

TEACHERS PROFESSIONAL DEVELOPMENT AND PROFESSIONALIZATION OF TEACHING CAREER IN NIGERIA: EVIDENCE FROM SENIOR SECONDARY SCHOOLS IN EDO STATE, NIGERIA

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Abstract

The study examined the professional development of teachers and the professionalization of the teaching career in Edo State, Nigeria. The study employed a quantitative survey research design. Five research questions were raised and five null hypotheses were formed. The population of the study consists of 297 principals and 1,327 teachers in the public senior secondary schools (SSS) in the eighteen local government area of Edo State. The sample for the study is 170 principals based on the Taro Yamane's formula. Principals were selected through a non-proportional stratified random sampling technique from the eighteen local government areas of the State. The instrument used for data collection in the study is a structured questionnaire, titled: "Teachers Professional Development and the Professionalization of the Teaching Career Questionnaire (TPDPTCQ)" The instrument has a reliability coefficient alpha value of .845. The data collected were analysed using the descriptive, non-parametric statistics and one sample t-test statistics. The findings showed that the numbers of professionally-trained and auxiliary teachers in SSS in Edo State were not significantly different. Students-teacher ratio in most of the subjects studied were high. However, there were significant disparities in the students-teacher ratio across different subjects. The analysis also revealed substantial teacher shortages across the listed subjects. The study further showed that the levels of teacher availability for recruitment in the subjects studied were significant, indicating government challenges in meeting the teacher demand. The analysis of in-service training for teachers revealed that financial constraints, lack of resource persons, limited access to reference materials, and problems of logistics are common and critical issues and challenges facing the scheme. The study recommended, among others that policymakers, educational administrators, and stakeholders should endeavour to collaborate to implement policy reforms to address the identified gaps, improve working conditions and career progression opportunities for teachers, and enhance the professionalization of teaching career.

Keywords: Auxiliary Teachers, Issues/Challenges, Professional Teachers, Professionalization, Professional Development, Students-Teacher Ratio, Teacher Availability, Teaching Career.

Introduction

Teaching is a noble profession which aimed at bringing about meaningful learning through the use of methods that are morally and pedagogically acceptable. Teaching as an activity involves a teacher, a learner, and content in the form of knowledge facts, information and skills to be imparted. Ozano (2013) draws an analogy between teaching and marketing. He added that the teacher, like the sellers, has a product, knowledge or message call it concept, generalization, principles or laws embedded in the

different disciplines of the school curriculum to “sell” to an active, critically minded “buyer” the students. The teacher makes the product attractive to learners. This he believes is pre-requisites for effective teaching. Ozano (2013) viewed teaching as the systematic presentation of facts, ideas, skills, and techniques to students. It therefore implied that teaching involves the sharing of knowledge for the purpose of all round development of the individual.

Nwakonobi and Obiagwu (2010) found that the teachers supplied to secondary schools were insufficient and were far below the number demanded. Ogboro and Nwadiani (2017) further found that there is low deployment, poor utilization and uneven distribution of graduate teachers to public schools in Edo State. Ige (2022) also found that the professionalization of teaching helps to improve the commitment of teachers, the academic performance of students, and the standard of education. Yet, Shittu, Olubor and Oladimeji (2021) found that there was a yearly increase in professionally-trained teachers’ demand but was not commensurate with the number of professionally-trained teachers supplied to the schools. Okoro (2023) found that principals perceived staff development and skill acquisition as being critical for in-service training of professionally-trained teachers in secondary schools.

The potential benefits of professional integration of auxiliary teachers in Nigerian secondary schools, especially in Edo State cannot be overemphasized. These benefits include reduced teacher-student ratios, enhanced subject-specific instruction, and diversification of teaching strategies. However, the challenges associated with this approach, such as ensuring proper in-service training, to ensure quality standards, is one of the major trusts of this paper. These challenges become more worrisome because it appears that auxiliary teachers are often more employed or engaged than professional teachers in the secondary school system. Employing auxiliary teachers instead of professionally- trained educators may raise concerns for the professionalization of the teaching profession as a career. While the auxiliary teachers can provide short-term solutions to staffing shortages or budget constraints, their limitations can negatively impact the quality of education and the overall learning experiences for students.

Professionally-trained teachers typically undergo extensive education, including degree programmes, pedagogical training, and certification processes. In contrast, auxiliary teachers lack these essential qualifications, which implied potential deficiency in teaching skills, subject matter expertise, and classroom management techniques. The deficiencies of the auxiliary teachers can hinder students' academic progress and limit their exposure to high-quality instruction. Furthermore, the use of auxiliary teachers in some schools amount to inconsistency in instructional delivery that is two different qualities of instruction for the same level of students in different schools. Professionally-trained educators are typically well-versed in the established curriculum standards and teaching methodologies, ensuring that students receive a coherent and structured education while the auxiliary teachers may not have the same familiarity with these standards, leading to gaps in students' knowledge and understanding. This lack of consistency can create challenges for students as they transit between different instructors even in the same school.

