

**INFLUENCE OF TEACHING STRATEGIES ON PUPILS' ACADEMIC
PERFORMANCE IN KATHONZWENI SUB-COUNTY, MAKUENI COUNTY,
KENYA**

^{1*}Mary Mumbua Masika, ²Professor Pamela Ochieng & ³Dr. Robert Kamau

^{1*}Scholar, School of Education, Mount Kenya University, Kenya

^{2,3}Lecturer, School of Education, Mount Kenya University, Kenya

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ABSTRACT

The Purpose of the Study was to assess the influence of teaching strategies on academic performance among primary pupils in Kathonzwani Sub-County, Makueni County. Teachers are the core influential aspect of students' learning and achievement. Other essential contributors may include but are not limited to the school attended, the social and economic level of the students' families. This study was carried out amongst public primary schools in Kathonzwani Sub-county. The study focused on grade three pupils. The study focused on the influence of teaching dynamics on academic performance. A mixed methods approach was received and accordingly simultaneous triangulation research configuration was applied. Questionnaires were utilized to gather information from instructors, talk with direct for headteachers though perception agenda was utilized to gather information from grade three students. The target population was 2591 respondents comprising of 95 headteachers, 107 teachers and 2389 pupils. The quantitative data was analyzed illustratively utilizing frequencies, rates, mean and standard deviation and inferentially utilizing ANOVA in Statistical Packages for Social Science (SPSS Version 23). Most of the respondent, 51.61% of them agreed that teacher motivation is the most importance dynamic. a larger number of the respondent, 67.74% of them argued that the number of lessons affects pupils academic performance, 48.38% of the respondents agreed that the teaching experience affects pupils academic performance and The study finding found that there was a significant relationship between teachers' training, teachers experience and preparation of professional documents. The study recommends tht teachers should utilize their experience from teachers training to experience that they got.

Keywords; *Teaching Strategies, Academic Performance, Kathonzwani Sub-County*

INTRODUCTION

Teachers are the core influential factor in students' learning and achievement. Other essential contributors may include, but are not limited to, the school attended, the social and economic status of the students' families, as well as the students' abilities and characteristics. However, the most powerful and influential contributor to students' academic performance always remains the teachers. Consequently, teachers' qualities and credentials shape and define the

students' future. Effective teachers possess several characteristics that signify their quality. These characteristics include content knowledge, teaching experience, preparation, qualifications, and overall scholarly capacity (Policy Studies Associates, 2005).

Globally, numerous teacher trainees pursue educational training for effective teaching, thereby improving pupils' performance. Primary schools have specific objectives that vary from one country to another (Fajan, 2002). In Uganda, the objectives of primary education aim to provide facilities and resources to enable every child to enter and stay in school until completing primary education, eliminate disparities and inequalities, ensure education is accessible to the majority of Ugandans, and reduce poverty by equipping individuals with basic skills (Wachiye, 1990). Fajan (2002) identified a lack of recognition for well-done work as a factor contributing to low motivation. In Australia, the primary curriculum has been a subject of debate. While many argue for teachers to specialize in key subject areas, teachers are often considered generalists, responsible for teaching all subjects. In contrast, in England, generalists are considered outdated, and reflective practice is not emphasized (Alexander, 1992).

The specialization model should have a positive impact on improving learners' academic performance. If teacher trainees were fully trained to excel in their specialized subjects, there should be observable improvements in students' skills and teaching strategies, leading to better academic outcomes. Masters (2009) prioritizes core areas such as literacy, science, and numeracy and advocates for the deployment of specialists. Australia has faced the challenge of teachers teaching subjects for which they are not qualified or trained, known as "out-of-field" teaching. Reports suggest that such teachers negatively affect student performance and achievement scores because they lack the competence to deliver relevant content (Wachiye, 1990).

