KIU Journal of Education (KJED)
Volume 2 Issue 1: Page 8-18
ISSN: 2790-4172
January-April 2022
https://www. kjed.kiu.ac.ug

Comparison of Teaching Personnel Competence on Secondary Schools Students' Academic Performance in Mathematics

1Peter, Benjamin A. & 2Peter, Ruth E.

[1]Department of Mathematics and Statistics, Kampala International University, Kampala, Uganda.
[2]Faculty of Accounting and Informatics, Durban University of Technology, South Africa.
Corresponding email address: benjamin.aina@kiu.ac.ug

Abstract

This study compared the teaching personnel competence on secondary schools students' academic performance in Mathematics. To this end, five research questions and two research hypotheses were proposed. The data was collected from twenty secondary schools in Ijebu-Ode, Ogun State. One hundred (100) students and teachers were selected to participate in this study. The instruments used were Students' Attitude Towards Mathematics Questionnaire (SATMQ) and Teachers' Attitude Towards Mathematics Questionnaire (TATMQ). T-test and regression statistics were used to analyse data at 0.05 level of confidence. The findings indicated that there was a statistically significant difference between the students' attitude towards Mathematics in public and private secondary schools. Also, there was a statistically significant difference between the professional status of teachers in public and private secondary schools. This implied that there are more professional qualified teachers in public schools than their private school counterparts which could have positive influence on students' academic performance in Mathematics. There was, however, no statistically significant influence of teachers' competence on students' academic performance of public and private secondary schools in Mathematics. Invariably, this implies that teaching personnel competence is not the only contributing factors on students' academic performance in Mathematics. Therefore, there was no statistically significant influence of the students' attitude on academic performance of public and private secondary schools in Mathematics.

Key words: Teaching Personnel's Expertise, Academic Performance in Mathematics, Comparative study.

1. Introduction

According to Ofeimu and Kolawole (2017), human resources, not capital, not income, nor natural resources constitute the ultimate basis for the wealth of nations. Education is thus the nerve centre of socio-economic (and national) development. Since no nation can remain both ignorant and free; its citizens must be educated. Education is a driving force for making any nation free, united, strong and self-reliant. In view of the fact that education is a necessary pre-requisite for the social, economic, cultural, political, scientific and technological development of any nation, the need for an elaborate and synchronized system of education is imperative. Teaching personnel are the implements of every policy of education. It is the teacher who translates a policy into action at the classroom level (Federal Republic of Nigeria, 1998).

The teacher injects reality into educational decisions and concretizes the curriculum. A positive relationship has been found to exist between teaching personnel quality and the internal efficiency of secondary education (Ayodele, 2015). Indeed, no education system can rise above the quality of its teaching personnel. Sotonwa (2013) was of the view that quality teachers are needed for quality teaching in order to ensure quality education in Nigeria. In recognition of the fact that qualified teaching personnel are the bus of the education system (especially at the secondary level), therefore, teaching personnel's in Mathematics needs to go for workshops, seminars, in-service training and so on. There is no doubt that the effectiveness of any system depends on the competence of the educational system and its teaching staff.

The need for quality and discipline are of overriding importance. When competent and qualified teachers are given the appropriate training, quality is ensured and when one is self-motivated and responsible as a teacher, most disciplinary problems are solved as he stimulated Mathematics learning through cognitive and affective methods. For the learning of Mathematics to be stimulated and revitalized in the lives of Mathematics students, Nigerian teachers have to be sincere, sensitive and honest in their vocations. Some teachers are not approachable; hence students find it difficult to seek help. Remediation is not effective because affective means of teaching is lacking.

In many ways, teachers themselves in their own ways either consciously or unconsciously encourage the development of this view during their formal and informal interactions with students. Thus, in the actual teaching-learning situation, it only requires the teacher to reinforce this view by simply not giving any opportunity for students to either ask questions or express an opinion on what is being taught. From the teacher's point of view, there is also an aspect of insecurity in that it may at times directly bring into question their professional integrity as a teacher in terms of the content knowledge of the subject as an academic discipline (Matang, 1998).

