

Influence of Teacher Academic Qualification on Pupils' Performance at Kenya Certificate of Primary Education Examination in English subject in Kenya

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Abstract: *Teacher academic qualification is repository of competencies and knowledge skills acquired through a learning process in an academy. In the realm of English language as a subject, teacher academic qualification is an indicator of the level of mastery of literacy and competency skills which a teacher is known to have acquired and certified by recognized Examinations body. The objective of this study was to determine the influence of teacher academic qualification on learner performance in Kenya Certificate of Primary Examination (KCPE) in English subject in public primary schools in Kenya. The study used descriptive research design and purposive sampling for all inclusive and representative population sample with regard to distribution and categories of schools in Machakos County as its method for research. Unit of analysis was Public primary schools in Machakos County. Respondents were Primary school teachers with teacher academic qualifications at various certificate levels and who teach English subject in KCPE exam classes. The sample size was 132 academically qualified teachers. Data collection was done through questionnaires. The study found Kenya Certificate of Primary Examination candidates taught by teachers with Kenya Certificate of Secondary Examination (KCSE) certificates (Primary I teachers; at 19.7 % sample proportion) with Credit Pass achieved Learner Mean score of 47.13 % in English subject. Teachers with KCSE certificates with Credit Pass and Kenya Advanced Certificate Examination (KACE) certificates with Pass plus Diploma in Arts certificates (at 25.8 % sample proportion) achieved Learner Mean score of 48.03 % in English subject. Teachers with KCSE certificates with Credit Pass and KACE certificates with Pass plus Diploma in Science certificates (at 10.6 % sample proportion) achieved Learner Mean score of 47.37 % in English subject. Lastly, teachers with KCSE with Credit Pass and KACE with Pass and who also hold Diploma in Arts certificates with Pass and University Bachelor's Degree certificates (Primary Graduate teachers; at 42.4 %) achieved Learner Mean score of 58.05 % in English subject. There is a significant increase in Learner mean score by candidates taught by Undergraduate teachers probably as a result of their high self-efficacy in Classes and a reduction in Learner indiscipline and self-belief contributing to effective teaching and learning whose product is enhanced Learner performance at Kenya Certificate of Primary Examination. The study concluded that teacher academic qualification significantly influences pupils' performance at Kenya Certificate of Primary Examination in English subject in Kenya. Finally, this study recommends that only teachers with good academic qualification in subject taught at appropriate school learning levels with repository competencies and pedagogical skills acquired in the course of academic learning and professional training be deployed to teach English subject in schools for enhanced learner performance.*

Key word; *teacher academic qualification, Kenya Certificate of Primary Examination, pupils' performance*

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I. Introduction

The overall goal of the Government of Kenya according to Vision 2030 and Education Act of 2012 (Laws of Kenya) is to provide endeavors to provide quality education to her school going children in order to make them competitive human capital both locally and also in the global market. Teacher academic qualification has been cited by various authorities as a key focus area in improving learner performance in English language as an examinable subject. An effective Education system focuses on appropriate teacher qualifications (enhanced acquisition of competencies and skills) transfer that promotes cognitive, psychomotor

and affective domains to learners. According to Hammond and Akar (2005), the ultimate goal of teacher education is to provide teacher candidates with basic skills and preparation to communicate effectively and alleviate teaching fears.

The massive failure in Kenya of Primary teacher trainees in 2016 is an indication that literacy and knowledge skills of Primary trainee teachers is wanting hence a need to pay attention to academic qualification of candidates who are recruited into teacher training colleges (TTCs) to become professional teachers. The World Development Report (2018) titled "Learning to Realize Educations Promise" does paint a grim picture of teacher qualifications in Kenya's teacher training colleges (TTCs). The report says that 82% of the trainee teachers scored 80% in a Grade 4 English test exam. On average, teachers in several Sub-Sahara African countries are said, in the said Report, to perform much less in Reading test exams compared to the highest performing Grade 6 learner. Education sector in Kenya is indeed staring at a crisis, a situation which is likely to herald a false start in the newly introduced 2.6.6.3 System of Education. Introduction of Free Primary Education in Kenya in 2003 brought massive changes in Education Sub-Sector. Teacher academic qualification is therefore critical if quality education is to be achieved. The Republic of Kenya Report on Education (2005) says that academic and professional qualifications of teachers influence quality of service delivery and improve performance.

