Teacher Quality and Work Environment as Determinant Of Secondary School Students' Academic Performance in Makurdi Local Government Area of Benue State Nigeria

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Abstract: This study investigated teachers' quality and work environment as determinant of students' academic performance in secondary schools in makurdi LGA of Benue state. The study was carried out in five choice senior secondary schools which were done randomly. Research questions were raised and answered and hypotheses were formulated and tested at 0.05 level of significance. A research based on survey research design was adopted. The population for this study consisted of 150 teachers and students in the randomly selected secondary schools in makurdi local government area of Benue state. The questionnaire was used for data collection. The analysis of the result was carried out through the Pearson Product Moment Correlation Coefficient. The results showed that we have a very high number of qualified teachers in schools and that the level of academic performance of the students' was average. Recommendation was given among others that principals should organize workshops for training and retraining their teachers in order to enhance their quality so as to reflect the true picture in the academic performance of students.

Keywords: Teacher Quality, Determinant, Students, Academic Performance, Environment, Work

Introduction

The work environments as well as the quality of teachers in secondary schools are the important factors today that decide the nature of a school. School environment has a major part in the quality of education that students' receive. In other words, the environment where students' live is a central determinant factor in the performance of students' at all levels of education. This is because the physical, social and psychological environment provides the mental readiness of the learner for new learning to take place.

The quality of education of a nation could be determined by the quality of her teachers. The most important factor in improving students' academic achievement in schools is by employing seasoned and qualified teachers in all schools (Abe & Adu, 2013). Academically qualified teachers are those who obtain academic training by virtue of enrolment in educational institution and obtain qualifications in various areas of Endeavour such as HND, B.Sc, B.A, and Master of Art (M.A.) and so on; while professionally qualified teachers are those who obtained aptitudes, skills, professional knowledge, techniques e.t.c by profession. They hold degrees like, B.Ed, B.Sc. Ed, B.A. Ed, and M.Ed degrees and so on.

Teachers teaching skills do not only determine the nature of education, but also how they can control their work environment effectively. The importance of the teacher in the information process of students' is unquestionable. Teachers sure exact a lot of impact on their students by means of their practices in class. Instructors should have and observe particular teaching competencies and capabilities that can be pondered in their scholar's overall performance in the subject they train. This can make sure that their college students can be capable of make connections between what is taught in faculty and its application to trouble solving in actual existence.

.Statement of the Problem

Research studies have shown that many secondary school merchandise in Nigeria are negative in analyzing, writing, computational and vocational abilities (Uzoka cited in Oviawe, 2016). A lot of them additionally perform woefully in diverse examinations. The parameter typically used in determining school effectiveness is college students' consequences in standardized assessments in particular in outside examinations (Ijaiya, 2008). In view that one of the objectives of education is the acquisition of understanding and capabilities, college students' performance after commencement is viewed as a mirrored image of their performance in school. This additionally borders on the quality of human and material sources which are available in the course of the duration of their education. For many years, educators and researchers have debated at the faculty variables that effect college students' achievement (Asikhia, 2010; Ayodele & Ige, 2012). As policy-makers become extra involved in school reform, extra interest is given to the role teachers' fine plays on students' success.

Also, notwithstanding the efforts of government, parents teachers associations, old students association, non-governmental organizations and the administrators of schools in makurdi local government at ensuring a conducive teaching and learning environment that will enhance students' academic overall performance, the problems associated with poor school environment seem to hamper and overwhelm these efforts. The reason is not farfetched from the high rate of student's enrolment which leads to overcrowding in the available classes.

International Journal of Engineering and Information Systems (IJEAIS) ISSN: 2643-640X Vol. 6 Issue 9, September - 2022, Pages: 75-82

Despite the fact that several tries were made at improving instructors' quality, teaching facilities and good working environment, those efforts are not proportionately reflected in college students' usual overall performance. Consequently, there's the compelling want for today's teachers to be technologically compliant through obtaining capabilities in this area which will make them applicable. Even though many variables account for college students' instructional overall performance along with ; adequacy of tutorial assets (each human and fabric) and their effective utilization ; conducive mastering environment etc. This research is concerned mainly with investigating the extent to which teachers' quality and work environment determine students' academic performance in makurdi local government area of Benue state.

Research Questions

The subsequent research questions had been raised to guide this work.

1. What is the level of teachers' quality in secondary schools in makurdi?

- 2. What are the effects of work environment on secondary school student's academic performance?
- 3. What is the correlation between the teacher's quality and secondary school students academic performance

Hypotheses

The subsequent hypotheses had been formulated and tested at 0.05 degree of significance:

1. Instructors' quality does no longer significantly have an effect on students' academic performance in secondary schools in Makurdi.

