

Influence of Teachers' Qualification on Pupils Academic Achievement in Numeracy in Ilorin West Local Government Area of Kwara State

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Abstract: *The study investigated the influence of teachers' qualification on pupils' academic achievement in numeracy. The study adopted a descriptive survey research design, the population comprised all primary school teachers, 310 teachers was used as sample size, The questionnaire tagged Teachers' Qualification Questionnaire (TQQ) and pro forma achievement test was used to obtain the scores from schools. One research question and three hypotheses were guided the study. The instruments were face and content validated by experts and PPMC was determined which was ($r=.78$). descriptive statistics of frequency counts, percentage and mean for research question while research hypotheses were tested using inferential statistics of Linear Regression and t-test. The outcome revealed that there was significant influence of teachers' qualification on academic achievement in Numeracy. It was shown that, the influence of teachers' qualification on academic achievement in Numeracy. Recommendations made among was, governments and schools administrators should make more provision to study leave for in service teachers.*

Keywords: Teachers Qualification & Academic Achievement

Introduction

Any interactive activity between a teacher and the students is expected to produce learning outcomes in the learners. Numeracy is a compulsory subject which cuts across every human fact, and is equally used in every human endeavor, it also play a dominant role in the economic development of country.

Teachers play a vital role in ensuring quality education delivery. The functions of teachers' in classroom is to dispense pertinent knowledge to students by following the curriculum. Teachers use various methods such as small group activities and hands-on learning activities to dispense knowledge to students. Beyond that, they serve many other roles in the classroom.(Fraser & Walberg, 2005). The achievement of students in science generally is a major concern to science educators. Aghyeneku in Sakiyo and Sofeme (2008) noted that students' achievement in science subjects is low in both national and state examinations.

"Teacher qualifications" is the credentials, knowledge, and experiences that a teacher brings to the job. In the context of this study, it includes knowledge in mathematics, mathematics pedagogy, level of preparation, professional development, and experience in teaching. Quite related to this, is the term "Teacher practices," which refers to classroom practices that the teacher employs such as the teaching strategies and the assessment activities (Goe & Stickler, 2008). From Ajayi's (2009) point of view, the professional qualities of a teacher have to do with the following: Mastery of the subject matter, Sense of organization, Ability to clarify ideas, Ability to motivate students, Good imagination, Ability to involve the students in meaningful activities throughout the period of teaching, Management of the details of learning, Frequent monitoring of students' progress through tests, formal and informal, written and oral quizzes. The availability of professional teachers in our schools is low (Ngada, 2008). The reasons may not be farfetched. Teaching is seen as a dumping ground for any unemployed school leavers, irrespective of their area of specialization. This group of able bodied young men and women thus handle the job as a bye-pass venture to their desired ends. Consequently, their input on the job would be very low since it lacks the dedication demanded by the job. The few ones that seem to show little dedication lack the technical knowhow of teaching since they were never trained on the job. The resultant effect on the students' achievement is catastrophic. The major evil done by this is half-backed and shallow-knowledge students who often perform poorly in their examinations. This eventually culminates to a decline in the national technological growth. Variables of interest to the researcher are gender and school type

The issue of gender differences is paramount to educational researchers nowadays. There had been divergent views and reports as to the comparative ability of male and female in human endeavours, especially in education. A survey conducted by Ogbonnaya and Okunamiri (2008) on administrative effectiveness of male and female principals in Imo state, Nigeria revealed that female principals are more effective than their male counterparts in the management of instructional programmes, staff personnel administration, students personnel administration, management of finance and management of physical resources while the male principals are better in school-community relationships.. Ajayi (2005) in his own study revealed that school type makes a difference in pre-school

cognitive development. However, Keeves (2007) acceded that type of school did not make contribution to pre-school education social and cognitive development.