In practice, however, this approach will require the teacher to acknowledge students as equal partners of the teaching-learning process who in turn are also required to contribute meaningfully to, the educational activities that occur in the classroom. Students are made to be active participants in the information sharing process rather than passive recipients of information presentation. Ofeimu and Kolawole (2017) suggest that if Mathematics is to become a vibrant and vital subject then student-to-student and teacher-to-students interactions or vice-versa must be encouraged and promoted by teachers.

A significant feature of the Mathematics learning environment under such an approach is that both the teacher and students build the Mathematics together in developing special pride in learning activities facilitated by the spirit of free and open investigations. The learning climate in the classroom should provide an atmosphere of open communication between students and their teacher through cooperation and collaboration during which the teacher is expected to encourage the students to ask questions and at the same time accept a variety of problems from students.

Teaching is a skilled job. It is not just telling. It includes deciding what students should learn, helping students to learn and finding out how well students have learnt. The main aim of teaching and learning Mathematics so as to be revitalized consciously is to train students to know how to solve and apply knowledge,

therefore, the teacher must know a lot about the subjects that the students will be taught. The teacher should facilitate learning and "Must learn" should be the target, the things that every student must learn if he is going to be competent in his job must be stressed when the teacher is helping the students to learn (Sotonwa, 2013).

Performance in the certificate of Secondary Education Examination (CSEE) is a deciding factor in placing. The CSEE results place candidates in five categories. The categories are divisions I to IV and fail. The CSEE results can be used to compare the competence of different schools. Ezekwesili (2006) was of the view about education reform. 'Escape from conquest via knowledge'. She said that the Federal Ministry of Education and its counterparts in the states have failed the nation, though the ministry is supposed to formulate policy, articulate, coordinate and implement it, the rot in the sector was enough pointer to the fact that these ministries have failed the nation.

Mathematics can be said to be a creation of the human mind since it is concerned honourably with idea process and reasoning. It is also a language that uses carefully defined terms and concise symbolic representation. It is an organized structure of knowledge in which each proposition is deduced logically from previous propositions of assumptions, the structure of philosophies of theology. Several articles and papers have been presented at various levels and in the media indicating that despite the general awareness of the importance of Mathematics, evident in various curricula reviews and the adoption of new strategies in teaching the subject, there is widespread poor performance of most secondary school students in Mathematics.

It is common knowledge that Mathematics is the least passed subject in Nigerian secondary schools. Several studies found out that student achievements in Mathematics at both the Junior and Senior Secondary school levels worsen as years go by. Mathematics plays a fundamental role in the scientific and technological progress of any nation and as such Mathematics is taught at all levels of education. The greater demand for economic, scientific and technological know-how in the Nigeria development programme has brought about the securing of excellent Mathematical knowledge at all levels of education.

Thus, the increasing knowledge in Mathematics of the future engineers, Physics, Chemists, Sociologists, industrial and media personnel as well as other science-oriented professions in Nigeria cannot be overemphasized. Of sad reflection over the years is that Nigerian secondary school students' achievement in Mathematics at the SSCE has been relatively low (Ezekwesili, 2007). It is natural for people who are concerned with the standard of education to want to know whether private schools are up to the task of correcting the anomalies in public schools and thereby improving the standard of education.

There is a consensus in the literature that the performance of students over the years in the science subject (like Mathematics) has been consistently poor. Most of the time, the analysis is general for all schools involved. However, a comparative study of Mathematics teaching personnel competence in public and private secondary schools will enable us to know whether private schools are doing better or otherwise. Teachers' attitudes towards Mathematics have been consistently found to influence students' achievement. The different conditions for teaching and learning created by owners of public and private schools could affect teachers' attitudes towards Mathematics (Ofeimu and Kolawole, 2017).

Ofeimu and Kolawole (2017) investigated teaching personnel quality as a determinant of students' academic achievement in Post Primary Schools in Edo South Senatorial District of Nigeria. Their results revealed that the level of teaching personnel quality in post-primary schools in Edo South Senatorial District of Nigeria was high, there was the medial level of pupils' academic achievement in secondary schools in Edo South Senatorial District of Nigeria, Teaching personnel quality and university diploma had no notable impact on students' academic production. Ryan et al., (2021) studied academic attainment in Mathematics after the transition from primary to post-primary education. Their results showed that there is a scientifically notable loss in each strand area and in each procedure competency.

