Demand for and Supply of Teachers in Public Junior Secondary Schools in Kwara State

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Abstract

Teachers play indispensable and inevitable roles in the attainment of educational goals. The paper assessed the demand for and supply of teachers in public Junior Secondary schools in Kwara State, and concluded that the imbalances in the demand for and supply of Junior Secondary School teachers in Kwara State had resulted in over utilization of teachers, poor students' academic performance and a high rate of examination malpractice among students and teachers. There was a yearly increase in teachers' demand but it was not commensurate with the number of teachers supplied to the schools. Based on these facts, it was recommended, among others, that the teacher factor in terms of quantity in schools should be periodically evaluated by the State Universal Basic Education Board (SUBEB). The Kwara State Government through the State Universal Basic Education Board (SUBEB) should endeavour to increase the supply of teachers in some core subjects.

Keywords: Demand, Supply, Teachers, Public Junior Secondary schools

Introduction

The teacher as an essential factor for educational development is of prime importance. Despite the fact that human life is subjected to constant structural, functional and technological changes, teachers remain the key factors in the educational system. It has been observed that, most parents and guardians are more concerned with the quality of education given to their children and wards in schools. Quite often, parents show their concern by demanding that the schools teach better. If quality instruction is to be maintained in schools, it becomes imperative to get the school adequately staffed with highly diligent, qualified and well-motivated teachers (Abdulkareem, 1997).

Aghenta (2001) asserted that the social demand approach considered education as a service that was demanded by the people, just like other goods or services. Free education introduced at the primary and secondary school levels aids an increase in the literacy rate of citizens especially in developing nations such as Nigeria. Free education has perhaps led to a considerable expansion in students' enrolment in schools. It has also created a demand for a

more equitable distribution of teachers to schools. It is amazing to note that the increasing enrolment in most of the secondary schools these days does not correspond with the supply of teachers in such schools. It appears that increase in teachers' salaries and better conditions of service are necessary in order to attract and retain the right calibre of teachers in the teaching profession. The perceived low degree which teachers are placed in Nigeria and their poor conditions of service have generated the public slogan: "Teachers' reward is in heaven". Whether this slogan is used in mockery or in sympathy with teachers, it strongly attests to the fact that teachers are possibly not adequately catered for in this country.

To worsen the situation, some school principals force their teachers to teach subjects that are not within their areas of specialization. What obtains in these situations is that such teachers read related books and copy or dictate notes to students. According to the National Policy on Education (2013), teacher education will always to be given a major emphasis in all our educational planning because no education system can rise above the quality of its teacher. The aim of teacher education is to produce personnel equipped with adequate knowledge of subject matter and the teaching skills to teach in our school system.

Many educationists and researchers believe that if quality teachers are adequately supplied and effectively utilized and helped, better students' academic performance and adequate goal realisation may be better achieved. The level of academic performance of students in Junior Secondary Schools in recent times can be attributed to the quality and quantity of serving teachers. Teachers' demand, supply and utilization seemingly have significant roles to play in ensuring a successful implementation of the goals of education, especially at the level of education.

The demand for and supply of teachers have become more critical issues in the educational system, particularly at the secondary school level. Ijaiya (1998) concluded that the supply of teachers in Kwara State Junior Secondary Schools had always been a major problem in the State. High levels of enrolments in schools do not commensurate with the number of teachers supplied to schools and those have led to poor academic performance, absenteeism, drop out, repetition, ineffective utilization of the student-teacher ratio, excessive workload and long working hours of teachers, among others.

The paper was discussed under the following subheadings

- Theoretical Framework
- Concept of a Teacher
- Concept of Demand and Supply
- Demand for Teachers
- Supply of Teachers
- Demand for and Supply of Teachers in Kwara State
- Factors of Demand for and Supply of Teachers
- Implications of Low Supply of Teachers in Kwara State
- Implications on Educational Planning
- Conclusion
- Recommendations

Theoretical Framework

The theoretical framework of this paper was the General Economic Labour Market Theory of Demand and Supply which was propounded by Boardman, Darling-Hammond and Mullin (1982) and Dibbon and Sheppard's (2001) Theory of Globalization on the Demand and Supply of Teachers

The general economic labour market theory of demand and supply which was propounded by Boardman, Darling-Hammond and Mullin (1982) was applied specifically to teacher labour market by several major researchers. It is seen that, both the decisions of prospective teachers to enter the profession and of practising teachers to remain in one school, move to another, or leave the profession are shaped by the balance between the number of teachers available at a given level of compensation and the number of qualified people willing to teach at that level of compensation. Compensation includes not only current and expected salaries, bonuses and benefits, but also all other types of rewards derived from teaching, including intrinsic personal satisfaction (working with children, opportunities to be creative, contributing to society) as well as the benefits of working under certain conditions.