In this study, the researcher seeks to determine the comparative effects of teacher's qualification on pupils' academic achievement in mathematics in Ilorin West Local government area of Kwara state. It has been observed from the literature reviewed that study of this type has never been carried out in this locale. Therefore, this is meant to fill the gap requiring empirical evidence regarding the comparative effects of teachers' qualification on pupils' academic achievement **Statement of the Problem**

Teaching is a career that provides challenges, excitement, personal reward and chance to encourage and support others to achieve their goals. Good teachers work with their colleagues, parents, other professionals and community members to inspire their students to learn. These qualities are essential to ensure a permanent change in pupils' behaviour. With such qualities, teachers are expected to motivate and encourage pupils to study hard to improve the standard of education. However, there have been public outcries that the academic achievement of pupils in Numeracy is below expectation. Most of the pupils cannot calculate accurately.

This poor achievement of pupils has been partly attributed to the teachers' qualification. Claims have been made that the some of the teachers at primary school level of education are not qualified to teach or taking teaching as stepping stone. Studies on teachers' qualification have been conducted but deserved research attention has not been given to the examination of the influence of teachers' qualification on pupils' academic achievement in Numeracy particularly in at the primary school level. Also, this kind of study has not been conducted in this locale. This research is a product of this problem.

Purpose of the Study

Main purpose was to examine the influence of teachers' qualification on pupils' academic achievement in Numeracy. Specifically, the study aimed to examine;

The level of teachers' qualification in Ilorin West Local Government Area of Kwara State

Found out if there is any significant influence of teachers; qualification on pupils' academic achievement.

Access whether there is any significant difference of teachers; qualification on pupils' academic achievement in Numeracy based on gender

Investigate whether there is any significant difference of teachers; qualification on pupils' academic achievement in Numeracy based on school type

Research question

What is the level of teachers' qualification?

Research Hypotheses

The following research hypotheses are tested.

H₀1: There is no significant influence of teachers' qualification on the academic achievement of pupils in Numeracy

H₀2: There is no significant difference of teachers' qualification on academic achievement of pupils in Numeracy based on gender

H₀3: There is no significant difference of teachers' qualification on academic achievement of pupils in Numeracy based on school type

Methodology

A descriptive survey research design, it is descriptive because it involves the collection of data in order existing situation. The population comprised all private and public primary school teachers. There are 5,156 teachers school, Annual School Census; Report, Kwara State ministry of Education and Human Capital Development, 2019/2020. 310 teachers was used as sample size, the Krejcie and Morgan sample table, because it will not be possible for the researcher to involve all teachers. Instrument obtained data from the respondents. The researcher designed questionnaire tagged Teachers' Qualification Questionnaire (TQQ). A questionnaire provides information about participants' feelings, and knowledge. section A is designed to get demographic data like gender, school type and teachers' qualification was used and pro forma achievement test was used to obtain the scores from schools.

The face and content validity of the instrument that determined by experts. This was done by providing a copy of the drafted questionnaire to the experts to go through the contents and make necessary corrections and suggestions. Test re-test method was used to test for the reliability of the instruments. The instrument was administered and re-administered within the interval of two weeks to the same set of respondents. (PPMC) Co-efficiency was used to compare the two scores. To test for the reliability the researcher selected a school that is not participating in this study. Reliability index obtained was ($r=.78$). The data collected were analyzed using descriptive statistics of frequency counts, for demographic data and research question while inferential statistics of Linear Regression and t-test

Results

Research Question One: What is the level of teachers’ qualification?

Table 1: table showing level of teachers’ qualification

| Teachers’ Qualification | Frequency | Percentage |
|-------------------------|-----------|------------|
| NCE | 124 | 42.8 |
| BED | 143 | 50.0 |
| MED/PHD | 23 | 7.2 |
| Total | 290 | 100.0 |

Table 1 showed the distribution of the respondents based on teachers Qualification. 124 of the respondents representing 42.8% were NCE holders while one hundred and forty three (143) of the respondents representing 50.0% were BED holders, twenty three (23) of the respondents representing 7.2% were MED/PHD holders from analysis above, it is evident that BED holders were found to be more in number than other respondents. This therefore shows a numeric indicator that the level of teachers’ qualification was high

Research Hypothesis One: There is no significant influence of teachers’ qualification on academic achievement in Numeracy

