ANALYSIS OF TEACHERS’ QUALIFICATIONS ON THE INTERNAL EFFICIENCY OF PRIMARY SCHOOLS IN CENTRAL EQUATORIA STATE, SOUTH SUDAN

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Abstract. This paper investigated the effect of teachers’ qualifications on the internal efficiency of primary schools in Central Equatoria State, South Sudan. The study adopted a descriptive cross-sectional survey design. Data were collected using questionnaires and interviews from a sample of 443 teachers drawn from 40 primary schools in the study area. A reconstructed cohort of 5668 pupils who matriculated in 2002 and graduated in 2011 was used. Data was analysed at univariate, bivariate and multivariate levels using means, t-statistics and regression analysis. It was established that higher teachers’ qualifications raise the level of internal efficiency. The wastage rate for primary education was found to be high. The teachers’ qualifications were found to be the best predictor of the schools’ internal efficiency. It was concluded that the higher the quality of teachers, the higher would be the level of internal efficiency. Therefore, it was recommended that the Central Equatoria State government should intensify efforts to train teachers. Seminars and workshops could be organized for teachers in order to acquaint them with the modern methods of teaching. Employment of teaching staff should be anchored on technical expertise. Government should also intensify staff development by sending teachers for further training in order to acquire advanced knowledge and skills that will enable them to perform their jobs better and, therefore, improve the internal efficiency of their schools.
Introduction

Education is an indispensable tool for the continued existence and growth of any nation (Ajayi & Mbah, 2008). Its contribution to national development cannot be over emphasized (Maicibi, 2005). It is not only a means of understanding, controlling and developing natural environment, but also a tool for development of human capital and it has a direct impact on mortality, nutrition and health, environmental conservation and sustainable livelihoods. It is a catalyst for economic growth and development and it is a means of equipping individuals with the technical and vocational skills they need to enhance their productivity and prosperity (Musaazi, 2005).

Education is important to society. It is for this reason that everywhere in the world, governments devote enormous resources to its development and to ensuring that schools are managed efficiently and effectively. All children regardless of their handicaps, ethnic backgrounds, and social status have a right to education (Obanya, 2004). Unfortunately, even the developed countries are yet to fulfill this fundamental right. However, due to the significance of education to the world, the question about an efficient education is of relevance to government, policy makers and the civil society. Although this has been seriously explored especially in the US and Western European countries, there has been little research on educational efficiency in transitional and underdeveloped countries (Abagi & Odipo, 1997, cited in Onen, 2007).

The period between 1960 and 1980 witnessed an unprecedented enrolment expansion at all levels of education in many countries across the globe. But after that things started to change for the worse, particularly in Sub-Saharan Africa. Over the 1980s, the gross enrolment ratio at primary level in Sub-Saharan Africa fell from 78% to 68% of the school age group. One way of explaining this is the combined effect of recession, rapid population growth and failure of the newly independent countries to adopt effective education policies. Faced with economic hardship, there were budgetary cuts and high levels of domestic inflation resulting in serious reduction in spending on education. As such, there was not only a big decline in school quality but the systems were struggling to keep children in school.

In Mozambique and Ethiopia, for example, the numbers of school-age children out of school exceeded the number of those enrolled by 7 million. The next highest numbers were in Sudan, with 3.9 million, followed by Zaire, with 3.5 million. A closer look at these countries shows that they were all affected by, or recovering from, conflict or political instability. From a global perspective, by 1990 there were about 128 million out of school children. Majority (63%) of these were girls and 86% were living in the less developed regions of the world, particularly Sub-Saharan Africa and Asia. This situation forced government and world leaders to hold a major educational forum at Jomtien, Thailand in 1990 and since then there have been concerted efforts spearheaded by UNESCO and the World Bank, among others, to provide school places to all children of school going age.

Subsequently, the total enrolment in primary education in the world increased from 596 to 648 million by 2000. The highest relative increases occurred in the developing regions, particularly Sub-Saharan Africa with 38% followed by Asia with 19%, and then Arab States with 17%. This reduced the number of out-of-school children to 104 million, 57% of which were girls. There were also shifts towards gender parity which resulted from a realization that once enrolled in school; girls tend to perform well or even better than boys. The most remarkable gains in the developing countries were in Benin, Chad, Mali, and Bangladesh.

