

## **The Quandary of Teacher Demand and Supply in Secondary Schools in Kenya: Equity, Quality and Policy Performance**

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### **Abstract**

*This study focuses on the relationship between teacher demand and supply in Kenyan schools. It was motivated by the fact that since independence, there has never been either overproduction of science teachers or those in humanities. The balance in demand and supply has never been attained while the distribution has been said to be inequitable especially in urban and rural areas. The study was guided by the theory of demand and supply which emphasize that when a commodity is on demand, it will be priced highly and vice versa. The study used mainly secondary data to analyse existing documents on teacher demand and supply. The staffing situation over a period of two decades was explored to compare staffing in science, humanities and technical subjects. Similarly, the training of human capital in the same subjects was explored against the available staffing norms and policy documentation. The findings emerged which formed a basis for implication in this study. The study recommends that in order to achieve the optimum allocation of resources, manpower approach to education planning should be employed by analyzing the market needs of human capital (teachers) and project future needs by qualifications. This can be achieved through ingenious use of employer data based method and the traditional high and middle level manpower survey techniques.*

**Key words:** *teacher demand and supply, market, manpower planning, quality and graduate outcomes*

### **Introduction**

The question of teacher demand and supply in Kenyan secondary schools remains an enigma to date. The supply is by Kenyan public and private universities and teacher training colleges (TTCs) while the largest market demand is by the Teachers Service Commission (TSC). Education planners have argued that there is little interplay between universities and the market sector. This has resulted in the overproduction of either science or arts trained teachers. In the 1980's and 1990's there was a huge shortage of science, language and mathematics teachers in Kenyan secondary schools. To alleviate this problem, after the introduction of the 8-4-4 system of education, the education sector emphasized the production of science and mathematics teachers almost to the point of demonizing arts based programmes. This led to over production of

teachers in the science and mathematics disciplines. Two decades down the line, the country now faces acute shortage in arts and humanities teachers suggesting little interplay between the universities and the market requirements. A survey in schools presently reveals acute teacher shortages especially in rural areas. Teacher staffing has also been found to be inequitably distributed forcing parents in understaffed schools to employ teachers on board thus compromising the free tuition policy. In teacher recruitment, some of the graduates from universities have failed to be recognised by the TSC on the account that they do not have two teaching subjects. Some universities have trained teachers in botany and zoology or double mathematics. TSC has insisted that such qualifications do not meet their policy requirements of two teaching subjects forcing such teachers out of the job market.

TSC also insists that all primary school P1 certificate holders pursuing degree courses must attain the minimum university admission requirements of grade C+. The universities have set their minimum admission requirements at grade D- and post KCSE certificate, thus setting a platform of confrontation between the TSC and the universities which has been joined by politicians and teachers' unions. This leaves the question as to whether manpower in such an important sector as education should be based on political whims or professional balance between the market requirements and the supplier of the labour force.

### **Methodology**

The study used both primary and secondary data. Primary data was collected through informal but in-depth interviews. This targeted senior officers at the TSC headquarters, 2 primary school teachers, 2 secondary school teachers, and 2 lecturers from universities. Similarly, Managers of education institutions such as the head teachers of primary and secondary schools were interviewed. A deputy vice chancellor in a public university including two renowned professors was also interviewed. The objective of interviewing teachers and lecturers was to interrogate the quandary of teacher demand and supply in Kenyan schools. The administrators were to interrogate the practices and policies including in admissions vis a vis employment policies. Also interviewed were officials of teachers unions.

### **Desk review**

This constituted about 80% of the study and entailed collating existing information that has been published on the subject, by the government, NGOs, Donors and other Stakeholders. Government documents and reports at the TSC, specifically on employment policy were also reviewed.

### **Literature Review**

It all started in the 1990's when the issue of surplus production of teachers emerged (Adel, Al-Bataineh, Mohammed and Nur-Aweleh, n.d). The Kenyan government then sought to rationalize the recruitment of

teachers through collaboration with the IMF and World Bank. TSC then advised reduction in enrolments for teacher trainees, freezing of employment for teachers and delegation of powers in the recruitment process (Adel, Al-Bataineh, Mohammed and Nur-Aweleh, n.d). The question of surplus production of teachers at primary level was achieved through reduced enrolment almost by 100 percent in 1998/1999 which reduced the number of admissions from 18407 to 8929. At secondary school and university level forces of demand and supply have been at play due to the relative autonomy of the universities in running their programmes but the World Bank managed to push for reduced funding owing to what it termed very low rates of social returns to higher education (ibid). The issue of low rates of social returns of university education remains contentious to date and new efforts are being made to calculate the rate of return to primary secondary and higher education.