Data from the 2013 global Teaching and Learning International Survey (TALIS) report reveals that 5.3% of science instructors received no proper training in their subjects. In a recent report by the Australian Council for Educational Research (ACER) on staff in schools, it was found that 20% of mathematics teachers were out-of-field. Addressing the issue of out-of-field teaching requires tackling factors such as teacher shortages, school funding models, and school leadership practices. Until recently, little attention had been paid to curbing the negative effects of out-of-field teaching on both teachers and learners' well-being (Goldberg, Gallimore, Reese Garnier, 2001).

In Africa, primary education has undergone significant reforms in various areas, particularly in alignment with the Sustainable Development Goals (SDGs). Among the SDGs, two relate to education: "Achieving universal primary education" (SDG number two) and promoting gender equality and empowering women (the third Sustainable Development Goal). These goals emphasize the importance of ensuring that all primary school learners complete their education, regardless of gender, and eliminating inequalities at both primary and secondary school levels. This aligns with the target of Vision 2030. The challenge lies in ensuring that girls and boys worldwide complete their primary education with a focus on quality education and the quality of teachers, who play a crucial role in guiding learners (Kabeer, 2005).

Despite efforts to meet SDG2 and SDG3, challenges related to primary education persist. Emphasizing education as a priority is crucial, focusing on helping learners complete their primary education, and ensuring that they receive a quality education facilitated by well-prepared teachers (Richard, 2009). Teacher education programs allow aspiring student teachers to choose their preferred subject areas based on their academic qualifications. These programs aim to train teachers in their specialized areas and impart the appropriate teaching

methodologies (Reynolds, 1992). There is a growing need for both generalist and specialist teachers in various areas of education. Pursuing a specialty allows teachers to advance their careers and increase their lifetime earning potential, thus benefiting both teachers and students. Teachers are responsible for the intellectual development of their students, and quality teaching is essential based on the knowledge acquired (Anderson, 2012).

In Kenya, the current Primary Teacher Education (PTE) curriculum includes five core subjects made mandatory for student teachers: English, Mathematics, Professional Studies, Physical Education, and ICT. Each student can choose two optional subjects from two categories. Option A includes Home Science, Science, Mathematics, and Agriculture, while Option B includes creative arts, music, Social Studies, and Religious education. The professional examinations encompass traditional education disciplines like philosophy, history, sociology, comparative education, curriculum studies, educational psychology, educational measurement and evaluation, educational administration, and Special needs education, guidance and counseling, and legal issues in education (MoEST, 2004).

Teaching practice occurs in three sessions, and the assessment in PTE includes continuous assessment, a final examination, and evaluation of teaching practice. However, there are challenges in the PTE curriculum. According to Camerchero (2006), e-Learning is a variety of learning experience that uses technology to support and enhance teaching and learning. One significant challenge is the limited specialization for practice in primary sections in public primary schools. Teachers often find themselves teaching subjects they are not specialized in, including primary classes where all subjects are compulsory. Despite the employment of trained teachers, academic performance among primary pupils has been on the decline in Kathonzi Sub-County over the last three years (Kathonzi education office, 2018). This situation has prompted the researcher to investigate the influence of teaching dynamics on pupils' academic performance.

Statement of Problem

Teaching dynamics as far as subject specialization is concerned is a practice among many institutions aimed at fostering quality of education among learners. In Kenya Primary Teacher Education Curriculum is offered in certificate level Colleges through a two- year residential program where teachers are trained on Core Subjects which include; English, Kiswahili, Physical Education (P.E), Information Technology (IT) and education (previously called professional studies) offered in the first year of training and in the second year they either specialize in Option A or Option B. Option A consists of Mathematics, Science, Agriculture and Home science whereas Option B caters for C.R.E, Subject Performance , creative Arts and Music. However, as stated in the background, Masters (2009) noted that priority to core areas of literacy, science and numeracy have to be prioritized so that pupils' performance is improved. Despite teachers being required to train with a specialist in a particular subject of learning, once they have gained qualified status, they are free to teach any subject. The fact that teachers are supposed to teach all subjects, they need to have positive attitude towards teaching, improve on their teaching strategies and have adequate mastery skills in order to ensure that pupils' performance is improved. Teaching efficiency is still wanting; pupil's performance is low with most public primary schools witnessing an increased decline in academic performance in reading, writing and numeracy skills. Studies have not interrogated on how the changes in the training and teaching dynamics impacts on pupils academic performance. After the training period, teachers are posted to schools whereby they are expected to teach all the primary subjects without consideration of the subjects they specialized in Teacher Training Colleges. This scenario could be the underlying

factor for the declining academic performance in reading writing and numeracy among grade three pupils in Kathonzwani Sub-County hence the study.

