

Teachers' demand and supply for effective junior secondary school administration in Rivers State from 2017 – 2021

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ABSTRACT: This paper investigated teachers' demand and supply for effective secondary school's administration in Rivers state. Two research questions guided the study. Descriptive survey design was adopted for the study. The population of the study was 230 UBE Board Staff of Rivers State. The sample of the study was 115 staff of UBE Board drawn from the population using simple random sampling technique which represents 50% of the staff. The instrument for the data collection was document analysis (Teacher's data). The percentage of teachers demand and supply was used in answering the question. The findings revealed that there are shortages of teachers in the junior secondary schools in Rivers State. Based on the findings, the study recommends among others, that government should recruit more qualified teachers to correspond with the increased in students' enrollment. Conclusively, teachers' welfare package should be made more attractive to motivate teachers and to encourage young graduates to join the teaching profession.

Keywords: Administration, demand, secondary school, supply, teachers.

INTRODUCTION

Teachers are the most crucial tools for enhancement of effective teaching and learning process in the school's system. They are the curriculum implementers. They ensure the goals and objectives of education are achieved. Teachers' are characters builders, without them formal education cannot be achieved. Therefore, teachers supply is considered absolutely germane in the school system.

The demand for teachers in public secondary schools in Rivers state have been on an increase over the years, due to the awareness of education role as a key to national and individual development. This has made most parents all over the world to enroll their children and wards in one school or the other according to their age. In Nigeria, Rivers State in particular public secondary schools have received a rapid increase in enrollment rate due to this awareness, economic recession and compulsory UBE

programme which aim at eradicating illiteracy in the country.

As the population of the students keeps increasing so does the demand for teachers increases. The students' teacher ratio of 1:35 as recommended in FRN (NPE, 2014) is currently been abused in most of the public secondary schools in Nigeria, with what they are facing in terms of number of students in the class. This means that a teacher is facing more than 35 students as recommended per teacher in a class. Teachers are been face with overcrowded classrooms which can frustrate the teaching and learning process. The teacher can use almost half of the period allotted for the lesson in calming the noise in the classroom due to over population. The classroom condition is not conducive for teaching and learning process, and teacher are compelled to teach in this kind of

classroom that is overcrowded with more than one hundred and fifty (150) students especially in urban schools. Kpee (2013) and Agabi *et al.* (2013) cited in Agabi (2018) posited that teaching is enhanced when teacher teach with relevant resources in classroom environment that is conducive for teaching and learning. They all agreed to the general notion that all manner of social vices such as; examination malpractice, drug abuse, lesbianism, cultism, addiction and so on, are promoted in a classroom that students are not space out and where teachers are overburdened with a very high student teacher ratio.

Following the realization of education role as the key to national and individual development, the demand for education is on the increase. As the student's enrollment is increasing so as the demand for teachers. Therefore, teachers supply is considered absolutely germane in the educational system. This is why the Rivers State Government during the Rotimi Chibuike Amaechi regime deems it necessary to adequately supply teachers to public schools in 2013. During this period 13,000 teachers were recruited into the educational system. Despite this massive recruitment of teachers in 2013 teachers are still insufficient in some subject area. Teachers are professionally trained personnel who help the students to acquire knowledge in schools. They play a significant role in building the life of the students, by imparting knowledge into them, without the teacher there will be no organized formal education. There is no educational system that can rise above the level of its teaching staff. This statement has proven the key function teachers play in any society.

Fufunwa (1972) cited in Fareo (2015) posited that services of the teacher to a nation are more than any other human resources influence the lives of Nigerian youth and the nation future. This implies that teachers play a vital role in the life of the students; they educate the students and mold their characters to become a better person in future that can contribute meaningfully to the society. Aggwal (1981) cited in Fareo (2015) stated that the destiny of a nation is shaped in its classrooms and is the teacher who is very important in molding the destiny of the nation. This means that teacher play a crucial role in national development.

