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TEACHERS' PERCEPTION ON INFLUENCE OF TUSOME INTERVENTION STRATEGIES ON READING IN PUBLIC PRIMARY GRADE TWO PUPILS, KILIFI COUNTY, KENYA

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Abstract:
The purpose of the study was to establish the teachers' perception on the influence of Tusome instructional intervention strategies on reading levels in public primary schools in central zone, Kilifi North Sub-County, Kenya. The study employed a descriptive design to carry out the study. A pilot study was conducted in two schools. The sample size comprised 60 grade two children, 18 teachers, 5 headteachers, ICSO and 1 sub-county director of education. Data collection techniques involved the use of observations and questionnaires to collect both qualitative and quantitative data. The collected data obtained from observations and respondents were grouped together, coded, transformed and analyzed through the use of Statistical Packages for Social Scientists (SPSS) software version 21. Then the analyzed data was presented in form of frequencies and percentages while figures and tables will be used to present the result where necessary. The findings revealed that teaching strategies have an influence on the implementation of Tusome in lower primary schools. Pupil's textbooks, teacher's guides and storybooks were adequately provided. There were no other ICT resources provided for the learners. It was concluded that indeed, the Tusome literacy intervention program was strongly related to the improved learner achievement in other tasks that require reading, in the improvement of the overall learner achievement at grade 2. The ANOVA statistics were used to test the fitness of the regression model. The significance F value of 47.345 ($p<0.001$) was obtained implying that the regression model was fit and statistically significant and can be deemed fit for prediction. The study recommends that the Ministry of Education implements literacy interventions as a means of improving learner

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achievement in other subjects. The instructional support included should take into consideration the scope (number of teachers supported), as well as the logistics of reaching schools, teachers and head teachers.

Keywords: grade two, instructional intervention, reading literacy, Tusome programme; teachers' perceptions

1. Introduction

The 2006 Education for all (EFA) Global Monitoring Report (2005:17) committed to the subject of literacy, notes that literacy is vital to achieving each of the EFA goals (Sayed & Ahmed, 2015). Unfortunately, in recent years reports of low literacy levels from all over the world is alarming. An article by Independent Education correspondent (December 2016 pg. 15) revealed that right around 200,000 children across England are at what is viewed as failing to meet expectations grade in schools where less than 65 percent of learners reach the expected standard in reading. The trend is not different in Central and Southern Asia which has the second-most noteworthy rate with 81 percent or 241 million not learning. Amazingly, 66% of the children who are not learning are in school out of the 387 million primary-age children who cannot read capably, 262 million are in classrooms. The report additionally demonstrates that alongside an absence of access to class and an inability to hold children in school, the low quality of education in the classroom is among the three regular issues (Paseka & Schwab, 2020).

Similarly, in Africa, in the recent past, admission to primary education has expanded globally yet the nature of education, including learning how to read and write fluidly and comprehension lags behind. In Kenya, low learning results is a zone of expanding concerns and interest (Kim, 2020). The Uwezo household survey assessment (Uwezo, 2016) shows no national–level changes in education results from 2010 to 2014, regardless of the execution of in excess of 25 interventions across Kenya in 2014 (Edwin et al., 2016)). It has been a long struggle to tackle this issue of low literacy levels in Kenya which has a long history of especially inadequate usage after fruitful experimental runs programs (Wangeci & Njoroge,2021).

