

## **School Size as Predictor of Teachers' Classroom Utilisation Level in Public Primary Schools in Edo South Senatorial District**

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### **Abstract**

This study was carried out to ascertain whether there is a relationship between school size and teachers' classroom utilisation level in public primary schools in Edo South Senatorial district. Five research questions were raised to guide the study. The study is a descriptive survey research, using the correlation design for the purpose of investigation. The population of the study comprised all 476 public primary schools, and 1009 teachers in the seven Local Government Areas that make up Edo South Senatorial district. A stratified random sampling technique was used to select the sample of the study. Data was collected using a structured questionnaire titled School Size and Teachers' Utilization Scale (SSTUS). The instrument had an r-co-efficient of 0.996, which exceeds the commonly accepted benchmark of 0.70 for internal consistency. The instrument was administered to 100 teachers in 48 public primary schools. Data were analysed using descriptive and inferential statistics. Mean Score and Standard Deviation were used to answer research questions 1,2,3 while One-Way ANOVA was used to test research question 4, and Regression was used to analyse research question 5. Pearson r was used to test for relationship. Findings of the study indicates that school size is a powerful predictor of teachers' classroom utilization. The study recommended that posting of teachers to schools should be based on subject teacher demand.

**Keywords:** School, Size, Predictor, Teachers, Utilization

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## **INTRODUCTION**

Education has remained a social process in capacity building and maintenance of the society for decades, as well as a tool for acquiring skills, relevant knowledge and habits for surviving in an evolving world (Sukkon,2016). The school irrespective of its size, is established to provide training for citizens to acquire learning and in return give back to the society. The teachers' primary duty in the school involves accomplishing tasks with reference to the curriculum, hence, he occupies a strategic position in the dissemination of knowledge and information. Andreyka, (2020) noted that the recent socio-economic reality and development in the country has kept most parents too busy to tend to the needs of their children, and most often leave these children in the care of their teachers. Quality teaching, is aimed at guiding learners in acquiring skills, hence, teachers must perform their duties in the most professional manner. An objective of primary education, stipulated in the National Policy on Education (2014) stated that it should "lay a sound basis for scientific, critical and reflective thinking". The teaching-learning process should be designed to enable the pupil's active participation during lessons as this will help broaden their ability to develop an attitude of critical and reflective thinking. Everard et al. (2025) is of the opinion that the quality of education of a country is determined by the teacher, the teachers can upgrade the quality of education by giving it their best through hard-work or degrade it by being lazy and incompetent. The success of the educational sector therefore, is highly dependent on the teacher's attitude to his job.

### **Theoretical Framework**

This study is anchored on the Resource Dependence Theory (RDT) propounded by Pfeffer and Salancik, (1978). This theory provides a suitable insight in examining the effects of school size on teachers' level of utilization. The RDT posits that organizations such as schools rely on the external environment to function effectively. In the context of schools, teachers are critical resources whose deployment is affected by school size. Larger schools may experience challenges of redundancy or uneven workload distribution, while smaller schools may overstretch teachers due to limited staffing. Thus, the RDT helps explain how variations in

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school size shape the extent to which teachers are efficiently utilized.

The relevance of this theory to the study is that the school cannot exist without the society; the society depend on the school to produce citizens with skills for its sustenance. The primary school teacher has his job cut out, as this foundational stage of the schooling process requires a lot of effort from the teacher to ensure that learners put in their care are equipped with necessary knowledge to sustain them through the higher levels of education Akinyemi and Lawal, (2020). Adequate investment in security and education from government and other stakeholders is necessary to ensure that the teachers and pupils, as well as school properties are protected as this will guarantee a solid academic foundation of citizens.