Statement of the problem

In Rivers State there has been an increased in demand for teachers over the years due to the rapid increased in student's enrollment rate in the state. The compulsory UBE programs, economic recession and education role has made most parents to enroll their children and wards in public schools on the notion that education is free. They even go as far as withdrawing those that were in private schools to public schools. As such, over populating the public school system with this influx of students, and there are no corresponding infrastructures put in place to tackle

this increased. As the student's population is increasing so is the teachers work load and the demand for more teachers. This situation if not properly handled can cause a setback in the quality of education in Rivers State. Therefore, this study examines the percentage of teacher's demand and percentage of teachers supply in public junior secondary schools in Rivers State.

Aim and objectives of the study

The purpose of this study was to examine the teachers' demand and teachers' supply for effective administration of secondary schools in Rivers State. Especially, the objectives of this study are to:

1. Determine the percentage of teachers demand for effective secondary school administration in Rivers State from 2017 to 2021 Academic sessions.
2. Determine the percentage of teachers for supply effective secondary school administration in Rivers State from 2017 to 2021 Academic sessions.

Research questions

The following research questions guided the study;

1. What is the percentage of teachers demand for effective secondary school administration in Rivers State from 2017 to 2021 academic session?
2. What is the percentage of teachers supply for effective secondary school administration in Rivers State from 2017 to 2021 Academic session?

Conceptual clarification

Teacher

A teacher is someone who plays a vital role in shaping and molding the character of the students, by imparting knowledge, value and skills into the students to become a better person in the future who can contribute meaningfully in the society. Teachers are necessary tools in educational system that plays a vital role in the implementation of educational goals and objectives. They bring about transformation in the lives of the students. According to (TRCN) handbook (FRN, 2011), a teacher is someone who have undergone approved professional training in education at appropriate level and capable of imparting knowledge, attitude and skills to the learner. Teachers are professionally trained personnel who help the students to acquire knowledge in school. Radhika (2018) posited that teachers are the most important element in the educational programme. According to him, teachers are responsible

for putting into practice the educational programme at any stage. Teachers are referred to the individual's or personnel or workforce within an organization responsible for performing the tasks given to them for the purpose of achieving the goals and objectives of the organization which is possible only through proper orientation and induction, training, skill development, proper assessment of employees performance appraisal providing appropriate compensation and benefits (Owens, 2001).

Demand

Demand simply connotes the ability and desire to purchase goods services and willingness to pay a specific price for them (Investopedia Team, 2022). Demand in economics terms is the quantities of goods and services that consumers are willing and able to purchase at different prices during a given period of time (Business Standard, 2021). To Nwankwo (1981) cited in Adeyemi (2009) described demand as the quantity of goods required at a given price at a certain time. The higher the price of the goods, the lesser the quantity demanded. When the demand increases the price of the goods rises and the quantity to the market also increases. The law of demand according to Adams (1976) posited that consumers are willing to purchase more units at a lower price than at a higher price. He noted the relationship between price and quantity demand is inverse and so widely observed that it is called the law of demand. Onwuka (2010) defined demand as the quantity of goods or services that government is willing to buy or pay for at any given time, he dealt extensively on the willingness to buy which is backed up by the ability to pay for such goods or services. According to Bradley (1999) cited in Ayedemi (2009), there is a relationship between the economic meaning of demand and the demand in education. The rapid growth in student's enrolment has cause the demand for teachers to be on the high side. Demand and supply is perhaps one of the most fundamental concepts of economics and it is the backbone of a market economy (Adams, 1976). Demand refers to having much quantity of a product or services desired by buyers. The quantity demanded is the amount of a product people are willing to buy at a certain price; the relationship between price and quantity demanded is known as the demand relationship.

Supply

This refers to the amount of goods and services the producer offers to the market and able to sell when given a certain price. The concept of supply is fundamental to economic theory. Supply refers to the quantity of goods a producer is willing and able to sell at a specific price (Sujata, 2019). The law of supply states that all other

factors remaining constant, the higher the price of a product, the larger the quantity supplied. If the firm insensitive to price changes the supply will be inelastic. Supply represents how much the market can offer. The quantity supplied refers to the amount of a certain goods or services the producers are willing to supply when receiving a certain price. Alfred (2002) cited in Investopedia Team (2023) stated that the price is a reflection of supply and demand, and that the relationship between demand and supply underlie the forces behind the allocation of resources.

