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Access vs. Learning: Kenyan Teachers' Experiences in Free Primary Education Implementation

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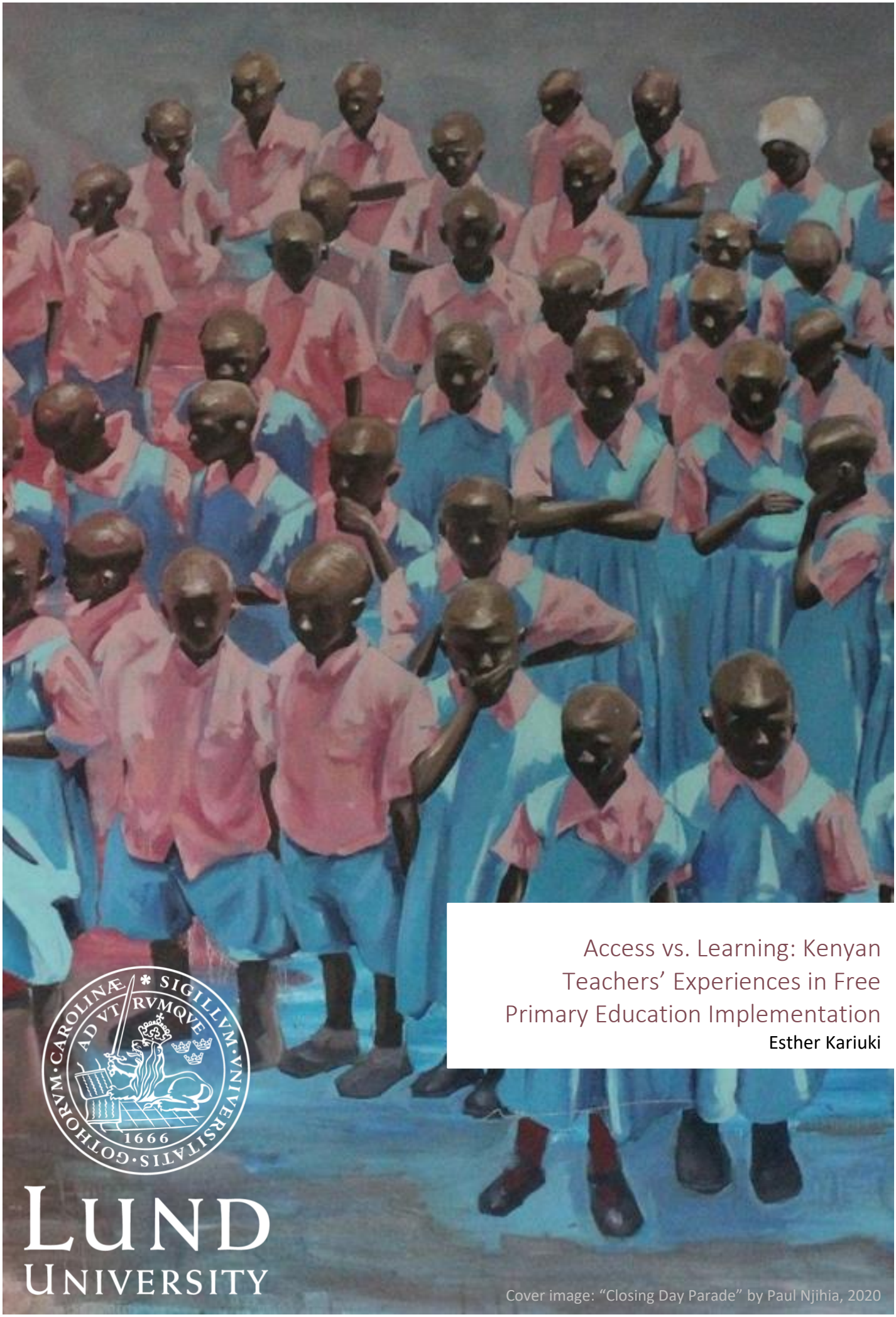

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Cover image: "Closing Day Parade" by Paul Njihia, 2020

Abstract

Despite advancements world-over in access to basic education, hundreds of millions of children cannot read simple texts nor solve simple math problems, whether or not they have been to school. While there is evidence signalling the significant role of teachers in education outcomes, they are often seen as contributing to the learning crisis. The purpose of this thesis was to explore the perceptions and experiences of the free primary school education policy among teachers in public primary schools across Kenya and position this in the learning debate. Information from 13 interviews was analysed thematically using a capabilities approach and concepts of implementation theory. Teachers felt that the policy had improved access to education especially for children living in vulnerability but they lamented the crowded classrooms coupled with teacher shortages following the policy. Working in a resource-strained environment, some of the teachers' coping mechanisms contributed to the learning crisis. The findings contribute to the learning debate with insights from teachers and suggest that future studies and policy or development interventions should focus on alleviating the constraints on schooling resources.

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Esther Kariuki
Gothenburg, Sweden
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LIST OF ABBREVIATIONS

BOM	Board of Management
CA	Capability Approach
CBC	Competency Based Curriculum
EFA	Education for All
FPE	Free Primary Education
HDI	Human Development Index
KCPE	Kenya Certificate of Primary Education
KES	Kenyan Shillings
NASMLA	National Assessment of Monitoring Learning Achievements
NG-CDF	National Government Constituencies Development Fund
SACMEQ	Southern and Eastern Africa Consortium for Monitoring Educational Quality
SDG	Sustainable Development Goals
SES	Socioeconomic Status
TSC	Teachers Service Commission
UNDP	United Nations Development Program
UNESCO	United Nations Educational, Scientific and Cultural Organization
WDR	World Development Report

1 INTRODUCTION

1.1 Motivation for the Study

While global advancements in access to basic education have been made, in 2013, 250 million children were unable to read, write or solve basic Math problems (UNESCO, 2013). Using data from 2015, the UNESCO Institute for Statistics (UIS) estimates that 617 million children and adolescents do not achieve the minimum literacy and proficiency levels. Around two-thirds of the 617 million are in school but do not meet satisfactory proficiency levels either because they dropped out or did not learn. Of the total figure, over 387 million are children aged 6 to 11 years old and 230 million are adolescents aged 12 to 14 years old.

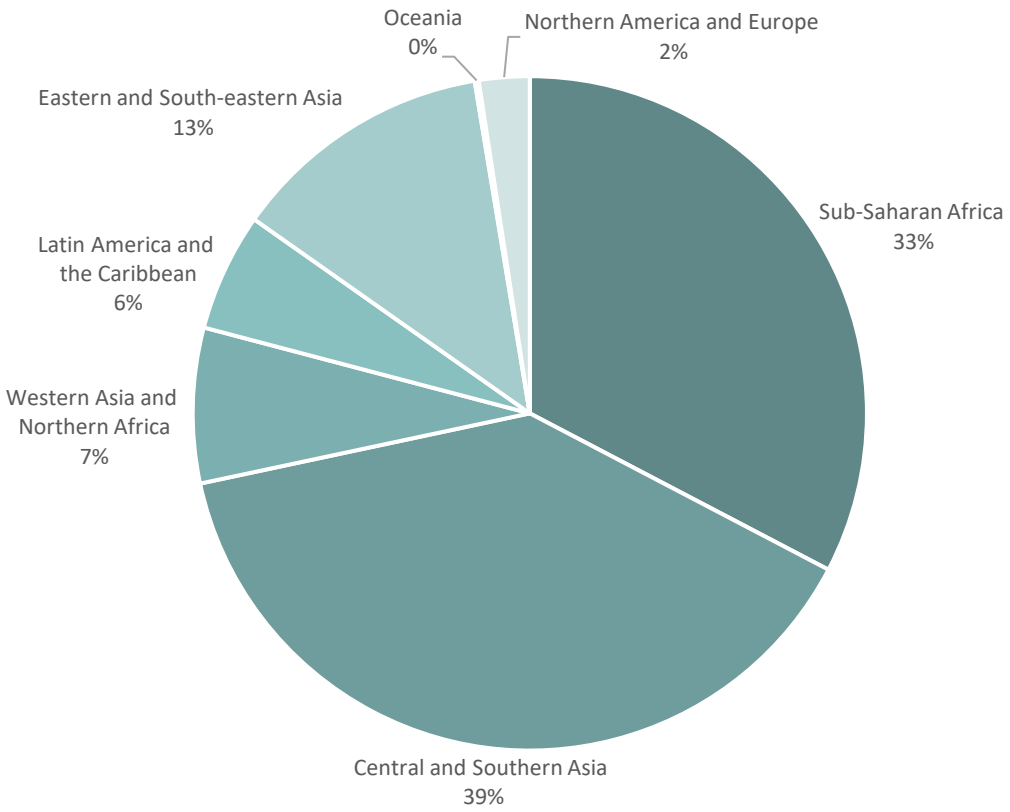


Figure 1: Regional share of global proportion of children/adolescents not achieving minimum proficiency level (UIS, 2017)

The rates of adolescents with poor learning outcomes are higher than those of children. With a rate of 89%, Sub-Saharan Africa is the region with the highest proportion of adolescents aged 12 to 14 years who are not learning (UIS, 2017).

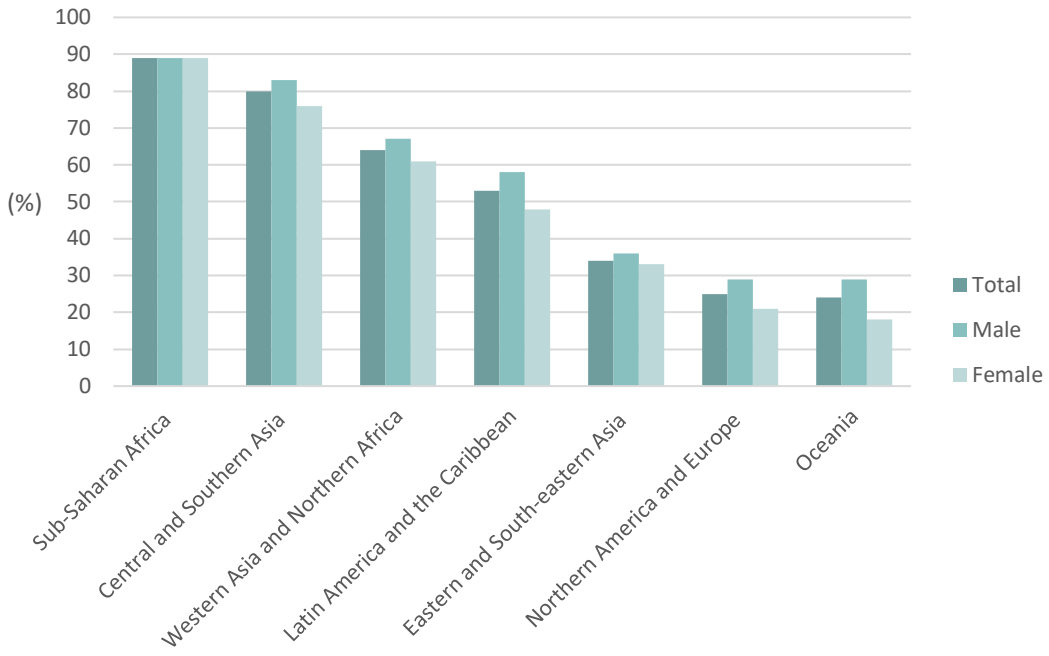


Figure 2: Proportion of school-age population not achieving minimum proficiency level, Lower secondary school-age adolescents (UIS, 2017)

That children and adolescents are in school but are not learning has been dubbed the "Global Learning Crisis" (UNESCO, 2013). Studies and development interventions into the learning crisis reflect a conflict between access to schooling and quality education or learning. Kabay (2019), coining this the "access vs. learning paradigm", posits that the discipline of international education rallies behind the paradigm to offer the cause of the learning crisis. The main argument is that focus has long been on access to education at the expense of education quality.

Across Africa, 47 out of 55 countries have legal provisions for free primary education (UNESCO, 2021). Policy development towards universal basic education was catalysed by the 1990 Education for All (EFA) Conference in Jomtien, Thailand that established that the greatest impediment to universal basic education was school fees. The target for compulsory universal basic education was set for 2000 but an assessment of EFA revealed that the progress made had been unequal and slow with around 113 million children without access to primary school (UNESCO, 2000). The EFA goals were extended by another 15 years during the 2000 World Education Forum in Dakar, Senegal.

The enrolment rate in the sub-Saharan Africa region improved by 75% from 1999 to 2012 (Benavot and UNESCO, 2015). This expansion of access to basic education is, however, argued to not have led to improved learning outcomes but that instead, most governments expanded access at the expense of quality as low learning outcomes are reported despite several years of schooling (Prichett, Banerji and Kenny, 2013; Jones *et al.*, 2014). Results from the Southern and Eastern Africa Consortium for Monitoring Educational Quality II (SACMEQ) project, one of several learning achievements assessments, disclose low learner achievements in terms of literacy and numeracy proficiency across eastern and southern Africa (Prichett, Banerji and Kenny, 2013).

In a review of 32 Randomised Controlled Trial (RCT) studies on learning and access outcomes in primary schools low- and middle-income countries, Kremer, Brannen and Glennerster (2013) find that school inputs, textbooks, grants and additional teachers, have little contribution to learning outcomes as compared to incentivising teachers, accountability and pedagogy improvement reforms. Using data from 7 sub-Saharan African countries that comprise 40% of the region's population, including Kenya, Bold *et al.* (2017) conclude that; teachers teach for slightly over half the required time, a large proportion of teachers have not mastered the curricula; good teaching practices are hardly employed and that basic pedagogical knowledge among teachers is low.

Most literature on teacher quality is based on experimental trials and interrogates deficiencies in teachers' skills, professionalism and motivation with prevalent conclusions of poor service delivery. This study addresses a gap in the literature by looking at the perceptions and experiences of teachers that are arguably missing in the access vs. learning paradigm.

1.2 PURPOSE, RESEARCH QUESTIONS AND CONTRIBUTION

The overall aim of this study is to contribute to the learning debate with understandings of experiences of public primary school teachers and their perceptions of quality primary education. It does this by contextually analysing their perceptions and experiences as street-level bureaucrats (Lipsky, 2010). Public primary school teachers were chosen for the enquiry as evidence points to lower learning outcomes in public schools compared to private schools following free primary education (FPE) implementation in Kenya (Bold *et al.*, 2011).

Learning, at the basic education level, is envisioned by Target 4.1 of Sustainable Development Goal (SDG) 4 that directs that "all girls and boys complete free, equitable and quality primary and secondary education leading to relevant and effective learning outcomes" (United Nations, 2015, p. 21). Many of the SDG, as well as national and global development agenda, are dependent on the achievement of SDG 4 which calls for inclusive and equitable quality education. While Kenya is used as a case study, the insight from this work may shed light on the circumstances of teachers and its impact on the public education system in other countries that have implemented similar universal education policies.

The thesis is guided by the following two key questions:

- First, what are the perceptions and experiences of public primary school teachers in implementing the FPE policy?
- Second, what are public primary school teachers' understandings of quality education?

2 BACKGROUND

The Background section begins with a brief introduction to the case study country in section 2.1. Following this is a history of FPE initiatives in Kenya leading up to the current FPE policy in section 2.2.