Numerous local studies conducted in Kenya have gathered data on the adoption of Tusome. For instance, Piper et al. (2018) assessed whether the rollout of Tusome's implementation was done in a way that would allow officials and government structures to adapt to the new program in an efficient manner. Tusome, however, was found to have underutilized the available classroom observational data to more effectively target instructional help. Karimi (2020) showed that the program's effectiveness was significantly influenced by the availability of teaching and learning materials, program management, and training and instructional support. Gitau (2018) found that the success of early-grade literacy programs in Kenyan primary schools was strongly influenced by the availability of resources and the involvement of stakeholders. This study, however,

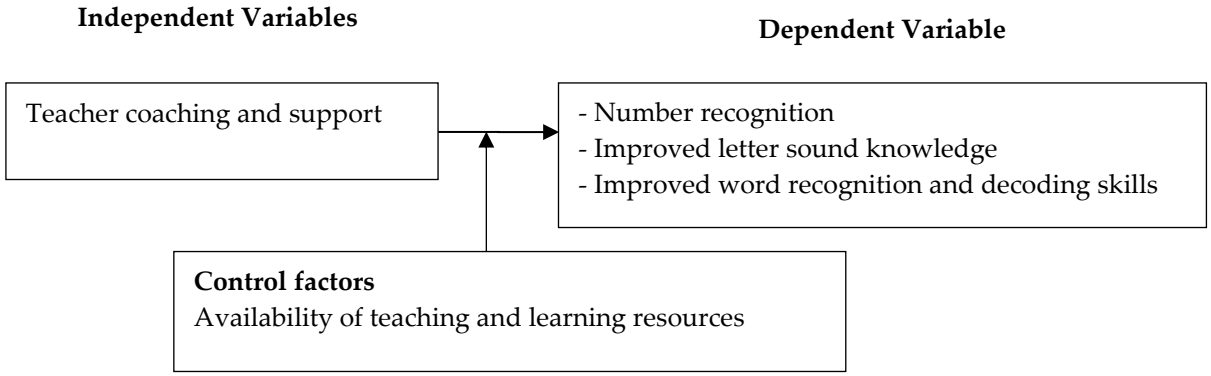
was restricted to Mbeere North in Embu County and as a result, it could not be extrapolated to other regions of Kenya.

Since most students lack confidence, they may be reluctant to raise questions or request clarifications. Reports from the Sub-County Education Office in Kilifi North Sub-County (Kilifi North, 2021) have shown that despite the pupils being advanced to higher classes, their reading literacy is extremely low. Therefore, having weak literacy skills might result in a learner losing their sense of self-worth in the classroom when a teacher introduces new concepts. Since most students lack confidence, they may be reluctant to raise questions or request clarifications. In Kilifi North Sub-County, reports from the Sub-County Education Office (Kilifi North, 2021) have shown that reading literacy is very poor even as the children are promoted to the next grades. Nonetheless, no study has been carried out in Kilifi North Sub-County.

1.1 Purpose of the Study

The purpose of this study was to establish the teachers' perception on the influence of Tusome instructional intervention strategies on reading levels, determine the availability of teaching and learning resources and identify the challenges facing teachers in implementing the program in classrooms in Central zone, Kilifi County.

1.2 Conceptual Framework



2. Literature Review

This section discusses the theoretical framework and the literature related to the study topic.

2.1 Theoretical Framework

This study was guided by Socio-Cultural Theory which was founded and developed by Vygotsky (1978). According to socio-cultural theory, learning is primarily a social process for humans. The term "socio-cultural perspective" refers to an understanding of how people's conditions within their environments and how their behaviors are especially influenced by their social and cultural origins. It is used in a variety of professions,

including psychology (Verenikina, 2013). Early literacy development offers teachers the instructional direction they need to encourage the development of early literacy in their students. It is believed that the development of children in the domains of speaking, listening, reading, and writing are all interconnected. According to socio-cultural theorists, infants learn to speak, listen, and write from birth, therefore their level of literacy is highly influenced by their surroundings at home. Their literacy practices evolve through time and eventually conform to mainstream practices (Panhwar et al., 2016). This implies that the development of young children's literacy skills depends greatly on the adults in their life, especially their instructors.