In regional terms, Sub-Saharan Africa, South and West Asia, and Latin America continued to perform badly. In Sub-Saharan Africa, at least 20 million children, majority of them being girls, were still out of school. The region also had the worst record of gender disparity, accounting for 17% with the poorest boy-girl ratios. Incidentally, in a number of developing countries, especially those in Sub-Saharan Africa, mass enrolments seem to be more of a problem. For instance, studies conducted in Equatoria Guinea and Uganda indicate that despite high enrolments the systems show high rates of dropout before class five.

In the case of South Sudan, up-to-date data on the efficiency of the school system is generally non-existent. Regardless, review of literature from countries with similar backgrounds suggests that the country will have to struggle to keep pupils in school. An evaluation of the implementation of the UPE programme in Southern Sudanese refugee camp in Kiryandongo, Uganda, also revealed that although primary education is offered free to all the Sudanese, pupils often dropout of school from an early stage of learning, rendering the school system internally inefficient. One wonders why this is the case despite the fact that the schools and pupils are provided with learning materials by UN agencies like United Nation Children Education Fund (UNICEF) and United
Nation High Commissioner for Refugee (UNHCR). Besides, World Food Programme (WFP) runs a school feeding programme as well as providing food for the settlement.

In South Sudan, the current situation shows that only 49.4% of South Sudanese pupils are enrolled in primary schools. In terms of gender, only 45% of the girls’ populations are enrolled while for the boys it is 60%. Moreover, these numbers diminish greatly in secondary enrolment with only 21% and 27% rate for boys and girls respectively, indicating high dropout rates for both boys and girls. Internal efficiency is generally low, especially after the introduction of UPE. The education system in South Sudan takes the 8:4:4 system. However, the pupils enrolled in primary one in a particular year do not graduate after eight years as it is supposed to be. This has been evidenced by repetition and dropout rates which have led to high wastage of resources. Between 2008 and 2009, for instance, only 15% of the boys and 9% of the girls enrolled in grade one completed grade 8 (Ministry of Education, Science and Technology [MoEST], 2009). This indicates a very high level of internal inefficiency.

**Statement of the Problem**

The education system in South Sudan is internally inefficient. For example, UNICEF (2008) indicates that many children are poor in reading, writing and in computational and vocational skills, so they perform poorly in various examinations. Consequently, repetition rates are high. The country’s dropout rate, another attribute of wastage and internal inefficiency, is the highest in the world. Moreover, the enormity of the problem of internal inefficiency is compounded by an already unimpressive net enrolment ratio, which stands at less than 25 percent. Besides, the country’s resources constraints are such that it can least afford an inefficient system of education given that the country is only trying to recover from the ravages of protracted conflict and decades of neglect by the Government of Sudan in Khartoum. The significance of these problems arise out of the fact that an efficient education system is recognized as an essential part of the country’s post-conflict reconstruction. It also arises out of the understanding that an inefficient system of education might aggravate the problems of disunity, instability, insecurity, human rights deprivation, economic/technological backwardness, social ills and criminology that the newly independent country is contending with.

Over the last seven years, the Government of South Sudan and various diplomatic and civil society organizations have implemented interventions aimed at improving learners’ readiness, governance at all levels of the education system and educational infrastructure—cognizant of the contribution of inadequacies at each of the various nodes of the education system in the country to the inefficiency of the system. Ironically, the problem of internal inefficiency is still persisting. The propositions of Systems Theory give credence to the hunch that the incidence of internal inefficiency in South Sudan could be related to the quality of teachers in the school system, since teachers are part of the inputs into the teaching and learning process. However, hitherto, the relationship between the quality of teachers and internal efficiency of schools in South Sudan had not attracted commendable scholarly attention. This study was conducted to fill this gap, taking the case of Central Equatoria State. Specific attention was put on teachers’ qualifications, experience, competence and job performance. The justification for this focus was that, after interventions to improve educational infrastructure and to develop teachers had been implemented over a period of seven years, persistence of internal inefficiency pointed to need for interrogating the theory of change regarding the way each of these variables related to internal efficiency.

**Purpose of the Study**

The purpose of the study was to investigate the effect of teacher qualifications on the internal efficiency of primary schools in Central Equatoria State, South Sudan.

**Research Objective**

The specific objective of the study was to establish the effect of teachers’ qualifications on the internal efficiency of primary schools in Central Equatoria State, South Sudan.

**Hypothesis**

The researcher tested the following hypothesis:
Teachers’ qualifications have no significant effect on the internal efficiency of primary schools in Central Equatoria State, South Sudan.