The justification of the economic labour market theory in this paper implies that what governs teachers' decisions in secondary schools and elsewhere to stay, move or leave the profession is the relative attractiveness of their current position compared to all other available positions. The theory therefore, implies that schools which are financially under-resourced might always lose qualified, committed and competent teachers to those with stronger financial muscles. In this regard, this theory also explains the relative attractiveness of a job that influences the extent to which a teacher will be in the supply pool. Once the job loses its relative attractiveness and the teacher probably decides to venture to another school or district, there is a demand to fill the gap generated in such a context so that the supply stays in balance.

Dibbon and Sheppard's (2001) theory of globalization on the demand for and supply of teachers is the driving force behind societal and economic change which includes, among others, changes in teacher supply and demand. Globally, the matter of teacher demand is a complex issue and it increases in complexity when it is considered how it varies by grade, subject area, gender, district, location and population. The variations are facilitated by and are a facilitator of the new technologies that are constantly transforming the workplace, and just about every other aspect of society. The new technologies move schools from traditional resource-based schools to knowledge-based schools where teachers require highly specialized skills such as mathematical and scientific skills. These skills are in demand around the world and the so-called professional teachers have a wide choice as to where they want to work.

The marketability of rare skills professionals has increased the migration of teachers which may have far reaching consequences, especially on the demand for and supply of school teachers. When teachers cross international boundaries, a gap is left that should be filled by someone else. In equal terms, one would assume that globalization might impact on the demand for and supply of teachers in secondary schools. Maree (2009) and Manik (2009) alluded to the fact that globalisation allowed teachers with scarce skills from developing countries to fill gaps in the labour market in developed countries such as Britain and America. To them, globalisation is removing barriers (physical barriers) and sharing and exchanging knowledge and skills among countries. For example, new graduates might be lured into more lucrative opportunities that are available elsewhere in the world.

The justification of the theory of globalization on the demand for and supply of teachers in this paper implies that globalisation has provided some insights to fully understand the nature of the teacher in the labour market and it is no longer adequate to view the situation solely from a local perspective. Globalisation implies the complexities of the demand for and supply of teachers within the discourse of living in an interconnected world which also identifies the

causes of demand for teachers and teacher shortage which, among others, include migration that is brought about as a result of globalization.

Concept of a Teacher

The teacher is the key man in the educational programme, the custodian of whatever ideal and value society expects her children to learn in school. Teachers are persons who provide the tools and environment for learners to develop into responsible adults who will in turn, become productive members of society. Adeyemi (2008) described teachers as key inputs of a highly skilled labour resource which combined with the educational plant and its allied services, produce the educated or at least schooled individual, Akinsolu (2005) opined that the adequate provision of teachers in schools served as the hub and pivot of the educational process.

Bartholomew (1997) described teachers as that critical resource upon which the economic future and development of a nation depended. Afe (2006) viewed the teacher as a person who was instructed to provide the teaching learning process. According to Yasin (1998), the teacher assumes various capacities as educator, instructor, tutor, lecturer, counsellor, and professor. He is the mainstay or prime mover of the educational system. Also, Dike (2002) perceived the teacher as one who had undergone professional training, specialized in a field of study and is employed to bring up and teach the learner (students) for self-development of society and the nation. In his contribution, Bradley (1999) viewed the teacher as one whose profession was to impart knowledge, practical skills and understanding. The teacher imparts knowledge, precepts, and experiences, and guides learners/students through their studies which are principally directed at getting them to think for themselves. In line with this, Adeyemi (2011) defined the teacher as "a person directly engaged in instructing a group of pupils (students). He advised that heads of educational institutions, supervisors and other personnel should be counted as teachers only when they had regular teaching functions.