As new learners join adults in this endeavor, they eventually become experts themselves and are welcomed and given leadership roles in the group. This is evident in a school setting when students primarily learn from their teachers (Rahmatirad, 2020). This eventually means that the children's understanding of what has been taught will match what the teachers convey to them. This calls for teachers to receive the appropriate training in order to impart the proper knowledge to the younger students. According to sociocultural models, literacy is a social practice based on societal and cultural norms. As a result, the entire meaning of learning to read and write is seen inside a certain social context where students give the meaning credence.

2.2 Literacy Interventions and their Impact on Reading Skills

In the recent past, many reports of widespread inability to read among students despite them going through years of schooling and the increased demand for accountability from stakeholders have compelled governments and educators to look for urgent solutions to the reading problems (Weishart, 2017). A study on the influences on reading and reading habits of preschoolers in Iraq was undertaken by Celik (2019). In the context of this study, activities to develop reading habits were asked about by 106 out of 143 six-year-olds who are in the final year of their preschool education at the Ishk Kindergarten.

Fleisch and Motilal (2020) concur with these discoveries and clarify the involvement with Gauteng Province in South Africa which likewise exhibits the significance of organized ways to deal with an instructional method with extra accentuation put on the institutional framework expected to help those methodologies. The foundation incorporates an assortment of high-quality learning materials, executed in the mix with help to educators (through continuous training) that empowers them to use those learning materials and that sets up a situation of expert instructional responsibility.

Also in Africa, intervention programs show mixed results. A five-month mediation for proficiency educators in Malawi resulted in changes in attitude and beliefs about their showing capacities however there were no movements in instructional practices watched (Slade et al., 2017). In Kenya, Tusome which is the national proficiency program of the Kenya Ministry of Education, was planned and is being executed in a setting of developing enthusiasm for huge-scale program usage (Piper et al., 2018). It depends on thorough proof from past research on improving proficiency results in Kenya

and subsidized by USAID. It was in 2012 when Kenya started executing the PRIMR activity, the forerunner to the Tusome mediation (Momanyi & Rop, 2020). In their study, Piper et al. (2018) looked at whether the implementation of Tusome was carried out in a way that would allow officers and government structures to effectively respond to the new program. It was discovered that Tusome was able to communicate these expectations all the way down to the school level and that they were clear expectations for implementation and results at the national level using standards for Kiswahili and English learning outcomes.

3. Methodology

3.1 Research Design and Target Population

This study employed a descriptive survey design to observe the subjects in a real-life situation, and collect information directly from the teachers and children in classrooms relating to what is currently happening as far as the implementation of reading intervention programs is concerned, the impact and what challenges the teachers are facing (Kothari, 2006). A descriptive research design was appropriate as it enables the researcher to generalize the findings to a larger population. The study on the impact of reading intervention strategies on reading targeted a population of 185 lower primary teachers in 45 public schools and 3114 grade two pupils, 45 headteachers, and one CSO in Central zone Kilifi North Sub-County, Kilifi County and Sub-County Director of Education.

3.2 Sampling Technique and Sample Size

The study employed a simple random sampling technique to select the sample from the target population. The researcher sought an updated list of schools from the Sub-County Director of Education Office, Kilifi County. The researcher then did a simple random sampling on the list of schools to get the sample to get the sample of teachers, headteachers and pupils. The random sampling technique was ideal because it enabled the researcher to equally sample the participants without any discrimination or prejudice (Kothari, 2004). The purposive sampling technique was used to sample the 1 Curriculum support officer and 1 sub-county director of education because they were the key resources (Acharya et al., 2013). The sample size consisted of 5 schools, 19 lower-grade teachers, 315 pupils, one CSO and one sub- County Director of Education.

3.3 Research Instruments

This data was collected by the use of observations guides in the classrooms and structured questionnaires which were administered to the sample population. A structured questionnaire is an instrument with both open and close-ended questions. The instrument was used to collect both qualitative and quantitative data.