**Literature Review**

**Teacher Qualification and Internal Efficiency in Primary Schools**

The success of any school depends on the kind of teacher it employs. For schools, the kind of teaching force they employ could determine how effectively and efficiently the schools operate. Mullins (2002) concurs with this statement when he observes that staff should be more skilled and more competent if they are carefully selected, specifically trained and continuously kept updated in their field of operation. It is the staff or personnel of an organization (or school) that will ultimately put all other resources to active use. Because of this, Cole (2004) observes that the staffing role has expanded over the years and occupied its own department in organizations: the department of human resource or personnel management. The kind of teacher in a school therefore, is a direct reflection of the role the school is expected to play. Their qualifications, years of experience and the number of teachers employed in a school are central to the determination of the internal efficiency of the school (Cole, 2004). Mullins (2002) and Cole (2004) observed the importance of staffing in an organization and their studies was not in the context of South Sudan, therefore this leave a gap for this study.

Whatever the factors are, the ultimate quality of education is determined by the teacher, as he transmits the value of education to the student. Similarly, what the teacher does and how he does it are important in the determination of quality of education. The teacher is equally important in the determination of quantity of education. Hence, perhaps the National Policy on Education (FGN, 2004) declared that “… no education system may rise above the quality of its teachers.” It can therefore be argue that in South Sudan it seem teacher quality is below standard and if this is true it may affect the internal efficiency of primary schools in South Sudan.

Lack of adequate teacher is one of the major causes of repetition and dropout of schools. Many primary schools in developing countries tend to have a shortage of teachers—not only in quantity but also in quality because the economic situation constraints them to employ few and lowly qualified teachers. Yet there cannot be quality education without well-qualified and, motivated teachers. Dinharm (2006) found cases of ageing teacher population in Australia, which if not controlled would give rise to shortage of teachers as retirement increases in the later year. This was concurs by Barlin and Hallgarten and Johnson (2001) who found that there was shortage of qualified teachers in England and Wales in the 1990s when continuing increase in pupils’ enrolment were not reflected in the employment of extra teachers even though schools in the region regarded an increase in pupil teacher ratio as detrimental to quality of learning.

Camphire (2001), Clark (2000) and Darling–Hammond (2000) confirm shortages of teachers in the United States. The studies showed that in general, the labour market for most of the 20th century was characterized by recurring shortages of teachers. In the state of California, reported acute shortages of mathematics and science teachers. Salvador (2001) also found that under-qualified and emergency credential teachers numbered more than 40,000 (about 14% of the work force) and were clustered in schools serving population minority students in the state in 2000. He also reported a similar situation in the state of Florida. So did Clark (2000) in respect of the state of New Hampshire.

Acedo (2000) found out that on the basis of a 1992 survey by the master plan for continuing in-service training that 45%, 82%, 79%, 59% and 60% of mathematics, physics, Biology, chemistry and General science teachers respectively were unqualified to teach the subjects in the Philippines. Some primary schools in South Sudan are inadequately staffed and this may jeopardize efforts to attain internal efficiency. It was this scenario that occasioned the need to determine the teacher quality in primary schools, and its effect on the level of internal efficiency of the schools with a view of availing information that could help planners and decision makers to overcome the problem of internal efficiency in primary schools in South Sudan and elsewhere in the world.

Teacher quality involves the level of qualification and some studies show that additional teacher education has a positive correlation with student achievement in some cases, others find that it negatively affects achievement (Hanushek, 2006). Nevertheless, results from all the studies seem to imply that there is no positive
correlation between teachers having advanced degrees in subjects other than those they teach and student achievement.

Teachers are a key input in educational production, and an adequate supply of skilled teachers is a prominent policy concern in many nations, including developing ones. Not unexpectedly, teacher supply is influenced by such factors as teachers’ salaries and working conditions relative to those in other occupations, and the costs of teacher preparation relative to those for other occupations (Murnane, 2005). The harsh working conditions in rural areas in developing nations often lead to a shortage of skilled teachers in these areas. Their finding is in line with what is going on in South Sudan. The researcher is of a view that if teaching is to be attractive then motivation is of perquisite to all the teachers who are teaching in the schools.