2. Work environment does not significantly influence students' academic performance in secondary schools in makurdi. **Methodology**

The survey research design was used for this study. This was considered appropriate because survey design generally can be used to effectively investigate problems in realistic settings.

Population of the Study: Made up of all the teachers and students in both private and government schools; single/mixed sex schools in makurdi local government area of Benue state.

Sample and Sampling Technique: the sample style utilized in this work is the simple random **sampling** (srs) technique where 100 students and 50 teachers were selected from the randomly selected schools in makurdi respectively. 150 respondents were used as sample in all.

Instrument of the Study:

Instruments made use of in the work was a questionnaire which was structured according in keeping with the issues affecting the quality of teachers and work environment. The questionnaire was also structured using a five –likert scale measuring attitude of strongly agreed, agreed, undecided, disagree and strongly disagreed.

Validity and Reliability of the Instrument:

Content and face validity was carried out on the instrument by experts especially the researcher's supervisor for a review of the designed items. This ensured that the contents were relevant, clear and unambiguous.

Administration of the Instrument and Data Analysis:

The five sampled secondary schools were visited and the relevant data collected using the questionnaire. The research questions were analyzed descriptively using percentages and the Pearson Product Moment Correlation Coefficient was used to test the hypotheses.

RESULTS

Tables based on research questions

Table 1 years of experience in teaching

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	0-2 years	13	26.0	26.0	26.0
	3-5 years	20	40.0	40.0	66.0
	6-8 years	7	14.0	14.0	80.0
	9-11 years	5	10.0	10.0	90.0
	above 11 years	5	10.0	10.0	100.0
	Total	50	100.0	100.0	

Source: field survey, October, 2015.

Table 1 above shows the years of experience of the respondents used for this study.

International Journal of Engineering and Information Systems (IJEAIS) ISSN: 2643-640X Vol. 6 Issue 9, September - 2022, Pages: 75-82

Out of the 50 respondents, 13 which represent 26.0percent had 0-2years experience in teaching, 20 made up of 40.0percent had 3-5years experience in teaching, 7 representing 14.0percent had 6-8years experience in teaching, 5 representing 14.0percent had 9-11years experience in teaching, and 5 representing 14.0percent had over 11years experience in teaching.

Table 2 academic performance of students has nothing to do with teachers' academic qualification.

	-	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	strongly agree	5	10.0	10.0	10.0
	agree	4	8.0	8.0	18.0
	undecided	5	10.0	10.0	28.0
	disagree	10	20.0	20.0	48.0
	strongly disagree	26	52.0	52.0	100.0
	Total	50	100.0	100.0	

Source: field survey, October, 2015.

Table 2 shows that educational performance of students has loads to do with trainer's academic qualification.

5 of the respondents representing 10.0 percent strongly agreed that academic performance of students had nothing to do with teacher's academic qualification.

4 of the respondents representing 8.0 percent agreed that academic performance of students had nothing to do with teacher's academic qualification.

5 of them representing 10.0percent were undecided.

10 of the respondents representing 20.0percent disagreed that academic performance of students had nothing to do with teacher's academic qualification.

26 of the respondents representing 52.0 percent disagreed that academic performance of students had nothing to do with teacher's academic qualification.

Table 3 secondary school students who are taught by highly qualified teachers perform better than those taught by lowly qualified teachers.

_	-	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	strongly agree	15	30.0	30.0	30.0
	agree	16	32.0	32.0	62.0
	undecided	9	18.0	18.0	80.0
	disagree	5	10.0	10.0	90.0
	strongly disagree	5	10.0	10.0	100.0
	Total	50	100.0	100.0	

Source: field survey, October, 2015.

Table 3 shows that secondary school students who were taught by highly qualified teachers performed better than those taught by lowly qualified teachers.

15 respondents representing 30.0 percent agreed strongly that students who were taught by highly qualified teachers performed better than those taught by lowly qualified teachers.

16 representing 32.0 percent agreed that students who were taught by highly qualified teachers performed better than those taught by lowly qualified teachers. 9 representing 18.0 percent were undecided. While 5 of the respondents representing 10.0 percent

International Journal of Engineering and Information Systems (IJEAIS) ISSN: 2643-640X Vol. 6 Issue 9, September - 2022, Pages: 75-82

disagreed those students who were taught by highly qualified teachers performed better than those taught by lowly qualified teachers. And 5 representing 10.0 percent disagreed strongly that students who were taught by highly qualified teachers performed better than those taught by lowly qualified teachers.

-	-	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	strongly agree	20	40.0	40.0	40.0
	agree	15	30.0	30.0	70.0
	disagree	10	20.0	20.0	90.0
	strongly disagree	5	10.0	10.0	100.0
	Total	50	100.0	100.0	

Table 4 there is a significant relationship between the qualification of teachers and secondary school student academic performance.