3.4 Pilot Study

Two schools from the zone will be randomly sampled for the pilot test outside the five for the actual study. However, the actual sample participants will not be used in the pretest. Two regular teachers will be selected for the pilot test to ensure that the instruments yielded the needed data. Questions were corrected and the questionnaires were given to the same respondents. The researcher verified all items in the instruments to ensure that they are related to the study and cover all the important areas and objectives of the study. Items that were found not clear were modified or discarded. The test-retest technique for surveying the reliability of information includes giving a similar instrument twice to a similar group of subjects. Then the researcher correlated the scores from both testing periods whereby a reliability coefficient of 0.7 was obtained and hence ensuring the instruments were deemed reliable.

3.5 Data Collection Procedure

Research assistants were trained to assist in observations and in the distribution of the questionnaires and collecting them after completion. Questionnaires were distributed to the respondents to complete themselves. Questionnaires were self-administered to the respondents using the drop-and-pick method. Respondents were allowed to fill out the questionnaires on their own time after which the researcher picked the instruments after two days. The process was repeated in other schools and it took a period of 2 weeks to complete collecting data. The researcher defined the behaviours to be observed and then developed a detailed list of behaviours. Then Observation checklists were utilized by the researcher to record what was observed.

3.6 Data Processing and Analysis

Most of the questions in the interview guide were coded into quantitative responses. Some of the comments, however, underwent thematic analysis. The Statistical Package for Social Scientists (SPSS Version 26.0) for Windows was used to collect all of the data. Frequency counts, percentages, averages and standard deviation, regression, correlation, and multiple regression were conducted to establish the relationship between the teaching strategies (independent variables) and dependent variable (reading level) which was generated from SPSS. The result of objective one was further subjected to ANOVA (Analysis of Variance) to analyze the variance based on the following formulated hypothesis:

H01: There is no significant relationship between Tusome instructional intervention strategies and reading levels.

Qualitative data retrieved from open-ended items were organized into relevant themes and presented using texts and narratives.

4. Study Results

4.1 Demographic Information

In terms of demographic data, the study determined the distribution of the participants by gender, age, and professional qualifications as shown in Table 1.

Table 1: Demographic Information of the Participants

	Frequency	**Percentage**
Gender		
Female	13	68.42%
Male	6	31.58
Total	**19**	**100.0**
Years of Experience		
1-3	5	26.32%
3-6	12	63.16%
>6	2	10.53%
Total	**19**	**100**
Teachers' Professional Qualifications		
Certificate or other	10.53%	2
Diploma	57.89%	11
1st Degree	21.05%	4
Masters and above	10.53%	2
Total	**19**	**100**
Courses in Literacy Instruction Attended by the Teachers		
None	4	21.1%
One	13	68.42%
More than One	2	10.53%
Total	**19**	**100**

The results show that the majority 13(68.42%) of the teachers were female with their male counterparts constituting 6(31.58%). These findings imply that most of the lower primary teachers engaged in the implementation of Tusome were female. Further, that eleven (57.89%) of the teachers teaching in the lower primary were diploma holders while those who hold 1st Degree were 21.05%. Masters and certificate holders were the least at 10.53% in each case. This information implies that teachers are professionals in their work, hence there were other underlying factors linked to the acquisition of reading skills among learners. Teachers who had served for a duration between 3-6 years were (63.16%) while 1-3 years were (26.32%). Finally, those who had served a period of more than 6 years were (10.53%). more than half (68.4%) of teachers who took part in the study had attended at least one course in literacy instruction while two had attended more than two courses related to literacy instruction. However, four (21.1%) of the teachers had not attended any course of literacy instruction at all.

4.2 Teachers' Perception on the Influence of Tusome Instructional Intervention

The main purpose of this study was to establish the impact of Tusome instructional intervention strategies on reading levels. Results on strategies for teaching reading were presented in Table 1.