2.1 Kenya as a Case Study

Kenya lies on the east coast of Africa bordering five other countries; Tanzania to its south, Uganda to its west, Sudan to its northwest, Ethiopia to its north, and Somalia to the east. On the Human Development Index (HDI) of the United Nations Development Program (UNDP), the country is positioned at 143 out of 189 countries and territories. The index "is a summary measure for assessing long-term progress in three basic dimensions of human development: a long and healthy life, access to knowledge and a decent standard of living" (UNDP, 2020, p. 2). The 2019 HDI value of 0.601 is an increase of 24.7% from 1990 and places Kenya in the middle human development category. When this measure is adjusted for inequality, however, the HDI falls by 26.3%. In the Gender Inequality Index, which highlights gender-based inequalities in the dimensions of reproductive health, empowerment, and economic activity, Kenya ranks 126 out of the 162 countries in the Human Development Report index (UNDP, 2020).

The structure of education in Kenya has since 1985 featured eight years of primary schooling, four years of secondary schooling, and four years of college or university (8-4-4) resulting in the bachelor's degree. This structure replaced a previous system with seven years of primary, four years of secondary, two years of advanced secondary, and three years of university, 7-4-2-3, leading to a bachelor's degree following recommendations from the Mackay Commission of 1981 (Lelei and Weidman, 2012). The 8-4-4 system was designed to provide relevant employment avenues in post-independent Kenya but has been marred by concerns of quality, access, relevance, over selectiveness owing to the emphasis on national exams and sustainability of state spending (Lelei and Weidman, 2012; M'mboga Akala, 2021). In 2017 the country began transitioning towards a new curriculum referred to as a Competency-Based Curriculum with the system following a 2-6-6-3 structure; two years of pre-primary, six years of primary; three years of junior secondary, 3 years of senior secondary and three years of higher education leading to a Bachelor's degree (Kaviti, 2018; Koskei and Chepchumba, 2020). The new curriculum is seen by the Ministry of Education as one that will align

learners' skills and competencies with the nation's development agenda (Kaviti, 2018). The Ministry's position is that the 8-4-4 curriculum puts "too much focus on passing examinations rather than skill and knowledge acquisition" justifying the need for CBC (Ministry of Education, 2018, p. 21).

2.2 Free Primary Education in Kenya

Kenya has had several education reforms dating back from its colonial period. Most of these have taken the form of top-down policy decisions and free basic education has emerged thrice in the country's history as education reform. While under colonial rule education for the black African population was limited; it was racially segregated with the most esteemed schools designated for Europeans and black Africans relegated to the worst (Mugo, Moyi and Kiminza, 2016). In the parallel education system, primary education for Asians and Europeans was compulsory but not so for Africans. The education tailored for Europeans and Asians was academic to prepare them for white-collar jobs, while that for black Africans was shorter and practically oriented (Ojiambo, 2009). In 1949, Africans voiced rejection of the racist system designed to keep the majority black African population at low cadre employment and argued for universal literacy and expansion of the primary school network but European administrators instead campaigned for the improvement of the quality of existing schools (Somerset, 2009). The result was the extension of post-primary education to the African population but on condition of competitive examinations that marginalised the majority of the population (Ojiambo, 2009; Somerset, 2009).

Kenya gained its independence and ceased being a British colony in 1963 and a promise of school expansion and free education was made in the first president's inaugural speech (Buchmann, 1999). It was a decade later on 12th December 1973, that partial FPE was decreed by the country's first president, Jomo Kenyatta. The policy abolished school fees for Standard 1 to Standard 4, the first four grades of primary school the result of which was a surge in enrolment with a rate of 2.8 million in January 1974 from 1.8 million in 1973 (Amutabi, 2003). The mass enrolment motivated a country-wide school construction (Ojiambo, 2009) as well as extensive teacher employment (Amutabi, 2003). It was commonplace for communities to contribute to the construction effort but the high student enrolment saw schools raising construction fees, a situation that, in some instances, resulted in the building levies being higher than the previously abolished school fees leading to school

dropouts (Somerset, 2009). The mass teacher enrolment posed a further challenge with the quality of education coming into question as the Ministry of Education (MoE) had resorted to enlisting a large proportion of untrained teachers (Amutabi, 2003). Four years into the FPE policy, in 1978, the dropout rate stood at a high of 55%, a situation attributable to the strain presented on parents and communities by the higher costs (Somerset, 2009).

The partial FPE was expanded in 1979 when schooling in the remainder of the grades, Standard 5 to Standard 8, was declared free by the country's second president, Daniel Arap Moi through a presidential directive in 1978 (Amutabi, 2003). Under the decree, all non-fee charges such as the construction levies were also scrapped (Somerset, 2009) however, the state did not undertake any notable school expansion (Ojiambo, 2009). Further, efforts as in the previous initiative such as employment of untrained teachers were not replicated (Somerset, 2009) and graduates from Teacher Training Colleges (TTCs) were not placed into school because of a "donor-imposed employment freeze" (Amutabi, 2003, p. 134). Instead, there was an increase in in-service teacher training courses offered by the TTCs (Amutabi, 2003). With the lag in teacher employment, the learner-teacher ratio in the second instance of FPE leapt from 33.13 in 1978 to 39.84 in 1979 (Somerset, 2009).

School fees made a comeback in the next decade in 1988 by way of a cost-sharing push commended by the International Monetary Fund and the World Bank under the Structural Adjustment Programmes (Somerset, 2009). The drive was advocated as a channel to lower public spending on education and parents' commitments towards school expenses, including the abrogated construction levies, were reinstated (Muyanga *et al.*, 2010). Primary school participation dwindled as the rates of enrolment subsequently fell while dropout rates rose (Somerset, 2009). In 2001 the enrolment rate had dropped from 95% in 1991 to 78% and by 2002 completion rates were at a dim 50% (Zani and Chacha, 2015).

The third manifestation of FPE was in 2003 when an electoral promise was immediately effected on the inauguration of a new government, instituting free education from Standard 1 to Standard 8 (Zani and Chacha, 2015). While the political agenda had a direct connection to the policy, the environment was ripe for it internally and at a regional and global scale. During the 1990s, countries, including Kenya, had committed to achieving EFA by the year 2000 following the 1990 World Conference on Education for All, the Jomtien conference. In

1999 a commission required to recommend ways of enabling the education system to facilitate national unity, mutual social responsibility, accelerated industrial and technological redevelopment was formed by the government of Kenya (Koech, 1999). The Koech Commission's (1999) conclusion was that the country grappled with the provision of quality education and its recommendations were towards compulsory and equitable basic education where education for the most disadvantaged groups such as those with special learning needs and the poor would be subsidised. In the year 2000, the Dakar Framework extended the EFA goals by fifteen years. Around the same time, the Millennium Development Goals were launched with goal 2 aiming at providing universal primary education, recognised as a requisite for development, by the year 2015 (United Nations, 2000).

The new decree required consent from the MoE for any levying of fees by schools and direct costs by parents were revoked (Ojiambo, 2009). School participation was instantaneously noticeable with the gross enrolment rate rising by 18% from 6.06 million in 2002 to 7.16 million in 2003 (Owuor, 2018). Sifuna (2005) notes that the increased enrolment resulted from the participation of learners from disadvantaged socio-economic backgrounds, a nod to equity concerns that was welcomed by many (Abuya *et al.*, 2015). However, the policy has been met with worry over quality and solidity by it being a political directive that featured little consultation with education stakeholders, particularly on matters of (Sifuna, 2005; Ojiambo, 2009; Zani and Chacha, 2015). Further, concerns of extra costs to parents, insufficient teachers and pedagogical quality have resurfaced as with the previous FPE policies (Somerset, 2009).

3 PREVIOUS RESEARCH

Following the interrogation into what quality education is, sections 3.1 and 3.2 detail understandings of education. The learning paradigm introduced at the beginning of this study is then expounded on in section 3.3 with section 3.4 narrowing in on issues of learning in Kenya. Finally, section 3.5 discusses the representation of Kenyan public primary school teachers in the learning paradigm.

3.1 Education as Human Capital

Human capital is an economic theory that propounds that education improves an individual's and a society's economic productivity and was advanced, most notably, by Becker (1993) and (Schultz, 1961). A person's knowledge, skills, health or values are a form of capital, human capital. Spending on education and training, therefore, is an investment in human capital which Becker (1993) regards as the most vital investment in human capital. As an investment in human capital that improves the productive capacity of a population, formal education or schooling is seen by proponents of the theory as equal to or more valuable than investment in physical capital (Olaniyan and Okemakinde, 2008). Human capital is an integral component of a country's economic growth (Schultz, 1961).

Proponents of the theory suggest that advancement in education positively correlates to increased individual earnings and that years of schooling have explanatory power on disparities in earnings (Becker and Chiswick, 1966). Mincer (1974) developed a model of the rate of return to investment in schooling which suggests that income growth is determined by the change in countries' average level of schooling. This is reiterated by Krueger and Lindahl (2001) who add that improvements in education systems may also impact complementary changes in other policy areas that may contribute to the observed income growth in countries. Following this Petrakis and Stamatakis (2002) aver that developing countries benefit more from primary and secondary education while developed ones gain more from higher education. A study on the contribution of human capital to economic growth by Ogundari and Awokuse (2018) finds a significant positive effect of school enrolment on economic growth but with the only enrolment in primary and secondary school being statistically significant in Sub Saharan Africa. Previous work found primary school enrolment to be the most significant variable with a positive correlation to economic growth in the region (Artadi and Sala-i-Martin, 2003; Sala-i-Martin, Doppelhofer and Miller, 2004). In Kenya, education

positively affects earnings not only in the formal wage employment of the public and private sectors but also in the informal sector. The impacts are on both access to employment and within employment with returns on investment to primary education, especially for women, being significant in the informal sector while those to secondary school are low (Wambugu, 2011).

3.2 The Right to Education

Rights-based discourses conceptualise education as an inalienable human right that ought to be guaranteed to all. The right to education is recognised in several international conventions and treaties and the model is relied on by international organisations. Its recognition dates back to 1921 when the International Labour Organization convention endorsed free and compulsory education as a path to the elimination of child labour (ILO, 1921). Since then it has been adopted in the Universal Declaration of Human Rights (United Nations, 1948), the Convention against Discrimination in Education (UNESCO, 1960), the International Covenant on Economic, Social, and Cultural Rights (United Nations, 1966), the Convention on the Rights of the Child (United Nations, 1989), among other international legal instruments. The right to education is firmly rooted in the global commitments of EFA as well as the Sustainable Development Goals (SDG). The language of SDG 4, the education goal, is in line with a rights-based approach with its first target being to "ensure that all girls and boys complete free, equitable and quality primary and secondary education leading to relevant and effective learning outcomes" (United Nations, 2015).

Following a rights-based framework, education should be provided even where it does not have any returns to the investment. Tomasevski (2003) stresses that education should serve to ready learners for social and political participation as well as instil an awareness of human rights. Rights can be conceptualised as either moral rights or legal rights where they are not merely part of the law but also moral standards (Pogge, 2008, 2011). Human rights as legal rights are "safeguards against abuse of power by government" (Tomasevski, 2003 p. 36). The right to education is a moral right accorded legal right status as a way of ensuring its protection from parents or the state who have a duty to the children's right (Floud, 1976).

The rights approach has been criticised for being too rhetorical. There are out of school children or children present in school who are not learning in several countries yet the right to

education for every child is legally established in these countries (Tomasevski, 2003). Unterhalter (2003) likewise stresses that while the intrinsic value of education is widely affirmed in various international agreements and global education commitments, including the EFA movement, the declarations "appear merely rhetorical" (Unterhalter, 2003, p. 8).

3.3 The Access vs. Learning Paradigm

In a landmark report, (Prichett, Banerji and Kenny, 2013) claim that schooling is not learning and emphasise that the objective of the EFA was on education, essentially learning, but not solely school enrolment. They quote SACMEQ data revealing that in eastern and southern Africa, most children have not achieved literacy proficiency by grade 6, to highlight that several years in schooling do not necessarily translate to learning. It is argued that increased enrolment and longer periods of universal education may be inconsequential to learning achievements if it cannot be guaranteed that learning is ongoing (Pritchett and Beatty, 2012).

In 2018, the World Bank released its first World Development Report (WDR) focused on education titled "LEARNING To Realize Education's Promise". The WDR's central message is that schooling is not synonymous with learning, in fact, that schooling without learning counts as both a wasted opportunity and an injustice to learners (World Bank, 2018). The stance of the bank in the matter is seen as vital as it is a key player in framing the global education policy consensus being the largest funder of education in developing countries (Fontdevila and Verger, 2015; Mundy and Verger, 2015). It is not an impartial lender but it has great influence over individual country educational policies and agendas as it presents itself and is equally perceived as a knowledge bank or hub (Steiner-Khamsi, 2012; Verger, Edwards and Altinyelken, 2014).

Despite the scepticism towards the shift in learning outcomes in international education, numerous studies of learning outcomes interventions, mostly in the form of quasi-experimental or RCT have been conducted. Reviews of such studies are also increasingly prominent. Evans and Popova (2016) evaluate reviews of over 200 learning outcome studies in developing countries. Most of these studies feature RCTs conducted in Sub Saharan Africa. The main objective of the studies has been to identify what improves learning; a solution to the learning crisis. Summarising 6 reviews of learning studies, Evans and Popova

(2016) find that the conclusions and recommendations of what improves learning are divergent.

Conn (2014, 2017), reviews 56 studies featuring 66 RCT and quasi-experiments on formal education learning outcomes in Sub-Saharan Africa from 1980 to 2013. The interventions studied range from the supply of learning materials, the use of teacher incentives, and school-based management programs. Pedagogical interventions, particularly those that change the current teacher pedagogical method or instructional technique were found to be more effective. Conn concludes that "it is possible that the quality of current pedagogical methods is on average so poor…that even small changes in teaching techniques could have a large impact" (Conn, 2014, p. 50).

Conclusions by Glewwe *et al.* (2014, p. 47) favour "a fully-functioning school" with resources including a school library and better classroom infrastructure; quality walls, roof, floor and desks. Teachers with a mastery of the content they teach, longer school days and tutoring were also found to improve learning outcomes. They highlight teacher absenteeism which is found to have a negative impact on learning. Reviewed were 79 quasi-experimental studies and RCT on primary and secondary school learning or access outcomes in low- and middle-income countries between 1990–2010. 67 of the 79 studies focused on learning (Glewwe *et al.*, 2014).

McEwan (2015) reviews 77 RCT on interventions on learning outcomes in primary schools in low- to upper-middle-income countries. The effective interventions identified, ranked in order of those with the greatest mean size effects, include those with computers or instructional technology; teacher training; smaller classes; smaller learning groups within classes; contract or volunteer teachers; student and teacher performance incentives; and instructional materials. The effectiveness of these interventions is on learning outcomes and their cost-effectiveness could not be determined. Two of the effective school-based interventions, contract teachers and instructional materials, were dependent on other factors including either training or class size reduction or both. The finding somewhat contradicts that of Krishnaratne, White and Carpenter (2013) who found the provision of learning materials to be effective. Teaching resources were found likely to improve learner enrolment and retainment in school as well as test scores. Other interventions with significant positive

effects on learning outcomes include improved school buildings; early childhood development programmes; school-based management and school-feeding interventions.

Findings by Kremer, Brannen and Glennerster (2013) were highlighted in section 1.1. In their finding on increasing the number of teachers, they draw on 2 RCT from Kenya (Duflo, Dupas and Kremer, 2008, 2015) and one from India (Banerjee *et al.*, 2007) that found that there were no changes in test scores for learners who remained in classrooms with government-employed teachers when additional teachers were hired. The finding is contrasted with an American RCT where test scores improved when the class sizes were reduced (Krueger and Whitmore, 2000) and postulate that additional learning resources have a greater impact where accountability is more established. They add that a challenge to developing nations is understanding the role of private schools arguing that private schools, including those aimed at the poor, have mushroomed in response to low-quality public schools. Government support and regulation is therefore required. An intervention from Pakistan that provides information to parents on both government schools and low-cost private schools is cited as having made "low-performing schools to improve their performance and higher-performing private schools to reduce their fees" (Kremer, Brannen and Glennerster, 2013, p. 299).