THEORETICAL FRAMEWORK

The theoretical framework for this study is based on the principle of social demand approach to educational planning propounded by Harman (1968) which stated that the social demand approach attempts to forecast the consumer demand for education at various future times. The approach requires educational authorities to provide the necessary facilities to meet up the demand of students' enrollment. According to Resnik (2006), social demand approach assumes that the objective of policy is to provide a supply of facilities corresponding with the estimated demand for educational services. Agabi (2012) posited that social demand approach is an empirical approach of forecasting the societies demand for education (social demand) as well as estimating the resource requirement for satisfying such demand. Using this approach, educational planners will be able to forecast the trends in the demand for teachers in a society and then project into the requirement to satisfy such demand.

Demand and supply of teachers

The demand for teachers arises where the number of available teachers is not equal to the number of teachers required by the education system (Stinbrick, 2001). The major factors of teachers' demand include: the range of subject taught, the students teachers ratio, the number of classes in the school, class size, number of periods per teacher per week, teaching methods and size distribution of schools (Sheehan,1973; Yasin, 1999 as cited in Adeyemi, 2011). From the economic perspective, the demand for teachers is a function of price for the purchase of teachers' services and indicates the numbers of teachers the government or firm is willing to purchase at a particular price. This economic definition also means that potential teachers may stay out of the teaching market, if the current prices the government or firm is willing to pay are below teachers' reservation price thereby increasing the demand (Enaohwo, 1990). He also recognized the explosive enrollment in Nigeria educational system which provides the basis for estimating requirements for

teachers in future. Demand for teachers has continued to increase over the years. To Williams (1975), the factors that influence the demand for teachers include development of the teaching force arising from growth or decline in enrolment or changes in the way teachers are used in the education sectors. He further maintained that even where there is no development demand and special replacement demand programs, it is important to recruit teachers, maintain and renew the stock. This will provide solution to the attendant problem of death, retirement and resignation. Okeke (1985) opined that the demand for teachers is of great relevance and is strictly determined not only by the number of learners to be enrolled but the school leaving age, class size, number and type of subject taught, method of teaching load.

Teachers demand

This entails the total number of teachers that is required, needed or desired to be purchased in the school system. The national demand for public school teachers is defined operationally and in the aggregate, as the total number of teaching positions funded by the government and the number that government is able and willing to employ at a given time (Erling *et al.*, 1992). Total demand thus defined is the end result of a number of considerations leading to the establishment of teaching positions. The main factors determining teacher demand in any particular year are the number of students enrolled in public schools policies pertaining to curriculum and teacher pupil ratio, prior commitments to employ teachers, government funding capacity and the prices that must be paid for various types and qualities of teachers (Erling and Gilford, 1992). Teacher demand is on the increase as students' enrollment raises.

Teachers supply

This is the total number of teachers that are available for effective teaching in the school system. According to Agabi (2018), teachers supply refers to as the total number of teachers that are available in school for any particular level of education. It is the total number of teachers that are available for education programme at any level of education irrespective of area of specialization. The adequacy or inadequacy of any supply of teachers is measured in terms of enrollment size and demand for teachers. Teachers supply is considered adequate if it meets the statutory pupil teacher ratio and the demand for teachers at any particular level of education. It is considered inadequate for any particular education programme if pupil teacher ratio exceeds the statutory requirement for that particular education programme and level.

Administration

This is the management of human and resources in an organization, office, business or institution towards the achievement of a common goal and objectives. It is the process or act of running an organization, enterprise, office or government to accomplish set objectives. It involves the implementation of policies, creation of rules and regulations, making of decisions and directing activities towards a common goal. Theo Haimann cited in Viandita (2022) defined administration as the overall determination of policies, setting of major objectives, identification of general purposes, and laying down of broad programs and projects. McCanny cited in Nwanisobi *et al.* (2020) stated that administration is the organization and use of men and material to accomplish purpose.