The fallen standard of education in schools is often largely attributed to teachers. This statement had been observed by some writers as a means of escape-goat to the teachers. That besides the contribution of the teachers, debasement of educational standards was due to other factors. Ajayi and Mbah (2008) argued that it is a symptom of pervasive natural failure syndrome (as the problem is not only experienced in educational sector alone). He went further to say that crash education programme crashed the educational system in the country. He submitted that the teaching profession no longer attracts the best brain that only the mediocre were teaching our children, as no one would expect poor teachers to produce good results. The statement pointed out that quality of education depends on the teacher quality. The issue of quantity is closely related to quality. He asserted that one of the reasons for low enrolment is the low quality of education. Both parents and pupils recognize poor quality when they see it, and therefore avoid it. He opined that being street kid may be more educationally stimulating than being in a class of 100 pupils with a poorly motivated and poorly qualified teacher. He submitted that quality of education is based on the academic level of the teacher, the pedagogical skill of the teacher and the relevance of learning to pupils among others.

The importance and the need for high quality teachers in schools had been emphasized in classical as well as modern times. The teacher is a creation and an embodiment of general education, professional training, experience and opportunities for continuous self. He submitted that the extent to which the teacher is able to analyse specific learning situations and adopt appropriate methods is itself a function of the level and type of his/her education, training and experience. In fact, the statement that there is a direct link between the quality of education and the quality of teaching, which also has a direct bearing on the national policy on education.

No education system can rise above the level of its teachers. This explain in part what is responsible for the internal control of primary schools. It is, therefore, certain that students would not benefit much from learning where teachers are not competent. Competency in this regard can be measured in terms of teachers’ qualification/quality.

Earlier, Loxman (1976) attempted to analyse the qualities expected of a productive teacher when he said: The goal is not less than building body of teachers, well prepared academically and professionally, to sustain confidently the formidable task to which they are called: a full appreciation of our culture, to quicken their social and moral awareness, to enhance intellectual ability to the highest standard, which each is capable and to develop their practical and human skills to make… maximum contribution to health, wealth and harmony of a democratic society.

Researchers have identified many factors affecting internal efficiency. However, the greatest determinant of student achievement is the influence of teachers (Collias et al, 2000; Lasley et al., 2006). Studies have found that the majority of the difference in student tests scores can be directly attributed to teacher quality (Darling-Hammond and Ball, 2007). Thus, the impact of teachers can either be positive or negative depending on teacher quality as defined by various teacher characteristics. In this study particularly, the effect teachers have on student achievement depends upon teacher qualification, experience, competence and job performance. In some developing nations, low educational quality is related to the existence of a significant proportion of untrained teachers, so is the case with South Sudan.

Agyeman in Telia (2006, Ndefo, 2006) reported that a teacher who doesn't have both the academic and the professional teachers qualification would undoubtedly have a negative influence on the teaching and learning of his/her subject. However, they further stated that a teacher who is academically and professionally qualified, but works under unfavourable conditions of service would be less dedicated to his work and thus be less productive than a teacher who is unqualified but works under favourable conditions of service.
Monks (2004) reported that students whose teachers had taken a greater number of mathematics and science courses scored higher on the math and science assessments. Whereas Goldhaber and Brewer (2007) and Quinn (2007) found similar relationships in their analysis. This means that the type of training teachers receive is very important and matters a lot when considering the issue of students’ achievement.

Quinn (2007) argued that it is not only the qualifications obtained by a teacher that could contribute to a teacher’s quality but actual achievement in terms of subject matter competence. Researchers have also attributed the low achievement of pupils in schools to teachers’ inadequate knowledge of the subject matter. Oladejo (2001) for instance, conducted a survey on teacher factors in the effective teaching and learning of English as Second Language (ESL) in Kaduna State, Nigeria and found that out of the 95 teachers in his sample, 44 (46.3%) were degree holders in English Language having qualifications relevant to what they taught while 53.7% were non-degree holders or teachers specialized in other subjects teaching English Language in schools. He then argued that the problem of getting competent teachers has been a major problem to students’ learning outcomes. He however observed that children of “all aptitude levels achieved more when taught by teachers who exhibited competency in classroom management.”

Kaplan and Owings (2001) observe that teacher quality is concerned with what teachers bring to school. These include teachers’ professional preparations, subject studies in the university, social status, aptitude, teachers’ licensing status, certification and prior professional working experience. According to the 1997-98 edition of the National Council for Accreditation of Teacher Education (hereafter to as NCTAE) considered hiring standard as an aspect of teacher quality. This is because the most significant predictors of teacher quality include hiring standard in some school districts.