3.4 Learning in Kenya

The 2003 FPE initiative, as stated earlier, led to a surge in schooling participation particularly for poorer students but it also led to an "access shock" where classrooms were crowded with large numbers of over-age learners, teachers had to work double or triple shifts and there were shortages of learning materials (Banerjee *et al.*, 2007). Lucas and Mbiti (2012) reiterate the lack of significant increase in public school capacity which they measure by the number of teachers or school construction and find that they resulted in increased demand and supply for inequitable private schooling which in the short run mitigated any negative effects of the crowded public school system. The sense of deteriorated education quality in public schools saw parents who could afford it moving their children to private schools resulting in differential learning outcomes. Learners in both high-cost and low-cost private schools reported better learning outcomes compared to those in public schools (Sawamura and Sifuna, 2008; Bold *et al.*, 2010; Mugo, Nderitu and Ruto, 2015). One study found that learners in private schools score an average of 290 on the Kenya Certificate of Primary Education exam, compared with a national average of 247 out of 500 (Bold *et al.*, 2011).

Bold *et al.* (2010) argue that this preference for private schools by the middle and upper classes, a trend notable only in primary schools but not secondary schools, denotes a decline in quality of public primary schools as a result of FPE but still maintain its advantages to learners hailing from poor backgrounds.

Equity too became a concern as even with the high enrolment, there were still high numbers of out-of-school learners mostly from "the less-serviced districts of Northern Kenya and urban informal settlements (Mugo, Moyi and Kiminza, 2016, p. 89). Indirect out-of-pocket costs of schooling act as disincentives to access for some. Privileged public schools for instance, which in the country's colonial past were designated for Europeans and Asians, feature facilities including libraries and swimming pools still charge levies as they cannot be maintained by state-provided funds (Sawamura and Sifuna, 2008). Provision of textbooks by the government following free primary education was found to not affect the average learner but instead improved outcomes for those who already had higher learning incomes (Glewwe, Kremer and Moulin, 2009). Kremer, Brannen and Glennerster (2013) argue that this suggests that the textbooks are tailored to benefit higher-performing learners.

Ruto, Ongwenyi and Mugo (2009) highlight educational marginalisation in northern Kenya, with indicators such as low enrolment and retention rates, low learner to teacher ratios and poor performance in national exams and a widening gender gap. Hungi and Thuku (2010) also report significant gender disparities, in favour of boys, within the learner population in schools in northern Kenya. They posit that even though improvements have been recorded in the arid counties, they have remained in the lowest positions since the introduction of FPE in 2003, alongside cities that hold the majority of the urban poor, referent to net enrolment rates. The most recent national census data establishes an increase in the net enrolment rate from 91.2 % in 2016 to 92.5% in 2018. The completion rate, however, stood at 82% revealing that 18.1% of learners who entered Standard 1 in the year 2012 did not complete Standard 8 either due to dropping out or repeating classes (Ministry of Education, 2019a). This figure does not include all children of school-going age who are not in school but only those who entered but did not complete the primary school cycle. When the enrolment data is aggregated by county level, there is an overrepresentation of economically marginalised counties in Northern Kenya as well as major cities such as Nairobi with large informal settlement populations below the national average gross enrolment rates consistent with the findings by Ruto, Ongwenyi and Mugo (2009). The trend is somewhat similar when considering out-of-school

children as the majority hailing from the counties Mandera; Turkana; Wajir; Garissa; Nairobi and Bungoma, the first four being from northern Kenya.

The challenges stemming from the access shock buffered an increase in preference for learning outcomes as measures of quality from inputs such as learner-teacher, learner-textbook and learner-classroom ratios in Kenya (Mugo, Moyi and Kiminza, 2016). The Ministry of Education conducts the National Assessment of Monitoring Learning Achievements (NASMLA) which measure literacy and numeracy in Grade 3. Some of the findings, reported in the National Education Sector Strategic Plan for 2018 to 2022 include in literacy, "close to 71 per cent cannot read for meaning in English" and where numeracy was concerned, "close to 64 per cent cannot add or subtract simple fractions" (Ministry of Education, 2018, p. 20).

Twaweza, a non-governmental East African initiative has since 2009 conducted the largest national numeracy and literacy assessments of children of school-going age under their program, Uwezo. Uwezo assessments are household-based and therefore capture both school-going children in both private and government schools as well as those who are out of school. The nationally representative Uwezo data and findings, they cover 157 of 158 districts in Kenya, including a random sample of 4,649 enumeration areas and 69,183 households, are cited and used in analyses (Jones *et al.*, 2014; Mugo *et al.*, 2015; Mugo, Moyi and Kiminza, 2016). Their most current report on Kenya finds that learning outcomes are low with 8 out of 100 learners at Standard 8 unable to do Standard 2 work across the country with the outcomes being lower in rural areas, arid areas and poorer households. Disparities in learning outcomes between learners in private schools and public schools, in favour of privates schools, are also registered. Concerning gender, girls tested better than boys in all the subjects assessed; Math, English, and Kiswahili. An improvement in school enrolment was marked, however, from 9 out of 100 children aged 6-16 years old who have never attended school to 6 out of 100 in 2015 (Uwezo, 2016). The figures below present some of the findings on these differences in learning achievements by Uwezo:

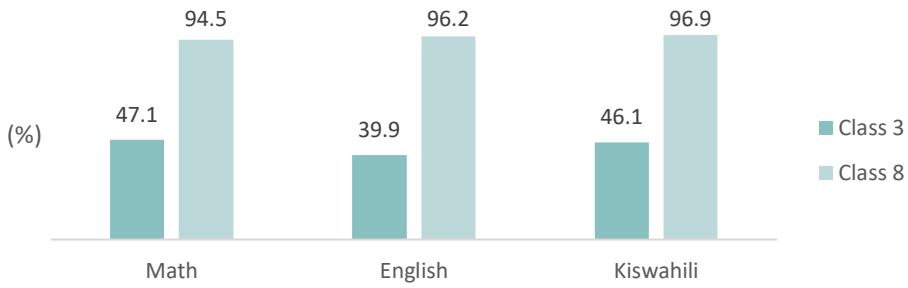


Figure 3: Percentage of Class (Standard) 3 and 8 learners who can do Class 2 work by subject, (Uwezo, 2016)

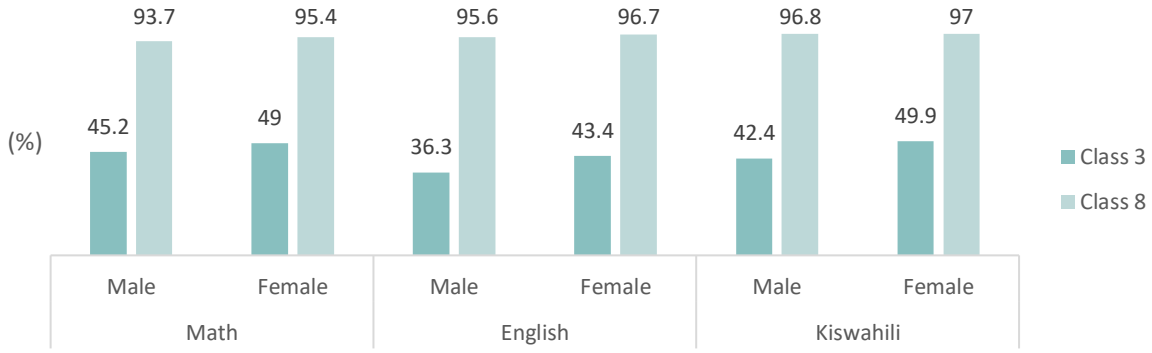


Figure 4: Percentage of Class 3 and 8 learners who can do Class 2 work by gender, (Uwezo, 2016)

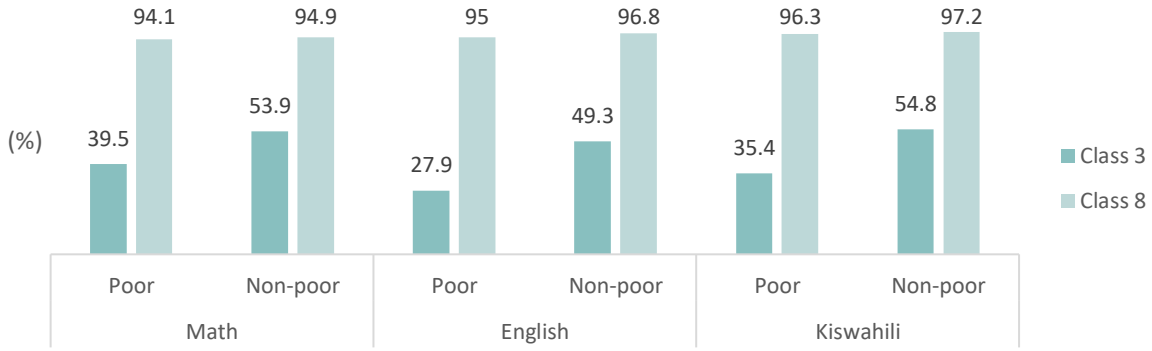


Figure 5: Percentage of Class 3 and 8 learners who can do Class 2 work by socioeconomic background, (Uwezo, 2016)

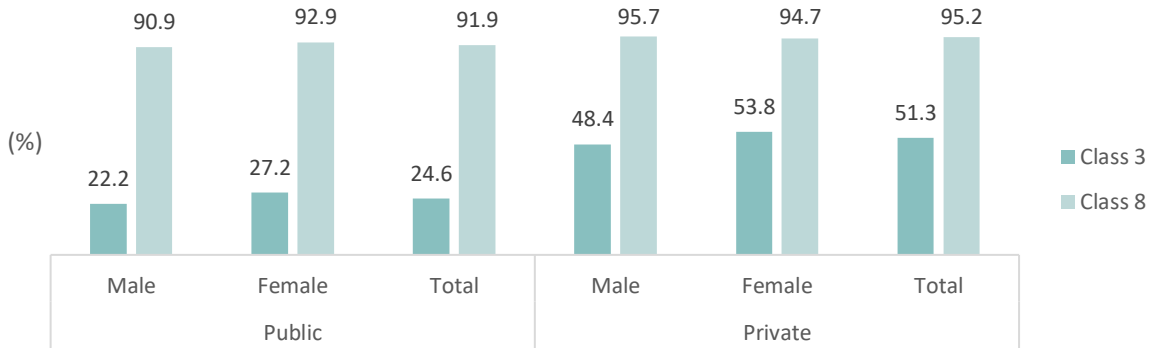


Figure 6: Learners' competency levels by gender and type of school attended, (Uwezo, 2016)

3.5 Representation of Teachers in Kenya

Teachers are often depicted as key players in studies on learning. Using SACMEQ data, which includes assessments of teachers' performance in mathematics and reading, in their study of differences in learner achievements, Hungi and Thuku (2010) use teachers' test results as a variable of teacher quality and predictors of learner achievement. As discussed above, the doublespeak on teachers is also present in the characterisation of teachers in Kenya. On the one hand, they are seen as lacking effort, therefore, contributing to the learner achievements and inversely as significant actors in addressing education quality concerns. The government, remarking on education quality, has taken the position that "minimum quality standards are not achieved as schools are not regularly inspected and therefore teachers and school management, in general, are not held into account for the declining educational achievements in the country" (Ministry of Education, 2012, p. xxvii). Some studies have addressed issues of absenteeism (Duflo and Hanna, 2005; Gayle, H. and Pimhidzai, 2013) while others reinforce that a bigger concern is of those teachers who show up but do not teach (Gayle, H. and Pimhidzai, 2013). (Uwezo, 2016) also reports rates of teacher absenteeism which had risen from 9 out of 100 teachers absent in the previous year to 12 out of 100 in 2015. A caveat is however made to the effect that the decline in attendance "could be attributed to the fact that assessment happened shortly after a nationwide teachers' strike that ended in a stalemate"(Uwezo, 2016, p. 10).

Reviewed by Kremer, Brannen and Glennerster (2013) a randomized control trial ran in Western Kenya to measure, among other things, the effectiveness of contract teachers, found that better incentives had a positive effect on learning outcomes. There were improvements in test scores for pupils taught by contract teachers who would stand to be employed by the government if they performed well while there were hardly any improvements among the government teachers (Duflo, Dupas and Kremer, 2015). Teacher effectiveness and efficiency are central in the study with teacher incentive solutions proffered to remedy government teachers' lack of effort and accountability. The findings of the RCT suggest that "initially hiring teachers locally on short-term contracts at about one-fourth the salary, would, in theory, be infinitely cost-effective" (Kremer, Brannen and Glennerster, 2013).

Just as the rest of the population, teachers in Kenya received the news of the 2003 FPE over the media shortly before schools reopened for a new term (UNESCO and Kenya, 2005;

Abuya *et al.*, 2015). Having had no input in the policy decision or any preparation they had to deal with the access shock without any extra teacher recruitment except for retired teachers replacement (Zani and Chacha, 2015). The large learner population made it hard for teachers to pay individual attention to learners possibly impacting the dismal completion rates of 50% (Munyi and Orodho, 2014). After FPE the teacher-learner ratio leapt to 1:60 (Abuya *et al.*, 2015) with some teachers in rural areas and urban informal settlements faced with up to 120 pupils (Owuor, 2018) while the recommended average is 1:40. It has been shown that learners perform better in literacy and numeracy where the learner-teacher ratio is low (Hungi and Thuku 2010). The challenges faced by the sudden cost-free education; the mushrooming learner population, teacher shortages, lack of admission guidelines, expanded administrative roles of headteachers and the obscurity of the extent of cost-free schooling about parental responsibility to school expenses were cited by teachers as contributing to limitations on quality (UNESCO and Kenya, 2005).

Abuya *et al.* (2015) argue that the experiences, motivation and their effect on education quality of teachers under FPE, are rarely studied but instead research is constrained to issues of demand and supply of teachers. Empirical data was gathered in this study to offer nuanced perspectives of government teachers' experiences.

4 THEORY

The theoretical approach guiding this investigation, the capability approach, is expounded on at the beginning of this chapter, section 4.1. Concepts of policy evaluation that are used to bolster the capability approach are then highlighted in section 4.2; the capability approach in section 4.2.1 and street-level bureaucracy, a policy implementation concept, discussed in section 4.2.2. A summary of the study's analytical framework concludes this chapter.

4.1 Capability Approach

The capability approach (CA) is a set of ideologies, concepts and methodologies advanced by Amartya Sen and Martha Nussbaum. The CA's central tenet is that human development should be understood through the freedom individuals have to enjoy what they value. Capabilities refer to are "the various combinations of functionings (beings and doings) that the person can achieve" where functionings are the doings and being that the person values and has reason to value (Sen, 1992, p. 40). Capabilities are an individual's abilities, skills and knowledge (Nussbaum, 1988, 1995). While functionings are essentially achievements, capabilities encompass both a person's achievements and their "unchosen alternatives" (Alkire, 2008, p. 5). They interrogate whether a person has the opportunity to achieve a functioning that another effectively achieved (Sen, 1985). The CA to education differs from the human capital and human rights models' conceptualisations in that it embraces all the roles of education. Where the human capital theory stresses the instrumental economic purpose and the right to education discourse the intrinsic personal role and has the potential to reduce education to merely a legal right but not real freedom or opportunity, the CA values both the instrumental and intrinsic roles of education (Drèze and Sen, 2002; Unterhalter, 2003). The CA provides an understanding of education that highlights the facets of education that are concerned with the individual's achieved functionings, which may impact economic production, such as being able to secure employment and those related to broader significant freedoms with links to social change such as, as Nussbaum (2003) points out, a woman being emboldened to engage in politics or leave an abusive marriage owing to her opportunity set being expanded through literacy. (Saito, 2003) argues that a discussion of children's development in terms of capabilities is problematic as they inadvertently require support from parents, teachers or societies. The CA, therefore, justifies compulsory education for children as while adults have the agency to make decisions affecting their well-being or regarding their participation in society children may not be the best decision-makers. It is

stressed, however, that the nature of such compulsory education should be of high quality and one whose goal is towards the growth of the full human being (Nussbaum, 2003).