Table 1: Strategies for Teaching Reading as Reported by Teachers

Strategy/Statement	Frequency	Percentage
I use media (TV-based hall learning programs) in assisting learners in reading	14	73.7%
I actively guide the learners in the use of learning materials	16	84.2%
I do incorporate learners re-reading books they recently read in the exercise	12	63.2%
I involve parents in children's reading	13	68.4%
I provide a variety of learning materials and resources	10	52.6%
I provide charts and homework books to learners	12	63.2%
Instructional Support is provided by Curriculum Support Officers (CSOs)	9	47.4%
I use the feedback provided by the CSOs to improve learning	11	57.9%

Results in Table 1 indicate that the majority 16(84.2%) of the teachers agreed that they actively guided the learners in using learning materials. Further results showed that 14(73.7%) said that they used media i.e. TV-based programmes in assisting learners in reading. Other strategies reported include the involvement of parents in children's reading, incorporating learners reading books they recently read and provision of charts and homework books to learners. Further analysis was done and results were summarized in terms of mean and standard deviation as shown in Table 2.

Table 2: Strategies for Teaching Reading as Reported by Teachers

Strategy/Statement	N	Mean	Std. Dev
I use media (TV-based hall learning programs) in assisting learners in reading	19	3.26	1.279
I actively guide the learners in the use of learning materials	19	4.01	1.002
I do incorporate learners re-reading books they recently read in the exercise	19	3.14	1.267
I involve of parents in children's reading	19	3.25	1.302
I provide a variety of learning materials and resources	19	2.87	1.361
I provide charts and homework books to learners	19	3.05	1.273
Instructional Support is provided by Curriculum Support Officers (CSOs)	19	1.98	1.343
I use the feedback provided by the CSOs to improve learning	19	2.97	1.285
Overall mean		**3.06625**	

As shown in Table 2, the teachers showed that teaching strategies have an influence on the implementation of Tusome in lower primary schools. These aspects of teacher strategies included: actively guiding the learners in the use of learning materials scoring a mean of 4.01, use of media (TV-based hall learning programs) in assisting learners in reading scoring a mean of 3.26, Involving parents in children's reading (mean=3.25),

incorporating learners re-reading books they recently read in exercise (mean=3.14), providing charts and homework books to learners (mean=3.05) and finally the provision of Instructional Support (CIS) by Curriculum Support Officers (CSOs) (mean=1.98).

Further, the researcher sought the respondents' opinions and views on how the teaching strategies influenced the reading levels among learners. The majority of teachers (89.47%) agreed that the strategy they used was effective. Regarding parental involvement, exceptionally significant is the contribution or organization of parents in the program. This can truly shape LL1 achievement whereby parents are approached to resolve to do their own form of schoolwork, which incorporates perusing the kid each night. According to Colditz et al. (2015), parents' contribution is significant on the grounds that it supports the program and gives learners the understanding that everybody is in this together to reinforce understanding practices. In light of information, LLI results show that learners getting this intercession are making up for lost time with their friends and at times passing the moment understanding capacity.

The respondents further indicated that intervention reading strategies had an impact on reading ability levels and learning outcomes for learners at lower primary levels as presented in Table 3.

Table 3: Teachers' opinion on the impact of the intervention reading strategies

Area	No improvement		Low improvement		High improvement		Total
	F	%	F	%	F	%	F/%
Reading ability level	0	0.0%	7	36.8%	12	63.2%	19(100.0%)
Learning outcome	2	10.5%	6	31.6%	11	57.9%	19(100.0%)

As indicated in Table 3, the majority 12(63.2%) of teachers agreed that intervention reading strategies led to high improvement in reading ability level. On slight difference, 11(57.9%) of teachers agreed that intervention reading strategies led to high improvement in learning outcomes while 10.5% were of the contrary opinion that there was no improvement in learning outcomes. A checklist on reading errors was further done by the researcher focusing on 100 children's reading levels out of the sampled 315. The data were analyzed using descriptive statistics frequency and percentage and finally presented in Table 4.