Teachers are important inputs in the educational systems. They are the key factor in formal education, the hubs of the educational system. Teachers therefore, constitute an important aspect in student learning, as the level of performance in any school is intimately related to the quality and quantity of the teachers. Teachers are the principal determinants of change and progress in the educational industry. Ilechukwu (2011) opined that the teacher was a critical resource person for the effective implementation and realization of the educational policies and objectives at the practical level of the classroom. According to Omojunwa (2007), it is the teacher who, ultimately, interprets and implements the policy as represented in the school curriculum which is designed to actualize educational goals. The obvious implication is that the quality of a nation's education can only be as high as the quality of its teachers. Effanga (2001) stated that teachers established effective classroom climate, student motivation, management of materials and supply physical conditions for instruction and use of time, routines and monitoring system in the classroom for effective instruction.

The teacher holds the key to national building. The aspiration of any nation to transform into a great country can only be possible if there are competent and dedicated teachers to impart the appropriate knowledge, attitude and skills in students. Lassa (2005) noted that without good teachers, there would not be good engineers, medical doctors, accountants, scientists, politicians, priests/ pastors, imams, and others. Learning cannot and does not occur without teachers since children and variety of learning services. So, according to Ibadin (2010), a teacher is still needed to guide the learners, diagnose a learner's need, guide him, answer learners' specific questions, encourage learners when learners need personal attention and encouragement, assist learners at

the right time, listen to ideas, feeling and help learners to develop healthy attitude, interact with learners, and make learners feel wanted and accepted as a person who values himself and others.

Concepts of Demand and Supply

Demand is the rate at which consumers want to buy a product. Economic theory holds that demand consists of two factors: taste and ability to buy. Taste, which is the desire for a product, determines the willingness to buy the product at a specific price. Ability to buy means that to buy a product at a specific price, an individual must possess sufficient wealth or income. When the market price for a product is high, the demand will be low and when the price is low, the demand will be high. So, many consumers will be able to purchase a product at very low prices. However, people usually want only so much of a product.

Demand is the term that economists use to refer to what people are willing and able to buy. Demand needs to be investigated for two reasons. First, demand places strict limits on the behaviour of business firms: firms cannot do whatever they like but they are limited by consumers' demand. Firms in capitalism cannot sell as much as they want at whatever price they want. They are constrained by what people in "the market" want to buy. For instance, if the price is too high, few people will likely be interested in buying the product. To get more people to buy the product, the firm will have to lower the price it charges. Demand for commodity implies the desire to acquire, and the willingness and ability to pay for it.

Supply refers to the willingness and ability of manufacturers to provide goods that are demanded by consumers. At higher prices, more of the commodity may be produced by the producers in order to make more profit. In a real market, when the inventory is less than the desired inventory, manufacturers may raise both the supply of their product and its price. The short-term increase in supply causes manufacturing costs to rise. This leads to a further increase in price. The price change in turn increases the desired rate of production. A similar effect occurs if inventory is too high. Supply is defined as how much of goods or services are offered at each price (Afolabi, 2000).

Demand for Teachers

Demand as a basic concept in Economics is described as the quantity of goods required at a given price during a certain period. Yakubu (2000) posited that demand was the willingness of consumers to buy particular goods. The most important factor influencing the consumers buying decision is the price of the product. The demand for a particular product would be higher if its price is lower than the other related products. Therefore, the price of a product and the quantity demanded are inversely related to each other.

Mereka (2000) stated that the demand for teachers could not be easily and adequately defined as the demand for other types of labour required in industries. Mereka (2000) defined teacher demand as the number of qualified and trained teachers necessary to produce a certain specific output from an educational system. In other words, without the provision of teachers of a certain number and description, the output targets of an educational system cannot be achieved. Also demand for teachers refers to the number of teachers who are required in schools according to the recommended teacher-student ratio even when they are not supplied. Odu (2009) asserted that when the law of demand was applied to teacher demand, the higher the wages or salaries, the more willing, teachers offered their services and the less willing employers could demand for the services of teachers. Demand for teacher refers to the quality and quantity of teachers needed by an educational system over a given period (academic year) and location (urban or and rural) in

order to attain the stated educational goals and objectives. The demand for teachers in the school system is influenced by a number of factors. The main determinants of teacher demand are the number of teachers who leave the system through retirements, retrenchments, deaths, illnesses and transfer. Therefore, there is the need to replace them. Also, an increase in learners' enrolment brings about a demand for teachers.

