delivered in a general education setting. New Jersey: The State University.
- Kelly, A. (2003). Barriers to low achievers' success in the elementary classroom as perceived by teachers: A qualitative study. USA: University of Florida.
- Kelly, J., & Pohl, B. (2018). Using Structured Positive and Negative Reinforcement to Change Student Behavior in Educational Settings in order to Achieve Student Academic Success. *Multidisciplinary Journal for Education, Social and Technological Sciences*, 5(1), 17–29. https://doi.org/10.4995/muse.2018.6370
- Khoza, J. (2012). The relationship between the school principals instructional leadership role and the academic performance of pupils in Swaziland primary schools. *Unpublished thesis*.
- Kibui, W. (2013). Transformational leadership in schools management and capacity building: A survey of public secondary schools in Kenya. *International Journal of Applied Research Studies (IJARS) ISSN: 2278-*9480 Vol. 2.
- Kimeli, J. (2017). Teachers and pupils' perception on the effects of pupils ranking in Kenya Certificate of Primary Education on the uses of instructional methods by teachers in selected primary schools in Eldoret municipality. Eldoret: Chuka University. *International Journal of Education and Research* Vol.5 No. 2 February 2017
- Kirti, K. (2008). Assessment for improving learning in schools in India: A perspective.
- Kosgei, Z., & Chelimo, B., & Kitainge, K. (2023) Relationship Between Secondary School Categorization and Value- Added Progress in Public Secondary Schools in Nandi County, Kenya. *Innovation The European Journal of Social Science Research. VII. 990-1004.*
- Kothari, C. (2008). *Research methodology, methods and techniques (2nded.)*. New Delhi: New Age International Publishing Limited.
- Krasnoff, B. (2015). Leadership qualities of effective principals. Education Northwest.
- Kruger, A. (2003). Instructional leadership: The impact on the culture of teaching and learning in two effective secondary schools. South African Journal of Education, Vol.23(3), 206-211.
- Lazarus, S., Wu, Y., Altman, J., & Thurlow, M. (2010). The characteristics of low performing students on large scale Assessment. Minneapolis, MN: University of Minnesota, National Centre on Educational Outcomes
- Louis, C., Lawrence, M. & Keith, M. (2011). Research methods in education (7th ed.). London: Routledge.
- Louis, K., Leithwood, K., Wahlstrom, K., & Anderson, S. (2010). *Investigating the links to improved student learning: Final report of research findings*. Retrieved from http://www.wallacefoundation.org/knowledge-center/ school-leadership/key-research/Pages/ Investigating-the-
- Links-to-Improved-Student- Learning.aspx Magidanga, F. (2017). Impediments towards enhancing the pedagogical content knowledge to secondary school teachers in Tanzania. Tanzania: Mkwawa University College of Education. *International Journal of Education and Research Vol.5 No.1 January 2017*
- Makewa, L., Elizabeth, R., Jesse, R., & Yegoh. E. (2011). School climate and academic performance in high and low achieving schools, Nandi Central district, Kenya. Kenya: University of East Africa, Baraton. *International Journal of Scientific Research in Education Vol.4 (2) 93-104.*
- Manaseh, M. (2016). Instructional leadership: The role of heads of schools in managing the instructional programme. International Journal of Educational Leadership and Management, 4(1), 30-47. doi:10.17583/ijelm.2016.169/
- Marcus, A., Dick, M., Grant, C. (2015). Heading for the exits: Comparing characteristics of leavers from charter schools to traditional public schools in Denver public schools. Center for the Study of Government and the Individual. University of Colorado.
- Marian, A. & Intan, A. (2012). Students of low academic achievement: Their personality, mental abilities and academic performance: How a counselor can help.

Mbunde, J. (2017). Aspects of head teachers' competence on pupil's performance in Kenya Certificate of Primary Education. Nairobi: University of Nairobi. *International Journal of Education and Research Vol.5 No.5 May 2017*

Mestry, R. (2017). Principals perspectives and experiences of their institutional leadership functions to enhance learner achievement in public schools. *Journal of Education, 2017, Issue 69.*

Michelle, L. (2010). Identifying underachievers. Alexandria: USA.