### **Determinant of school size**

School size refers to the number of pupils in the school. A school with a high number, is often referred to as a large school, while schools with fewer number is referred to as medium or small school. School size often determines staffing levels, physical capacity, and resource allocation. The size of a school is not accidental; it is influenced by several interrelated factors known as determinants of school size (Andreyka, 2020; Nkedishu, 2021; Okeke, et al 2021). Speaking on this, Nguyen et al. (2020) noted that availability of funds, level of security, quality of school management amongst others affects the school enrolment. Adequate funding allows schools to build more classrooms, employ more teachers, and provide facilities. Schools in secured environment according to Tanner-Smith et.al (2018) attract more students and can grow larger. Parents, and other stakeholders in education will generally prefer to send their children/wards to schools were security is guaranteed. The teaching-learning process needs a conducive environment to succeed, so as to actualise stated goals and objectives.

### **Level of Teachers' Utilization**

The level of teachers' utilization, according to Jaiyeoba and Hazzan, (2024) refers to the extent, to which teachers' skills, time, expertise, and professional capacity are effectively used within a school system. Utilization measures the range at which a teacher is engaged with his duties; he could be fully engaged, under-engaged, or overworked. Effective utilization according to Okeke

et al. (2021) occurs when teachers are posted to teach subjects they specialise in, their workload aligns with approved standard, and they handle appropriate class sizes. Under-utilization occurs when teacher's qualifications are not fully optimised. While over-utilization of teachers occurs when classrooms are overcrowded as against the teacher: pupil ration stipulated in the National Policy on Education (2014), teachers teach subjects outside their area of specialisation, and their workload exceeds approved teaching hours.

### **Statement of The Problem**

Effective classroom utilization of teachers may be essential for achieving educational goals and ensuring optimal school performance. Teachers constitute the most critical human resource in the school system, and how they are deployed, assigned duties, and engaged in instructional activities may determine learners' academic outcome. Ideally, teachers should be adequately utilized in line with their areas of specialization, workload capacity, and professional competence. As observed, the number of teachers in public primary schools in Edo South Senatorial district is a far cry from the stipulated teacher pupil ratio in the National Policy on Education. The teacher's classroom performance, may often be determined by his workload in terms of teaching load, and alignment of subject specialization. The question therefore remain how well can a teacher be utilised irrespective of the number of pupils in the school. It is based on this premise this study is designed to find out if there is a relationship between school size and teachers' classroom utilisation level in primary schools in Edo South Senatorial district. Specifically, the study seeks to establish whether school size (small, medium, and large) predict the overall teachers' classroom utilisation level in public primary schools in Edo South Senatorial district.

### **Purpose of the Study**

The main purpose of this study is to investigate whether there is a relationship between school size and teachers' classroom utilisation level in public primary schools in Edo South Senatorial district. Specifically, the study sought to:

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1. Determine whether there is a relationship between school size and teachers' classroom utilisation level in public primary schools in Edo South Senatorial district.
2. Find out the extent to which school size determine teaching load in public primary schools in Edo South Senatorial district.
3. Find out the extent to which school size determine the alignment between teachers' subject specialization and subjects taught in public primary schools in Edo South Senatorial district.
4. Determine whether there is a difference in the level of teachers' classroom utilization among small, medium, and large public primary schools in Edo South Senatorial district.
5. Determine the extent to which school size predict the overall level of teachers' classroom utilization in public primary schools in Edo South Senatorial district.

### **Research Questions**

The following research questions guided the study:

1. What is the relationship between school size and teachers' classroom utilization level in public primary schools in Edo South Senatorial district?
2. To what extent does school size determine teaching load in public primary schools in Edo South Senatorial district?
3. To what extent does school size determine the alignment between teachers' subject specialization and subjects taught in public primary schools in Edo South Senatorial district?
4. To what extent does school size determine a difference in the level of teachers' classroom utilization among small, medium, and large public primary schools in Edo South Senatorial district?
5. To what extent does school size predict the overall level of teachers' classroom utilization in public primary schools in Edo South Senatorial district?