Ochieng et al., (2016) considered the impact of instructor expertise on Mathematics attainment in KCSE Examinations among Public Schools in Nyatike Sub-county, Migori County Kenya. Their findings revealed that there are positive correlations between instructor university diplomas with Mathematics performance, instructor training with Mathematics attainment, and teacher experience with Mathematics achievement. Charles et al., (2021) examined pupils' regard for Mathematics teaching Competency. Their results showed four diverse approaches to pupils' perceptions of teaching competency, and these approaches were linked with pupils' commitment and attainment in Mathematics.

Filipe (2019) studied modify analysis of teaching personnel expertise and its impact on pupils' attainment in upper Primary Schools in Mozambique and other Sacmeq Countries. His findings revealed that the relationship between instructor expertise and Pupils' achievement in reading and Mathematics in upper Primary Schools in Mozambique as well as in SACMEQ Countries is influenced by the cognitive domain, affective domain and behavioural domain. It is therefore important to compare these variables in public and private secondary schools. Therefore this study focused on the comparative study of teaching personnel competence on students' academic performance in public and private secondary schools in Mathematics.

2. Research Hypotheses

HO1: There is no statistically significant influence of teachers' competence on students' academic performance in public and private secondary schools in Mathematics.

HO2: Is there any statistically significant influence of the students' attitude on the academic performance of public and private secondary schools in Mathematics?

3. Materials and Methods

In order to achieve the research objectives, ten selected secondary schools in Ijebu-Ode Local Government Ogun State were selected and questionnaire were administered to 100 both students and Mathematics teaching personnel in the chosen schools. Pearson's Rank correlation were utilized as a qualitative approach using descriptive statistical tables and statistical analysis package.

4. Sample and Sampling Techniques

The sample will consist of hundred (100) students and teachers in all the selected schools. A stratified sampling technique was used to determine the ten (10) students and teachers from each school. The schools include Ijebu-Ode Grammar School, Adeola Odutola College, Anglican Girls Grammar School, Muslim College, Ansar-U-Deen High School, Varsity Grammar School, Dupmos International Secondary School,

Mabunmi Memorial Grammar School, Sanni Luba Comprehensive High School and Seico International Educational Institution.

5. Research Instrument

The instrument that will be used for this study is a format prepared to collect data from "Teachers and Students' Attitude towards Mathematics Questionnaire" (TATMQ and SATMQ) were developed and used. Experts in Tests and Measurement and Educational Planning have ascertained the content validity of the data collection format and already standardized. Also, the method used for reliability of the instrument is student's t-test and regression statistics. The t-test may be applied to determine the significance of the difference between two means calculated on independent samples.

6. Result/Analysis

Research Question 1: Is there any statistically significant difference between the teachers' attitude towards Mathematics in public and private secondary schools?

Table 3.1: Comparison of Teacher's Attitude Towards Mathematics

School Type	N	X	S.D	Standard Error Mean	df	t-cal	t-cri	Decision	p. value
Public	50	29.1400	5.52918	0.78194	98	1.342	1.96	0.05	0.183
Private	50	27.5800	6.08474	0.86051	97.115				

The 2-tailed value is known as the P-value, X = mean, SD= standard deviation. Significant at 0.05 level of confidence. The man scores of teachers in both types of school show that public school teacher have slightly better attitude toward Mathematics teaching than their private school counterparts. The difference is not statistically significant as shown in the table because P-value > 0.05 decision value of significance. It is also worth nothing here that the mean scores show that the attitude of teachers in both schools fall below average. The instrument used to measure teachers' attitude was a ten item four Likert scale questionnaire. The maximum obtainable score on the attitude scale is 40.

Research Question 2: Is there any statistically significant difference between the use of instructional materials in public and private secondary school in the teaching of Mathematics?