The emphasis on teacher quality is based on the assumption that the quality of teacher is central to the quality of education in any country and teaching quality is seen as indicator of the extent to which teachers can assist students to achieve their maximum potential. The quality of teachers is relevant to the achievement of the goal of education particularly in ensuring students, achievement and reducing wastage (Nadefo, 2006). Hence, parents and other stakeholders recognize the roles of teachers as central to the delivery and the quality of education. There is a wide range of findings on the relationship between years of teaching experience and student outcomes. Hanushek (2006) found that fewer than half of the 109 previous studies on the estimated effects of teacher experience showed that experience had any statistically significant effect on student achievement; of those, 33 studies found that additional years of experience had a significant positive effect, but seven found that more experience actually had a negative impact on student achievement. Other studies show a stronger positive relationship between teacher experience and student outcomes in some, but not all, cases they reviewed. As observe, it seem some primary schools teachers in Southern Sudan are unqualified and this may jeopardizes the efforts to attain acceptable values of internal efficiency in the schools. It was this scenario that occasioned the need to determine the teacher quality in primary schools, and its effect on the level of internal efficiency of the schools with a view of availing information that could help planners and decision makers to overcome the problem of internal efficiency in primary schools in South Sudan and elsewhere in the world.

Education International (1996) stated that pre-service education should be a must for all teachers and should provide foundation for later upgrading and professional development through in-service education. This is because in structural quality depends on the personal and professional competence of those who provide the instruction. According to Herbet and York, (2000) and Turner (2000), a masters’ degree should be imperative if all teachers are to achieve the professionalism requires that teachers teaching have demonstrable efficiency in teaching and power to make decisions about their work and thus argued that the period of undergraduate training is too short for teacher trainees to acquire them.

NCTAE (1996), reviewed literature on teacher education programmes in Australia, China, Germany, France, Japan, New Zealand and the USA, has shown that mode, duration and content of initial preparation of teachers vary across countries. Education International (1996) stress that initial preparation of all teachers should be at higher education level (university or equivalent). Clark 2000 and Education International (1996) argued that there should be more subject matter content and fewer education courses. These differences in the modality, duration and content may give rise to differences in the quality and effectiveness of the products and consequently, differences in the general performance of the pupils entrusted into the care of the teachers.
calls for concern especially in a country such as Southern Sudan where teacher — training programmes are carried out in different institutions and under varying conditions.

Studies have shown that efforts towards adequate initial preparation and professional development often face serious constraints. For instance researchers (e.g. Oluchukwu, 2005) have shown that there is a decline in the quantity and quality of a candidate applying for admission into teacher training institutions in recent times. This is because few candidates are willing to go into teaching as a career. Many of those who end up in teacher training colleges are often those who failed to secure admission into other courses they desired. This undoubtedly impacts on the quantity and quality of teachers produced by the training institutions and consequently, the effectiveness of teacher education programmes as means of equipping schools with quality teacher. The quality of teacher training institutions (Acedo, 2000), course content (Clark, 2000), quality of teacher educator and methods of training (Salvador, 2001) are critical to quality. Teachers’ perception of their responsibilities and teaching as a profession influence prospective candidates’ decision to enrol in teacher training institutions and thereafter in taking up teaching as a career (Akiri, 2013, Adyemi 2012 and Arinde 2010).

In Southern Sudan, insufficient funding, high cost of further education, dearth resources, poor quality of trainees, inadequate motivation and laziness of some teachers, inadequate opportunities for teachers in tertiary institutions, rigid school programmes, un co-operative attitude of school administrators, aversion for the teaching profession and Luke warm attitude to policy implementation as constraints to the production of quality teachers have been identified (Leo, 2010).

Teaching is not just a matter of teachers talking and students listening. Effective teaching involves interactive communication patterns that are skilfully directed. In developed and developing countries, the quality of any worker in any organization is generally measured through obtained certificates as epitomized by output (Asuku, 2009). This simply means that the quality of products of any industry is reflective of the quality of the producing industry. After all, one gives out what one has. He who has nothing practically gives out nothing. In the teaching industry therefore, we can safely infer that high quality students, no doubt, might pass through an equally high quality group of teachers in their corresponding high quality supporting instructional materials. The trend of outcry in the South Sudan educational system is that the teaching profession has been made a dumping ground for all categories of job seekers and a stopover camp for teachers seeking more lucrative employment. This has led to a “fall” in the standard of education. Most primary school teachers then were unqualified and the situation was even worse at the secondary level where mediocre teachers were building upon shaky foundation laid by un-informed and barely literate primary school teachers. This shows that the qualification of a teacher is assumed to have an influence on the quality of information and knowledge imparted to the students through teaching.