4.2 Policy Evaluation Concepts

4.2.1 The CA in Policy Analysis

For a policy evaluation, five concepts of the CA are significant; resources, capabilities, functionings, conversion factors and choices. Commodities refer to the goods and services availed to individuals in a particular context and are at their disposal. Also regarded as resources, they are the entitlements or commodities and may stem from the social, political or economic systems (Sen, 1999). They are the entitlements accessible to street-level bureaucrats which herein encompass the public provisions following the FPE policy. Capabilities differ from functionings in that capabilities are the abilities people have to be or do what they want and what they have reason to aspire to while functionings are what individuals effectively achieve. Capabilities are, however, individual and therefore equal resources do not always translate to equal functionings. Conversion factors that refer to the actual ability of an individual to transform their resources into individual capabilities are therefore required to measure this inequality. The empirical data relied upon in this thesis is differentiated along geographical and social-economic lines to capture prevailing inequalities. Conversion factors may be individual, social or environmental and without them, resources may remain merely formal rights. Their inadequacy may impend compliance, which is generally required of street-level bureaucrats, as the real capability of teachers to comply is inequitable. The ability to comply has bearing on choice which is concerned with the agency of an individual to effectively achieve the policy objective. Choice or agency is concerned more with internal constraints or limitations of the street-level bureaucrat (Goerne, 2010).

The individual plays a central role in the CA and attention is paid to their freedom and capability to act, which Sen terms as "agency freedom" (Sen, 1993, p. 35). Agency freedom denotes the ability of individuals to effect changes that they value. Individuals are active agents both in their own lives and in advancing social goals. In this thesis, the social goals relate to teachers' roles in advancing the policy objectives. The concepts of freedom of action and thought as well as practical reason are dominant in the CA (Alkire, 2008). Alkire's work on agency stresses that agency is dimension-specific and is not only inhibited by internal hesitations but also external limitations such as economic or social constraints. Evaluation

should thus focus both on domain-specific agency and autonomy measures (Alkire, 2005). The framework has been criticised for not taking into account interactions lending the approach to ignore power relations and agency in the process of individual action but merely describing a conducive environment for such action. External constraints arising from macro variables such as geographical areas linked to experience and interaction lead to individual action and therefore freedom of action should be considered as a process of interaction with the environment (Zimmermann, 2006). (Goerne, 2010) reiterates that the concept of agency as conceptualised by the CA leads to abstract explanations of internal constraints and a study would benefit from a more elaborate theory of agency. The following discussion on the policy implementation concept of street-level bureaucracy seeks to remedy this deficiency of the CA.

4.2.2 Street-Level Bureaucracy

The concept of implementation was advanced by (Pressman and Wildavsky, 1984) is understood as the fulfilment of given tasks as spelt out in official documents. (O'Toole, 1995) defines policy implementation as the link between the intention of the authoritative decision and the actual results which depend on a world of actions. The policy decision often emanates from a statute but may also stem from executive decisions, as is the case with FPE, or court decisions (Mazmanian and Sabatier, 1983). Successful implementation requires compliance with the goals of the directive, achievement of pre-determined success indicators and improvement in the political climate around the policy. It also is heavily reliant on the capacity and will or motivation of the implementors. Motivation is influenced by factors external to the policy environment such as competing priorities and pressures and therefore has a large bearing on the policy, particularly at the frontline level (Matland, 1995).

Paudel (2009) presents an account of the evolution of implementation theories and argues that a real theory of implementation is still lacking. Earlier works on implementation, the first generation, are concerned with the process of the implementation through studies of predominantly case studies while the second generation research's focus is on the development of frameworks to explain implementation success or failure. Two perspectives emergent from the second generation are the top-down approach and bottom-up implementation perspective. The top-down approach is concerned with the intent of the policy decision while with the bottom-up the focus is on formal and informal relationships in both modelling and fulfilling of the policy. The third generation combines the macro

policymaker level and the micro implementors world but it is contended that this has not been achieved in practice (Paudel, 2009). The table below highlights the distinction between the two implementation approaches:

Variables	Top-down perspective	Bottom-up perspective
Policy decision-maker	Policymakers	Street-level bureaucrats
Starting point	Statutory language	Social problems
Structure	Formal	Both formal and informal
Process	Purely administrative	Networking, including administrative
Authority	Centralisation	Decentralisation
Output/Outcomes	Prescriptive	Descriptive
Discretion	Top-level bureaucrats	Bottom-level bureaucrats

Table 1. Differences between top-down and bottom-up implementation perspectives. Adopted from (Paudel, 2009)

Street-level bureaucracy is a theory propounded by (Lipsky, 2010) that centres on public employees who interact directly with the public in the delivery of public policies. They hold significant discretion in service delivery that enables them to not only implement a policy but mould it. From a bottom-up perspective, the theory maintains that it is not always the formal mandate of the policy rather the discretionary decision-making of the street-level bureaucrats that becomes public policy hence these actors play a significant role in implementation. The discretion may result in inequitable results as the street-level bureaucrats adopt coping mechanisms in their delivery of the policy objectives to deal with the gap between the demand for services and limited resources. They may, for instance, differentiate clients by selecting and prioritising those most likely to succeed following a bureaucratic success criterion over the neediest ones, a coping mechanism referred to as creaming. (Winter, 2002), however, calls for a less value-laden approach to coping mechanisms and questions whether in coping policy implementors always skew the policy objective. She demonstrates that the bureaucrat's attitudes influence coping more than the resources available to them; a positive perception of the effectiveness of a policy would lead to less coping.

In dissecting the concept of discretion (Maynard-Moody and Musheno, 2000) differentiate between what they term state agent and citizen agent. The state agent definition emerges from the dominant Lipsky understanding of the street-level bureaucrat while the citizen agent is a reflection of street-level workers' narratives. The state agent, while acting in response to the policy decision, employs discretion out of self-interest to make their work easier. They are the real policymakers, creating a situation that has negative implications on democratic governance as they do not hold elective capacities. The citizen agent, on the other hand, does

not view their decision-making as a part of a policy implementation process. They do not respond to the dictates of an authoritative decision, which may be unrealistic, but on practical normative choices concerned with the needs of the client or citizen. Selflessly, the citizen agent will make their work harder and officially less successful to attend to the needs of the citizen client.

4.3 ANALYTICAL FRAMEWORK

The analytical framework is adopted from Thierry *et al.* (2009) and operationalises the CA in the evaluation of teachers' roles in the FPE policy. It serves less like a normative model but instead as an analytical one concerned with the process of policy implementation together with the output. Goerne (2010) argues that while the concepts from the CA have an inherent normative bearing such as the preference for individualisation rather than standardisation, the definitions of valuable capabilities in most analyses, however, stem from CA-external normative underpinnings. The CA, if employed purely as a normative framework, can be used in two ways; a study may either assess good capabilities as derived from a pre-determined theory of justice or it may apply a set of standards that derive from the analysis. Thierry *et al.* (2009) argue that while the second assessment may be analytical, methodological difficulties in studying socially valued capabilities are eminent.

For analysis, this thesis does not adopt an understanding of the CA as a theory of justice but as an assessment tool. As Sen put it, "the approach must nevertheless be practical in the sense of being usable for actual assessments of the living standard" (Sen, 1987, p. 27). It explicitly relies on the concepts discussed in the theory section above as well as insights emergent from the empirical data and not purely the concepts of the CA. The analytical framework serves to assess the first research question; what are the perceptions and experiences of public primary school teachers in implementing the FPE policy? The responses from the second, what are public primary school teachers' understandings of quality education? inform the selection of valuable capabilities and functionings.

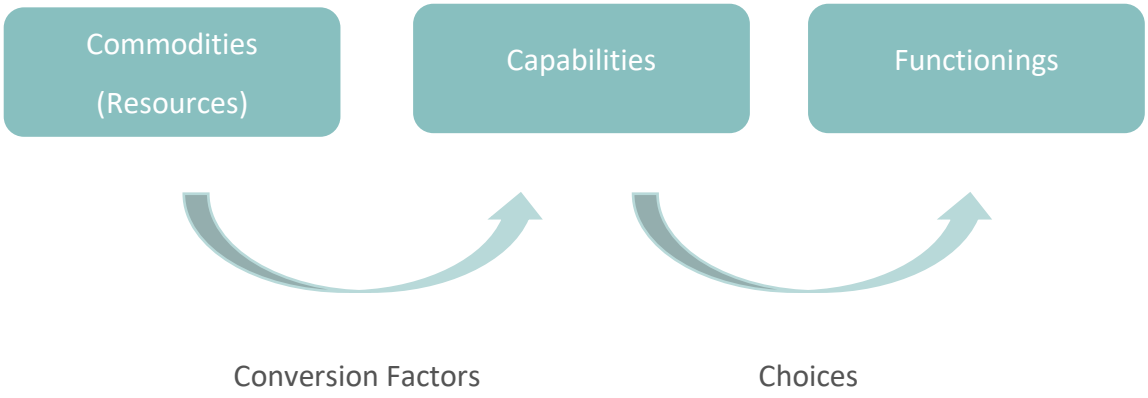


Figure 7: the Capabilities Approach Analytical Toolbox, adopted from Thierry et al., 2009

At the centre of the analysis are the capabilities stemming from converted resources availed to street-level bureaucrats following an inquiry into why they do not act the way policymakers envision them to. The framework stresses the "effective capability of individuals to accomplish their projects and the ways in which public action enables this real capability" (Thierry *et al.*, 2009, p. 4). Achieved functionings are easier to identify compared to capabilities and they may be useful in revealing existent inequalities in access to capabilities (Robeyns and van der Veen, 2007). Some researchers (Nussbaum, 2003; Robeyns, 2005) call for a pre-determined list of achievements for assessment of policy objectives but Sen's CA envisions an evaluation of social policy that is contextual without set benchmarks and one that pays attention to individual aspirations (Unterhalter, 2003). However, although in some cases data on achieved functionalities may be sufficient, the CA advocates for assessment of capabilities, not only functionings (Alkire, 2008) as focusing solely on functionings ignores differences in people's social circumstances (Unterhalter, 2003). A qualitative enquiry, such as the semi-structured interviews used in this study, also assists the researcher to select valued capabilities (Goerne, 2010).

To evaluate public policy using the framework Thierry *et al.* (2009) posit that three hypotheses require studying: resources are insufficient or ill-adapted; inadequate capacity to use the resource due to inadequate conversion factors; expected behaviours not occur due to objection from individuals. To employ the framework, expected functionings which derive from the objective of the policy, the resource, and a description of the players and their interactions, as well as the role of the environment to the players, are also needed. The focus of this thesis is on one player, teachers, and their environment as reflected by the empirical

data. However, secondary data is also used to provide a description of the policy objective and the system in which the key players are situated as well as their interaction.

5 METHODS

A brief description of the research design, section **Error! Reference source not found.** is followed by a detailing of the sample in section 5.2. The data sources and procedure of the method are then discussed in section 5.3. Characteristics of the study's participants are provided in section 5.4. Following this the analysis strategy is outlined in section 5.5 then the chapter closes with a discussion of limitations in section 5.6.

5.1 Case Study

An instrumental case study, this thesis focuses on the learning crisis in developing countries with the FPE policy in Kenya as experienced by public primary school teachers selected as a single bounded case for the inquiry (Creswell and Kasmad, 2020).

5.2 Sample

This study set out to collect information from public primary school teachers about their experiences with FPE and their understandings of quality basic education. The choice of the purposive sampling strategy used was influenced by the objective of a maximum variation sample. The study aimed to capture a broad range of responses that would reflect the diversity of teachers' experiences. Theory saturation of the perceptions and experiences of FPE and understandings of quality education was also an important consideration but the emphasis was placed on variation.

Learning outcomes vary based on geography and population density as evidenced in the findings of the national learning assessment conducted by Uwezo (2016, pp. 14–15). School attendance around the country similarly varies, with rural counties in the central region registering 90% a value higher than that of cities such as Mombasa and Nairobi with 81% and 87% attendance rates. Coastal counties average a 72% attendance and arid counties perform least with Turkana, for example recording 25% attendance based on the country's 2009 census data (Wiesmann, Kiteme and Mwangi, 2016). Teachers' experiences were predicted to vary along these lines thus these data informed the sample selection. Uwezo ranks counties by learning outcomes and to obtain a sample, the data were grouped into quartiles with the sample representing counties in each of the four clusters. Teachers interviewed are posted or had been posted in schools in rural areas, urban areas, arid and marginalised areas or in cities. Appendices B, C and D provide fuller details of the sample selection procedure.

The interviewees were identified through the author's, a Kenyan citizen, networks. To obtain the desired sample and given the access challenges the snowball technique was employed. Identified participants were asked to recommend acquaintances who fit the study's requirements to participate. Captured in the sample are cities, urban areas and rural areas. In cities and larger towns, further differentiation was made be made based on socio-economic grounds. The data from Nairobi, for example, include experiences of a teacher posted in a school in an area characterised by high socioeconomic status (SES) and one in a lower socioeconomic neighbourhood.

5.3 Data Sources and Procedure

5.3.1 Documentary Review

Policy documents and publications by the Ministry of Education were studied to gain understandings of; the objective of the FPE policy, the conceptualisation of quality education by the Kenyan government and the resources availed towards the implementation of FPE.

5.3.2 Semi-structured Interviews

15 semi-structured interviews were conducted by the author in January 2021 of which 6 were face-to-face and the rest were phone interviews. Phone interviews were deemed suitable due to the restrictions and safety considerations following the global Covid-19 pandemic. Before the interviews, the aims and outcomes of the study as well as the rights of the interviewees, including, the voluntary nature of their participation, guaranteed anonymity and the steps that will be taken to secure their confidentiality, were elaborated (Creswell and Poth, 2018). Informed oral consent was obtained from all the participants. With the phone interviews, this was in most cases done twice; during the initial call to schedule the interview and before the start of the interview. Teachers who were phoned but did not want to participate in the study were not pressured to do so. With the permission of the participants, the interviews were recorded and transcribed in full.

Teachers were asked to recollect how they reacted to FPE and to describe their teaching experiences immediately after the policy came into effect, over the years and at the time the interviews were conducted. They were also asked questions concerning their opinions about learning and teaching. The interview guide was thematically structured based on the research

questions with a section dedicated to understandings of quality education and another on teachers' experiences. It featured scheduled and unscheduled probes geared at eliciting more detailed responses (Qu and Dumay, 2011). However, the interview questions were broad and designed in a manner that would enable the participants to describe their subjective experiences freely instead of extracting responses based on hypothesised factors. The interview questions differed from the leading research questions which Kvale (1996) reiterates does not amount to deception. For instance, to collect information on understandings of quality education, proxy questions such as "what would you say is the most valuable take-away for learners who go through primary school?" and "try to think about the best teacher you know of, what makes this person such a good teacher?" were posed. The number of questions asked as well as the duration of the interview varied from one participant to another. Where the interviewed teachers were headteachers, the interview guide was adjusted to include questions about the managerial experience.