The contemporary trend in teachers supply

In the contemporary schools in Nigeria there exist two strata of teachers in the education system. The professional teachers and the non-trained teachers, they are both employed into the educational system. The professional teachers are those who have undergone approved professional training in education at appropriate level and capable of imparting knowledge, attitude and skills to the learner (TRCN) Handbook (FRN, 2011). The non-trained teachers are graduates of other fields of training who take up teaching career in the absence of employment in their area of specialization (Agabi, 2018). According to Adieze (1986) cited in Gimah (2022), the non-professional teachers in teaching profession are those killing the profession because they are not really teachers. Adieze further regarded them as bird of passage that create unnecessary vacuum whenever they found opportunities in their area of specialization. Meanwhile, Okeke (2004) cited in Agabi (2018) described the non-professional teachers in the teaching profession as quacks. He said that the existence of the quacks is not peculiar to teaching profession since other noble service professions like medical and legal professions also have a fair share of quacks. The quacks exist to bridge the gap between the demand and the supply for personnel with professional training in these noble fields. The existence of non-trained teachers in the school system is an indication of insufficiency in the supply of teachers.

The general lack of interest by qualified graduate teachers to seek employment in the teaching field due to teachers' poor condition of service has contributed to teachers' shortage in the school system. Therefore, there is a paucity of accurate statistics on the available supply of professionally trained teachers in Nigeria's educational system. Since most trained teachers are yet to be registered with the professional body, Teachers' Registration Council of Nigeria (TRCN) and the existence

of the non-trained teachers have made it difficult to follow the trend of teachers supply in Nigeria.

Class size and teachers job satisfaction

The size of the class is a crucial aspect of a teacher job, a larger class size frustrates the effort of the teacher in the class. The Teacher can use half of the period allotted for the lesson in calming down the noise in the larger class. A larger class size is a hindrance to effective teaching and learning. Class size is the number of students in a teacher's class. To Munoz and Porte (2000), class size is defined as how many students are in a teacher's class.

Organizations for Economic Coordination Development (OECD, 2002) posited that class size is the average number of students per class, calculated by dividing the number of students enrolled by the number of classes. Abakpa cited in Akinyemi (2022) posited that the commission has discovered that the teacher- student ratio is very high with a teacher handling so many students more than they could effectively teach because of the acute shortage of teachers in the system. He further said that Nigeria has a shortage of 277,537 teachers at the basic level.

Job satisfaction is an effective reaction to an individuals' work situation, in terms of an overall feeling or in terms of feeling about specific aspects (e.g. compensation, autonomy, coworkers); it can also be related to specific outcomes such as productivity (Rice *et al.*, 1991). To Zembylas and Papanastasiou (2004), job satisfaction is the relationships between teachers and their teaching. In other words, teachers could affect classroom management and solve many problems of the schools, if they retained good Inter-personal relations with students, parents, their colleagues and their principal (Henkey *et al.*, 1996; Whiteford, 1990). There are several factors that contribute to teacher job satisfaction levels, such as school culture, school size, communication with school leaders, parents and colleagues equipment and facilities; students' performance and abilities, professional treatment among others (Nganzi, 2014). Job satisfaction is a universal phenomenon. Most of the expectations of workers somewhat correlate worldwide, although there are divergent differences due to sociological, political and cultural backgrounds. However, there similar expected aspects from a job from all global workers, such as good pay, good environment, recognition, promotion and respecting their human rights (Heywood *et al.*, 2008). On the other hand, job satisfaction is a desired commodity worldwide. Morgan and O'leary (2004) stated that "there is growing body of evidence that when teachers feel good about their work, pupil achievement improves".

When a teacher teaches a small class size, the work load reduces. There is a less behavioral problem in the class as the teacher will be able to manage the class. The

fewer the students implies, the fewer paper to mark, fewer paper to grade, fewer students to discipline, fewer attendance to take. A small class size provides a teacher with personal job satisfaction. In a small class size, the teacher will be able to move round the class to ascertain students' activities while the lesson is going on to ensure they all understood the lesson. Seeing the students performing well in the class makes the teacher feels better and satisfied that their effort is not in vain.