Source: field survey, October, 2015.

Table 4 shows that there was a significant relationship between the qualifications of teachers and secondary school students' performance.

20 of the respondents representing 40.0 percent agreed strongly that there is a significant relationship between the qualification of teachers and second any school student performance.

15 representing 30.0 percent agreed that there is a significant relationship between the qualification of teachers and students' performance.

10 representing 20.0 percent disagreed that there is a significant relationship between the qualifications of teachers and students' performance. and 5 representing 10.0 percent strongly disagreed that there is a significant relationship between the qualification of teachers and students' performance.

Table 5 work environment does have an effect on secondary school students' academic performance.

	-	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	strongly agree	19	38.0	38.0	38.0
	agree	20	40.0	40.0	78.0
	undecided	1	2.0	2.0	80.0
	disagree	2	4.0	4.0	84.0
	strongly disagree	8	16.0	16.0	100.0
	Total	50	100.0	100.0	

Source: field survey, October, 2015.

Table 5 shows that work environment does have an effect on secondary school students' academic performance.

19 of the respondents representing 38.0 percent agreed strongly that work environment does have an effect on students' academic performance.

20 representing 40.0 percent agreed that work environment does have an effect on students' academic performance. 1 representing 2.0percent was undecided.

2 representing 4.0 percent disagreed that work environment does have an effect on students' academic performance. And 8 representing 16.0 percent disagreed strongly that work environment does have an effect on students' academic performance.

Table	6	better	working	environment	improves	secondary	school	student
acader	nic	perform	nance.					

	-	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	strongly agree	19	38.0	38.0	38.0
	Agree	20	40.0	40.0	78.0
	undecided	1	2.0	2.0	80.0
	Disagree	2	4.0	4.0	84.0
	strongly disagree	8	16.0	16.0	100.0
	Total	50	100.0	100.0	

Source: field survey, October, 2015.

Table 6 shows that better working environment improves secondary school students' academic performance.

19 of the respondents representing 38.0 percent strongly agreed that better working environment improves secondary school students' academic performance.

20 representing 40.0 percent agreed that work environment does have an effect on students' academic performance.

1representing 2.0percent was undecided.

2 representing 4.0 percent disagreed that work environment does have an effect on students' academic performance.

8 representing 16.0 percent strongly disagreed that work environment does have an effect on students' academic performance **Hypothesis to be tested**

Hypothesis 1

Ho: Teachers quality does not determine secondary school student academic performance.

H₁: Teachers quality does determine secondary school student academic performance.

Level of significance: 0.05

Decision rule:

In taking decision for "r", the following rules were observed;

- i) If the value of "r" tabulated is greater than "r" calculated, accept the alternative hypothesis (H₁) and .reject the null hypothesis (H₀).
- ii) If the "r" calculated is greater than the "r" tabulated, accept the null hypothesis (H₀) while the alternative hypothesis is rejected.

Table 7 Correlations

	Students who are taught by highly qualified teachers perform better than those taught by lowly qualified teachers in external examinations	There is a significant relationship between the qualification of teachers and secondary school students' academic performance.
Students who are taught by highly Pearson Correlation qualified teachers perform better than those taught by lowly qualified teachers in external examinations	1	.929** .000 50
There is a significant relationship Pearson Correlation between the qualification of teachers Sig. (2-tailed) and secondary school students' academic performance.	.929** .000 50	1

**. Correlation is significant at the 0.05 level (2-tailed).

Conclusions based on table 7

From the above table, "r" calculated 0.000 being less than the "r" tabulated; we rejected the null hypothesis and concluded that there was a significant relationship between the qualification of Physics teachers and secondary school students' performance in external exams.

A strong positive correlation of 0.929 exists between teachers' quality and the performance of secondary school teachers.

Hypothesis to be tested

Hypothesis 2

 H_0 : work environment does not have a significant effect on secondary school students' performance.

H1: work environment does have a significant effect on secondary school students' performance.

Level of significance: 0.05

Decision rule:

In taking decision for "r", the following rules were observed;

- i) If the value of "r" tabulated is greater than "r" calculated, accept the alternative hypothesis (H₁) and .reject the null hypothesis (H₀).
- ii) If the "r" calculated is greater than the "r" tabulated, accept the null hypothesis (H₀) while the alternative hypothesis is rejected.