Teacher academic qualification has become a target of several reforms not only in Kenya but globally. Clarke (2003) says qualifications of teachers, academic and professional, are key for any government to influence quality of instructional delivery. Qualifications of teachers are proxy for quality teaching and higher learning performance. The National Assessment Centre (NAC 2010) report on monitoring learner performance says majority of Kenyan Primary school teachers are holders of Grade P1 professional certificates. Research findings show that after pre-service teacher training, teacher performance can be improved through in-service training. UNESCO (2009) Report says that professional training may enhance skills and performance capabilities.

Adeogun (2001) found that in Nigeria, the quality of any Education system depends on the quality of teachers. According to Usman (2012), a qualified teacher is defined as one who holds teaching certificate. He quotes Pakistan Ministry of Education officials who described a qualified teacher as one who possesses knowledge of the subject matter, human growth and development, ethical values, instructional planning and strategies assessment, learning environment, communication and advocacy. Although researchers have never reached a consensus on specific teacher factors that influence learner's academic performance (Rivkin et al., 2005) some studies found that teacher's experience and qualification significantly influenced students' performance (Njeru and Orodho, 2003, Asikhia 2010; Yala and Wanjohi, 2011). This reinforces the belief that the quality of Education is equal to the quality of teachers who implement the Education system.

Competency is associated with knowledge, skills, and attitude. According to TSC Report of 2007, there is minimum qualifications for teachers in any level of teaching, what Yorke and Knight (2006) refer to as employability which has many facet characteristics of an individual. This defines the suitability of a teacher which is appraised as a set of achievements, skills, and personal attributes. Dan Goldhaber (2002) found that teacher's preparedness and understanding of their content areas highly influenced the learner's performance especially in languages and Mathematics, a new finding which contradicted his earlier "Does teacher certification matter?" joint study finding with Brewster (2000). This study interrogated teacher qualification amidst a downward trend in English subject performance in KCPE in Public primary schools in Kenya. The findings confirmed that KCPE candidates who were taught by teachers with higher academic qualifications did perform better in KCPE in English subject than their counterparts who were taught by teachers with lower academic qualifications, all other factors held constant.

II. Statement of the problem

It is evident from candidates' poor Mean Score in KCPE in English subject at National level (2012 – 2016) that Kenya indeed has a Learner performance problem, particularly in English subject, in Education Sub-Sector. It is apparently inferred from some studies cited hereafter that teacher academic qualification is partly the reason why learners dismally perform in KCPE in English subject in Kenya. A Republic of Kenya (2000) report says teachers who teach English subject don't impact literacy or develop English subject skills on Learners for lack of academically certified and qualified teachers.

A Ministry of Education (2007) Report says examination candidates do demonstrate lack of adequate English language skills when answering examination questions due to poor mastery of content which UWEZO East Africa report partly attributes to teachers who teach particularly in primary schools. A Kenya National Examination Council (KNEC 2017) Report also attributed the low performance in KCPE in English subject in Kenya to lack of mastery of English language by candidates in reading and interpreting questions correctly before giving answers and poor command of English language (and indiscipline). The problem at hand is aptly captured thus "an English language speaking Nation such as Kenya whose learners perform dismally in English

Language which is the language of instruction, international trade and research cannot grow its human capital to effectively compete in a competitive global market" (Kenya Institute of Curriculum Development (KICD 2012).

Objective of the Study

Teacher academic qualification is contextualized to mean teacher academic certificates awarded to Candidate examined and found qualified in National examination by Kenya National Examinations Board or from other Examinations Board recognized by Kenya National Examinations Board that qualifies Candidate to undergo teacher professional training. Teacher academic qualifications studied were Kenya Certificate of Secondary Examinations (KCSE) aka Ordinary Level, Kenya Advanced Certificate of Education (KACE) aka Advanced Level, Diploma (Arts) certificate, Science I Diploma certificate and University Degree certificate at Bachelors level.

The study sought to establish influence of Teacher academic qualification on Learner performance in KCPE in English subject in Kenya.

Research Hypothesis

Teacher academic qualification does not significantly influence Learner performance in KCPE in English subject in Kenya.