A small class size stimulates teaching and learning. Meanwhile, a large class size frustrates teachers' effort and increases teachers' work load. When teachers have large class size, they feel less successful and must pay attention to students who are not only diverse learners but whose needs are also greater. Larger class size increases teacher work load and decrease opportunities for differentiation or individualize instruction, the less the time that teacher can devote to each child unique needs (Jenna, 2008).

Rising enrolment and falling teacher student ratio

In Nigeria, the national policy on education recommends a pupil-teacher ratio for all the levels of education. The Table 1 illustrates the pupil-teacher ratio. This recommendation is based on adequate supply of teachers into the school system. It is phenomenal that teachers are so crucial for the success of the education enterprise, so their supply should be given adequate attention in order to be available in their right quality and quantity in schools. In other words, no education system can rise above the quality of its teachers (FRN, 2004). By the above recommendation of students' teachers' ratio, it is assumed that classrooms are designed based on the stipulated number of students.

Unfortunately, the contemporary classrooms are overpopulated with more than the number of students recommended to be in a class per teacher in junior secondary schools in Nigeria, Rivers State in particular. The junior secondary schools currently have a minimum of one hundred and fifty (150) students in a class that was recommended for 35 students per teacher, due to the rising enrolment of students. Government at this point are required to recruit more qualified teachers to tackle this increase by decongesting the overcrowding in the existing classroom into smaller classes. This increase in enrolment has made the existing facilities insufficient as the numbers of students are increasing so as the demand for teachers and infrastructures are increasing.

Adeogun (2006) noticed high student teacher ratio in most public schools. The high student teacher ratio noticed in the public schools is as a result of non-recruitment of additional teachers into the system to tackle the sporadic explosion in students' enrolments and the inadequate supply of infrastructural facilities which has in turn have a negative effect on the quality of education. According to

Table 1. Technical and vocational education and training

Education Level	Pupil-Teacher Ratio
Crèche	1 : 10
Pre-Primary	1 : 25
Primary	1 : 35
Junior Secondary	1 : 35
Senior Secondary	1 : 40
TVET	1 : 20

Source: National policy on education, 6th edition (FRN, 2014).

the Executive Secretary National Secondary Education Commission, Abakpa cited in Akinyemi (2022), the commission has discovered that the teacher-student ratio is also very high with a teacher handling so many students more than they could effectively teach because of the acute shortage of teachers in the system. He further said that Nigeria has a shortage of 277,537 teachers at the basic level, according to the 2018 National personnel Audit conducted on public and private Basic Education (UBEC). The teachers' shortage was also noted by the students of Olanada Secondary School in Port Harcourt, Rivers State, who went on a peaceful protest on 17th February, 2021. Pleading that the State Government should recruit more teachers to fill in the vacant space left by the retirees' teachers, in order for them to teach all the subjects (Olukomaiya, 2021). Teachers' inadequacy is a known fact in Nigerian schools. Adeyemi (2009) reported that the supply of qualified teachers to Ondo State secondary school did not match with the demand for them. Agabi, (2018) posited that there is a general lack of interest in the teaching profession by prospective tertiary education candidates as well as the unwillingness of graduate teachers to seek employment in the school system contribute to the factors of teachers' shortage in the school system.

Issues facing the quality of teachers' employed

Lack of promotion

The issue of promotion is a very big challenge facing the teachers in public schools in Nigeria, Rivers State in particular. Teachers pay is very poor as they do not get promotion as at when due compare to other public workers. For over ten years, teachers have been stagnant on one position, as the government of the state have not conducted another promotion interview for teachers' neither implement the last one done in 2010. Someone who was employed on a particular grade level, if care is not taking will retire at the same level if nothing is done. Teachers have over the years been agitating for the implementation of last promotion which was conducted a decade ago, payment of promotion arrears and conduction of fresh promotion since they are overdue for a double

promotion. All to no avail as the Government has not yielded to the teachers' request. Adelabu (2005) noted that teachers often experience irregular promotion, low pay package (when compared to other public workers), poor societal perception of the job and many more which has dampened the morale of teachers.