### **Secondary School Teacher Supply and Demand in Kenya**

The supply is by Kenyan public and private universities and teacher training colleges (TTCs) while the largest market demand is by the Teachers Service Commission (TSC). Education planners have argued that there is little interplay between universities and the market sector. This has resulted in the overproduction of either science or arts trained teachers. In the 1980's and 1990's there was a huge shortage of science, language and mathematics teachers in Kenyan secondary schools. To alleviate this problem, after the introduction of the 8-4-4 system of education, the education sector emphasized the production of science and mathematics teachers almost to the point of demonizing arts based programmes. This led to over production of teachers in the science and mathematics disciplines. Two decades down the line, the country now faces acute shortage in arts and humanities teachers (Lengeibon, 2010) suggesting little interplay between the universities and

the market requirements. A survey in schools presently reveals acute teacher shortages especially in rural areas with some schools have shortages of over 20 teachers.

According to a Government Report (cited in Siringi, 2009) at the secondary school level, TSC has a short fall of 23,291 teachers for the 1.4 million students enrolled. This means the country is currently experiencing the worst shortage ever. According to the report, Nyanza province suffers the worst shortage of teachers at both primary and secondary schools. At the secondary school level, the province has a shortage of 6,243 teachers, slightly above quarter of the total deficit. The region is followed by expansive Rift Valley that has a shortage of 4,909. Nairobi Province, which has for a long time been overstaffed, has realised a deficit of 101 teachers at the post-primary school level. Going by the figures, it means the teachers are inequitably distributed in the country and the worst areas hit by understaffing seem to be rural areas. This undermines the quality of education provided in the country. Parents in understaffed schools have since then resorted to hiring teachers through BOG and this has raised the private costs of education thus compromising the free tuition policy.

In teacher recruitment, some of the graduates from universities have failed to be recognized by the TSC on the account that they do not have two teaching subjects. Some universities have trained teachers in botany and zoology and double mathematics. TSC has insisted that such qualifications do not meet their policy requirements of two teaching subjects forcing such teachers out of the job market. TSC requires that a single teacher covers a load of 27 lessons per week at secondary school level and this cannot be achieved if one has only one teaching subject and would lead to inefficiency in teacher utilization (TSC, 2010). Diploma colleges are now combining English language with other subjects in the humanities or business

studies but not literature as before. Although TSC still accepts English language and Literature as two teaching subjects, Diploma colleges have insisted on combining English with other subjects arguing that the policy of two teaching subjects should apply to all subjects and this has overloaded the students at that level. Universities still combine English language with literature. Unless this is discussed and harmonized, it might disadvantage teacher trainees in those combinations.

### **Teacher quality and retention**

Although there is no doubt amongst the stakeholders in education about the low standards in Kenyan schools, there seems to be little consensus about the sources of the difficulties and how they can be confronted. The plethora of complaints range from inadequate curriculum, to incompetent graduates in classroom instruction and even a demoralized teaching force. The complaints are too numerous to be dealt with piecemeal but together they signal a set of fundamental problems whose common sources must be recognized if we are to improve the quality of public education. We will restrict ourselves to a few in this paper.

Undoubtedly, the quality of education outputs depends on the inputs. Away from the regular student intake through the Joint Admissions Board (JAB) who must meet JAB cut off points of grade B, universities now admit fee paying students who are known invariably as module II students, PSSP, SSP, direct intake etc (Adedeji, Baraka, Dugga, and Odebero, 2011). What is not clear is the minimum entry requirements for admission into these programmes.

According to the Commission for Higher Education (CHE) standards for validation of programmes in postsecondary school institutions (CHE, 2007), the criteria for admission into diploma and degree programmes shall be minimum aggregate C plain at KCSE or equivalent for diploma