Table 3. 2: Comparison of the use of Instructional Materials

School Type	N	X	S.D	Standard Error Mean	df	t-cal	t-cri	Decision	P. Value
Public	50	17.6000	3.67007	0.51903	98	-0.316	1.96	0.05	0.753
Private	50	17.28689	0.46484	96.832	97.115				

There is no statistically significant difference between the use of instructional materials in Public and Private secondary schools in the teaching of Mathematics. Though the standard deviation values show that the public schools use adequate instructional materials than their counterparts in private school. It should however be noted that teachers in both schools have very favourable attitude towards the use of instructional materials. As shown in table 2, the calculated P-value > 0.05 decision value of significance.

Research Question 3: Do these schools have the required professionally qualified teaching personnel's of Mathematics in public and private secondary schools?

Table 3.3: Professional Status of Teachers

QUALIFICATION						
Public/Private Schools	Frequency		Percentage (%)		Cumulative Percentage (%)	
NCE	18	13	36.0	26.0	36.0	26.0
HND	2	8	4.0	16.0	40.0	42.0
BSC	25	26	50.0	52.0	90.0	94.0
MED	4	2	8.0	4.0	98.0	98.0
BSC+MED	1	1	2.0	2.0	100.00	100.00
Total	50	50	100.00	100.00		

TEACHING PERSONNEL						
Public/Private Schools	Frequency		Percentage (%)		Cumulative Percentage (%)	
Not Qualified	27	34	54.0	68.0	54.0	68.0
Qualified	23	16	46.0	32.0	100.0	100.0
Total	50	50	100.00	100.00		

The table reveals that the public schools have the required professionally qualified teaching personnel than their counter parts in the private schools. The table reveals that twenty-three (23), representing 46% of the teaching personnel in public schools were qualified. This comprised of eighteen (18) NCE holders representing 36%, four (4) MED holders representing 8% and one (1) BSC + MED holder representing 2%. The table equally reveals that twenty-seven (27), representing 54% of the teachers were unqualified. This is made up of twenty-five (25) BSC holders and two (2) HND holders representing 52% and 16% respectively. The table also reveals that sixteen (16), representing 32% of teaching personnel in private schools were qualified. This comprised of thirteen (13) NCE holders representing 26%, two (2) MED holders representing 4% and one (1) BSC + MED holder representing 2%.

The table equally reveals that thirty-four (34), representing 68% of the teachers were unqualified. This is made up of twenty-six (26) BSC and eight (8) HND holders representing 52% and 16% respectively. Hence, the table revealed that the public schools have the required professionally teaching personnel of the Mathematics than their private school counter parts. This suggests that the professionally qualified of teachers could have positive influence on students' academic performance in Mathematics.

Research Question 4: Is there any statistically significant difference between the years of experience of Mathematics teaching personnel in public and private secondary schools?

Table 3.4: Teachers' Years of Experience

School Type	N	X	S.D	Standard Error Mean	df	t-cal	t-cri	Decision	P-Value
Public	50	1.6200	0.49031	0.06934	98	5.992	1.96	0.05	.000
Private	50	1.1200	0.32826	0.04642	85.577			0.05	

The table reveals that there is a statistically significant difference between the years of experience of Mathematics teaching personnel in public schools than their counterparts in private school because the P-value < 0.05 the decision value of significance. Invariably the public schools have more experienced teachers than their private school counterparts which could invariably influence the students' academic performance positively. Hence, research question, which predicted a significant difference, is upheld.

Research Question 5: Is there any statistically significant difference between students' Attitude Towards Mathematics in Public and Private Secondary School?

Table 3.5: Comparison of Students' Attitude Towards Mathematics

School Type	N	X	S.D	Standard Error Mean	df	t-cal	t-cri	Decision	P-Value
Public	50	50.8200	10.83963	1.53295	98	3.267	1.96	0.05	0.001
Private	50	44.2800	9.10044	1.28700	95.148				0.002

The students in public schools have more favourable attitude towards Mathematics than their counterparts in private school. The difference is statistically significant as evident in table 5. Since the P-value < 0.05 the decision value of significance. Hence, the research question therefore implies that there is a statistically significant difference in the students' attitude towards Mathematics. The maximum obtainable score on the 20 item students' attitude

questionnaire, which is a four-point Likert scale type, is 80.

Research Hypotheses (HO1): There is no statistically significant influence of teachers' competence on students' academic performance of public and private secondary schools in Mathematics.