The Federal Government of Nigeria realized this fact and therefore stated in the National Policy on Education that “teachers already admitted into the profession without the pre-requisite qualification must qualify within a stipulated time or leave the profession and that NCE must be the minimum entry qualification for teachers in Nigeria”. Also, it further stated that all teachers in our educational institutions from primary level to the university will be professionally-trained. The quality of the students in every school is largely the reflection of the quality of the staff of that school. Each and every literature reviewed so far has emphatically stressed the importance of qualified teachers to students’ quality education. There is no disagreement among the various authorities cited on the quality of students as reflective of the teacher quality or qualifications. Several writers have individually and severally expressed the view that for any solid foundation for education in any country, teachers must be appropriately trained. It is only after this that one can consider the relationship between teachers’ qualifications and students’ academic achievement, especially at the primary education level (Ndefo, 2006).

A study of factors affecting pupil performance, investigating the variables of teacher, student, parents and community, and concluded that the teacher was the key factor in student achievement was conducted. The quality of education depends on the quality of teachers, particularly in the initial stages of education when the pupils are at an early age, and especially in the rural areas (Adyemi, 2012).

Quality of primary school teachers, both academic and professional, cannot be overly emphasised. Training plays an important role in improving the quality of education in schools. The professional quality of the trained teacher depends on the quality of the curriculum to which the teacher was exposed and the ways in which it is implemented (Tiberondwa & Okello, 2003).
Academic and professional training of teachers is believed to have a direct and positive bearing on the quality of performance and by implication, on students’ achievement. No education system which rise above the quality of its teachers. Consequently, schools require teachers with high quality, academic training and human relations skills (UNESCO, 2000). More over schools are currently being expected to prepare all students adequately to meet challenges of the 21st century. This mean that what teachers know and can do seriously influence what students learn (Salvador, 2001).

In recognition of the importance of teacher quality, determination of accurate staff needs before selection processes would ensure a balance between demand and supply. Kaplan and Owings (2001) emphasized that schools administrators should hire teachers with major in their fields and full professional certification. These recommendations while useful may not be applicable in the case of government of Southern Sudan which has just recovered from war. For instance, in situations of high demand for teachers, conformity to standards and policy guide lines may not be possible. In such a situation admission, selection and deployment may be a function of the urgency and availability of applicants rather than standards.

The review done so far, illustrate that a major means of evaluating the quality of schooling especially in the developing countries, is to assess the quality of teachers in terms of qualifications. This has provided an underpinning for this study whose focus is to ascertain the extent of availability of qualified teachers in South Sudan and their link to internal efficiency of primary schools.

Well qualified teachers enhanced better learning and are the key to increasing the level of internal efficiency in education (Arinde, 2010, Tiberondwa & Okello, 2003). There should therefore exist clear guidelines for procuring teachers in primary schools. In the absence of clear and proper guidelines and controls on the staff establishment in primary schools may result into recruitments of few and lowly qualified teachers. This is likely to lower the internal efficiency of primary schools since poor quality teacher cannot guide pupils to learn well and proceed successfully with their education. As observes by the Ministry of Education (2008), and as revealed by this study, there is strong evidence that some primary schools in Southern Sudan are not adequately staffed and this jeopardizes the effort to attain acceptable values of internal efficiency in the schools.

Of the teacher qualifications variables, the strongest relationship was found for scores on the state licensing examination, a test that measures both basic skills and teaching knowledge. The effects were so strong, and the variations in teacher expertise so great, that after controlling for socioeconomic status, the large disparities in achievement between black and white students were almost entirely accounted for by differences in the qualifications of their teachers. Ferguson (2001) also found that every additional dollar spent on more highly qualified teachers netted greater increases in student achievement than did less instructionally focused uses of school resources.