One participant preferred to write about their experiences rather than be interviewed via phone. Open-ended questions adapted from the interview guide were availed to the participant after which the author read the essay responses and relayed follow-up questions via text on the messaging platform WhatsApp. Creswell and Poth (2018) note that forms of data such as formally written responses have been used in studies following a phenomenological approach. However, this interview and another were excluded from the analysis as it emerged that they did not meet the inclusion criteria. One other interview was also disregarded as it did not satisfy internal validity requirements. In total 13 interviews inform the findings in this thesis.

The audio files and transcripts were stored electronically in password-protected folders on the author's personal computer and cloud account. Hard copy versions of the transcripts that were also filed.

5.4 The Participants

The participants in the study are, first, public primary school teachers and second, they were in the profession before FPE education was implemented. Recording the recollection of the reactions to the policy and experiences before and after FPE was essential to the study

necessitating the two inclusion criteria. The table below provides the characteristics of the sample. A detailed table with the participants' profiles is listed in Appendix A.

Gender	Total (n=13)
Female	9
Male	4
Education	
None	0
P1 Certificate	6
Diploma	1
Undergraduate Degree	5
Master's Degree	1
School Area	
City Lower-SES	2
City High-SES	1
Urban Lower-SES	2
Urban Higher-SES	1
Rural	6
Arid County	1
Employment Status	
Currently Employed	12
Retired	1

Table 2: Characteristics of the sample

5.5 Analysis Strategy

A thematic analysis was conducted to understand the complexity of the experiences of teachers under FPE (Creswell and Kasmad, 2020). The CA analytical framework discussed in section 4 was employed in the analysis of the themes. The transcripts were read severally then significant statements from each transcript were highlighted and later clustered into themes. Attention was paid to both emerging commonalities and variations among the teachers. Findings are reported textually with attention paid to contextual similarities and variations. The findings of the documentary review are discussed alongside those of the empirical data.

5.6 Limitations

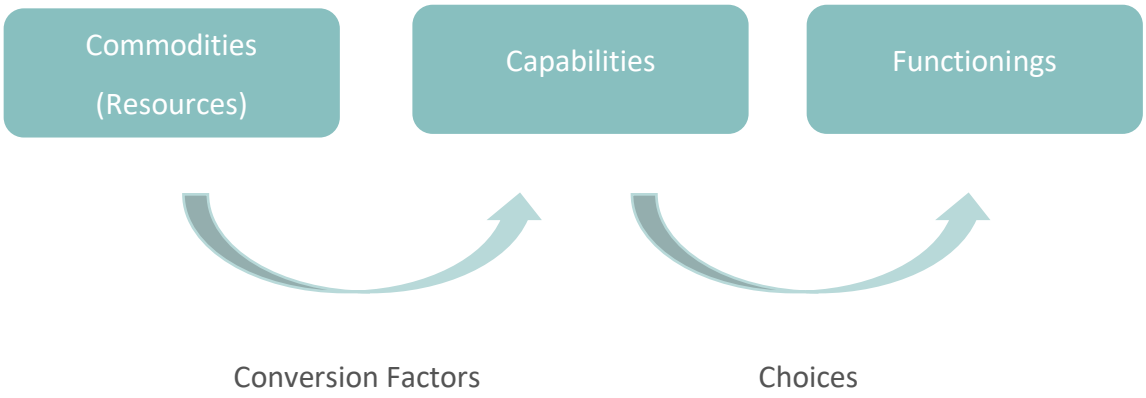
Interview data were preferred for this thesis as the qualitative approach is suitable for the exploration of the lived experiences of public primary school teachers and the information retrieved would nuanced (Yauch and Steudel, 2003). However, a weakness of the choice is the control that participants exert of the process. While this may lead to critical issues being raised, the information may not be objectively verifiable. To remedy this, triangulation

through the documentary review was sought. The secondary data's purpose was to both, corroborate and complement the empirical findings (Greene *et al.*, 1989).

The interviewer is a positioned subject and findings are based on their interpretations creating a risk of important issues being overlooked (Yauch and Steudel, 2003). The author of this study has experience with the research material having been in a public primary school at the time the policy was implemented and subsequently transferring to a private one, a trend discussed herein. The researcher's past experience is argued to have the potential to "obfuscate, distort or truncate data collection and analysis" (Tufford and Newman, 2012, p. 6). Bracketing, which Gearing (2004, p. 1430) defines as "the scientific process in which a researcher suspends or holds in abeyance his or her presuppositions, biases, assumptions, theories, or previous experiences to see and describe the phenomenon" was applied by the author, especially in the interpretive analysis phase of the study. While there are tensions about whether bracketing is possible and at what stage it should be applied (Tufford and Newman, 2012), the author aimed for an awareness of their preconceptions throughout the research process. Bracketing during the interview phase is discouraged and it is argued that engagement with participants should be prioritised (Giorgi, 1998 as cited in Tufford and Newman, 2012).

6 FINDINGS

Teachers' perceptions and experiences of FPE and how they fit into the learning paradigm formed the objective of this thesis. They are presented textually and thematically in this section analysis following the CA analytical model.



As mentioned before, the 2003 FPE policy in Kenya passed by way of an electoral promise and its immediate implementation was announced through mainstream media to the nation, teachers included. Public teachers' perceptions and reactions to the policy included a mixture of jubilation, fear and scepticism. The promise of free schooling sounded like mere puff to some like Tr. Moses from Lamu while to others, including Tr. Fiona from Kisumu worried about the implications to their workload.

> We really could not imagine that that could happen until we saw it to be a reality and we started and the programme was on. -Tr. Moses, Lamu

> We were just scared because of a number of things like maybe handling a class of 90 and maybe you're one teacher; you have to teach all the subjects and you have to grade them. -Tr. Fiona, Kisumu

The overwhelming reaction was a welcome one, particularly because of what the policy meant to children who had been out-of-school on financial grounds as expressed by Tr. Charity from a school in Kiambu in a low-income neighbourhood.

> It was good because there were so many children at home who could not be able to come to school because they had to pay money so this time when it was announced that it was free we expected them to come to school because nothing was to be paid. -Tr. Charity, Kiambu low-SES

The increase in enrolment following FPE is well documented and has been discussed earlier in the background section. Teachers' recollections of this period similarly echo the enrolment shock, however, where some teachers felt overwhelmed, others, especially in areas where the

school attendance rate was dismal, welcomed the increased attendance. Turkana County in northern Kenya is an arid region mainly populated by citizens who lead a pastoral life and is considered marginalised. Tr. Simon considers the hiked enrolment after FPE positively:

> Before FPE enrolment within our arid area was low. There was low attendance. But after that of 2003 we saw that enrolment has improved. Even attendance in terms of that has affected so much. -Tr. Simon, Turkana

Children who had either been out of school or had been previously enrolled in private schools reported to the public school and were admitted. Schools were not allowed to reject any learners and minimal admissions requirements were placed. Parents were only required to provide school uniform but in cases where they could not, this did not place a barrier on admission. The ensuing increased learner population, however, varied. Several schools had around 90 learners per classroom but the number was seen as manageable in others such as in marginalised areas as shown in the case of Turkana above. In a public school in a higher income neighbourhood in Nairobi, where Tr. Diana was teaching, FPE was boycotted by the community and although there was an increase in the learner population, it could not be compared to other schools in the city.

> The classes now went up, we used to have 35, they went up to 45 because the classes were small, they could not accommodate more than that. But still they were congested, with the 45 the classes were congested. This is especially because they had lockers, they don't have desks and the lockers take up space. -Tr. Diana, Nairobi high-SES

With FPE in Kenya nearing its second decade, this study analyses the data on the understandings and experiences of teachers considering them as street-level bureaucrats charged with implementing the FPE policy. There are commonalities as well as variations in the teachers' experiences which translate to both shared and differentiated capabilities, conversion factors, choices and expected or achieved functionings.

6.1 Resources

From the onset of FPE in 2003 public primary schools received a capitation grant per learner annually. The money was split into two school accounts the School Instructional Materials Bank Account, Account 1, and the rest into General Purpose Account, Account 2, to cater for school operational costs (Ministry of Education, 2018). From 2003 to 2009 the amount was KES 1,020 with KES 650 going into Account 1 and the rest in Account 2 (Hungi, 2011). The disbursement changed in 2010 where schools that had fewer textbooks

per learner would receive more money. Responsibility for infrastructure development in the schools lies in the government. Currently, the learner capitation grant stands at KES 1,420 with an additional KES 2,300 for learners with special needs and disabilities. The government spending on education per learner has remained constant since 2011 (Ministry of Education, 2018). Teachers felt that these resources, learning inputs improved teaching and learning:

> Initially, there were no resource materials and when you don't have resource materials, both for teachers and children, then the teaching becomes so difficult. But when you have teaching-learning materials, for teachers for learners then teaching becomes so easy because every subject that you want to cover you have somewhere to refer from. So my experience is much better than before, that one I can confirm. -Tr. Moses, Lamu

Teacher recruitment on account of increased enrolment was not done and teacher shortages were found to be a major constraint in primary public schools. The government acknowledges that FPE has created a teacher shortage and estimates an overall figure of 38,054 primary school teachers (Ministry of Education, 2018).

A recent change in the school resources was an initiative from the government to distribute textbooks instead of having school administrators order them. This resulted in a reduction of the capitation grant with school administrations unable to provide exercise books nor stationery while the government maintains that there should be no costs to parents.

> The exercise books are not now the same because when FPE was implemented, there were two accounts. There was account one which is called School Instructional Materials and there was the General Purpose account. The School Instructional Materials would give us money to buy the textbooks and the exercise books and the pens but now when the government started supplying textbooks they stopped giving us money in account one so they bring books directly to the schools so we have a challenge with the exercise books. The challenge is now the parents have to buy them again. -Tr. Jacob, rural Siaya

One headteacher shared that they would not have gone into administration before FPE as it would be impossible to run a school without funds. However, the disbursement of the funds was often not smooth:

> We are managing but it's also a challenge because they don't even give the money on time. I wish they could give it maybe- if it is giving it at once and then they now leave the issue to the headteachers to know how to deal with the money that they have deposited in the accounts but they bring termly and you have to do a budget of a year. - Tr. Josephine, rural Kakamega

Feelings of misappropriation of school resources by some school administrators were also expressed by some of the teachers:

> I am a teacher but I want to give you the right information. Money was sent to headteachers and you know how people behave with money. So it is given money for every pupil to have a book or for two to share, in fact, what they started with is a book to be shared among two from class 6, 7 and 8; class 4,5 a book against 3. So what happened is that you could see a teacher buying a few books, few exercise books and the money is over. So I never liked the idea, in fact, I never liked it. -Tr. Patience, rural Kitui

> To my school [FPE] was really a relief and it took the direction I was imagining but to some schools later on- it caused many headteachers to be discontinued in the service. Because they were getting [funds] directly and they were using the BOM, the board of management, in a wrong way. They were misappropriating. Now, for example, we were given money to buy learning materials and sincerely if you go round checking, very few schools- maybe where the BOM was serious, you will get those learning materials. Because you could order those learning materials and they don't come. Especially these globes we use in teaching geography. In fact, if you go round the schools you will get, in a population of a hundred schools, you will get only two. -Tr. Greg, rural Nyamira

6.2 Capabilities

Although some teachers entered the profession as untrained teachers, at the time of the interview they all had received teacher training and two were undertaking further studies. Understandings of what teachers considered good or quality teaching were analysed as their capabilities. Capabilities, teachers' knowledge, skills and abilities to achieve what they aspire to, are closely tied to teachers' expected achievements, the functionings, of both themselves and the learners, in short, what they consider quality education. Several of the teachers cited academic performance as a major goal from basic literacy and literacy to passing and/or improving in examinations. To many teachers, schooling entailed more than academic excellence and "life skills" were viewed to be an essential product of the school system.

Lesson preparedness, where one has updated lesson plans, lesson notes and schemes of work was considered by some an element of teaching capability. Occasionally teachers are assessed impromptu by quality standard assessment officers and the presence and use of these

documents contribute to the teacher grading. Most teachers expressed that lessons they were satisfied with were in subjects that they had mastered and in which the content was at "their fingertips" as well as subjects that they had a personal interest in. Among many teachers, the training received was generalised so many tended to stick to subjects that they either liked or had a good mastery of. The use of teaching aids or learning resources was deemed important. The teacher-learner relationship was also important among some of the teachers who felt that the learners should look up to the teachers as role models but not be frightened of them. Being a teacher was viewed as going beyond the academic classroom environment and catering to learners' struggles.

6.3 Conversion Factors

The actual capabilities of service providers are affected by the constraints on resources. Conversion factors concern the alleviation of the constraints on resources and in their absence resources may remain formal rights and lead to inequalities (Thierry *et al.*, 2009). The constraints on resources identified concern learning inputs including school infrastructure and teacher shortages. Several teachers insisted that no infrastructure development had happened since the inception of FPE; there had been no environmental conversion factors. In some schools, funds from the National Government Constituencies Development Fund (NG-CDF) were utilised to construct additional classrooms and in others, infrastructure development was a combined effort between the NG-CDF, the BOM and the Parents Teachers Association (PTA). The BOM in some instances had also employed additional teachers.

Teachers may also be seen as resources; their teaching is a resource to the client learners with implications on learning achievements. School administrators are charged by the government to ensure the accountability of teachers. The effectiveness of the management strategies is, however, questionable:

> I had gone for a weekend, I came on Monday late, rushing all the way only to realise that I had a lesson by 7. Going to class, I had less content for the lesson, for 35 minutes I was only beating about the bush. I was unprepared, I was only covering myself from the administration. It was so tedious, to finish 35 minutes was so hectic because I was unprepared. -Tr. Greg, rural Nyamira

One deputy teacher felt that what teachers need is motivation that does not necessarily need to be monetary. They felt that headteachers should aim for striking a balance between

allowing freedom and independence to teachers and upholding their authority. Furthermore, teachers are not the only player involved in the learner's schooling:

> You motivate the learners, at the same time you motivate the teachers because it is a two-way traffic and then incorporate the parents because without them you won't go far. Because they are the ones who support these children. Give any take-away home, if they are not supported at home there's nothing they are doing; some of them come the next day from home having done a lot of nothing. So there must be three stones, at the beginning of every year, that's what I always tend to tell the head…You don't motivate parents. You motivate the learner and you motivate the teachers. It doesn't have- it can be intrinsic motivation. You just satisfy the teachers, do not be too harsh on them, give them that free environment to work but at the same time make sure that they understand that you are the leader. It does not have to be monetary. -Tr. Beatrice, rural Kiambu

To some administrators, however, accountability measures in place by the state were welcome:

> You know the government has introduced certain measures that have helped us so much as headteachers. Like there's this thing called Lesson Attendance Sheet which is with the learners, maybe with the class prefect or class monitor. So every Friday the monitors or prefects give them back to us. They give them to the deputy then the deputy can bring them to me after analysing then we see teacher so and so missed these number of lessons. Then we call them to the class and ask them, why did you miss this number of lessons, they explain to us then we tell them to reschedule. They must cover up and when somebody is called in maybe twice or thrice then definitely they must change. -Tr. Jacob, rural Siaya

6.4 Functionings

Education is tied to the country's development agenda and the government in several publications alludes to education as a human right, a pathway to industrial development and social cohesion (Ministry of Education, 2005, 2018, 2019b, 2019c). A signatory to the SDG and the African Union Agenda 2063, Kenya's Ministry of Education emphasises inclusivity and equitability of learning (Ministry of Education, 2018).