Theoretical Foundation

The study was grounded on "Vyogtsky Social Development Theory" whose highlights are Social interaction, the more knowledgeable other (MKO) and the zone of proximal development. According to the theory, social learning precedes development i.e. a child's learning of a language occurs between a teacher and a child, and thereafter in the child. The teacher of English language needs to be competent in English language knowledge skills and prepare for social interaction with the child if the child is to learn from teacher's competency and English language knowledge skills. The More Knowledgeable (MKO) is aspect of Social Development Theory which in Teacher-Learner relationship equates MKO with a teacher or mentor and positions a student/pupil as a learner or mentee. Thus, a teacher, as an avenue of learning, plans and prepares the teaching of English subject in a manner that enhances and improves the learner's performance in English subject. The zone of proximal development (ZPD) is the distance between student's ability to perform a task under teacher's guidance and student's ability to perform a task independently. The theory is beholden to ZPD as the zone where learning takes place. According to this assumption, both a teacher and a learner needs teaching and learning tools/resources to influence cognitive and effective development of the learner. In summary, the Vygotskys Social Development Theory underpins the necessary concepts teacher preparedness must consider.

A teacher needs to be competently knowledgeable in English language skills in order to transfer same competencies and knowledge skills to a learner through teaching-learning process. Thus, teacher academic qualification (certification) which is a measure of knowledge skills and competency achievement in an examinable subject is critical in a teaching-learning process and assessed in the performance of the learners.

III. Revised Literature Review

Darling-Hammond (2000) observed in his study that a teacher's academic qualification matters when it comes to effective teaching. He further observed that certification measures teacher qualification; and, that the certification process combines aspects of knowledge on a subject matter taught and aspects of knowledge learnt. According to Maguswi (2012), the lack of qualified teachers significantly contributes to poor student performance. Clarke (2003) says that academic qualification of teachers influences the quality of instructional delivery; and professional qualifications are proxy for quality teaching and higher learner performance. However, Luschei and Carnoy (2010) reported in a study that a teacher's post graduate education does not significantly influence English learner's performance.

In a conceptual model to study the influence of teacher academic qualification on learner performance in KCPE in English subject in Kenya, respondent teachers were categorized into 5 Levels according to their academic qualifications and professional certifications. The five Levels of professional teachers are: (i) Form 4 pass certificate/Grade P2 teacher, (ii) Form 4 credit certificate/Grade P1 teacher, (iii) Form 4 credit or distinction/Form 6 pass or credit (Art)/Grade Diploma teacher, (iv) Form 4 credit or distinction/Form 6 Pass or credit (Science)/Grade Science one (S1) teacher, (v) Form 4 credit or distinction/Form 6 pass or credit (Art)/Form 6 pass or credit (Science)/Grade Diploma teacher or Grade Science one (S1) teacher/Bachelor of Education Degree/Grade Graduate teacher. These five categories of teachers are reflections of the levels of competencies and knowledge skills acquired by teachers at school. The study interrogated the performance of learners in KCPE in English subject who were taught by each of these five categories of teachers, all other factors influencing learner performance being held constant.

IV. Research Methodology

The study used descriptive research and purposive sampling. The unit of analysis was public primary schools in Kenya and respondents were teachers of English subject. The study selected 84 public primary schools out of 842 in all 8 Sub-Counties of Machakos County. Total number of teachers interviewed was 132 out of 1687 teachers who teach English subject in public primary schools in Machakos County. Teachers' academic qualifications interrogated by the study focused on classroom teachers who at least taught KCPE examination class in English subject at their present school over the past five successive years (2012 – 2016). Teachers interviewed cut across academic qualification levels from Lowest (Form 4 "Ordinary Level") academic certificate holders to Highest (University Bachelor's Degree Level) academic certificate holders. Both qualitative and quantitative data was collected, collated and analyzed through descriptive statistics and regression analysis, and findings presented as charts, graphs and tables.