Table 3.6: Teachers' Competence

School Type	N	X	S.D	Standard Error Mean	df	t-cal	t-cri	Decision	P-Value
Public	50	23.4000	4.56696	0.64587	98	0.389	1.96	0.05	0.698
Private	50	23.0000	5.66707	5.66767	93.761				

Sources of value variation		Degree of freedom	Sums of square	Means of square	f-ratio	P-
2017	Regression 0.508	1	4746.502	4746.502	1.051	
	Residual	86	38488.82	4517.254		
	0.322 Total	87	43235.322	9263.756		
2018	Regression 0.286	1	4200.85	4200.85	1.15	
	Residual	86	313565.07	3646.114		
Total		87	317765.92	7846.964		

There is no statistically significant influence of teachers' competence on students' academic performance in both public and private secondary schools. Though the mean values shows that the teachers in public schools are slightly better than their counterparts in the private school. As shown in the table P-value > 0.05 the decision value of significance. It can be inferred that the teachers' competence does not only influence the academic performance of students in Mathematics. Hence, the null hypothesis, which predicted no significant influence of teachers' competence on students' academic performance of public and private schools in Mathematics, is upheld. This implies that there are other variables that could contribute to students' academic performance in Mathematics.

Research Hypothesis (HO2): Is there any statistically significant influence of the students' attitude in academic performance of public and private secondary schools in Mathematics?

Academic Performance

School	Academic Performance	Mean	N	Standard Deviation	Std. Error Mean
Public	2017	112.2200	50	66.67781	9.42967
	2018	94.7800	50	62.90819	8.89656
Private	2017	23.0263	38	9.88170	1.60302
	2018	19.7368	38	7.82126	1.26878

Table 3.7: Students' Attitude on Academic Performance

School	Std's Attitude towards academic performance	df	N	Mean	Std. Deviation	t-cal	t-tab value	Decision	P-value
Public	2003	49	50	-61.40	67.66	-6.42	1.96	0.05	0.0005
	2004	49	50	-43.96	63.98	-4.86			0.0005
Private	2003	37	38	20.53	12.79	9.89			0.0005
	2004	37	38	23.82	11.30	12.99			0.0005

	Sources of variation	Degrees of freedom	Sum of square	Mean of square	f-ratio	P-value
2003	Residual	1	19506.781	19506.781	4.489	0.37
	Regression	86	373723.54	4345.623		
	Total	87	393230.32	23852.404		
2004	Residual	1	13568.592	13568.592	3.836	0.53
	Regression	86	304198.03	3537.186		
	Total	87	317766.62	17105.778		

The table reveals that P-value > 0.05 decision value of significance. This shows that the result is not statistically significant and the research hypothesis is not accepted. That is, there is no statistically significant difference between the students' attitude on academic performance of public and private schools in Mathematics. Favourable home and school conditions have been found to be potent in improving students' performance and vice versa. WAEC (2017) also attested to the fact that different personality factors like anxiety, self-concept and level of interest affected academic performance of students. The table also reveals that the mean scores of students' attitude on academic performance of public school are better than their counterparts in the private secondary schools. Hence, teaching personnel competence

is not only the contributing factors on students' academic performance.

7. Discussion

This study was embarked upon to determine the comparison of teaching personnel competence on secondary schools students' academic performance in Mathematics in Ijebu-Ode Local Government, Ogun State. The findings show that there are more Mathematics teachers in the public schools than in their private schools and the teacher-student ratio. The number in a class is more than what the teacher can cope with. This result agreed with Josiah and Oluwatoyin (2017) who found that the higher results in schools might have been due to a higher ratio of teachers to pupils. It also agreed with the findings of Josiah and Oluwatoyin (2017) reported that the student-teacher ratio is a critical variable in academic achievement. Schools having a lower student-teacher ratio performed much better than schools having a high student-teacher ratio.