Table 4: Children's Reading Level from Observation

The ability of the child to read	Frequency	Percentage of Children
Omits a letter, word or sentence	60	60.0%
Repeats a word several times	20	20.0%
Reads a word wrongly and corrects	40	40.0%
Substitutes a word or letter for another	20	20.0%
Inserts a word that is not there	10	10.0%
Mispronounces	70	70.0%

Hesitates after every word	40	40.0%
Reverses letters or adds letters or words	30	30.0%

The result in Table 4 indicates that the majority of seventy (70.0%) of the children that were put under observation had problems with the pronunciation of words. Further, 60.0% of the children had the trend of omitting letters, words or sentences while reading paragraphs, equally 40.0% read a word wrongly and corrected and hesitated after every word. Findings imply that not all children had the same level of reading skills acquisition and hence the implementation of Tusome programme needs to be properly monitored and evaluated based on children's differences in abilities in learning.

Further qualitative data from the teachers extracted from the open-ended also indicated that there was an improvement in general performance following the Tusome program. For example, Teacher 4 from school B said:

> *"We are excited because after they have known how to read, they are capable of tackling other new tasks that also involve reading. Tusome has been the best program and we always commit that in the world, otherwise we would still have non-readers and that would still contribute to weak performance because across all subjects require a child to be a better reader for them to understand what they are doing."*

The above sentiment was domiciled under the positive impacts of Tusome programe. This teacher was of the view that the capacity of pupils to read was now being felt in other areas of different tasks that also require proper reading skills. The sentiment also means that if there was no Tusome, a good number of non-readers would still be high and the status quo of poor performance could still exist. Also drawn from the same view, one of the head teachers from school A reported:

> *"…of course, Tusome programmme has not only improved the level of reading in both Kiswahili and English but has also enhanced the pupils' performance in other subjects. So, the skills that the child has learnt in English will also be applied in these other subjects. The element of understanding will be there. In this case, the child will read a sentence in science and will understand what is expected of him. In mathematics, English is also used to test this child. With the Tusome programme, children are able to read and understand. This has also improved their communication skills"*

Evidently, most respondents in the qualitative study confirmed that there had been improvement in the trend of reading and consequently performance in other subjects with the implementation of the Tusome programme. As indicated by Guo, Sun, Breit-Smith, Morrison, and Connor (2015), knowing how to read makes it possible for teachers to shift their focus from "learning to read" to "reading to learn". Sub-County Director of Education, as stakeholders in education at this level, also felt the impact of Tusome. Among other areas of influence, the Sub-County Director of Education felt that

they were now more involved in their core role of providing curriculum support when he expressed:

> *"You know Tusome has really changed the roles of the Curriculum Support Officers. Before, they would not even visit the schools. And, surely, their work was very minimal. They would go to school, just talk with the head teacher and leave. But now, you go to school, you get into class, you observe a teacher a whole lesson, and then observe another teacher, as many as three teachers. Half of the day, you are in school. This has in turn made teachers become more devoted at their work".*

In agreement with Piper et al. (2015), the Tusome early literacy programme outcomes are: improved conveyance strategies and directions, improved access to course readings and beneficial materials, upgraded backing and supervision of instructors by CSO mentors and headteachers, improved of ICT to help proficiency and limit of Education sector.

4.3 Correlation between the Dependent and the Independent Variables

Multiple regression was conducted to establish the relationship between the teaching strategies (independent variables) and dependent variable (reading level) which was generated from SPSS. This result is shown in Table 5.