V. Research Findings

Primary teachers who are holders of Form 4 "Ordinary Level" academic certificates (Grade P1 teachers), Form 4 "Ordinary Level"/Form 6 "Advanced Level" academic certificates (Diploma teachers), Form 4 "Ordinary Level"/Form 6 "Advanced Level" academic certificates (Science S1 teachers), and Form 4 "Ordinary Level"/Form 6 "Advanced Level"/Bachelor of Education Degree (Graduate Primary teachers) are preferred to teach English subject in KCPE exam classes. Teachers who are holders of Form 4 "Ordinary Level" pass academic certificate (Grade P2 teachers) plus teachers who are holders of academic certificates of standing lower than Form 4 "Ordinary Level" pass academic certificate (Grade P3 teachers who have since been upgraded to Grade P2) were not found to teach English subject in KCPE exam classes. The teachers' academic qualifications captured by the study were: Form 4 "Ordinary Level" certificate (pass & credit), Form 6 "Advanced Level" certificate (pass & credit), Diploma certificate (Arts), Diploma certificate (Science), and, Bachelor of Education Degree certificate. A summary of the proportion of respondent teachers' academic qualifications are shown in Table 1.

Table 1: Academic qualification of teachers who taught English subject in 2012/16 KCPE examination Classes

Teachers' academic qualifications	Frequency	Percent
Form 4 Ordinary Level certificate with credit pass (trained Primary Grade P1 teacher)	26	19.7
Form 4 Ordinary Level certificate with credit pass/Form 6 Advanced Level certificate (trained Primary Diploma teacher)	34	25.8
Form 4 Ordinary Level certificate with credit pass/Form 6 Advanced Level certificate (trained Science Grade S1 teacher deployed in Primary)	14	10.6
Form 4 Ordinary Level certificate with credit pass/Form 6 Advanced Level certificate/Bachelor's Degree certificate (trained Primary Graduate teacher)	56	42.4
Total	130/132	98.5/100

The Table shows the distribution of English subject teachers' academic qualifications. 42.4% of teachers are holders of Bachelor's Degree academic certificates followed by the teachers who hold Diploma certificates in Arts at 25.8%. Primary (Grade P1) teachers are numbered at 19.7% out of the total classroom teachers taking third place in proportionate distribution. Science (Grade S1) teachers contribute 10.6% out of the total number of classroom teachers. Form Four (Grade P2) teachers are at tail end in staff numbers and control only 1.5% of the total classroom teachers who teach English subject in upper primary schools in Machakos County. The basic entry requirement into Teachers Training Colleges in Kenya to train as a professional teacher is a Form 4 Ordinary Level academic certificate. Findings were cross-tabulated with learners' performance in order to examine the effect of teacher academic qualification (a teacher preparedness variable) on learner performance (the assumption being that content delivery is supportive).