Strauss & Sawyer (2006) found that North Carolina’s teachers’ average scores on the National Teacher Examinations (a licensing test which measures subject matter and teaching knowledge) had a strong influence on average school district test performance. Taking into account per-capita income, student race, district capital assets, student plans to attend college, and pupil/teacher ratios, teachers’ test scores had a strikingly large effect on students’ failure rates on the state competency examinations: a 1% increase in teacher quality (as measured by NTE scores) was associated with a 3 to 5% decline in the percentage of students failing the exam. The authors’ conclusion is similar to those of Ferguson (2001): of the inputs which are potentially policy-controllable (teacher quality, teacher numbers via the pupil-teacher ratio and capital stock), an analysis indicates quite clearly that improving the quality of teachers in the classroom will do more for students who are most educationally at risk, those prone to fail, than reducing the class size or improving the capital stock by any reasonable margin which would be available to policy makers.

Teacher quality, teacher learning, and teacher improvement, therefore, are becoming the foci of researchers, policy makers, program designers, implementers, and evaluators. This section traces the growing emphasis on teachers in education quality, while the following section reviews the literature on teacher learning – how teachers learn, change, and improve practice. New views on the nature of learning and the locus of authority and responsibility for education have combined to alter how teachers are regarded and how teacher support programs are designed and carried out. At the same time that more authority and responsibility have devolved to local levels, there has been a strong trend toward the devolution to teachers of authority and responsibility for their practice. Recent trends in the United States and elsewhere, however, suggest an increase in
accountability for teachers, but not an increase in authority: teachers are losing decision-making authority in the classroom, as high-stakes testing requires that they follow more prescriptive approaches to instruction.

Fargusan (2001) observes that quality of teachers is the most critical aspect of schooling and that it has a direct impact on student learning. Literature suggests that quality of teachers depends on educational qualifications of teachers and quality of pre-service and in-service teacher education (Aga Khan Foundation, 1998). Teacher education therefore assumes great importance in achieving the goal of quality education. In Pakistan, the quality of teacher education has been questioned and criticized from time to time by the concerned constituencies. In order to meet the growing demands of teachers at various levels, the teacher education system has gone through significant quantitative expansion, yet the quality of teachers’ preparation has been overlooked and compromised.

Commenting on the current state of teacher education in Pakistan, the National Education Policy: 1998-2010 observes: “The qualitative dimension of teacher education program has received marginal attention resulting in mass production of teachers with shallow understanding of both the content and methodology of education. A recent report published by UNESCO about teacher education in Pakistan points out that “absence of quality has to be tackled urgently in a context where teacher-learner interactions are mediated by a supportive management, as well as by an enabling policy environment”.

The fundamental impact of teacher quality has led many policy makers to focus on the implications for the form and level of pay of teachers. The most common expression of this focus is that we should pay sufficient salaries to ensure that there are high quality teachers in all classrooms. Higher salaries are viewed as a way of providing incentives to attract and retain the teacher force that we need as a country. This conclusion, however, is not as straightforward as it sounds, given the current structure of schools and labour markets for teachers and given limitations on understanding of how to identify effective teachers especially with the perspective of South Sudan which is recovering from the civil wars.

**Research Methodology**

The study adopted a descriptive cross-sectional survey design. Data were collected using questionnaires and interviews from a sample of 443 teachers drawn from 40 primary schools in the study area. A reconstructed cohort of 5668 pupils who matriculated in 2002 and graduated in 2011 was used. Data was analysed at univariate, bivariate and multivariate levels using means, t-statistics and regression analysis.

**Results and Discussion**

**Teachers’ Qualifications**

The teachers in primary schools were asked to indicate their qualifications. This attribute was used to measure teacher quality in schools. A total of 454 teachers participated in the study. Their responses are summarized in figure 1.

The teachers were asked to indicate their status. This attribute was used to measure the level of staffing in the schools. Their responses were summarized in fig. 1. The information revealed that the majority of the teachers (240 or 53%) are untrained teachers, while (122 or 27%) of the participants are grade three certificate holders. There were (79 or 17%) Diploma holders, (13 or 3%) university graduates. This means that the majority of teachers (240 or 53%) have not received the adequate qualification to teach in primary school and they are not adequately qualified. Even at this preliminary level, therefore, the internal inefficiency noted in the schools seems to present as unsurprising.

The interview analysis revealed that County Education officers are aware of the difference it makes if highly qualified teachers are employed to handle instructional processes in schools. For schools to attain high internal efficiency the assistance of highly academically qualified teachers is required.