Table 8 Correlations

		Better environment improves academic performance secondary students.	working the of school	Working environment does have an effect on secondary school students' academic performance.
Better working environment improves the academic performance of secondary school students.	Pearson Correlation Sig. (2-tailed) N	1 50		.709 ** .000 50
Working environment does have an effect on secondary school student academic performance.	Pearson Correlation Sig. (2-tailed) N	.709 ** .000 50		1 50

**. Correlation is significant at the 0.05 level (2-tailed).

Conclusions based on table 8

From the above table, "r" calculated 0.000 being less than the "r" tabulated; we rejected the null hypothesis and concluded that work environment does have a significant effect on secondary school students' performance.

Contributions to Knowledge

This study will be of immense contribution and will significantly add to knowledge in the following ways:

I. It found out that qualification of teachers does not have significant impact on the performance of students' but, trainer commitment and dedications to their obligations are essentials to enhancing college students' academic overall performance.

II. It additionally discovered that the level of trainer excellent isn't always reflected inside the educational overall performance of students.

Findings, conclusion and recommendation

The objectives of this study were:

- i. To find out teacher's quality as determinants of secondary school students' academic performance
- ii. To determine the effect of work environment on secondary school students' academic performance
- iii. To identify factors that affect secondary school students' academic performance

Findings from the study revealed the following:

- i. That there is a significant relationship between the qualification of teachers and secondary school students' academic performance.
- ii. The performance of secondary school students is a direct consequence of the level of qualification of teachers.
- iii. Working environment of teachers has an effect on secondary school students' academic performance.
- iv. There is a high impact of the qualification of teachers on the academic performance of secondary school students.
- v. Better working environment improves both teachers and secondary school students' academic performance.

Recommendation

Based on the findings from the study, the following recommendations are made:

- i. Trainings and retraining of teachers should be a priority as the quality of teachers directly influences the quality of students in secondary schools.
- ii. Teachers should be constantly tested to determine their level of qualification; this would help to improve the academic performance of secondary school students.
- iii. For teachers to give their best, they have to be provided with better working conditions help bring out the best in them.

REFERENCES

Abe, T.O. and Adu, E.I. (2013). Influence of qualification on development and assessment of computer programmed instructional package on energy concept in upper basic technology in Ekiti State. *Journal of Science and Technology*, 3 (6): 611-618.

Adebule, S.O. (2004). Gender differences on a locally standardized anxiety rating scale in mathematics for Nigerian secondary schools in Nigerian. *Journal of Counselling and Applied Psychology*, 1, 22-29.

Adedoyin, O. (2011). The impact of teacher pedagogical mathematical content knowledge on academic performance: as perceived secondary school pupils. *European Journal of Educational Studies*, 3(2), 277-292.

Akinsolu, A.O. (2010). Teachers and students' academic performance in Nigerian secondary schools: Implications for planning. *Florida Journal of Educational Administration & Policy*, 3(2), 87-103.

Asikhia O.A. (2010). Students' and teachers' perception of the causes of poor academic performance in Ogun State secondary schools [Nigeria]: Implications for couselling for national development. *European Journal of Social Sciences*, 13(2), 22-29.

Ayodele, J.B. and Ige, M.A. (2012). Teachers' utilisation as correlate of students' academic performance in senior secondary schools in Ondo State, Nigeria. *European Journal of Educational Studies*, 4(2), 55-62.

Daso P.O. (2013). Teacher variables and senior secondary students' achievement in mathematics in rivers state, Nigeria. European Scientific Journal 19(10): 1857 – 7881 Federal Republic of Nigeria (2004). *National policy on education*. (Revised edition). Lagos: NERDC Press.

Ijaiya, Y. (2008). An investigation into the problems of teacher management in Kwara State secondary schools. Studies in Educational Planning and Administration (SEPA). *Journal of the National Institutes for Educational Planning & Administration, Nigeria.* 2(1), 49-54.

Jacob, B.A. and Lefgren, L. (2004). The impact of teacher training on students' achievement: Quasi experimental evidence on school reform efforts in Chicago. *Journal of Human Resources*, 39(1), 50-79.

Madumere-Obike, C.U. (2003). *Managing quality assurance: the secondary education sector*. A paper presented at the 18th annual congress of the Nigerian Academy of Education at University of Port Harcourt, 10th –15th November.

Onyekuru, B.U. and Ibegbunam, J.O. (2013). Teaching effectiveness of secondary school teachers in Emohua Local Government Area of Rivers State, Nigeria. *European Scientific Journal*, 9(28), 212-226.

Oviawe, J.I. (2016). Teachers' effectiveness as correlates of students' academic achievement in basic technology in Nigeria. *International Journal of Academic Research in Progressive Education and Development*, 5(2), 111-119.

Uche, C.M. (2012). Students' perception of academic staff quality: A measure of quality assurance in South-South Nigerian higher institutions. *International Journal of Educational Science*, 4(2): 163-173.

WAEC (2014). Recurring mass failure in WASSCE. Daily Sun Newspaper, November 28, 2014.