Figure 1: Academic qualification of teachers who taught English subject in KCPE

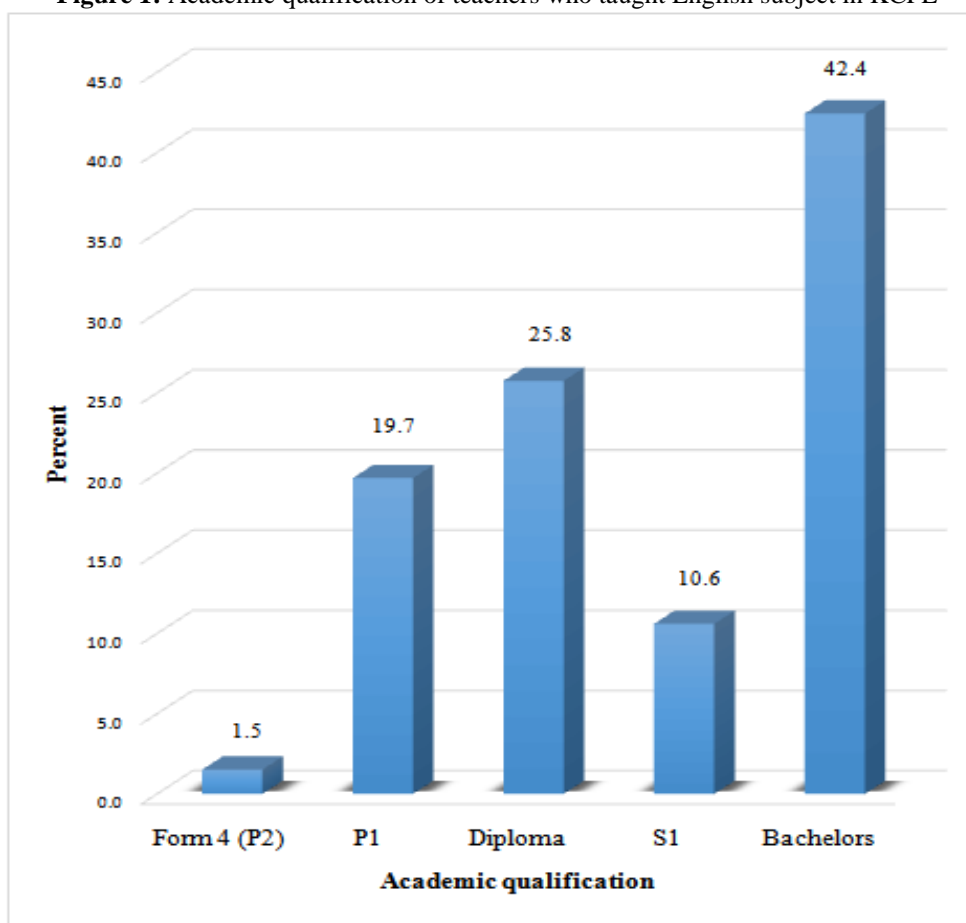
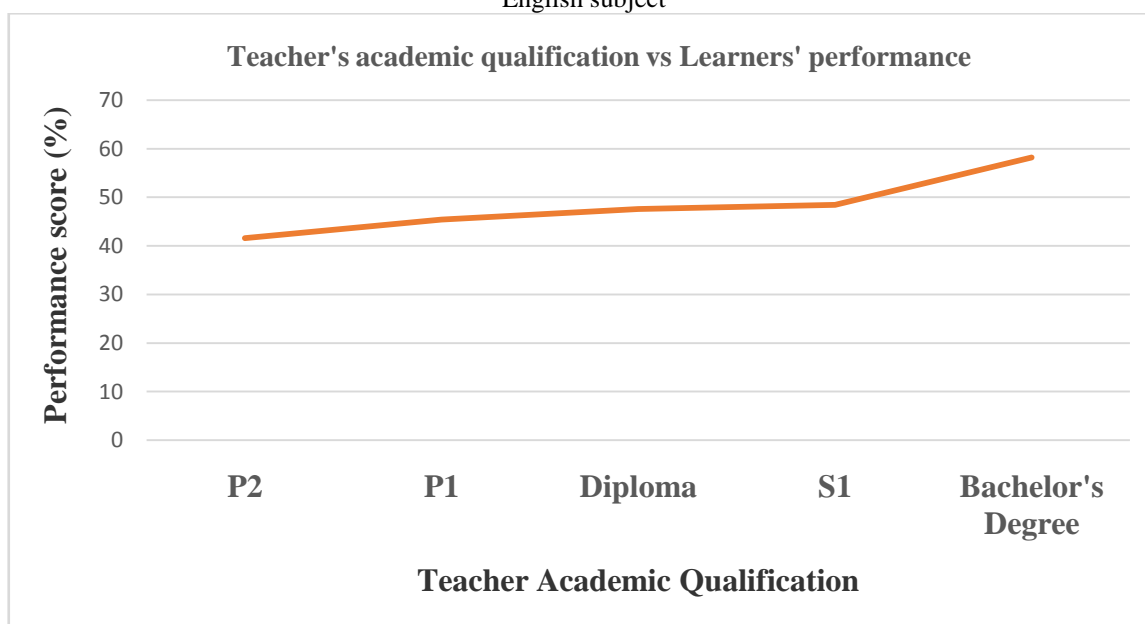


Figure 1 shows that more teachers have gone back to class to upgrade their academic qualifications. Both Table 1 and Figure 1 show that combined Grade P 2 and Grade P 1 teachers constituted 21.2% of all teachers who taught English subject in KCPE examination Classes. The remaining 78.8% of teachers who taught English subject in KCPE examination Classes form a pool of Primary teachers who are holders of either Diploma or S1 or Bachelor's Degree academic certificates. These latter academic qualifications are considered as superior qualifications at Primary Education level were found to be preferred in the teaching of English subject in upper primary examination classes, particularly in the teaching of English subject. The study further found that most of the teachers who taught English subject in Standard eight were the same teachers who taught English subject in Standard seven. Study findings were triangulated with learners' performance and interpreted.