Unfavorable environment and insufficient facility

The classroom environment is not conducive for teaching and learning process as it is overcrowded. This means teachers are facing more than 35 students as recommended per teacher in a class by FRN (2014). In fact, some schools have 150 and above in a small airless class and teachers are been compelled to teach in this condition. The overcrowding can frustrate teaching and learning process, as the teacher can use half of the period allotted for the lesson in calming the noise distractions in the class especially the periods after break. In some schools, the staff rooms and classrooms are in a bad shape. The school physical facilities such as building, laboratories, libraries, classrooms, furniture and fittings and other instructional facilities are inadequate in the schools, the once available are dilapidated. This over populated and over utilized classrooms were noted by Kpee (2013) and Agabi et al. (2013), in Agabi (2018) that teaching is enhanced when teachers teach with relevant resources in classroom environment that is conducive for teaching and learning. They all agree to the general notion that examination malpractice and all manner of social vices are promoted in a classroom that students are not spaced out and where teachers are overburdened with a very high teacher student's ratio.

METHODOLOGY

The study adopted descriptive survey design. The population of this study comprised all the 230 staff of UBE Board. The sample of the study was one hundred and fifteen (115) UBE Staff. A simple random sampling technique was used to draw the sample. The instrument for data collection was document analysis (teachers' data). The researcher works on the assumption that the documents were products of face and content validity. The confirmation of the documents from a senior staff establishes the reliability of the instrument. Percentage was used in answering the Research questions.

RESULTS

The results of this study were presented in Tables 2 to 9 in line with the Research Questions 1 and 2. Table 2 assessed the percentage of teachers demand for effective secondary school administration in Rivers State in

Table 2. Percentage of teachers' demand for effective junior secondary school administration in Rivers State 2017 / 2018 Academic year.

Subject area	Students population	Teachers demand	Teachers supply	Teacher's shortfall	% of Teachers demand
Science	105,815	3023	2849	174	5%
Arts	105,815	3023	1129	1894	56%
Social Science	105,815	3023	2822	201	6%
Pre-vocational	105,815	3023	1912	1111	33%
Total		12,092	8,712	3,380	100%

Table 3. Percentage of teachers supply for effective junior secondary school administration in 2017 / 2018 in Rivers State.

Subject Area	Students Population	Teachers Demand	Teachers Supply	Teacher's Shortfall	% of Teachers Supply
Sciences	105,815	3,023	2,849	174	33%
Arts	105,815	3,023	1,129	1894	13%
Social Sciences	105,815	3,023	2,822	201	32%
Pre-vocational	105,815	3,023	1,912	1111	22%
Total		12,092	8,712	3,368	100%

Table 4. Percentage of teachers' Demand for effective Junior secondary school administration in Rivers State 2018 / 2019 Academic year.

Subject area	No of students	Teachers demand	Teachers supply	Teachers short fall	Percentage of teachers Demand
Science	110,834	3,166	1901	1265	19%
Arts	110,834	3,166	1042	2124	32%
Social science	110,834	3,166	1802	1364	21%
Pre- vocational	110,834	3,166	1332	1834	28%
Total		12,664	6,077	6,587	100%

2017/2018 Academic year in four subject areas. The result shows that in Sciences 5% of teachers are in demand, in Art 56% of teachers are in demand, in Social Science 6% of teachers are in demand, and Pre-vocational 33% of teachers are in demand. This implies that there are shortages of teachers in the above subject areas in junior secondary schools in Rivers State. The Table 2 shows that 3,380 teachers were in demand for effective administration in Rivers State in 2017/2018 Academic year. Therefore, government should plan for the recruitment of more qualified teachers into the school system to bridge the gap between the teachers demand and teachers supplied.

Table 3 assesses the percentage of teachers supply. The result shows that in Sciences 33% of teachers were supplied; in Arts only 13% of teachers were supplied, in Social Sciences 32% of teachers were supplied and in the Pre-Vocational 22% of teachers were supplied. This implies that teachers supplied were insufficient in the various subject's area assessed for the study in junior secondary schools in Rivers State.