and C+ for university. However, it adds that in special cases, candidates who do not certify the above conditions but have demonstrated potential ability to successfully complete a diploma or degree may be admitted (P.1). It is this proviso that has opened a Pandora's Box giving each institution a leeway to set its own criteria. The universities have set their minimum admission requirements at grade c+ for direct intake and D+ or sometimes D- and a post secondary certificate such as P1 certificate. TSC has insisted that all primary school P1 certificate holders pursuing degree courses must attain the minimum university admission requirements of grade C+ thus setting a platform of confrontation between the TSC, the teachers and the universities which has been joined by politicians and teachers' unions. TSC has also insisted that graduates seeking employment as teachers must have two teaching subjects which must have been done at secondary school level and passed with a grade of at least c+ (TSC, 2010, Odebero, 2010, Lengoiboni, 2010). This means that Kenyan KCSE graduates who seek A level education across the borders must meet the minimum requirements for admission for A level studies. They must possess at least a credit in their subject combinations. Surprisingly, KCSE graduates have enrolled for A level education with as low as Mean grade D+ in Ugandan institutions but ended up passing with flying colours. This has put to sharp focus the quality of education offered in Uganda's 7-4-2-3 system of education. This prompted an officer at TSC to query:

'how do you explain a person with grade D in a subject advancing to do it at the university and comes back to Kenya to teach a non suspecting child?' We trusted Ugandan standards of education for a long time but when we saw real failures return with maximum points, we launched investigations, and our fears were confirmed when the graduates could not deliver at all in class. We felt really cheated.'Sic.

Teachers Service Commission (TSC) has also cracked the whip on those taking post graduate diploma in education PGDE. Universities have been advised to reject those without two teaching subjects such as those with basic degrees in forestry, fisheries, engineering, law, etc.

The following questions emerge:

- i) Who should set the minimum university entry requirements?
- ii) Is TSC as a consumer of teacher trainees justified to refuse to employ those who did not score grade C+ in KCSE?

Universities on the other hand have claimed that there is ample evidence of University professors who did not pass their secondary school examination but are now professors. Be that as it may, the following questions need to be interrogated.

- i) Are universities admitting the right material to pursue teacher education?
- ii) What was the score in secondary examination of the professors who failed to gain direct admission into universities and how did they reach their goal?
- iii) Does achievement in secondary school examination have an effect on classroom performance for graduate teachers?

Whatever the crisis that this standoff holds, it is not beyond solution. Most importantly, TSC, CHE and universities must realize that their roles are complimentary to one another, thus the need to sit on a roundtable to bridge their differences as soon as it is humanly possible. As noted by the Minister for Higher education in the stakeholder consultative workshop (Kosgei,2009)

*Universities must view their partners as friends... there must be coordination of primary teacher training and university education as it relates to admission and employability.*

**Matching teacher training with**

### **employability**

It is recommended that in order to achieve the optimum allocation of resources, manpower approach to education planning should be employed by analyzing the market needs of human capital (teachers) and project future needs by qualifications. This can be achieved through ingenious use of employer data based method and the traditional high and middle level manpower survey technique. The ministry of planning can then publish statistics in their website of manpower requirements over a period of say five to ten years that universities can use to train their manpower. Students' enrolment in universities locally and in foreign universities may also be guided by such statistics. Only then will graduates of universities be readily employable.

The demand for manpower can be projected through the employer data based method. This involves employer in every ministry providing statistics of the number required within say 5 years and this is given to the ministry of planning and manpower development. It involves getting the mean aggregate of all the employer manpower requirements by qualifications. The average includes estimates of retirements, deaths, dismissals, voluntary resignations, transfers, study leaves etc. Though with limitations, it is this average that is used to make projections over the country's manpower needs.

### **Conclusions and recommendations**

- i) There is need for a data bank of all the employer manpower requirements for teacher skills. This would facilitate university and college linkages with professional bodies with the ability to employ teachers. This should include the largest

teacher employer such as TSC, MOEST, private sectors and other stakeholders in order to match the skills and knowledge so acquired by the graduates with the market demands.

- ii) The study established that there is disconnect between university teacher training institutional curriculum and the employer requirements by the TSC. It is therefore recommended that TSC should disseminate information regarding teacher education. More dialogue and partnership should also be encouraged between the teacher educators and the employers in order to fill the training gaps.
- iii) High attrition rate is observed among the teachers in Kenyan secondary schools thus losing out on the most experienced of the teachers. The study recommends that TSC should develop a friendlier and rewarding structure in order to benefit from their experience.

In order to maintain quality and professionalism in the teaching profession, teachers and teacher trainees must meet certain set minimum academic and professional qualifications. As universities get motivated by market forces to dilute their minimum entry requirements, CHE and TSC must keep their eyes on quality in order to bring sanity in the profession. Global trends in teacher training, employment and deployment should also be considered in the matching of teacher training and employability.

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