FPE was implemented to achieve EFA and access and retention in school are at the heart of the policy objective (Ministry of Education, 2005). The Ministry of Education in Kenya measures the quality and relevance of education by learning achievement. For primary school, the measures include performance in the national exam, KCPE as well as NASMLA literacy and numeracy tests for Grade 3 (Ministry of Education, 2018).

As stated earlier in the capabilities section, teachers understandings of quality education encompass both academic performance and all-rounded growth for the learners. Teachers'

responses to what they deemed the most valuable product of going through primary school reflected expectations of more than academic achievements:

> You know, here the core business is performance. Then, the discipline of the children. That is also very important. Then let's talk about the welfare of the children, you know some have some problems so you must identify those with problems and then we also know how to handle them. -Tr. Nancy, higher-SES Kiambu

> The value of primary school is it's the most basic thing. I don't know what I can say about it because there's no way they can jump from home to secondary level. It really prepares them psychologically. Without basic education, they cannot go far and at the same time, with basic education alone, still they are nowhere. It's vital to go through primary education and you cannot even- there's no way you can compare a child who has not gone through any school, who has gone through informal education, with a child who has gone through formal. There's a lot of difference. -Tr. Beatrice, rural Kiambu

> I think life skills because some of them may not even, you know, acquire in academic but they learn a lot about socialising with others and also- there are many other skills, daily living skills, especially in the special education, we train more of daily living skills. -Tr. Elizabeth, low-SES Nairobi

> It's not just about passing exams. It's about how you are going to relate with the environment, what you can do if there are no jobs. -Tr. Fiona, Kisumu

6.5 Choices

On the one hand, teachers' experiences can be interpreted as normative decision making focused on the learners' needs. In some cases, this may involve choices that go beyond the intent of the policy and in others, the dictates of the policy may be ignored altogether for the benefit of the learners.

> Last year, 2020, I had this experience, a boy who had just come from jail and wanted to come to school. And everybody knew that this boy was indisciplined, smoking bhang and all. But he insisted he wanted to come to my school and when I told them no, I cannot admit him, they went to the government officers and we were compelled that we must admit him. Such are our experiences, you now have to admit everybody and learn to deal with everybody. -Tr. Jacob, rural Siaya

Some teacher choices, on the other hand, allude to objection. The limitations on resources affect teachers' motivation leading to choices that may be seen as designed to make their work as service providers easier. The large learner population was to many teachers an impediment to successful equitable learning, there are simply those who will learn and those who will not.

Failure to achieve expected academic achievements is, however, seen as affected by external factors that influence teachers' motivation. Lower performance in public schools as compared to that in private schools was attributed to transfers to private schools close to the national examination period. Private schools also were said to actively poach top-performing learners to improve their profiles. Some teachers expressed that the burden of academic performance cannot be placed solely on one player; without support from home or motivation of the learners, the academic objectives of FPE would be without reach. Policy decision makers' interventions, including the abolition of tuition and class repetition, affected learner achievements.

> Well, there was a big achievement in learning during the early stages of FPE but in recent years you can find that due to the way the government placed this system of removing disciplinary action in schools, you can find that learners discipline has declined and that has affected learning. -Tr. Simon, Turkana

> The other thing, of late the government introduced something called 100% transition. Formally we could insist that you have to pass before you move to the next grade. But now the children know whether they pass or not they will go to the next grade. That again has really affected work in schools because there's no fear; there's nothing for the learners to fear that if I don't do well this will happen to me. It is now a walk in the park. And you see all those are after FPE. -Tr. Jacob, rural Siaya

Discretion taken by teachers, their coping strategies that were identified, are discussed below:

6.5.1 Teaching Shifts

At the onset of FPE, to deal with the large learner population, schooling was organised in shifts as Tr. Elizabeth, who was teaching at a school in a low-income neighbourhood in Nairobi explained:

> There are no afternoon classes but now because they could not fit in the classes, we had to have a morning shift and an afternoon shift. On the morning shift, the children could come and leave at 12 then the other shift of the afternoon they start at 12 something up to around 3. So now the challenge was the parents felt those who come in the morning are the ones who study well other than those who come in the afternoon. So you find parents coming to approach you because they felt in the morning the teachers are energetic so learning takes place in the morning so they don't want their students to come in the afternoon. So the shifts went on like that and then it stabilised. -Tr. Elizabeth, Nairobi

6.5.2 Class Advancement

Another feature of the enrolment in the early phases of the policy was the presence of over-age learners. To some, this posed a discipline challenge with cases of truancy especially in a rural school in Homabay where the older learners who had been previously out of school would skip school to return to labour activities such as sand harvesting. As the years passed and more children of the right school-going-age this was seen as improving the teacher experience. Yet, for some teachers the situation created an opportunity where these learners could advance faster:

> The population increased but then you know their age, like the ones who came to class 1 where I was, they were overage. You could get somebody in class 1, 9 years so as you teach they are able to get what you are teaching very fast. Some of them could even be there for one term, you take him or her to the next level. -Tr. Charity, Kiambu low-SES

6.5.3 Creaming

The crowding situation across many schools eased over the years with many parents withdrawing their children from public schools in preference of private ones. Some schools, including several in rural areas, have low learner-teacher ratios, but in others, especially those in urban areas, are to date grappling with high classroom populations. Several of the teachers interviewed emphasised the significance of a close teacher-learner interaction and how that would be most beneficial to those in the classroom who are "slow learners". In a classroom of around 70 to 90 learners within a 35-minute lesson or a 30-minute one in lower primary school, they affirmed that it would not be possible.

> One teacher handling maybe 80 pupils, the 80 will not get very high-quality education. So maybe there will be roughly 20 who will be fast learners. In most cases, the 20 are the ones who will perform. The rest who are slow-learners, the teacher will not- many teachers will not even bother about them. So they will do poorly. -Tr. Jacob, Siaya rural

> I remember asking another teacher in class 3, she has about 98 [learners]. So I asked her, you know, how do you deal with these 98? How many- OK, obviously she moves with a certain number, so I asked her, what number do you move with? Three quarter, half? She told me, three quarter? No, maybe half or less. So you see the rest are just there warming the class. -Tr. Elizabeth, Nairobi low-SES

> …[With] increase in number in a class you will not make the right delivery, for one is that you have weak pupils, you have hypers, you have all kinds of pupils. So when I'm teaching and I'm asking a question, those who know shout a lot. Not even shouting, they want to answer because they see that thing is very simple and those

who do not know, they tend to relax because there are people who are supposed to answer, they are not there and when it is answered they are gone. And because they are many it becomes very difficult for a teacher it becomes very hard for a teacher to do what you call remedial because of the workload, remedial becomes difficult. So this is a game of those who know they just know, those who don't know, they'll lag behind. -Tr. Patience, rural Kitui

6.5.4 Charges

Is it really free? It's not really free. -Tr. Kiambu low-SES

Charges and costs to parents in school have been re-introduced ranging from the purchase of exercise books, printings costs for exams to school development charge. In schools where a majority of parents do not contest such fees, the parents are seen as being cooperative with this cooperation leading to the improved academic performance of the learners. A teacher in a rural school in Siaya remarked that the performance of the school could not be compared to schools in the Central Region of the country because most of the parents in the region are not agreeable to any school-related costs. The learners in counties in Central Kenya scored highly in learner literacy and numeracy tests administered by Uwezo (2016). The region, which hosts Kiambu County, has a higher socio-economic performance than the Western region in which Siaya County is situated (Wiesmann, Kiteme and Mwangi, 2016).

You know when the children are a bit stable or they do not have so many problems, like let's talk about this school. We don't have children who maybe are even going to the coffee plantation to work there. For the school we can say at least 75% of the children who are here, the parents can provide the basic needs. So children, about 75% they have food or even 80%, they have food, they have uniforms, even if I was to parade them here, you wouldn't say this is a- you can say this is a private school. So when the children have what they need, they will be able to learn. But you can also have 15 who are in a school within a coffee estate, the parents are vulnerable, they will not be able to perform. -Tr. Nancy, higher-SES Kiambu

A little changed when we called to talk to them on parents' day, we explained to them that the government cannot do everything. Some parents understand, some parents do not understand. Even up to now, there are parents whose children will not even have uniform, will not pay anything extra because they say it is free. But some understand. -Tr. Jacob, rural Siaya

6.5.5 Tuition, Peer Learning and Grading

Teachers previously offered tuition after school hours for a fee but this was made illegal in the country. However, the practice is still ongoing, particularly in schools where parents are "cooperative", only instead of being called tuition, it is referred to as remedial.

Some teachers have adopted a "group learning" methodology in addition to the lecture method where a few learners in the classroom are assigned to head a particular subject. Where the teacher is absent during a lesson, the learner in charge of the subject is responsible for leading the rest in doing work in the respective subject. They also take the lead during extra learning times, knows as preps, usually from 7 am to 8 am and from 3:30 to 4:30 in the afternoon. The learners are also involved in the grading of assignments.

> For example myself I have three classes I am teaching English, so you can imagine 86, 86, 86. The marking of composition, the marking of the books. So with the FPE, we cannot tell you that we are marking books, we cannot. With a class of 86. Even if I gave 3 questions, I cannot manage to teach and then mark within the 35 minutes. And also with the TSC not giving us enough teachers, so like now I only have 3 free lessons per whole week. Like now I have talked of the marking. During our time, I did not mark books but now they have learnt to mark. Sometimes even the exams they mark for themselves because- like now, that group work, we can give them some piece of work, let's say Social Studies. I've said it is wide, so give them a topic and then they go and copy notes, so you only come to polish. So they have some information, they don't wait for us, they have learnt now how to survive. They also get the information, you give what you have and then you can push the syllabus faster. -Tr. Nancy, higher-SES Kiambu

7 LESSONS LEARNED

7.1 Learning Resources and Accountability Strategies

The findings of this study reflect a resounding acknowledgement of the significance of learning and teaching materials by teachers. There are conflicting conclusions on the effectiveness of learning resources in improving learning outcomes as discussed in section 3.3. Kremer, Brannen and Glennerster (2013) provide a unique comparative assessment of the impact of teaching resources. While most of the studies and reviews on learning outcomes focus solely on developing countries, they compare two studies in Kenya and one in India with a case in America arguing that stronger school accountability structures may account for no effect on learning outcomes from additional resources in the Kenyan and Indian cases. Accountability, however, particularly as concerned with school resources was welcomed by teachers. Managerial strategies that were resisted were those seen to be focused on policing teachers. From the interview data, an administrator, "Tr. Beatrice" is seen advocating for a relaxed working environment for teachers with a teacher, “Tr. Greg”, explaining that while unprepared for the lesson, he still had to attend to avoid repercussions from the administration. While improved school-based management is likely to lead to improved learning outcomes (Krishnaratne, White and Carpenter, 2013), the findings here suggest that a balance should be struck in managerial strategies aimed at teachers’ accountability. As evidenced in the findings coping is resorted to where there is a negative outlook on the effectiveness of policy intervention.

7.2 Teachers and the Learning Crisis

Teachers’ choices, even where they contribute to the learning crisis, may be seen as coping strategies employed to deal with constraints on resources rather than merely lack of professionalism. While findings of RCT in Kenya point to no improvement even where additional teachers were hired, teachers maintain that in addition to the size of the class it is further challenging to handle such a class of learners with varied learning capabilities. While interventions based on pedagogical reform are reported most as effective across the reviews (Evans and Popova, 2016), they tend to focus on the content of what is being taught. Methodologies employed by teachers such as peer-learning and strategies involving grading of assignments and tests then are not so much just a way of making work easier for the teachers but more of navigating through the resource challenges to cover the syllabus content. The suggestion that hiring contract teachers on a short-term basis for lower pay would lead to

improved outcomes as well as reduce government spending on education by Kremer, Brannen and Glennerster (2013) based on RCT by Duflo, Dupas and Kremer (2008) and Duflo, Dupas and Kremer (2015) overemphasises cost-effectiveness over learning. UIS (2016) deems the global teacher shortage an impediment towards achieving SDG 4 by 2030 finding that sub-Saharan Africa accounts for the largest teacher shortage with 17 million teachers need to address the shortfall.

On the question of equity, the findings herein concur with the literature on the learning crisis that notes disparate learning outcomes for the poor or average learners (Sawamura and Sifuna, 2008; Glewwe, Kremer and Moulin, 2009; Ruto, Ongwenyi and Mugo, 2009; Mugo, Moyi and Kiminza, 2016). Learning outcomes in public primary schools vary depending on financial capability signalling an elitist education system. Within the public primary school system in Kenya, schools with a majority of learners from families with a more stable financial background gear towards learning outcomes; children spend longer hours in school, identified by Glewwe *et al.*, (2014) as a positive intervention. "Tr. Nancy" who teaches at a school with learners from higher-income families detailed how the parents in the school have no hesitations in paying for printing costs for internal exams to assess learners' progress during the school term. Creaming, a coping strategy used by several teachers in the study leads to improved learning outcomes among only a fraction of the learner population.

8 CONCLUDING REMARKS

The role of teachers in improving learning outcomes has been emphasised and resulting accountability measures are backed in previous literature and by the government of Kenya in publications and through its interventions. The experiences of teachers studied in this thesis show that teachers are not only concerned with learning outcomes but also other aspects of the learners' holistic development. While learning outcomes were a priority expected achievement to several teachers, most expressed a grave awareness of learners being left behind. Working in an environment marked by reduced resources and inadequate conversion factors against increased enrolment, teachers daily choices may contribute to the learning crisis. The findings in this thesis have implications for future policy intervention strategies. Teachers' experiences and coping strategies suggest that efforts towards alleviating resource constraints should be prioritised; without them, FPE is merely a legal right. Future research

and policy or development interventions should focus on suitable conversion factors of schooling resources to actual teaching and learning capabilities.

REFERENCES

Abuya, B. A. *et al.* (2015) 'Free Primary Education and Implementation in Kenya: The Role of Primary School Teachers in Addressing the Policy Gap', *SAGE Open*, 5(1), p. 215824401557148. doi: 10.1177/2158244015571488.

Alkire, S. (2005) *Valuing Freedoms: Sen's Capability Approach and Poverty Reduction*. Oxford University Press.

Alkire, S. (2008) 'The capability approach to the quality of life'. Oxford Poverty & Human Development Initiative (OPHI).

Amutabi, M. N. (2003) 'Political interference in the running of education in post-independence Kenya: a critical retrospection', *International Journal of Educational Development*, 23(2), pp. 127–144. doi: 10.1016/S0738-0593(01)00055-4.

Artadi, E. V. and Sala-i-Martin, X. (2003) *The Economic Tragedy of the XXth Century: Growth in Africa*. w9865. National Bureau of Economic Research. doi: 10.3386/w9865.

Avenstrup, R., Liang, X. and Nellemann, S. (2004) *Kenya, Lesotho, Malawi and Uganda: Universal Primary Education and Poverty Reduction*. A case study from Reducing Poverty, Sustaining GrowthóWhat Works, What Doesnít, and Why A Global Exchange for Scaling Up Success 30765. Shanghai: The International Bank for Reconstruction and Development / THE WORLD BANK, p. 30.

Banerjee, A. V. *et al.* (2007) 'Remedying Education: Evidence from Two Randomized Experiments in India*', *The Quarterly Journal of Economics*, 122(3), pp. 1235–1264. doi: 10.1162/qjec.122.3.1235.

Becker, G. S. (1993) *Human capital: a theoretical and empirical analysis, with special reference to education*. 3rd ed. Chicago: The University of Chicago Press.

Becker, G. S. and Chiswick, B. R. (1966) 'Education and the Distribution of Earnings', *The American Economic Review*, 56(1/2), pp. 358–369.