Study Objective

To examine the influence of teaching strategies on pupils' academic performance in Kathonzwani sub-county

Literature Review

Specialization is a model aimed at reaching every student and teacher by allowing them to be trained in how to teach their preferred subjects (Jackson, 2000). The teaching dynamics phenomenon is therefore new in Kenya. In the past, teacher trainees used to learn all subjects, which has now been phased out. Gamoran's study (2006) indicated that teacher training improved student learning through its consequences for showing rehearsals that incorporate the delivery of content. Furthermore, different investigations by Jackson and Davis (2000) on teaching youths in New York reported that teacher training enhanced teachers' skills and knowledge, which further improved content delivery.

Weish (2010) and Gurskey (2013) state that adequately trained teachers have strong knowledge and a better understanding of the subject content to be taught to the learners. These trained teachers can incorporate different effective teaching methods to improve teaching methodologies and enhance classroom content delivery. Recent studies in Texas and Dallas have shown that instructor effectiveness is a solid determinant of student disparities in academic performance.

Sanders and Rivers (1996) and Horn and Sanders (1997) stated that learners taught by untrained and ineffective teachers have a higher chance of attaining low achievements in tests than those taught by well-prepared and effective teachers. Another study by the National Staff Development Council (2003) showed that teacher training improves instructional strategies and belief systems, strongly enhancing the delivery of content. Morgan (2010), through his study on the benefits of professional development, indicated that teacher training provides teachers with more knowledge and skills to aid them in content delivery. On the other hand, Haycock (1998) showed that teachers with limited training have insufficient knowledge of the subjects they teach, leading to their students lacking essential learning resources.

Ngala and Odebero (2010) opine that in recent years, instructors have become familiar with terms like blended learning and competency-based learning. These concepts are often associated with personalized learning and frequently involve ideas like self-paced instruction and the effective use of continuous feedback. Competency-based coaching and capacity-based training are often used interchangeably with personalized learning in various regions and by different groups. However, the central and crucial element in all of these is the same: enabling students to progress at their own pace as they master content.

In a study carried out in Kenya by Wanzare and Ward (2000) on providing knowledge to staff and professional development, it was observed that to enhance teacher effectiveness and student learning, it is important to improve all programs that support teachers. Ngala and Odebero (2010), after their study on teacher perceptions of teacher training in rural primary schools in Kenya, found that, among various reasons for training, many teachers improved their teaching effectiveness. This finding was inconsistent with Ngangarora (1996), who argued that mastery of content led to teaching effectiveness.

Theoretical Literature Review

The study was guided by the scientific management theory and theory of performance. This theory of scientific management was advocated by Frederick W. Taylor & Max Weber.

According to these theorists, the idea of teaching dynamics allows teachers to specialize in subjects. When teachers specialize in subjects, they can reach quite a big number of pupils in their area of expertise. The specialization provides an opportunity for the teacher to specialize in what he/ she is efficient to improve education production. Taylor states that teaching dynamics aims at improving the production in education since specialization does involve the narrowing of practice thus bringing about competency in the delivery of content.

Kapfunde (2000) & Kasher (2005) focuses on specialization on the idea of improving education. At the primary level, specialization being a form of division of labour increases schooling creation on the grounds that every instructor can completely focus on what he/she is talented in. Since specialization aims at improving the production in education, it aims at increasing both the teacher and learners and in return yield high results as far as performance is concerned. Bailey, Curtis & Nunan (2001) argue that the major role of specialization is the improvement of performance for the whole school, teachers and learners. Therefore, teaching dynamics gives the teacher a strong grounding in the specialized area. They enable the teacher to be relevant, effective and efficient enabling the teacher to become of great knowledge in the area of specialization.