Other factors that influence teacher demand include class size, teaching workload and required learning time for learners. Three other measures which are less likely to be used to determine the demand for teachers are the structure of the curriculum and educational programmes, the ending age of compulsory education and the academic standards defining graduation requirements (Lassa, 2000). In secondary schools, the variables which influence the demand for teachers are the student-teacher ratio, the number of learning areas and/or subjects in the curriculum offered by the schools, the areas of specialization and the number of hours per day that teachers teach. The demand for teachers can only be met if there is adequate supply of teachers. Teacher demand is an annual occurrence in many Nigerian secondary schools. Notwithstanding the importance given to teachers in the school system, it was noticed that teacher shortage is a common feature in many countries. Nwadian (1995) and Aghenta (2011) supported the view that teachers were almost always in short supply in schools and their turnover rate was high because they tended to leave the teaching profession if and when more attractive jobs became available in government, politics or private enterprises.

Conclusively, the factors affecting the demand for teachers in secondary schools include: an increase in students' enrolments (the major determinant), student - teacher ratio, the range of subjects taught, school population, class size ,number of periods per week and the size distribution of the class, teachers' retirement, teachers' attrition, immigration rate, and government policy among others.

Supply of Teachers

The term supply, was defined by Andrew in Afolabi (2000) as the quantity of that commodity the supplier wishes to bring to the market for sale at a given time and at a particular price. Supply is the amount of goods and services that is made available in the market at a given price. Supply is the total number of goods that can be bought at a given price and at a particular time. Ingersoll (2003) described supply as the quantity of a commodity that a seller offered for sale or wished to sell at a given price in a period of time and in a particular place. Supply, as a concept in Economics, has been described as the quantity of a commodity that is called into the market over a particular period of time at specific prices (Kayode, 2011). An increase in supply tends to hike the price and a decrease in the quantity demanded. Conversely, a decrease in supply causes a fall in price and consequently, a reduction in the quantity demanded. Nwadiani (1995) agreed that the period of training teachers takes a long time, it becomes difficult, for market forces to provide immediate solution to the supply of teachers.

It may be deduced from the above that the concept of supply refers to those commodities which the producers are willing, ready and able to offer for sale in a given period of time. It is also important to note that the amount of a commodity which a seller offers for sale varies from one period to another. This may also be determined by many factors such as a change in the price of the commodity, improved technology, a change in the cost of production and government policies. Teachers as an embodiment of the labour force supply their services for the production of economic goods and services (teaching) in the labour market. Olatoun (2011) stated that the labour market was an arrangement whereby the producers and the potential workers were

brought into close contact with one another for the purpose of hiring and offering labour services for productive purposes. The interaction of demand and supply in the labour market influences the wages or salary levels. When this is related to education, the labour market for teachers is the educational system or school system. According to Dooley (1999), teachers are crucial to the education system in the country because schools cannot be better than their teachers. With this assertion, it can be concluded that even in the current electronic age, teachers still constitute a vital factor in the educational system because school efficiency and effectiveness was hinged on their supply and quality. Afolabi (2003) described the supply of teachers as the quantity of qualified and competent teachers that is desired to take up the teaching job at a particular time and at specified wages. Dike (2002) believed that the supply of teachers referred to the available quality and quantity of teachers to be recruited to fill vacancies as well as the mechanisms to retain all the recruited teachers.

Ingersoll (2007) noted that the supply of teachers referred to the quality and quantity of qualified teachers which the various training institutions of learning, that is secondary schools, polytechnics, colleges of education and university faculties of education were able to turn out for the labour market over a period of time. Ibadin (2010) posited while examining the supply of teachers in secondary schools that the current economic problem in the country had worsened the problem of teacher supply. The problem of teacher supply is not concerned with mere numbers but essentially with the quantity necessary for effective utilization. Ali (2004) revealed that the percentage increase in yearly enrolments of students was greater than the percentage increase in teacher supply in the educational sector. Andrew (1990) opined that attention should, therefore, be focused on the supply of quality teachers for primary/secondary school education who would be able to teach and equip our children with the opportunities they needed to optimize their potentials and contribute to the growth and development of society and humanity.