Table 5: Regression Coefficients

Model	Unstandardized Coefficients		Standardized Coefficients		
	B	**Std. Error**	**Beta**	**T**	**Sig**
(Constant)	.247	.181		1.378	.161
I use media (TV based hall learning programs) in assisting learners in reading	.158	.109	.115	2.051	.000
I actively guide the learners in use of learning materials	.242	.169	.345	2.871	.000
I do incorporate learners re-reading books they recently read in exercise	.243	.156	.117	2.076	.000
I involve parents in children's reading	.249	.078	.375	3.053	.000
I provide a variety of learning materials and resources	.213	.056	.387	2.067	.000
I provide charts and homework books to learners	.282	.091	.299	4.005	.000
I ensure that Instructional Support is provided by Curriculum Support Officers (CSOs)	.261	.087	.287	3.043	.000
I use the feedback provided by the CSOs to improve learning	.221	.043	.307	4.013	.045

The findings in Table 5 above mean that when the independent factors (intervention strategies) are held at zero, the level of reading would be at 0.247. This also means a level

increase in the use of media would increase the reading level by a value of 15.8%, guiding learners in the use of learning materials by 24.3%, incorporation learners in exercise from the re-read books by 24.3%, involving parents in children's reading by 24.9%, providing a variety of learning materials and resources to children by 21.3%, providing charts and homework books to learners by 28.2%, ensuring that instructional Support is provided by Curriculum Support Officers (CSOs) by 26.1% and using the feedback provided by the CSOs to improve learning by 22.1%. The study indicated there is a significant relationship all the independent variables and level of reading ($p<0.001$) except for "I use the feedback provided by the CSOs to improve learning" with a p-value of 0.045 ($p>.001$).

The results were further subjected to ANOVA to analyze the variance based on the following formulated hypothesis:

H01: There is no significant relationship between Tusome instructional intervention strategies and reading levels.

Table 6: ANOVA Analysis of the Difference between the Means of Intervention Strategies and Reading Levels

Model		Sum of Squares	df	Mean Square	F	Sig
1	Regression	44.183	4	11.796	47.345	000[b]
	Residual	6.516	14	0.097		0.177
	Total	50.699	18			

The ANOVA statistics were used to test the fitness of the regression model. The significance F value of 47.345 ($p<0.001$) was obtained implying that the regression model was fit and statistically significant and can be deemed fit for prediction.

5. Conclusion

As to whether the Tusome literacy intervention had an effect on levels of reading at grade 2, it was concluded that indeed, the Tusome literacy intervention program was strongly related to improved learner achievement in other tasks that require reading, in the improvement of the overall learner achievement at grade.

6. Recommendations

1) The study recommends that the Ministry of Education implements literacy interventions as a means of improving learner achievement in other subjects. Among a myriad of factors influencing the quality of education, it is evident from this study that language is one of the factors.
2) The study recommends that the Kenya Institute of Curriculum Development infuses Tusome into the curriculum in grades 1, 2 and 3. This should be done by adopting the content, scope and sequence of Tusome literacy intervention for the two subjects: English and Kiswahili.

Conflict of Interest Statement

The authors declare no conflicts of interest.

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References

Acharya, A. S., Prakash, A., Saxena, P., & Nigam, A. (2013). Sampling: Why and how of it. *Indian Journal of Medical Specialties*, *4*(2), 330-333.

Celik, B. (2019). A Study on the factors affecting reading and reading habits of preschool children. *International Journal of English Linguistics*, *10*(1), 101.

Colditz, P., Sanders, M. R., Boyd, R., Pritchard, M., Gray, P., O'Callaghan, M. J., ... & Jardine, L. (2015). Prem Baby Triple P: a randomised controlled trial of enhanced parenting capacity to improve developmental outcomes in preterm infants. *BMC pediatrics*, *15*(1), 1-13.

Erwin, J., Woolf, A., Oyoo, O., Cederlund, I., Mwaniki, L., & Etau, P. (2016). The UWEZO project—musculoskeletal health training in Kenya. *Clinical rheumatology*, *35*(2), 433-440.

Fleisch, B., & Motilal, G. B. (2020). The triple cocktail programme to improve the teaching of reading: Types of engagement. *South African Journal of Childhood Education*, *10*(1), 1-13.