Similarly, the interview of Head teachers revealed that teachers who possess higher academic qualifications perform better in terms of educational research because they have a wider sense of teaching. However, they concluded that professionally trained teachers are better equipped in instructional processes, unlike those who
do not have professional teaching qualifications. They believe that professional teachers are considered to better manage educational problems and solve them more effectively.

“…during the 21 years of the civil war there was less progress in the [area of] teacher education. The teacher training colleges which were in place were destroyed during the war…the few trained teachers are those who got their training from the neighbouring countries [of] Uganda and Kenya. Those who got their training in Sudan are less qualified and have a problem of language deficiency since majority of them got their training using Arabic as the medium of instruction”, Interview with County Education Officer.

The Table 1 indicates that the means of the internal efficiencies of schools with poorly qualified teacher is higher than the mean coefficients of internal efficiency of schools with moderately qualified teachers and those with highly qualified teachers.

Table 4.9 reveals that the correlation between teacher qualification and internal efficiency was moderate (0.387) but still statistically significant because the calculated $p$-value ($p = 0.000$) was less than $p$-critical ($p = 0.05$). To determine the effect of teacher qualification on the internal efficiency of the schools, the coefficient of determination (or R-square) was used. The effect of teacher qualification on the internal efficiency was thus 15% ($R^2 = 0.150$), other factors notwithstanding. This effect was therefore statistically significant since the $p = 0.000 < 0.05$. In this regard, the null hypothesis which states that “teacher qualification has no effect on internal efficiency of primary schools” was thus rejected and the research hypothesis which states that “teacher qualification has a significant effect on the internal efficiency of primary schools” was therefore upheld. This meant that the more qualified the teachers were, the more efficient the schools would be, other factors assumed constant.

**Discussion of the Results**

The study determined the effect of teacher qualification on the internal efficiency of primary schools in central Equatoria state, South Sudan. Data on teacher qualification was collected using a questionnaire and interviews and analysed using means, standard deviation and t-values. This study found that, the majority of the teachers 53% are untrained teachers, while 27% of the teachers are grade three certificate holders. There were 17% Diploma holders, 3% university graduates and none of them have master degree. This is expected because master holders are more relevant in higher institutions than in primary schools and they must have migrated to the available ones. This accounts for the very low percentage of master holders in primary schools. The projections made by the South Sudan Secretariat of Education, more than 27,000 trained primary school teachers will be needed by 2010. This projection is in contrast with the finding of this study. The statistics described above indicate pertinent issues in the quality of teachers in South Sudan. This findings is in agreement with earlier studies which found high positive correlation between quality of staff (as measured by experience and qualification) and the level of school goal achievement, you refer to table 4.7 which is indicating teacher qualification.

The result also indicates that the means of the internal efficiencies of schools with poorly qualified teacher is higher than the mean coefficients of internal efficiency of schools with moderately qualified teachers and those with highly qualified teachers. These findings are also consistent with the findings of Ndefo (2006); Darling–Hammond (2000) and Kaplan and Owings (2001) that the proportions of well qualified teachers were consistently high significant predictors’ high internal efficiency and pupils achievement in schools. The result is in contrast with authors who showed that there was no significant difference in classroom performance of pupils taught by trained and untrained teachers in schools. The contrast notwithstanding, the finding supports popular opinions (Monk, 2004; Ndefo, 2006 and Abagi and Odipo, 1997 cited in Onen 2007) that teacher Quality counts. Hence academic and professional training of teachers have direct and positive bearing on the level of internal efficiency in schools especially in developing countries. This is so because teachers have a direct influence on the students’ academic performance. This is in line with the submission of Senteza-Kajubi (2000) that the quality of the product of any industry is reflective in the quality of the producing industry. This implies
that high quality students, no doubt, might have passed through an equally high quality group of teachers. In other words, without quality teachers, effort to improve the level of internal efficiency may fail (Salvador, 2001).

Conclusion and Recommendations

Therefore the researcher concluded that; Teachers’ qualification is the best predictor of internal efficiency of primary schools.

It is recommended that the central Equatoria State government intensifies its efforts in the area of teacher training. This will enable the area to acquire teachers with higher qualifications, thereby mitigating the problem of internal inefficiency currently affecting the school system. It is also recommended that state authorities enforce clear guidelines on the qualifications of teachers. This will encourage poorly qualified teachers to seek further education and training, since they will know that they cannot be allowed to teach unless they have the requisite qualifications. This, too, will lead to improvements in internal efficiency, given the relationship established between teachers’ qualifications and internal efficiency.

References