Table 4 assessed the percentage of teacher's demand for effective secondary school administration in Rivers State in 2018/ 2019 Academic year in four subject areas. The result shows that in Sciences 19% of teachers are in demand, in Art 32% of teachers are in demand, in Social Science 21% of teachers are in demand, and pre-vocational 28% of teachers are in demand respectively. This implies that there are shortages of teachers in the above subject areas in junior secondary schools in Rivers State. The Table 4 shows that 6,587 teachers were in demand in the 2018/2019 for effective administration of secondary school in Rivers state.

Table 5 assess the percentage of teachers supplied in Rivers State in 2018/ 2019 Academic year in four subject areas. The result shows that in Sciences 31% of teachers were supplied, in Arts only 17% of teachers were supplied, in Social Sciences 30% of teachers were supplied and in the Pre- Vocational 22% of teachers were supplied. This implies that teachers supplied were insufficient in the various subject's area assessed for the study in junior

Table 5. Percentage of teachers supply for effective junior secondary school administration in 2018 / 2019 in Rivers State.

Subject area	Students population	Teachers demand	Teachers supply	Teacher's shortfall	% of Teachers supply
Sciences	110,834	3,166	1901	1265	31%
Arts	110,834	3,166	1042	2124	17%
Social Sciences	110,834	3,166	1802	1364	30%
Pre-vocational	110,834	3,166	1332	1834	22%
Total		12,664	6,077	6,587	100%

Table 6. Percentage of teachers' demand for effective Junior secondary school administration in Rivers state 2019/2020 Academic year.

Subject area	No of students	Teachers demand	Teachers supply	Teachers short fall	Percentage of teachers Demand
Science	179,857	5138	2701	2437	20%
Arts	179,857	5138	1072	4066	33%
Social science	179,857	5138	2703	2435	20%
Pre- vocational	179,857	5138	1750	3388	27%
Total		20,552	8,226	12,326	100%

Table 7. Percentage of teachers' supply for effective Junior secondary school administration in Rivers State 2019/2020 Academic year.

Subject area	No of students	Teachers demand	Teachers supply	Teachers short fall	Percentage of teachers supply
Science	179,857	5138	2701	2437	33%
Arts	179,857	5138	1072	4066	13%
Social science	179,857	5138	2703	2435	33%
Pre- vocational	179,857	5138	1750	3388	21%
Total		20,552	8,226	12,326	100%

secondary schools in Rivers State.

Table 6 assessed the percentage of teacher's demand for effective secondary school administration in Rivers State in 2019/2020 Academic year in four subject areas. The result shows that in Sciences 20% of teachers were in demand, in Art only 33% of teachers were in demand, in Social Science 20% of teachers were in demand, and pre-vocational 27% of teachers were in demand. This implies that there were shortages of teachers in the above subject areas in junior secondary schools in Rivers State. The Table 6 shows that 12,326 teachers were in demand in the year 2019/2020 academic session for effective administration of secondary school in Rivers state.

Table 7 assessed the percentage of teacher's supply for effective secondary school administration in Rivers State in 2019/ 2020 Academic year in four subject areas. The result shows that in Sciences 33% of teachers were supplied, in Art only 13% of teachers were supplied, in Social Science 33% of teachers were supplied, and in Pre-

vocational 21% of teachers were supplied. This implies that teachers were not adequately supplied for effective administration of junior secondary schools in Rivers State in 2019/2020 Academic session.

Table 8 assessed the percentage of teacher's demand for effective secondary school administration in Rivers State in 2020/ 2021 Academic year in four subject areas. The result shows that in Sciences 21% of teachers are in demand, in Art 31% of teachers are in demand, in Social Science 21% of teachers are in demand, and pre-vocational 27% of teachers are in demand respectively. This implies that there are shortages of teachers in the above subject areas in junior secondary schools in Rivers state. The Table 8 shows that 13,700 teachers were in demand in the year 2020/2021 academic session for effective administration of secondary school in Rivers State.

Table 9 assessed the percentage of teacher's supply for effective secondary school administration in Rivers State

Table 8. Percentage of teachers' Demand for effective Junior secondary school administration in Rivers State 2020 / 2021 Academic year.