## **Hypotheses**

The following null hypotheses were tested at 0.05 level of significance

1. There is no significant relationship between school size and teachers' classroom utilization level in public primary schools in Edo South Senatorial district.
2. School size does not significantly determine teaching load in public primary schools in Edo South Senatorial district.
3. School size does not significantly determine the alignment between teachers' subject specialization and subjects taught in public primary schools in Edo South Senatorial district.
4. School size does not significantly determine a difference in the level of teachers' utilization among small, medium, and large public primary schools in Edo South Senatorial district.
5. School size does not significantly predict the overall level of teachers' utilization in public primary schools in Edo South Senatorial district.

## **METHODS**

This study adopted a quantitative correlational research design using an ex-post facto approach. The correlational design was considered appropriate because the study sought to determine the relationship between school size and the level of teachers' classroom utilization without manipulating the variables. The study was carried out in public primary schools in Edo South Senatorial district. The area covers seven Local Government Areas which consist of both urban and rural areas. The population of the study consisted of all the 1009 teacher's in the 476 public primary schools in Edo South Senatorial district. A sample of 48 public primary schools and 100 teachers consisted the sample for the study selected through a stratified random sampling technique. Data were collected using a structured questionnaire titled: School Size and Teachers' Utilization Scale (SSTUS). The instrument was subjected to face validity by two

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experts in Educational Management in the Faculty of Education, University of Benin. Data collected were analysed using Mean and Standard Deviation, Regression and One-Way ANOVA to answer the research questions, while Pearson r was used to test the hypotheses at 0.05 alpha level of significance.

## RESULTS

**Research Question One:** What is the relationship between school size and teachers' classroom utilization level in public primary schools in Edo South Senatorial district?

**Hypothesis One:** There is no significant relationship between school size and teachers' classroom utilization level in public primary schools in Edo South Senatorial district.

**Table 1: Correlation Between School Size and Teachers' Utilization**

Variables	N	Mean	SD	R	Sig. (2-tailed)
School Size	100	418.62	188.41		
Teachers' Utilization	100	3.87	0.64	0.88	0.000

The results show a correlation coefficient of  $r = 0.88$ , indicating a very strong positive relationship between school size and teachers' utilization. The significance value ( $p = 0.000$ ) is less than the 0.05 alpha level; therefore, the null hypothesis is rejected.

**Research Question Two:** To what extent does school size determine teaching load in public primary schools in Edo South Senatorial district?

**Hypothesis Two:** School size does not significantly determine teaching load in public primary schools in Edo South Senatorial district.

**Table 2: Correlation Between School Size and Teaching Load**

Variables	N	Mean	SD	R	Sig.
School Size	100	418.62	188.41		
Teaching Load	100	3.79	0.58	0.73	0.000

The correlation coefficient of  $r = 0.73$  indicates a strong positive relationship between school size and teaching load. Since the significant value is less than 0.05, the null hypothesis is rejected. School size therefore, significantly determine the teaching load in schools.

**Research Question Three:** To what extent does school size determine the alignment between teachers' subject specialization and subjects taught in public primary schools in Edo South Senatorial district?

**Hypothesis Three:** School size does not significantly determine the alignment between teachers' subject specialization and subjects taught in public primary schools in Edo South Senatorial district.

**Table 3: Correlation Between School Size and Specialization Alignment**

Variables	N	Mean	SD	R	Sig.
School Size	100	418.62	188.41		
Specialization Alignment	100	3.74	0.61	0.67	0.000

The obtained correlation coefficient ( $r = 0.67$ ) reveals a moderate-to-strong positive relationship between school size and subject specialization alignment. Since  $p$  is less than 0.05, the null hypothesis is rejected.

**Research Question Four:** To what extent does school size determine a difference in the level of teachers' classroom utilization among small, medium, and large public primary schools in Edo

South Senatorial district?

**Hypothesis Four:** School size does not significantly determine a difference in the level of teachers' classroom utilization among small, medium, and large public primary schools in Edo South Senatorial district.