Effective teaching leads to effective learning and consequently to good performance. The presence of many unqualified teachers in private schools may perhaps be due to the inability (or rather the unwillingness) of the proprietors to cope with the financial demands of employing and keeping trained teachers with a view to realizing a maximum profit. Consequently, there is a tendency for high staff turnover since most of the teachers could be 'birds of passage'. However, the presence of many untrained and hence unqualified teachers in the private schools may neutralize the effect of the graduate teachers and may therefore negate the belief of parents concerning the standard of private secondary schools. Josiah and Oluwatoyin (2017), however, found a significant difference in students' performance between public and private secondary schools.

8. Recommendations

In furtherance of the minimum standards stipulated in the National Policy of Education Josiah and Oluwatoyin (2017), it is hereby expedient that the State Government should provide more classrooms and qualified teachers in all schools. It can be concluded that some of the employed teaching personnel in private secondary schools are not professionally trained and are hence not qualified. In addition, the Professional Status of Teachers was higher in public schools than in private schools. In view of the finding of this investigation and their implications for secondary education and indeed, for education and national development, the following recommendations are considered worthwhile.

There should be close monitoring and supervision of the private secondary schools to ensure that qualified teachers are employed so that quality will not be sacrificed for profit. The present crop of untrained teachers in the private secondary schools should be mandated, through the proprietors to go for in-service training in teacher education with a view to increasing their proficiency. As a temporary measure, regular in-school seminars and workshops should be instituted to enhance the capacity of the untrained teachers and to keep the trained ones abreast of new developments in the area of methodology.

A long-term suggestion to improve the quality of teachers is that teaching should be professionalized in Nigeria. The present situation where anybody feels that he can teach and can be employed to teach should be arrested in the best interest of educational and national development. The efforts of the Teachers Registration Council (TRC) in this respect should be intensified and made a reality. The giving of grants-in-aid to private secondary schools should be reconsidered and revisited. This will enable the proprietors of private secondary schools to offset

part of their cost. Fees paid by students may thus be controlled. Many parents, especially of the low-income group may thus be able to afford to send their children to these fee-paying schools.

This is in line with the present government's policy of liberalization. There should be Mathematics Quiz competition between public and private secondary schools. There should be learning made easy with ICT because Nigerian students have more potential than they often exhibit. States government was implored to sponsor teachers to the National Mathematics Centre to enhance the Mathematics Improvement Programme and procure Mathematics kits and publications for their schools.

To revamp the school system, the Education Minister should also advise the Federal Government to scale down its direct involvement in secondary education, which is better handled by the lower tiers of government and the private sector. Adopting a School Scheme and Public-Private Partnership is okay, but it is still the government that must wake up fully to its onerous responsibilities. State Government should ensure that the rules regulating the establishment of private schools were enforced. This would help in the elimination of mushroom and substandard schools in the state. The state government to work harder at ensuring those who thrived in cutting corners were stopped.

There should be 'Inquiry teaching' which is a teaching technique that could be employed when dealing with a teaching or learning situation that is not teacher-centred. The technique gives some measure of freedom and opportunity for students to learn and find out some facts by themselves. It disallows teachers from dominating the class. It refers to the whole complex instructional phenomenon in which the teacher makes use of a variety of methods and activities that encourage students' active involvement in the generation of their own knowledge.

There should be changes in the curriculum that should reflect the global perspective and developments of the Mathematics curriculum should be flexible enough to accommodate the ethno-mathematics knowledge gained from everyday practices of Mathematics that students bring into the knowledge classroom. To achieve this, it is strongly recommended by Ryan et al., (2021) that Mathematics curriculum should include a wide variety of problems that build upon the mathematical understanding students have from their everyday experience and student should be engaged in doing Mathematics in ways that are similar to doing Mathematics out-of-school situations. If these are done from nursery to secondary level it will give students a sound and well-grounded foundation in Mathematics. Mathematics curriculum should include building upon the Mathematics understanding students have from their everyday experiences.

Students will be able to develop a wide variety of problem-solving strategies and legitimize their ownership of such knowledge. This in turn adds more meaning to many abstract ideas about a subject that many students come to perceive to be boring, meaningless and non-reflective (Josiah and Oluwatoyin, 2017). Students must value and they should be encouraged to become confident in their ability to do Mathematics. Teachers should encourage students to be Mathematics problem-solvers and communicate mathematically with teachers and among themselves. They should also be encouraged to reason mathematically. Teachers must also treat students as humans in the class and treat time, instruction materials, and activities as the variable to make the curriculum a reality.