Gitau, E. W. (2018). *The Influence of Project Activities on Performance of Early Grade Literacy Programmes: A Case of Tusome Program in Mbeere North Sub County, Embu County, Kenya* (Doctoral dissertation, University of Nairobi).

Guo, Y., Sun, S., Breit-Smith, A., Morrison, F. J., & Connor, C. M. (2015). Behavioral engagement and reading achievement in elementary-school-age children: A longitudinal cross-lagged analysis. *Journal of Educational Psychology*, *107*(2), 332.

Karimi, S. (2020). *Participatory monitoring and evaluation process, School Environment and Performance of Literacy and Numeracy Educational programme in Public Primary Schools in Nairobi County, Kenya* (Doctoral dissertation, University of Nairobi).

Kim, J. (2020). *Unpacking the Role of Early Learning in Student Learning Outcomes: Evidence from National Reform of Pre-primary Education in Ethiopia* (Doctoral dissertation, University of Cambridge).

Kothari, C. R. (2004). *Research methodology: Methods and techniques*. New Age International.

Momanyi, J. M., & Rop, P. K. (2020). Teacher preparedness for the implementation of competency-based curriculum in Kenya: A survey of early grade primary school teachers' in Bomet East Sub-County. *The Cradle of Knowledge: African Journal of Educational and Social Science Research*, *7*(1), 10-15.

Panhwar, A. H., Ansari, S., & Ansari, K. (2016). Sociocultural theory and its role in the development of language pedagogy. *Advances in language and literary studies*, *7*(6), 183-188.

Paseka, A., & Schwab, S. (2020). Parents' attitudes towards inclusive education and their perceptions of inclusive teaching practices and resources. *European Journal of Special Needs Education*, *35*(2), 254-272.

Piper, B., Destefano, J., Kinyanjui, E. M., & Ong'ele, S. (2018). Scaling up successfully: Lessons from Kenya's Tusome national literacy program. *Journal of Educational Change*, *19*(3), 293-321.

Piper, B., Destefano, J., Kinyanjui, E. M., & Ong'ele, S. (2018). Scaling up successfully: Lessons from Kenya's Tusome national literacy program. *Journal of Educational Change*, *19*(3), 293-321.

Piper, B., Jepkemei, E., Kwayumba, D., & Kibukho, K. (2015). Kenya's ICT Policy in Practice: The Effectiveness of Tablets and E-Readers in Improving Student Outcomes. In *FIRE: Forum for International Research in Education* (Vol. 2, No. 1, pp. 3-18). Lehigh University Library and Technology Services. 8A East Packer Avenue, Fairchild Martindale Library Room 514, Bethlehem, PA 18015.

Rahmatirad, M. (2020). A Review of Socio-Cultural Theory. *Siasat*, *5*(3), 23-31.

Sayed, Y., & Ahmed, R. (2015). Education quality, and teaching and learning in the post-2015 education agenda. *International Journal of Educational Development*, *40*, 330-338.

Slade, T. S., Piper, B., Kaunda, Z., King, S., & Ibrahim, H. (2017). Is 'summer' reading loss universal? Using ongoing literacy assessment in Malawi to estimate the loss from grade-transition breaks. *Research in Comparative and International Education*, *12*(4), 461-485.

Verenikina, I. (2003). Vygotsky's socio-cultural theory and the zone of proximal development. Retrieved from https://ro.uow.edu.au/cgi/viewcontent.cgi?referer=&httpsredir=1&article=4207&context=sspapers

Wangeci, K., & Njoroge, R. (2021). Awareness and use of information resources to promote environmental protection and conservation at Kenya National Library Service, Nairobi. *African Journal of Education and Practice*, *7*(3), 1-13.

Weishart, J. E. (2017). Aligning education rights and remedies. *Kan. JL & Pub. Pol'y*, *27*, 346.