- Ministry Of Education. (1999). School management guide. Nairobi: Jomo Kenyatta Foundation.
- Mogaka, A. (2014). Factors that influence the need for private supplementary tuition in secondary schools: A case study of selected schools in Borabu District in Nyamira County, Kenya. Nairobi: Unpublished thesis. University of Nairobi.
- Mohammed, J., Abbas, A., Helan, N., Kiranjit, K. (2011). Learning styles and overall academic achievement in a specific educational system. Malaysia: University Sains Malaysia. *International Journal of Humanities and Social Sciences Vol.1, No.10, August 2011*
- Mong'are, R. (2017) Parents' Role in Children's Learning: A case of Secondary Schools in Tarime. Unpublished Med Thesis
- Mphale, L. & Mhlauli, M. (2015). An investigation on student's academic performance for junior secondary schools in Botswana. Botswana: Gaborone University of Botswana. *Retrieved from European Journal of Educational Research Vol.3, No.3, 111-127 on 15th sept.2017.*
- Muchunguh, D.(2022). KCSE 2021: Concern over rise in Es (Daily Nation). https://nation.African/Kenya/news/education/KCSE-2021/ April/concern-over-rise-in-Es
- Mudibo, S. (2014). Impact on parents' involvement on students' academic success in secondary schools in Kenya. Nairobi: Kenyatta University. Unpublished thesis.
- Mugenda, A. (2008). Social science research: Theory and principles. Applied Research & Training Services, Nairobi: Kenya
- Mugure, K. (2014). Influence of social stratification on academic performance of public and private secondary school students in Nandi County. Nairobi: University of Nairobi.
- Mutua, M. (2015). A correlation study between learning styles and academic achievement among secondary school students in Kenya. Nairobi: Kenya.
- Mustafe, K. (2017). Institutional factors and student performance: A survey on public secondary schools in Hargeisa city, Somaliland. *International Journal of Education and Research Vol.5 No.3 March 2107*
- Mwaniki, M. (2011). School based factors influence on student performance in Kenya Certificate of Secondary Education in Murang'a South district, Kenya. Nairobi: University of Nairobi.
- Mwaura, J. (2010). Strategies employed by secondary schools' principals to improve academic performance in Embu West District. Nairobi: Kenyatta University
- Naidoo, P. & Petersen, N. (2015). Towards a leadership programme for primary school principals as instructional leaders. *South Africa Journal of Childhood Education 5(3), Art No.* 371.http://dx.doi.org/10.4102/sajce.v513,371.
- Nambuya, O. (2013). School based factors influencing students' academic performance at Kenya Certificate of Secondary Examination in Teso south district. Nairobi: University of Nairobi.
- Ndege, W., Bosire, K. & Ogeta, N. (2015). Factors affecting academic performance in day secondary schools in Borabu district in Kenya. *International Journal of Current Business and Social Sciences*, 1(3), 19-31
- Ndereba, W. (2011). Socio economic factors influencing students' performance in Kenya Certificate of Secondary Examination in secondary schools in Igembe south district, Eastern Province, Kenya. Nairobi: Kenyatta University. Unpublished thesis
- Njue, F. (2015). A comparative analysis of upper and lower quartile academic achievers study habits in secondary schools in Embu County, Kenya. South Africa: University of South Africa. Unpublished thesis
- Nyagosia, P. (2011). Determinants of differential Kenya Certificate of Secondary Education performance and school effectiveness in Kiambu and Nyeri counties, Kenya. Nairobi: Kenyatta University. Unpublished thesis
- OECD, (2016). Low performing students: Why they fall behind and how to help them succeed. PISA, OECD publishing: Paris. http://dx.doi.org/10.1787/9789264250246-en.
- OECD, (2013). PISA 2012-What makes schools successful (Volume IV): Resources, policies and practices. PISA, OECD Publishing, Paris, 2013.
- Ogola, E. (2013). Influence of principal's leadership styles on students' achievement in Kenya Certificate of Secondary Education in Awendo district, Kenya. Nairobi: Kenyatta University.

- Ogonda, G. & Njuki, P. (2001). Distance learning special needs education module 4: Learners with learning difficulties in an inclusive setting. Kampala: UNISE.
- Onguko, B. (2012). Teachers' professional development in a challenging educational context: A study of actual practice in rural western Kenya. Alberta: University of Calgary.
- Orina, K. & Omamba, A. (2017). Impact of the principals' leadership behaviour on students' academic performance in secondary schools, Manga division, Nyamira district, Nyanza province. Nairobi: Kenyatta University.
- Orodho, A. (2017). Techniques of writing research proposals and reports in education and social sciences: An illustrative approach to scholarly excellence. Nairobi: Kanezja Publisher.
- Orodho,A,J.; Nzabalirwa,W. Odundo,P,Waweru,P. & Ndayambaje, I (2016). Quantitative and Qualitative Research Methods: A step by step guide to excellence. Kanezja Publisher.
- Osuo, H. O. (2022). Effectiveness of Board of Management in Enhancement of Students Academic Performance in Public Mixed Day Secondary Schools in Bondo Sub–County, Kenya. *The international Journal of Humanities & Social Studies*, 10(5). https://doi.org/10.24940/theijhss/2022/v10/i5/HS2205-002
- Othoo, H. A. & Nekesa, F. (2022). Factors Affecting Teacher Motivation in Public Secondary Schools in Teso-South Sub-County, Kenya. *Journal of Research Innovation and Implications*, 6(2), 188–196
- Peipei, L. & Guirong, P. (2009). The relationship between motivation and achievement: A survey of the study motivation of English major in Quingdao agricultural university. *English Language Teaching Vol.2,* No.1, March2009.Retrieved from www.ccsenet.org/journal.html on 8th August, 2017

Pokropek, A., Costa, P., Flisi, S., & Biagi, F. (2018). Low achievers, teaching practices and learning environment. *Publications Office of the European Union, Luxembourg*. Doi:10.2760/973882, JRC113499.