Specialization in the education systems in China and the United States of America were observed by Pine (2012). She did note that the Chinese elementary schools had specialized in subjects. She more so, said that these specialists did not only specialize in the subject but on how to teach the same subject content. Schools in the United States of America had teachers who were generalists (Pine, 2012). As far as Taylor is concerned, he said that the main aim of specialization was to increase the productivity of human work with a scientific approach. According to Kocyba & Schumm (2002), the prerequisites for the increased productivity are the separation of head and handwork, systematic collection of dexterities and the worker's knowledge becoming independent of the functions and work analysis. According to Taylor, the workers worked but not efficiently and not to their full potential (Hodgetts, 2001). This theory is relevant to this study because teaching dynamics is a form of division of labour whereby teachers are allowed to practice what they are best trained in.

METHODOLOGY

The study applied mixed methods approach. The researcher employed quantitative and qualitative methods on this study. This study embraced the Concurrent triangulation design which encourages the accomplishment of contrasting yet relating data on the research problem to comprehend it best. This study was carried out in Kathonzwi Sub-County. Kathonzwi Sub-County is located in Makueni County and it has 95 primary schools. The target population was 2591 respondents comprising of 95 headteachers, 107 teachers and 2389 pupils. Utilizing the Central Limit Theorem, a sample of 20 headteachers, 50 teachers and 280 learners was used.

The researcher applied a well-designed questionnaire containing most of both closed and open-ended test things to gather quantitative information from instructors. The researcher utilized structured interviews with open-ended test things to accumulate subjective data from headteachers. The study conducted an observation on the pupils of live lessons in sampled schools. This was compared with reading, writing and numeracy skills. Data analysis started by distinguishing basic themes. The significant data was broken into expressions or sentences, which mirror a solitary, explicit idea. Subjective data was analyzed thematically while the quantitative data was analyzed illustratively utilizing frequencies, rates, mean and standard deviation and inferentially utilizing ANOVA in Statistical Packages for Social Science (SPSS Version 23).

FINDINGS AND DISCUSSIONS

The response rate for primary teachers was 80 respondents and 90 for the head teachers. This chapter introduces research findings and discussions.

Teaching strategies that affect Pupils' Academic performance

The study was to investigate the dynamics of teaching strategies that enhance pupil's academic performance. 40 (50%) of the respondents agreed that teaching experience enhance pupils' academic performance, 30 (37.5) of the respondents agreed that academic qualification enhance pupils academic performance while 10 (12.5%) of the respondents agreed that preparation of professional documents enhance pupils academic performance. Table 1 have the detail.

Table 1: Dynamics of teaching strategies that affects teaching academic performance

	Frequency	Percentage
Teaching experience	40	50
Academic qualification	30	37.5
Preparation of professional documents	10	12.5
Total	80	100

Source: Field Data (2021)

Level to Which Teaching Strategies Enhance Primary Pupils Academic Performance

The researcher wanted to investigate the teaching strategies that enhanced pupils' academic performance. An average of 13 (16.75%) of the respondents strongly disagreed that teaching strategies influences pupils academic performance, 18 (22.5%) of the respondents disagreed, 5 (6.8%) of the respondents were not sure whether teaching strategies influences pupils academic performance, 28 (35.25%) of the respondents agreed that teaching strategies influences pupils academic performance while 17 (22.6%) of the respondents strongly agreed that teaching strategies influences pupils academic performance.

A high percent of 40 (50%) of the repodants agreed and a lower of 6 (8.4%) of the respondant strongly diagreeed that teaching experience influence pupils academic performance. A high of 33 (42%)agreed and lower of 2 (3.4%) strongly disagreed that strategies influence pupils academic performance. A high of 26. (33%) and a lower of 7 (9.2 %)strongly disagreed and strongly agreed respectively that teachers planning strategies academic performance. A high of 28 (36.8) strongly agreed and a lower of 14 (18.4) disagreed that school provided and facilitated subject workshop, trainging and seminars as shown in table 2.