Students' rich ethno-mathematically knowledge in the classroom should be utilized to encourage the development of a conceptual knowledge base among students. It also enables students to

develop wide-ranging problems solving strategies that require both the teacher and students to further verify validity in a variety of both familiar and unfamiliar situations thereby making Mathematics to be meaningful. Teachers should be recognized and treated as professionals in their own right to retain the best brains. Teachers must become sensitive to the felt needs of students in relation to Mathematics teaching. Teachers need a clear understanding of what the problems of students are.

These problems can serve as a guide for teaching and learning. Provision should be made for the representation of the people of other disciplines on Mathematics curriculum designing panels. Science and Mathematics Centres and workshops should be set up as the foci of design experiments and equipment. Such centres can also serve as meeting places for Science and Mathematics Teachers. The teacher, as a model, should also show positive attitudes towards teaching. His attitude is like painting a picture, playing music or planting a garden (Ryan et al., 2021).

9. Summary

The performance of students in Mathematics is generally poor. Teachers should ensure that more learning is taking place in our schools. A deliberate attempt should be made to individualize instructions to carry along the good and not-so-good students. Teachers should improvise practical materials where necessary to enhance the quality of teaching. The findings on students' attitude show that there is hope as students' attitude toward science is generally favourable. This shows that if the teaching of Mathematics can be made more interesting and stimulating, the students are ready to learn. There should be incentives to boost the low morale of teachers in public and private schools. Teachers were no longer excited about their jobs due to poor remuneration therefore the employers of teachers should motivate them through improved welfare packages' (WAEC Committee; 2017).

References

Ayodele, J. B. (2015). An Assessment of the Quality of Teaching Personnel in Private Primary Schools in Ikere Local Government Area of Ekiti State, Nigeria. Studies in Curriculum, Vol. 4, P 141.

Charles Y. C. Y., Hercy N. H. C., Zhi-Hong C. , Calvin C. Y. L. and Tak-Wai C. (2019).Enhancing achievement and interest in mathematics learning through Math-Island. Research and Practice in Technology Enhanced Learning, (2019) 14(5), pp 1-19.

Ezekwesili O. (2006). Education Reform: Escape from Conquest via Knowledge. Punch Friday Nov., 17, 2006 Vol. 17 No. 19, 731, 52.

Ezekwesili O. (2007). Revamping the Public School System. Friday Punch, February, 23, 2007, pp16.

Federal Republic of Nigeria (1998). National Policy on Education (3rd Edition). Lagos: NERD Press.

Filipe A. (2019). A modify analysis of teaching personnel expertise and its impact on Pupil's attainment in upper Primary Schools in Mozambique and other Sacmeq Countries. Unpublished PhD Thesis Department of Education Management and Policy Studies, Faculty of Education, University of Pretoria.

Josiah, O. and Oluwatoyin, K. B. (2017). Teaching personnel Quality as determinant of students' academic achievement in Post Primary Schools in Edo South Senatorial District of Nigeria. British Journal of Education, Vol.5, No.13, pp.19-30.

Matang, R. A. (1998). The Role of Ethno-Mathematics and Reflective Learning and

Thinking in Papua, New Guinea. Directions: Journal of Educational Studies, USP 20(20), pp 22–29.

Ryan, V., Fitzmaurice. O and O'Donoghue, J. (2021). A study of academic achievement in Mathematics after the transition from primary to post Primary education. Journal of Social Science (2021), 1:17.

Ochieng, K. R., Kiplagat, P. and Nyongesa, S. (2016). Impact of instructor expertise on Mathematics Performance in KCSE Examinations among Public Schools in Nyatike Subcounty, Migori County Kenya. International Journal of Secondary Education, Vol. 4(5), 2016, pp 44-57.

Sotonwa, O. O. (2013). Quality Teacher and Quality Teaching: Towards Achieving Quality in Universal Basic Education. Nigeria Journal of Educational Research and Evaluation, 4 (1).

West Africa Examination Council (2017). WAEC Candidates Resort to Use of Mobile Phones to Cheat. Punch, Friday, April 13, 2017, pp 3.