Subject area	No of students	Teachers demand	Teachers supply	Teachers short fall	Percentage of teachers Demand
Science	185,455	5,298	2,432	2,866	21%
Arts	185,455	5,298	1,074	4,224	31%
Social science	185,455	5,298	2,433	2,865	21%
Pre- vocational	185,455	5,298	1,553	3,745	27%
Total		21,192	7,492	13,700	100%

Table 9. Percentage of teachers' supply for effective junior secondary school administration in Rivers State 2020 / 2021 Academic year.

Subject area	No of students	Teachers demand	Teachers supply	Teachers short fall	Percentage of teachers supply
Science	185,455	5,298	2,432	2,866	33%
Arts	185,455	5,298	1,074	4,224	14%
Social science	185,455	5,298	2,433	2,865	33%
Pre- vocational	185,455	5,298	1,553	3,745	20%
Total		21,192	7,492	13,700	100%

in 2020/ 2021 Academic year in four subject areas. The result shows that in Sciences 33% of teachers were supplied, in Art 14% of teachers were supplied, in Social Science 33% of teachers were supplied, and Pre-vocational 20% of teachers were supplied. This implies that there are insufficient teachers in the above subject areas in junior secondary schools in Rivers State.

DISCUSSION

The study revealed that there are shortages of teachers' in the various subject areas in the year 2017 to 2021 Academic Sessions for effective administration of public junior secondary schools in Rivers State. The findings indicated a serious gap between the demand and the teachers supplied in the various years under study in the respective subject areas.

The result of the findings is espoused by Adeyemi (2009) who reported that the supply of qualified teachers to Ondo State Secondary School did not match with the demand for them. The result is also supported by the report of Abakpa cited in Akinyemi (2022) who reported that the National Secondary Education Commission has discovered that the teacher-student ratio is very high with a teacher handling so many students more than they could effectively teach because of the acute shortage of teachers in the system. He further said that Nigeria has a shortage of 277,537 teachers at the basic level, according to the 2018 National Personnel Audit conducted on public and private Basic Education (UBEC). The sporadic increased in students'

enrolment found in this study has contributed to teachers' shortages as the government has not recruited more teachers to fill in the gap of the retirees teachers to tackle this increased in enrolment. Even with the most recent Recruitment of 13,000 teachers which was done by the previous government in 2013 still cannot tackle this explosion. The findings also espoused the study of Stinbrick (2001) who revealed that the demand for teachers always arise when the number of teachers available is not equal to the number of teachers demanded by the education system.

Conclusion

Based on the findings of this study, it was concluded that, there are shortages of teachers in all subject areas in public junior secondary schools in Rivers State. The sporadic increased in students' enrolment and the vacuum created by the retirees teachers has led to the shortages of teachers in the public junior secondary school system as the government has failed to recruit more teachers into the educational system. The government of Rivers State should at this point recruit more qualified teachers into the secondary school educational system because the quality of students produced is determined by the quality of teachers that the school have. By so doing, there will be enough qualified teachers in the system and it will bridge the gap between the students' enrollment and the teachers supply. Proper plan should be put in place for retirees teachers all over the country.

Recommendations

Based on the findings of this study, the researcher recommends among others that:

1. Government should build more structures to decongest this over population in the classrooms into smaller classes for effective teaching and learning in public junior secondary school in Rivers State.
2. Government should recruit more qualified teachers to correspond with the increase in students' enrollment in Rivers State.
3. Government should increase teachers' salaries and conduct promotion when due as it will encourage interested and qualified persons to join the teaching profession.
4. Government should endeavor to increase the budgetary allocation to education sector, so as to meet up with all the necessary sine qua non of the sector, to enable the practice of accurate teacher pupil ratio as stipulated in the National Policy on Education 2014.
5. Government should make adequate plans for payment of pensions to retirees teachers. By so doing it will attract more qualified trained teachers out there to join the teaching profession.
6. Teacher's welfare package should be made more attractive to motivate teachers and encourage the young graduates to join the workforce of teaching profession.

CONFLICT OF INTEREST

The author declares no conflict of interest.

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