- Polirstok, S. (2017). Strategies to improve academic achievement in secondary school students: Perspectives on Grit and Mindset. Sage Open. October 2017.doi:10.1177/2158244017745111.
- Ponge, A., Ndungo, C. & Lodiaga, M. (2018). Evaluation frameworks, testing and assessment in secondary schools in Kenya. International Journal of Research and Innovation in Social Sciences (IJRSS) Vol.II, Issue VII. Retrieved on 30th July, 2018.
- Pritchett, L. (2013). *The rebirth of education: Schooling ain't learning*. Washington D.C: Center for Global Development.
- Rono, K., Onderi, H. & Owino, J. (2014). Perceptions of causes of poor academic performance amongst selected secondary schools in Kericho sub-county: Implications for school management. Retrieved from http://www.emskenya.net
- Salehiss, A. & Mohammedkhani, K. (2013), The school curriculum as viewed by the critical theorists. *Procedia* - Social and Behavioral Sciences 89 (2013) 59 – 63
- Selina, J., Patrick, K. & Ahmed, F. (2017). Influence of school's inclusiveness on learning environment in public primary schools in Nandi North Sub-County. *International Journal of Education and Research Vol.5* No.6, June 2017.
- Shabrina, M., Fatimah, W., Mlamad, W. (2012). A conceptual framework in examining the contributing factors to low academic achievement: Self-efficacy, cognitive ability, support system and socio-economic. Petronas: University Tecknologi.
- Shaw, S. (1999). *The devolution of interest in slow learners: Can we continue to ignore?* NASP Communiqué, 31.
- Sigilai, R. & Bett, J. (2013). Effectiveness of head teachers' leadership styles on the management of public primary school's curriculum implementations in Bomet County, Kenya. Eldoret: Kenya. Retrieved from Journal of Emerging Trends in Education, Research and Policy Studies Vol.4 (2) on 10th September, 2017.
- Silyvier, T. (2017). Extrinsic motivational factors influencing teachers' classroom effectiveness: A case study of Kakamega County, Kenya. Eldoret: Moi University. International Journal of Education and Research Vol.5 No.1 January 2017. Retrieved on 17th August 2017
- Smarick, A. (2013). Closing America's high achievement gap: A wise giver's guide to helping our most talented students reach their full potential. The Philanthropy Roundtable, 1730, M Street NW Suite 601 Washington D.C. 20036.
- Snilstveit, B., Stevenson, J., Philips, D., Vojtkova, M., Gallagher, E., Schmidt, T. (2015). *Interventions for improving learning outcomes and access to education in low and middle- income countries. A systemic Review 3ie:* London

- Steinmayr, R., Meibner, A., Weidinger, A. & Wirthwein, L. (2014). *Academic achievement*. New York: Oxford University Press.
- Tashakori, A. & Teddlie, C. (2003). *Handbook of mixed methods in social and behavioral research*. London: Sage Publications.
- Tenai, N. K. (2017). Teacher factors influencing integration of information communication technology in teaching of English Language in secondary schools in Eldoret-East Sub-County, Kenya (Thesis).
 Strathmore University. Retrieved from http://su-plus.strathmore.edu/handle/11071/562 Wettasinghe, C. & Hasan M. (2007). Investigating the efficacy of the use of ICT for slow learners: Studies in Singapore Primary Schools.
- Walingo, M. (2010). Effectiveness of special needs education supervision in Uasin Gishu district, Rift-Valley province, Kenya. Nairobi: Kenyatta University. Unpublished thesis
- Wanjala, G. & Koriyow, H. (2017). Impact of subsidized fees on students' access to quality education in public secondary schools in Wajir County, Kenya. Nairobi: University of Nairobi. International Journal of Education and Research Vol.5 No. 7 July 2017
- Wekesa, E. & Simatwa, E. (2016). Students' factors influencing academic performance of students in secondary school education in Kenya: A case study of Kakamega County. Kenya: Maseno University. Educational Research Vol. 7(3), pp072-087, May 2016
- Werang, Basilius & Jampel, I & Agung, Anak & Putri, Hagnisaridewi & Asaloei, Sandra. (2022). Teacher teaching performance, students' learning motivation and academic achievement. Cypriot Journal of Educational Sciences. 17. 4672-4682. 10.18844/cjes.v17i12.7586.
- World Bank. (2011). *Learning for all: Investing in people's knowledge and skills to promote development.* The World Bank
- Xuan, B., Carol, Q., Selene, A. & Mitchelle, V. (2010). *Inclusive education: Research and practice*. USA: Maryland Coalition for Inclusive Education. www.mcie.org
- Young, D., Reynolds, A., & Walberg, H. (1996). Science Achievement and Educational Productivity: A Hierarchical Linear Model. *The Journal of Educational Research*, 89(5), 272-278. Retrieved February 21, 2021, from http://www.jstor.org/stable/27542044