Table 2: Level to Which Teaching Strategies Enhance Primary Pupils Academic Performance

	Strongly Disagree	Disagree	Not sure	Agree	Strongly Agree
Teaching experience influence pupils academic performance	8%	12%	2%	50%	28%
Teaching strategies influence pupils academic performance	3%	32%	8%	42%	15%
Teachers planning strategies academic affects pupils performance	32%	28%	8%	23%	9%

My school provided and facilitates subject workshops, training and seminars	24%	18%	6%	26%	36%
Average	16.75%	22.5%	6%	35.25%	22%

Source: Field Data (2021)

Most of the headteachers at Kathonzweni sub- county, Machakos County agreed that that teaching strategy have a greater impact on pupils academic performance. One of the respondent had this to say;

“Teaching strategies are classified into teacher-focused methodologies and student focused methodologies. Teacher-focused methodologies incorporate talk strategy, boring and addressing. In teacher focused methodology, learning happens when teachers instruct and later inspect showed ideas by giving students practices identified with the teacher's show during or after the exercise. This is to see if students got a handle on the information gave to them by the teacher.”

Regression analysis

Table 33: Teaching Strategies Towards Academic Performance -Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.559 ^a	.312	.294	1.227

a. Predictors: (Constant), Teaching Strategies

Source: Researcher (2021)

The table provided the R and R squared, adjusted R squared and standard error of estimate, which can be used to determine how well a regression model, fit the data.

A value of 0.559 is obtained and indicates an average prediction. The R square column represented the proportion of variance of academic performance that can be explained by the independent variable, teaching strategies. Technically, it was the proportion of variation accounted for by the regression model above and beyond the mean model. From the value of 0.312 multiplied by 100 therefore a value of 31.2% of the academic performance was attributable to teaching strategies. It also indicated a positive correlation, to determine if 0.559 was significant. Analysis of Variance (ANOVA) was tabulated as shown in table 4

Table 4: Teaching Strategies on Academic Performance -ANOVA

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	25.933	1	25.933	17.238	.000 ^b
	Residual	57.167	38	1.504		
	Total	83.100	39			

a. Dependent Variable: Academic Performance

b. Predictor (constant) Teaching strategies.

Source: Researcher (2021)

The F-ration in the ANOVA table test whether the overall regression model was a good fit for the data. The table showed that independent variable, Teaching strategies statistically predicted the dependent variable Academic performance, $F(1,38) = P < .005$ that the regression model was a good fit for the data.

Table 5: Teaching strategies towards Subject Performance - Coefficients

Model	Unstandardized		Standardized	t	Sig.
	Coefficients		Coefficients		
	B	Std. Error	Beta		
1 (Constant)	-1.796	1.207		-1.488	.145
Teaching strategies	.184	.044	.559	4.152	.000

a. Dependent Variable: Academic Performance

Source: Researcher (2017)

The table 5 indicated the coefficient of teaching strategies towards academic performance (b=0.184, p=.000) was significant and it is positive. An indication that an increase in teaching strategies would increase academic performance by 0.184 units.

Conclusions

The study concluded that there was a significant relationship between teachers' training, teachers experience and preparation of professional documents. Although from the findings of the study shows that teaching experience other dynamics have got a greater impact on the academic performance of the pupil. Academic qualification plays a bigger role on the academic performance of the pupils also as seen in the study findings. Preparation of professional document is very importance and should not be disregarded and has got significant importance and it do affect the academic performance of pupils in kathonzweni sub-county, makueni county like others.

Recommendations

The study recommends teachers to utilize their experience from teachers training to experience that they got since it is of a greater impact and it reflects the student academic performance. All teachers should be qualified academically since it too can affect the pupil's academic performance as we can see from the study finding and discussions. It is of important for teacher to be prepared with professional document.

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