According to Kerre (1999), teacher supply is influenced by curriculum policy, policy on teacher education, gender and the social and economic environments in which young people find themselves as they make study and career decisions. Some factors which affect the supply of teachers include lack of adequate supply of teachers from the source of production, (educational institution), poor wages, lack of incentives and charges in educational polices (Agabi, 1999). Notwithstanding, as far as the supply of qualified teachers is concerned, the salary to be paid each teacher represents the price at which the offer of appointment is made; and these salaries are crucial in determining the extent of supply of qualified teachers (Ogunsaju, 2004). In relating the concept of supply to education, Babalola (2003) argued that prices such as salaries (the price of labour) were determined in the same way as the prices of goods. However, in view of the fact that the period training of teachers takes a very long time, it becomes difficult for market forces to provide an immediate solution to the supply of teachers. In Nigeria, teachers are mostly found to be poorly paid and inadequately motivated. These may translate to teacher absenteeism, lukewarm classroom practices, frustration, decline in professional standards, militancy and early departure from the teaching profession. Owolabi (2007) summarized the major reasons for absenteeism to include absolute low salaries so that teachers had to hold other jobs to supplement their allowances;, lower salaries than those of workers in other fields, poor working conditions, scarce opportunities for professional advancement, and deficient local supervision, authority and administrative procedures.

Demand for and Supply of Teachers in Kwara State

The supply of teachers in Kwara State secondary schools has always been a major problem. The current economic downturn in the country appears to have worsened the situation. It has been observed that students' enrolment increases every academic session (Ijaiya, 1998). Nwankwo (1999) viewed educational wastage as inadequate utilization of teachers which resulted in school dropouts, repeaters, premature withdrawals and misguided types of education. Teacher utilization production cannot be effectively achieved if people do not embrace the profession with maximum interest and the zeal to put in their best. Ciwar (2004) observed that there had been a massive brain drain of professional teachers in Nigeria such that only those who could not get better jobs stayed on while new entrants assumed that the best of the best had moved on and the remnants left were the second best. Also, the profession seems to be an all comers' field because many people who are not trained teachers easily get employed.

The teacher is charged with the responsibility of transforming the nation's education programme into reality. Hence, the teacher factors in terms of quantity, quality and utilization in our educational programme need to be periodically evaluated.

In Kwara State, the demand for teachers increased abysmally with the introduction of free and compulsory primary and secondary education in May, 1999. It probably affected the quality of education at these levels. The Kwara State Government Education Review Committee (2007) observed that the standard of secondary education had been watered down in the State as a result of inadequate resources in the sector. It is known that there is a student ratio in both primary and secondary schools in the state. Just like other commodities or services, the demand for and supply of teachers in any society are largely determined by many market forces. Since most education services are publicly provided, the demand for and supply of teachers are determined largely by the political process and national or state economic growth. This might be the reason why some schools have adequate teachers and others lag behind.

Table 1: Demand for and Supply of Teachers in Kwara State from 2012 to 2016

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Years	Teacher Demand	Teacher Supply	Difference	Percentage of Teachers
				Supplied to Demand
2012	311	86	225	27.7
2013	256	57	199	22.3
2014	322	62	260	19.3
2015	350	70	280	20.0
2016	398	62	333	15.6

Source: Kwara State School Census Report (2015-2016)

Table 1 showed the demand and supply of teachers in Kwara State from 2012 to 2016. The teachers demanded for in 2012 were 311 while the corresponding teachers supplied were 86. That showed a difference of 225. This implies that 27.7% of teachers were supplied to schools. In 2015, teachers demanded for were 350 while the corresponding teachers supplied were 70. It showed a difference of 280 which indicated that the percentage of teachers supplied to the schools was 20%. In 2016, 15.6% of teachers was supplied to the schools. The Table further showed that there was an increase in teacher demand every year. Unfortunately, there was gross inadequacy in the supply of teachers. It meant that the percentage of teachers supplied to the schools was on the decrease in the years in focus. However, the percentages for the demanded for teachers increased steadily.