Benavot, A. and UNESCO (eds) (2015) *Education for all 2000 - 2015: achievements and challenges*. 1. ed. Paris: Unesco Publ (EFA Global Monitoring Report, 12.2015).

Bold, T. *et al.* (2010) *Does Abolishing Fees Reduce School Quality? Evidence from Kenya ∗.* CSAE Working Paper WPS/2011-04. Centre for the Study of African Economies.

Bold, T. *et al.* (2011) *The High Return to Private Schooling in a Low-Income Country*. CGD Working Paper 279. Washington, DC: Center for Global Development, p. 12.

Bold, T. *et al.* (2017) *What Do Teachers Know and Do? Does It Matter? Evidence from Primary Schools in Africa*. Policy Research Working Paper 7956. Education Global Practice Group The World Bank Development Research Group Africa Region.

Buchmann, C. (1999) 'The State and Schooling in Kenya: Historical Developments and Current Challenges', *Africa Today*, 46(1), pp. 95–117.

Conn, K. M. (2014) *Identifying Effective Education Interventions in Sub-Saharan Africa: A meta-analysis of rigorous impact evaluations*. Columbia University. doi: 10.7916/D898854G.

Conn, K. M. (2017) 'Identifying Effective Education Interventions in Sub-Saharan Africa: A Meta-Analysis of Impact Evaluations', *Review of Educational Research*, 87(5), pp. 863–898. doi: 10.3102/0034654317712025.

Creswell and Kasmad, R. (2020) *Second Edition QUALITATIVE INQUIRY& RESEARCH DESIGN Choosing Among Five Approaches*.

Creswell, J. W. and Poth, C. N. (2018) *Qualitative inquiry & research design: choosing among five approaches*. Fourth edition. Los Angeles: SAGE.

Drèze, J. and Sen, A. (2002) *India: Development and Participation*. Oxford University Press.

Duflo, E., Dupas, P. and Kremer, M. (2008) *Peer Effects, Teacher Incentives, And The Impact Of Tracking: Evidence From A Randomized Evaluation In Kenya*, p. 48.

Duflo, E., Dupas, P. and Kremer, M. (2015a) 'School governance, teacher incentives, and pupil–teacher ratios: Experimental evidence from Kenyan primary schools', *Journal of Public Economics*, 123, pp. 92–110. doi: 10.1016/j.jpubeco.2014.11.008.

Duflo, E., Dupas, P. and Kremer, M. (2015b) 'School governance, teacher incentives, and pupil–teacher ratios: Experimental evidence from Kenyan primary schools', *Journal of Public Economics*, 123, pp. 92–110. doi: 10.1016/j.jpubeco.2014.11.008.

Duflo, E. and Hanna, R. (2005) *Monitoring Works: Getting Teachers to Come to School*. w11880. Cambridge, MA: National Bureau of Economic Research, p. w11880. doi: 10.3386/w11880.

Evans, D. K. and Popova, A. (2016) 'What Really Works to Improve Learning in Developing Countries? An Analysis of Divergent Findings in Systematic Reviews', *The World Bank Research Observer*, 31(2), pp. 242–270. doi: 10.1093/wbro/lkw004.

Floud, J. E. (1976) 'A Right to Education : A Test-Case for a Theory of Children's Rights', *ARSP: Archiv für Rechts- und Sozialphilosophie / Archives for Philosophy of Law and Social Philosophy*, 62(3), pp. 319–327.

Fontdevila, C. and Verger, A. (2015) 'THE WORLD BANK'S DOUBLESPEAK ON TEACHERS: An Analysis of Ten Years Lending and Advice'. Education International.

Gayle, H., M. and Pimhidzai, O. (2013) *Service Delivery Indicators : Kenya.* Washington, DC: World Bank.

Gearing, R. E. (2004) 'Bracketing in Research: A Typology', *Qualitative Health Research*, 14(10), pp. 1429–1452. doi: 10.1177/1049732304270394.

Glewwe, P. *et al.* (2014) 'School Resources and Educational Outcomes in Developing Countries: A Review of the Literature from 1990 to 2010', in Glewwe, P. (ed.) a*Education Policy in Developing Countries*. Chicago and London: University of Chicago Press, pp. 13–64. doi: 10.3386/w17554.

Glewwe, P., Kremer, M. and Moulin, S. (2009) 'Many Children Left Behind? Textbooks and Test Scores in Kenya', *American Economic Journal: Applied Economics*, 1(1), pp. 112–135. doi: 10.1257/app.1.1.112.

Goerne, A. (2010) 'The Capability Approach in Social Policy Analysis - Yet Another Concept?', *Edinburgh*. doi: 10.2139/ssrn.1616210.

Greene, J. C. *et al.* (1989) 'Toward a conceptual framework for mixed-method evaluation design', in *Educational Evaluation and Policy Analysis*.

Hungi, N. (2011) *Quality of primary school inputs in Kenya*. Policy Brief No. 2 Policy Brief No. 2. Southern and Eastern Africa Consortium for Monitoring Educational Quality(SACMEQ).

Hungi, N. and Thuku, F. W. (2010) 'Differences in pupil achievement in Kenya: Implications for policy and practice', *International Journal of Educational Development*, 30(1), pp. 33–43. doi: 10.1016/j.ijedudev.2009.05.001.

ILO (1921) *Convention concerning the Age for Admission of Children to Employment in Agriculture*. Geneva: International Labour Organisation.

Jones, S. *et al.* (2014) 'Can Your Child Read and Count? Measuring Learning Outcomes in East Africa', *Journal of African Economies*, 23, pp. 643–672. doi: 10.1093/jae/eju009.

Kabay, S. (2019) *Not Always a Tradeoff: Access, Quality, and the Global Learning Crisis*. Ph.D. New York University.

Kaviti, L. (2018) 'THE NEW CURRICULUM OF EDUCATION IN KENYA: A LINGUISTIC AND EDUCATION PARADIGM SHIFT', 5(1), p. 13.

Koech, D. K. (1999) *Totally integrated quality education and training (TIQET)*. Report of the Commission of Inquiry into the Education System of Kenya. Nairobi: Government Printer.

Koskei, B. K. and Chepchumba, E. (2020) 'TEACHERS' COMPETENCY AS A CORNERSTONE ON THE IMPLEMENTATION OF COMPETENCY-BASED CURRICULUM IN KENYA. A CASE OF LOWER PRIMARY SCHOOLS IN NAKURU COUNTY', 8(2), p. 10.

Kremer, M., Brannen, C. and Glennerster, R. (2013) 'The Challenge of Education and Learning in the Developing World', *Science*, 340(6130), pp. 297–300. doi: 10.1126/science.1235350.a

Krishnaratne, S., White, H. and Carpenter, E. (2013) *(2013). "Quality Education For All Children? What Works in Education in Developing Countries."* 3ie Working Paper 20. Washington, DC: International Initiative For Impact Evaluation.

Krueger, A. B. and Lindahl, M. (2001) 'Education for Growth: Why and For Whom?', *Journal of Economic Literature*, 39(4), pp. 1101–1136.

Krueger, A. B. and Whitmore, D. M. (2000) *The Effect of Attending a Small Class in the Early Grades on College-Test Taking and Middle School Test Results: Evidence from Project STAR*. NBER Working Paper No. 7656. Cambridge, MA: National Bureau of Economic Research.

Kvale, S. (1996) *Interviews : an introduction to qualitative research interviewing*. SAGE.

Lelei, M. C. and Weidman, J. C. (2012) 'EDUCATION DEVELOPMENT IN KENYA Enhancing Access and Quality', in Acedo, C., Adams, D. K., and Popa, S. (eds) *Quality and qualities: tensions in education reforms*. Rotterdam ; Boston: Sense Publishers (Comparative and international education: a diversity of voices, v. 16).

Lipsky, M. (2010) *Street-level bureaucracy: dilemmas of the individual in public services*. 30th anniversary expanded ed. New York: Russell Sage Foundation.

Lucas, A. M. and Mbiti, I. M. (2012) 'Access, Sorting, and Achievement: The Short-Run Effects of Free Primary Education in Kenya', *American Economic Journal: Applied Economics*, 4(4), pp. 226–253. doi: 10.1257/app.4.4.226.

Matland, R. E. (1995) 'Synthesizing the Implementation Literature: The Ambiguity-Conflict Model of Policy Implementation', *Journal of Public Administration Research and Theory: J-PART*, 5(2), pp. 145–174.

Maynard-Moody, S. and Musheno, M. (2000) 'State Agent or Citizen Agent: Two Narratives of Discretion', *Journal of Public Administration Research and Theory*, 10(2), pp. 329–358. doi: 10.1093/oxfordjournals.jpart.a024272.

McEwan, P. J. (2015) 'Improving Learning in Primary Schools of Developing Countries: A Meta-Analysis of Randomized Experiments', *Review of Educational Research*, 85(3), pp. 353–394. doi: 10.3102/0034654314553127.

Mincer, J. (1974) 'Schooling, Experience, and Earnings. Human Behavior & Social Institutions No. 2'.

Ministry of Education (2005) *Sessional Paper No.1 Of 2005 On A Policy Framework For Education, Training And Research: Meeting the Challenges of Education, Training and Research in Kenya in the 21st Century*.

Ministry of Education (2018) 'National Education Sector Strategic Plan for the Period 2018-2022'. Ministry of Education, Republic of Kenya.

Ministry of Education (2019a) *Approved Basic Education Statistical Booklet 2019*. Ministry of Education, Republic of Kenya, p. 111.

Ministry of Education (2019b) *Policy Guidelines For Utilisation Of Learner Capitation Grant And Other School Funds*. Republic of Kenya.

Ministry of Education (2019c) 'Sessional Paper No. 1 of 2019 on A Policy Framework for Reforming Education and Training for Sustainable Development in Kenya'. The Government Printer, Nairobi.

Ministry of Education, G. of K. (2012) *Towards a Globally Competitive Quality Education For Sustainable Develpment: Report of the Taskforce on the Re-alignment of the Education Sector to the Constitution of Kenya 2010*. Nairobi: Ministry of Education, Government of Kenya, p. 340.

M'mboga Akala, D. B. (2021) 'Revisiting education reform in Kenya: A case of Competency Based Curriculum (CBC)', *Social Sciences & Humanities Open*, 3(1), p. 100107. doi: 10.1016/j.ssaho.2021.100107.

Moustakas, C. (1994) *Phenomenological research methods*. 2455 Teller Road, Thousand Oaks California 91320 United States of America: SAGE Publications, Inc. doi: 10.4135/9781412995658.

Mugo, J. *et al.* (2015) 'A call to learning focus in East Africa: Uwezo's measurement of learning in Kenya, Tanzania and Uganda', *Africa Education Review*, 12, pp. 48–66. doi: 10.1080/18146627.2015.1036564.

Mugo, J. K., Moyi, P. and Kiminza, O. (2016) 'The Challenge of Access, Quality and Equity Education in Kenya, 1963 to 2015', in Munene, I. I. (ed.) *Achieving education for all: dilemmas in system-wide reforms and learning outcomes in Africa*. Lanham: Lexington Books.

Mugo, J. K., Nderitu, J. K. and Ruto, S. J. (2015) 'The 2015 promise of Education for All in Kenya: Missed target or new start?', *ZEP : Zeitschrift für internationale Bildungsforschung und Entwicklungspädagogik*, 38(2), p. 11.

Mundy, K. and Verger, A. (2015) 'The World Bank and the global governance of education in a changing world order', *International Journal of Educational Development*, 40(C), pp. 9–18.

Munyi, C. M. and Orodho, J. A. (2014) 'Efficiency Implications of Free Primary Education Policy on Quality of Public Day Primary Schools in Kyeni Division, Embu County, Kenya', *Journal of Education and Practice*, p. 14.

Muyanga, M. *et al.* (2010) 'Free Primary Education in Kenya: An Impact Evaluation Using Propensity Score Methods', in Cockburn, J. and Kabubo-Mariara, J. (eds) *Child Welfare in Developing Countries*. New York, NY: Springer New York, pp. 125–155. doi: 10.1007/978-1-4419-6275-1_5.

Nussbaum, M. (1988) 'Nature, Function, and Capability: Aristotle on Political Distribution', *Oxford Studies in Ancient Philosophy*, pp. 145–184.

Nussbaum, M. C. (1995) *Human Capabilities, Female Human Beings, Women, Culture, and Development*. Oxford University Press, pp. 61–104.

Nussbaum, M. C. (2003) 'CAPABILITIES AS FUNDAMENTAL ENTITLEMENTS: SEN AND SOCIAL JUSTICE', p. 27. doi: 10.1080/1354570022000077926.

Ogundari, K. and Awokuse, T. (2018) 'Human capital contribution to economic growth in Sub-Saharan Africa: Does health status matter more than education?', *Economic Analysis and Policy*, 58, pp. 131–140. doi: 10.1016/j.eap.2018.02.001.

Ojiambo, P. C. (2009) 'Quality of Education and its Role in National Development: A Case study of Kenya's Educational Reforms', *Kenya Studies Review*, 1, pp. 133–149.

Olaniyan, D. A. and Okemakinde, T. (2008) 'Human capital theory: Implications for educational development', *European Journal of Scientific Research*, 24, pp. 157–162.

O'Toole, L. J. (1995) 'Rational Choice and Policy Implementation: Implications for Interorganizational Network Management', *The American Review of Public Administration*, 25(1), pp. 43–57. doi: 10.1177/027507409502500103.

Owuor, D. A. (2018) 'The Impact of Free Primary Education Inputs On Educational Outcomes in Kenya (2003 To 2013): The Rate of Enrolment and Retention at Primary School Level as a Factor', *European Journal of Educational Sciences*, 05(01). doi: 10.19044/ejes.v5no1a2.

Paudel, N. R. (2009) 'A Critical Account of Policy Implementation Theories : Status and Reconsideration', *Nepalese Journal of Public Policy and Governance*, xxv(No. 2).

Petrakis, P. E. and Stamatakis, D. (2002) 'Growth and educational levels: a comparative analysis', *Economics of Education Review*, 21(5), pp. 513–521. doi: 10.1016/S0272-7757(01)00050-4.

Pogge, T. (2011) 'Are We Violating the Human Rights of the World's Poor?', *Yale Human Rights and Development Journal*, 14, p. 34.

Pogge, T. W. (2008) *World Poverty and Human Rights*. Polity.

Pressman, J. L. and Wildavsky, A. (1984) *Implementation: How Great Expectations in Washington Are Dashed in Oakland; Or, Why It's Amazing that Federal Programs Work at All, This Being a Saga of the Economic Development Administration as Told by Two*

Sympathetic Observers Who Seek to Build Morals on a Foundation. University of California Press.

Prichett, L., Banerji, R. and Kenny, C. (2013) *Schooling Is Not Education! Using Assessment to Change the Politics of Non-Learning*. Report of the Center for Global Development Study Group on Measuring Learning Outcomes. The Center for Global Development, p. 40.

Pritchett, L. and Beatty, A. (2012) *The Negative Consequences of Overambitious Curricula in Developing Countries*. SSRN Scholarly Paper ID 2102726. Rochester, NY: Social Science Research Network. doi: 10.2139/ssrn.2102726.

Qu, S. Q. and Dumay, J. (2011) 'The qualitative research interview', *Qualitative Research in Accounting & Management*, 8(3), pp. 238–264. doi: 10.1108/11766091111162070.

Robeyns, I. (2005) 'SELECTING CAPABILITIES FOR QUALITY OF LIFE MEASUREMENT', *Social Indicators Research*, 74(1), pp. 191–215. doi: 10.1007/s11205-005-6524-1.