Table 2: Teachers' academic qualifications and Learners' Mean score in KCPE

Teachers' academic qualifications	Mean score in KCPE in English subject	
	Composition	Language
Form 4 Ordinary Level certificate with credit pass (trained Primary Grade P1 teacher)	50.0 %	44.25 %
Form 4 Ordinary Level certificate with credit pass/Form 6 Advanced Level certificate (trained Primary Diploma teacher)	50.75 %	45.30 %
Form 4 Ordinary Level certificate with credit pass/Form 6 Advanced Level certificate (trained Science Grade S1 teacher deployed in Primary)	50.50 %	44.20 %
Form 4 Ordinary Level certificate with credit pass/Form 6 Advanced Level certificate/ Bachelor's Degree certificate (trained Primary Graduate teacher)	58.10 %	58.0 %
Mean Score	51.07 %	46.52 %

Figure 2: Relationship between teacher's academic qualification and Learners' performance in KCPE in English subject



The Figure shows that the performance of Learners in examination Classes taught by teacher who are holders of Form 4 Credit academic certificates (Grade P1) achieved an average grade of 45.38% in English subject (Composition + Language). Learners in exam Classes taught by teachers who are holders of Form 4/Form 6 Credit academic certificates (Diploma in Arts, and Science Diploma, S1) achieved average grades of 47.57% and 48.45% respectively in English subject (Composition + Language). Lastly, Learners in Classes taught by teachers who are holders of Form 4/Form 6 and Bachelor's Degree academic certificates (Primary Graduate teachers) achieved an average grade of 58.21% in English subject (Composition + Language). The flexion in the graph implies that there is a jump in the performance of Learners probably due to high self-efficacy of Learners in Classes taught by teachers who are holders of University Degrees as a result of low cases of student indiscipline and self-belief that they are capable of performing well in assessment examinations because of being taught by graduate teachers.

Table 3: T-test result on teacher qualification & learners' performance in KCPE

	T	Df	Sig. (2-tailed)
Teachers qualifications – KCSE	-40.867	131	0.000

The t-test results indicate that there is a significant relationship between the teachers' academic qualification and student's KCPE performance in English as attested by $t(131) = -40.87, p = 0.00$. This implies that the higher the academic qualification of the teacher, the higher the students KCPE performance. This led to the rejection of null hypothesis: "teacher's academic qualification does not significantly influence performance of KCPE in English subject in Kenya". Thus, alternate hypothesis "teacher academic qualification significantly influences learner KCPE performance in English subject" was formulated.

These findings agree with past studies on impact of academic qualification (certification) on students' achievement in examinations. Clarke (2003) observed "teacher's academic and professional qualifications do influence the quality of a teacher's instructional delivery in the classroom". This study also agrees with the findings of Darling-Hammond (2000) who said that teachers' academic qualification matters in effective teaching. Lastly, this study agrees with the study finding of Dan Goldhaber (2002) that "teacher's preparedness and understanding of the content areas highly influences learner performance especially in languages and Mathematics". The study thus confirmed that "Teacher's academic qualification significantly influences learner's performance".

Summary finding of Study

The study found that the strength of teacher's academic qualification tends to improve learners' performance, possibly due to added knowledge skills and confidence building in both teacher and learner; and teacher academic qualification in a subject other than one which he/she teaches does not significantly improve

learners' performance possibly due to lack of mastery of content and knowledge skills. This explains why Machakos County with a high population of Primary graduate teachers who teach English subject (42%) has not translated into enhanced pupils' performance at KCPE exam in the subject.

Conclusion of Study

The study concluded that teacher academic qualification significantly influences pupils' performance at Kenya Certificate of Primary Examination in English subject in Kenya. Finally, this study recommends that only teachers with good academic qualification in subject taught at appropriate school learning levels with repository competencies and pedagogical skills acquired in the course of academic learning and professional training be deployed to teach English subject in schools for enhanced learner performance.

Recommendation of Study

Primary teachers in possession of High school certificates who want to pursue higher academic certificates while still in teaching service should only pursue courses in subject area relevant to their classroom teaching. This study therefore recommends that: (1) all Primary teachers who have acquired academic certificates in their professional career be appropriately deployed but those teachers who have acquired academic qualifications which do not make them more productive as classroom teachers should be counselled and appropriately retrained via school-based programs; and (2) only qualified teachers with repository competencies and knowledge skills acquired in the course of academic learning as measured by teacher academic qualification or by way of in-service training in English subject should be deployed to teach English subject in schools for enhanced learner performance.

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