Table 2: Showing the summary of Regression Analysis on significant influence of teachers’ qualification on academic achievement in Numeracy

| Variable | Mean | SD | N | R | R Square | Adjusted R Square | F | Sig. |
|----------------------|-------|--------|-----|------|----------|-------------------|-------|------|
| Qualification | 59.98 | 10.857 | 290 | .059 | .003 | .000 | 1.002 | .000 |
| Academic achievement | 1.65 | .622 | | | | | | |

Table 2 shows the regression Analysis on the significant influence of teachers’ qualification on academic achievement in Numeracy. The result indicated that there was positive relationship between qualification and academic achievement ($R = .059$) while the R-Square is .000 which means that the independent variable (qualification) explained 00.0% variation of the dependent variable (academic achievement). This indicates a good fit of the regression equation. Thus, this is a reflection that there was significant influence of teachers’ qualification on academic achievement in Numeracy ($F_{(1,289)} = 1.002, P < 0.05$). The hypothesis is therefore rejected in the light of the result since the significant value is less than 0.05. This implies that there is significant influence of teachers’ qualification on academic achievement in Numeracy

Research Hypothesis Two: There is no significant difference in teachers’ qualification on academic achievement in Numeracy based on gender

Table 3: summary of t-test analysis showing the difference in teachers’ qualification on academic achievement in Numeracy based on gender

| Gender | N | Mean | Std. Deviation | T | Df | Sig | Remark |
|--------|-----|--------|-------------------|-------|-----|------|--------------------|
| Female | 154 | 35.42 | 10.874 | -.493 | 288 | .622 | Not Significant |
| Male | 136 | 60.285 | 10.868 | | | | |

Table 3 shows the difference in teachers' qualification on academic achievement in Numeracy based on gender ($t = -.493$, $df = 288$, $p > 0,05$). The hypothesis is therefore not rejected in the light of the result since the significant level is greater than 0.05. This implies that there is no significant difference in teachers' qualification on academic achievement in Numeracy on gender

Research Hypothesis Three: There is no significant difference in teachers' qualification on academic achievement in Numeracy based on school type

Table 4: summary of t-test analysis showing the difference in teachers' qualification on academic achievement in Numeracy based on school type

| School type | n | Mean | Std. Deviation | t | Df | Sig | Remark |
|-------------|-----|--------|-------------------|-------|-----|------|--------------------|
| Public | 130 | 59.784 | 11.065 | -.289 | 288 | .772 | Not Significant |
| Private | 160 | 60.156 | 10.717 | | | | |

Table 4 shows the difference in teachers' qualification on academic achievement in Numeracy based on school type ($t = -.289$, $df = 288$, $p > 0,05$). The hypothesis is therefore not rejected in the light of the result since the significant level is greater than 0.05. This implies that there is no significant difference in teachers' qualification on academic achievement in Numeracy based on school type

Summary of Findings

- The level of teachers' qualification in Ilorin West Local Government Area of Kwara State was high.
- There was significant influence of teachers' qualification on academic achievement in Numeracy
- There was no significant difference in teachers' qualification on academic achievement in Numeracy based on gender
- There was no significant difference in teachers' qualification on academic achievement in Numeracy based on school type

Discussion

The findings of this study revealed that the level of teachers' qualification was high and there was significant influence of teachers' qualification on academic achievement in Numeracy. It is indication that there were qualified teachers in Ilorin West Local Government Area of Kwara state. The findings was in agreement with Hamzeh, (2012) revealed that there were significant differences in teachers' preparation for teaching specific mathematics topics, professional development programs, and in teachers' perceptions about the effects of school environment on students' TIMSS scores. In addition, the two countries' results differed in the mathematics topics that had not been taught to students, in assessment tools commonly used in mathematics, and in the type of questions used in tests. Some teachers' qualifications and practices were found to be related to students' scores.

Conclusions

The study shed light on the influence of teachers' qualification on the academic achievement of pupils in Numeracy. Based on the findings of the study, it can be stated that the level of teachers' qualification.

Recommendations

Based on the findings and the conclusions drawn in this study, it is recommended that

- Governments and schools administrators should make more provision to study leave for in service teachers
- Seminars, workshop, and conference should be organized for teachers on how best to further their study
- Gender and school type do not really influence teachers qualification on academic achievement

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