Factors of Demand for and Supply of Teachers

Some factors that are specifically attributed to inadequacy in teacher supply in schools include the following;

- The enrolment rate of pre-service student teachers
- New graduates
- Learning area /choice of student teachers
- The graduating number
- Personnel retained from the previous year.

Pre-service Student Teacher Enrolment: Student enrolment into teacher education helps to promote the supply of teachers. Several factors are attributed to the trend of low enrolment such as lack of bursary support, teachers discouraging learners from taking up the profession, perceived lack of discipline in schools, unattractive salaries and increased opportunities in other fields. Hurwitz and Hurwitz (2005) stated that an increase in teachers' salaries could help in retaining teachers and curbing and curb teacher shortage. Increase in salary will certainly increase the teaching pool, as they will attract more young college graduates to the profession.

New Graduates: The places at where new graduates prefer to work matter when analysing teacher supply and demand. Some may go for further studies, some graduates will move to the industrial sector, others may migrate to other countries in search of a better life while others may join other professions, especially if the pay is relatively better (Kings, 2003 & Dolton, 2003). According to Steiner and Schiller (2003), the supply of teachers is greatly influenced by the number of graduates that finally goes in for teaching.

Learning Area /Choice of Student Teachers: There are many differing teaching subjects in secondary schools that student teachers specialize in. These subjects include Mathematics, Biology, English Language, History, Physics, English Literature, among others. Most student teachers go for other subjects (History, Languages and technology) rather than Mathematics (Brown & Peters, 2001).

The Number of Graduates: Teacher supply has also been adversely affected by the drop in the number of student teachers in the last decade. Consequently, fewer graduates have entered the teaching profession in the last decade.

Implications of Low Supply of Teachers in Kwara State

Observations confirmed that in all levels of education in Nigeria, there is student population explosion. However, as student population increases yearly, the percentage of teacher recruitment seems to dwindle. Therefore, the effect of the low supply of teachers on Junior Secondary Schools in Kwara State include the following (Ali, 2004).

Low academic performance of students: Students will not perform well in both internal and external examinations and it leads to examination malpractice.

Over utilization of teachers: Some teachers may be over utilised because of acute shortage of teachers. Overutilization is an important cause of work stress.

Indiscipline among students: The low supply of teachers results in severe cases of gross indiscipline in schools

Truancy among students: This occurs because the few teachers may be over whelmed by the large population of students.

Lack of school management control: It may happen as a result of the shortage of teachers. Therefore, the school management will not be effective and efficient.

Implications for Educational Planning

Educational planners should ensure that the baseline for teacher supply and demand in the State is effectively and efficiently considered. This will greatly assist addressing any shortfall in respect of teachers' utilization in public Junior Secondary Schools. The shortage of qualified and competent subject teachers may affect the students when they get to senior classes. Another implication is that the shortage of teacher supply to Junior Secondary Schools may lead to a high rate of dropouts, ineffective utilization of the student-teacher ratio, excessive workload of teachers, low standard of education, work stress, among others.

Conclusion

The imbalances in the demand for and supply of Junior Secondary School teachers in Kwara State had resulted in over utilization of teachers, poor students' academic performance and a high rate of examination malpractices among students and teachers. These factors did not promote quality education in junior secondary schools in Kwara State. However, basic infrastructures such as classrooms, laboratories and libraries were not provided adequately and these affected teaching and learning process. Also, salaries and allowances of teachers were not paid as when due. Those were challenges in getting adequate qualified and competent subject teachers in the schools.

Recommendations

The following recommendations were put forward.

- Teacher factor in terms of quantity in schools should be periodically evaluated by the State Universal Basic Education Board (SUBEB)
- Kwara State government through the State Universal Basic Education Board (SUBEB) should endeavour to increase the supply of teachers in some core subjects.
- Teachers should be supplied to schools by the State Universal Basic Education Board (SUBEB) based on the principals' request and critical areas of need in the schools rather than principal's influence and political affiliation.
- All educational stakeholders, particularly the State Ministry of Education and Parent Teacher Association, should strive to improve the conditions of service and the standard of living of teachers, and ensure that teachers' salaries are paid as when due.

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