Robeyns, I. and van der Veen, R. J. (2007) *Sustainable quality of life: Conceptual analysis for a policy-relevant empirical specification*. 550031006/2007. Bilthoven and Amsterdam: Netherlands Environmental Assessment Agency and University of Amsterdam, p. 99.

Ruto, S. J., Ongwenyi, Z. N. and Mugo, J. K. (2009) 'Educational Marginalisation in Northern Kenya', *Background paper prepared for the Education for All Global Monitoring Report 2010 Reaching the marginalized*, p. 45.

Saito, M. (2003) 'Amartya Sen's Capability Approach to Education: A Critical Exploration', *Journal of Philosophy of Education*, 37(1), pp. 17–33. doi: https://doi.org/10.1111/1467-9752.3701002.

Sala-i-Martin, X., Doppelhofer, G. and Miller, R. I. (2004) 'Determinants of Long-Term Growth: A Bayesian Averaging of Classical Estimates (BACE) Approach', *The American Economic Review*, 94(4), pp. 813–835.

Sawamura, N. and Sifuna, D. N. (2008) 'Universalizing Primary Education in Kenya: Is It Beneficial and Sustainable?', *Journal of International Cooperation in Education*, 11(3), p. 16.

Schultz, T. W. (1961) 'Investment in Human Capital', *The American Economic Review*, 51(1), pp. 1–17.

Sen, A. (1985) 'Well-Being, Agency and Freedom: The Dewey Lectures 1984', *The Journal of Philosophy*, 82(4), pp. 169–221. doi: 10.2307/2026184.

Sen, A. (1987) *The standard of living : the Tanner lectures, Clare Hall, Cambridge, 1985*. Cambridge university press (The Tanner lectures).

Sen, A. (1992) *Inequality Reexamined*. Oxford: Clarendon Press.

Sen, A. (1993) 'Capability and Well-Being', in Nussbaum and Sen (eds) *The Quality of Life*. Oxford: Clarendon Press.

Sen, A. (1999) *Development as freedom*. 1st. ed. New York: Knopf.

Sifuna, D. (2005) 'The illusion of universal free primary education in Kenya', *Wajibu: Journal of Social and Religious Concern*, (20).

Somerset, A. (2009) 'Universalising primary education in Kenya: the elusive goal', *Comparative Education*, 45(2), pp. 233–250. doi: 10.1080/03050060902920807.

Steiner-Khamsi, G. (2012) 'For All by All? The World Bank's Global Framework for Education', in Klees, S. J., Samoff, J., and Stromquist, N. P. (eds) *World Bank and Education: critiques and alternatives*. Rotterdam Boston Taipei: Sense Publishers (Comparative and international education : a diversity of voices, Volume 14).

Thierry, B. *et al.* (2009) 'Toward a "Capability" Analytical Model of Public Policy? Lessons from Academic Guidance Issues', *undefined*.

Tomasevski, K. (2003) *Education Denied: Costs and Remedies*. Zed Books.

Tufford, L. and Newman, P. (2012) 'Bracketing in Qualitative Research', *Qualitative Social Work*, pp. 80–96.

UIS (2016) *The World Needs Almost 69 Million New Teachers To Reach The 2030 Education Goals*. UIS Fact Sheet No. 39. UNESCO Institute for Statistics (UIS), United Nations Educational, Scientific and Cultural Organization.

UIS (2017) *More Than One-Half of Children and Adolescents Are Not Learning Worldwide*. Fact Sheet No. 46 UIS/FS/2017/ED/46. UNESCO Institute for Statistics (UIS), United Nations Educational, Scientific and Cultural Organization.

UNDP (2020) *The Next Frontier: Human Development and the Anthropocene*. Human Development Report 2020. UNDP.

UNESCO (1960) *Convention against Discrimination in Education*. Paris: United Nations, Educational, Scientific and Cultural Organization.

UNESCO (2000) *The Dakar Framework for Action*. ED-2000/WS/27. Paris.

UNESCO (2013) *The Global Learning Crisis: Why Every Child Deserves a Quality Education*. Paris.

UNESCO (2021) *Right to pre-primary education A global study*. Paris, France: United Nations Educational, Scientific and Cultural Organization.

UNESCO and Kenya, M. of E., Science and Technology (2005) *Challenges of implementing free primary education in Kenya: assessment report.* Nairobi UNESCO Office.

United Nations, G. A. (1948) *Universal Declaration of Human Rights*. General Assembly Resolution 27A. Paris: United Nations.

United Nations, G. A. (1966) *International Covenant on Economic, Social and Cultural Rights*. General Assembly resolution 2200A (XXI). Geneva: United Nations.

United Nations, G. A. (1989) *Convention on the Rights of the Child*. General Assembly resolution 44/25. Geneva: United Nations.

United Nations, G. A. (2000) *United Nations Millennium Declaration*. Geneva: United Nations.

United Nations, G. A. (2015) *Transforming Our World: The 2030 Agenda for Sustainable Development.* A/RES/70/1. Geneva: United Nations.

Unterhalter, E. (2003) 'Education, Capabilities and Social Justice', in *Background paper for the EFA Global Monitoring Report 2004/4*.

Uwezo (2016) *Are Our Children Learning? Uwezo Kenya Sixth Learning Assessment Report*. Nairobi, Kenya: Twaweza East Africa.

Verger, A., Edwards, D. B. and Altinyelken, H. K. (2014) 'Learning from all? The World Bank, aid agencies and the construction of hegemony in education for development', *Comparative Education*, 50(4), pp. 381–399. doi: 10.1080/03050068.2014.918713.

Wambugu, A. (2011) 'The effects of educational attainment on employment outcomes in Kenya', *International Journal of Education Administration and Policy Studies*, 3(7), pp. 94–102.

Wiesmann, U., Kiteme, B. and Mwangi, Z. (2016) 'Socio-Economic Atlas of Kenya: Depicting the National Population Census by County and Sub-Location. Second, revised edition'. doi: 10.7892/BORIS.83693.

Winter, S. C. (2002) *In Social and Regulatory Policies*.

World Bank (2018) *LEARNING:To Realize Education's Promise*. Washington DC.

Yauch, C. A. and Steudel, H. J. (2003) 'Complementary Use of Qualitative and Quantitative Cultural Assessment Methods', *Organizational Research Methods*, 6(4), pp. 465–481.

Zani, A. P. and Chacha, B. (2015) 'The Impact of Free Primary Education on Pupil-Teacher Ratio in Kuria East Constituency, Kenya', *IOSR Journal of Humanities and Social Science*, 20(5), p. 12.

Zimmermann, B. (2006) ‘Pragmatism and the Capability Approach: Challenges in Social Theory and Empirical Research’, *European Journal of Social Theory*, 9(4), pp. 467–484. doi: 10.1177/1368431006073014.

Appendix A: Participants' Profiles

Name	No.	Gender	Interview Mode	Education Level	Levels Taught	Administrative Role	School County	Area
"Tr. Patience"	1	F	Phone	Master's	Grade 4 Class 5, 6, 7, 8	-	Kitui	Rural
"Tr. Greg"	2	M	Phone	P1 Certificate	Grade 4 Class 5, 6, 7	-	Nyamira	Rural
"Tr. Jessica"	3	F	Phone	Undergraduate degree	All classes	-	Homabay	Rural
"Tr. Nancy"	4	F	Face-to-face	P1 Certificate	Grade 4,Class 5, 6, 7,8	-	Kiambu	Urban Higher-SES
"Tr. Diana"	5	F	Face-to-face	Undergraduate degree	Class 8	-	Nairobi	City High SES
"Tr. Fiona"	6	F	Phone	Diploma	Grade 2	-	Kisumu	City Lower-SES
"Tr. Elizabeth"	7	F	Face-to-face	Undergraduate degree	Special Education	-	Nairobi	City Low-SES
"Tr. Charity"	8	F	Face-to-face	P1 Certificate	Grade 4 Class 5, 6, 7	-	Kiambu	Urban Low-SES
"Tr. Beatrice"	9	F	Face-to-face	Undertaking Master's degree	Class 7 and 8	Deputy Teacher	Kiambu	Rural
"Tr. Simon"	10	M	Phone	Undergraduate degree	All classes	Headteacher	Turkana	Rural Arid Area
"Tr. Moses"	11	M	Phone	Undertaking undergraduate degree	Grade 4 Class 6 and 7	-	Lamu	Town/ Settlement Scheme Low-SES
"Tr. Josephine"	12	F	Phone	P1 Certificate	Class 5, 6,7,8	Headteacher	Kakamega	Rural
"Tr. Jacob"	13	M	Phone	P1 Certificate	Grade 4 Class 5, 6, 7	Headteacher	Siaya	Rural

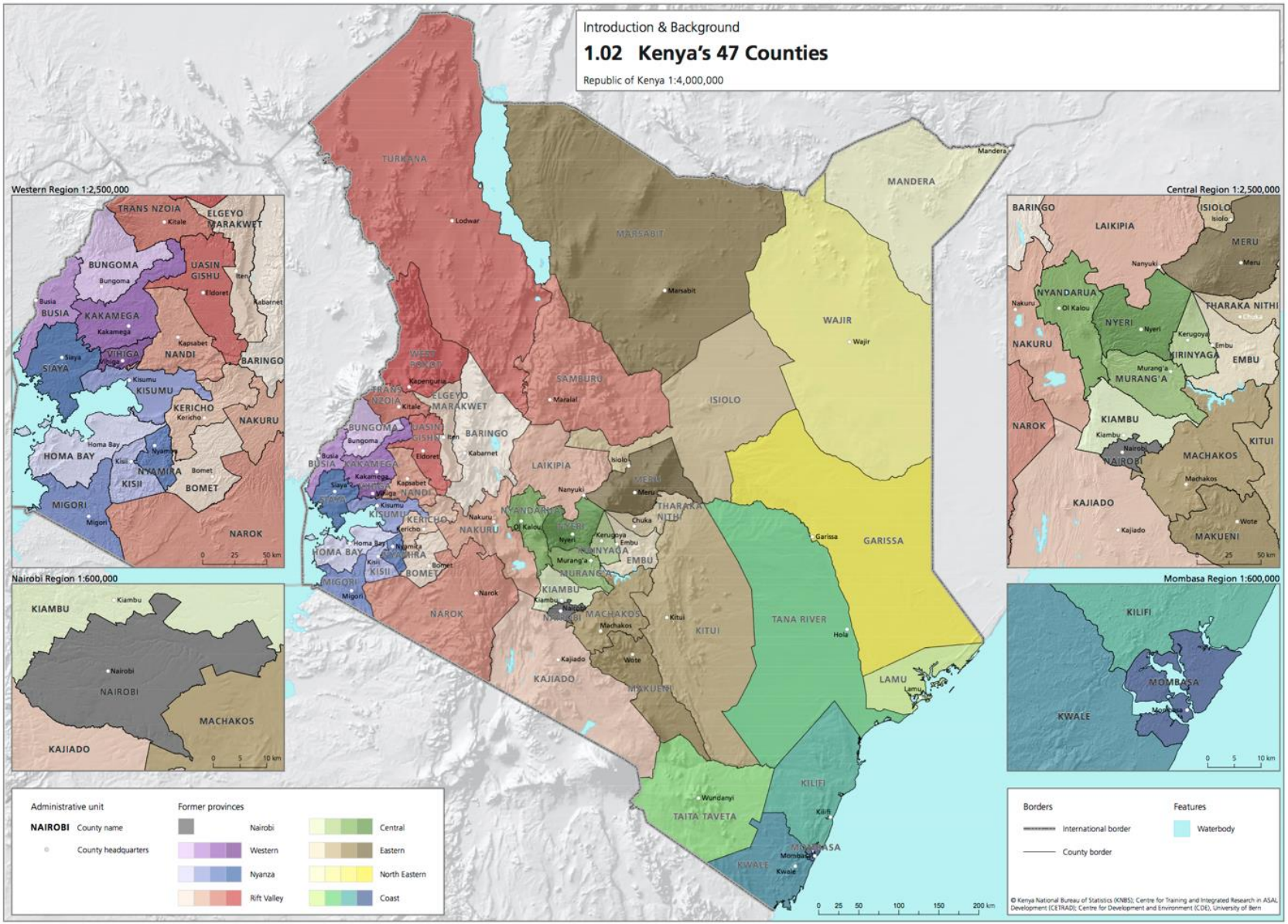
Appendix B: Sample Selection (Adapted from Uwezo)

The counties represented in the data sample are shaded teal in the table with the grey shading denoting the quartile cut-off points.

		Outcomes			
County Rank	**County Name**	**Class 3 who can do Class 2 work (%)**	**Class 3 who can do Class 2 work (Rural) (%)**	**Class 3 who can do Class 2 work (Urban) (%)**	**Children 6-16yrs who can do everyday math (%)**
1	Nyeri	51.8	47.2	68.2	75.3
2	Nairobi	50.5	-	50.5	64.1
3	Mombasa	49.9	-	49.9	62.1
4	Nyandarua	46.3	43.9	55.4	67.4
5	Kajiado	42.3	28.4	68.8	57.6
6	Homa Bay	39.6	38.8	43.5	66.6
7	Kiambu	39.5	43.2	37.2	68.4
8	Laikipia	39.2	35.1	51.6	58.8
9	Nandi	37.8	37	42.9	59.1
10	Kirinyaga	36.1	34.1	45.6	71.8
11	Uasin Gishu	35.3	31.1	41.4	58.7
12	TaitaTaveta	35.1	36.6	28.2	58.8
13	Meru	35	33.7	52.8	62.9
14	Murang'a	33.1	33.4	31.7	67.3
15	TharakaNithi	32.7	32.2	34.6	60.9
16	Nyamira	31.8	13	33.7	61.3
17	ElgeyoMarakwet	31	23.2	32.3	59.3
18	Nakuru	30.9	20.5	44	62.7
19	Kisumu	30.2	23.3	36.9	62.3
20	Embu	29.5	29.5	29.6	66.2
21	Kericho	29	29.2	28.7	60.3
22	Migori	28.7	21.9	43.8	56.7
23	Machakos	28.5	22.2	35.1	69.1
24	Kisii	27.7	27.4	29.2	64.2
25	Trans Nzoia	26.8	24.2	36.3	60.8
26	Kitui	26.1	24.1	38.7	65.3
27	Busia	25.9	23.5	44.2	57.2
28	Kilifi	25.9	22.4	33.6	54.8
29	Marsabit	24.5	15.5	27.4	42.8
30	Makueni	24.1	24.5	21.7	67.1
31	Siaya	23.9	21.4	37	50.5
32	Kakamega	22	19.2	41.1	59.2
33	Narok	21.4	21.1	30	56.5
34	Kwale	21.2	16.5	38.2	51.8

35	Vihiga	19.3	20.9	16.1	59.5
36	Bomet	19.1	17.4	27.5	65.1
37	Lamu	18.7	21.3	12.6	64.6
38	Tana River	18.2	4.5	20.6	42.9
39	Samburu	16.7	12.1	31.6	50.9
40	Baringo	16.6	15.5	26.1	59.4
41	Bungoma	15.4	13	24	56.3
42	West Pokot	15.4	13.5	42.8	55.4
43	Isiolo	15.3	7.9	24.2	61.8
44	Garissa	12.9	12.3	32.9	31.1
45	Turkana	11.4	13.6	-	40.1
46	Mandera	10.1	5.8	11	44.1
47	Wajir	9.9	11.1	5.6	49
	Kenya	30	25.1	40.7	60.4

Appendix C: Kenya's 47 Counties (Socio-economic Atlas of Kenya)



Appendix D: Primary School Attendance