**Table 4: Descriptive Statistics by School Size**

School Size	N	Mean	SD
Small	33	3.21	0.42
Medium	34	3.85	0.38
Large	33	4.52	0.35

**Table 5: One-Way ANOVA**

Source	SS	df	MS	F	Sig.
Between Groups	32.41	2	16.21	494.24	0.000
Within Groups	3.19	97	0.03		
Total	35.60	99			

The mean score indicates a steady increase in teachers' utilization from small to large schools. The ANOVA result ( $F = 494.24$ ,  $p = 0.000$ ) confirms that these differences are statistically significant. This means that variations in classroom utilization levels are systematically associated with school size rather than random variation. The null hypothesis is therefore rejected.

**Research Question Five:** To what extent does school size predict the overall level of teachers' classroom utilization in public primary schools in Edo South Senatorial district?

**Hypothesis Five:** School size does not significantly predict the overall level of teachers' classroom utilization in public primary schools in Edo South Senatorial district.

Simple linear regression analysis was conducted to determine whether school size predicts <https://journals.unizik.edu.ng/ujoemp/index>

teachers' classroom utilization level.

**Table 6**

**Regression Model Summary**

Model	R	R <sup>2</sup>	Adjusted R <sup>2</sup>	Std. Error
1	0.965	0.932	0.931	0.17

**Table 7**

**Regression Coefficients**

Predictor	B	SE	B	T	P
Constant	2.114	0.081	—	26.10	<.001
School Size	0.003	0.000	.965	36.71	<.001

The regression analysis indicates that school size is a powerful predictor of teachers' classroom utilization. The coefficient of determination ( $R^2 = 0.932$ ) shows that approximately 93.2% of the variation in teachers' utilization can be explained by school size. The standardized beta value ( $\beta = 0.965$ ) demonstrates an exceptionally strong predictive influence, meaning increases in school size substantially improve utilization outcomes. Since the significance value is less than 0.05, the null hypothesis is rejected. This confirms that school size is not merely associated with utilization but actively predicts it.

**DISCUSSION**

The findings on relationship between school size and level of teacher's classroom utilization indicates that increase in school size leads to increase in teacher deployment and engagement. This finding is in line with Nkedishu, (2021) whose findings revealed that increase in class size can determine the amount of work a teacher can complete within a specific period. The findings on the extent school size can determine teaching load, alignment between teacher specialization <https://journals.unizik.edu.ng/ujoemp/index>

and subject taught revealed that the number of pupils in the school determines teacher distribution to teaching assignment, as well as quality teaching and learning process through appropriate teacher-subject matching. The findings on the difference in level of classroom utilization among small, medium and large schools indicates that larger schools provide teachers with better opportunities for professional engagements. This finding agree with the findings of Jaiyeoba and Hazzan, (2024) whose findings revealed that teachers in larger schools tend to have more workload. The findings on the extent school size predict teachers' utilization provide strong empirical evidence that school size is a powerful predictor of teachers' classroom utilization.

## **CONCLUSION**

School size has been observed to predict teachers' classroom utilisation level in the school. The deployment of teachers to schools and subsequent posting to teach subject of specialisation is the highest form of teachers' classroom utilisation as observed in the study. Concerted efforts should be made to ensure that teachers are adequately utilized in schools in order to achieve curriculum goals and objectives.

## **RECOMMENDATIONS**

Based on the findings of the study, the following recommendations were made:

1. Posting of teachers to primary school by the Universal Basic Education Board should be based on subject teacher demands in schools
2. Primary school heads should ensure that pupils enrolment is based on number of available teachers in the school so as to maximize teachers' classroom utilization.
3. Government should increase employment of primary school teachers for even distribution of teachers.
4. Government and stakeholders should provide facilities to enhance the teaching-learning process to make the teachers' job easier
5. Teachers should be encouraged to participate in professional development training to

increase their exposure which in turn, will enhance their classroom utilization level.

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