Statement of the Problem

There seems to be increasing number of education graduates being produced every year from colleges and faculties of education in the country towards the implementation of the professionalization of the teaching profession as a career. Perhaps there appear to be many education graduates today who are not employed while auxiliary teachers may still continue to find their way into the teaching profession as career. In view of this precarious situation, one wonders if by any means there are enough education graduates to take up the entire teaching role in the state and invoke full professionalization of the teaching profession as a career with a minimum entry requirement of NCE or the Postgraduate Diploma in Education.

The lack of accurate data for policy formulation on this issue necessitates a critical study on the demand and supply of graduate teachers. Furthermore, the absence of specialized educators also undermines the development of students’ talents and interests across a range of disciplines. Thus, the growing culture of employing auxiliary teachers instead of professionally-trained teachers without adequate in-service training policy seems to be a source of concern. In the light of this unpleasant

circumstance, addressing the scarcity of qualified teachers through the professional development of auxiliary educators presents a compelling avenue for improving the overall quality of secondary education. Therefore, it is pertinent to evaluate the issues relating to the professional development of teachers and the professionalization of teaching career in Senior Secondary Schools (SSS) in Edo State. Thus, the aim of this study is to examine the professional development of teachers and the professionalization of teaching career in SSS in Edo State.

Research Questions

The following research questions guided the study.

Research Question 1: What is the level of difference in the percentage between auxiliary and professionally-trained teachers employed based on subject areas in SSS in Edo State?

Research Question 2: What is the level of current student-teacher ratio based on subject areas in SSS in Edo State?

Research Question 3: What is the level of employment need for teachers based on subject areas in SSS in Edo State?

Research Question 4: What is the level of availability of professionally-trained teachers for employment based on subject areas in SSS in Edo State?

Research Question 5: What are the issues and challenges facing in-service training of teachers in SSS in Edo State?

Research Hypotheses

The following hypotheses were proposed and tested at a 0.05 alpha level of significance.

Research Hypothesis 1: There is no significant difference in the percentage between auxiliary and professionally-trained teachers employed based on subject areas in SSS in Edo State?

Research Hypothesis 2: There is no significant difference among current student-teacher ratio based on subject areas in SSS in Edo State?

Research Hypothesis 3: There is no significant difference of employment need for teachers based on subject areas in SSS in Edo State?

Research Hypothesis 4: There is no significant difference in the level of availability of professionally-trained teachers for employment based on subject areas in SSS in Edo State?

Research Hypothesis 5: There is no significant issues and challenges facing in-service training of teachers in SSS in Edo State?

Method

Research Design

The authors employed a quantitative survey design for the study. This design made it possible for the authors to have a full and correct representative opinion of the characteristics of the problem being investigated.

Population and Sampling Procedure

The population of this study is 297 principals and 1,327 teachers in public SSS in the eighteen (18) local government area of the State as at the time of this study. The sample for this study is 170 principals based on the Taro Yamane's formula. Teachers were not sampled because questionnaire was not administered on them. These principals were selected through a non-proportional stratified random sampling procedure from the eighteen (18) local government areas in the State.

Instrument for Data Collection

A structured questionnaire, titled: “Teachers Professional Development and the Professionalization of Teaching Career Questionnaire (TPDPTCQ)” was used for data collection in the study. The questionnaire consists of five sections and each of them addressed the five research questions. Specifically, the questionnaire was a checklist designed to find answers to the research questions. The questionnaire allowed the respondents to give their assessment in a 6-point Likert scale in research questions one to four, while research question five requires the respondent to express their opinion in an open ended questions.

Instrument Validity and Reliability

The instrument was subjected to face and content validity through the judgment of three experts from the Department of Education, Benson Idahosa University, Benin City. To determine the reliability of the instrument, copies of the instrument were administered to 30 principals who were not part of the sample and their vice principals by the authors. The data collected were subjected to inter-rater reliability test. Using the Pearson Product Moment Correlation Coefficient statistics to compare the principals and vice principals’ responses, a reliability co-efficient alpha value of .845 was obtained, which indicated that the instrument for data collection was reliable.

Procedure for Data Collection

The authors sought the assistance of the Executive Secretary, State Secondary Education Board in the Edo State Ministry of Education who assisted and used the Ministry official channel to distribute the questionnaire to the 170 principals of SSS sampled for the study. The responses were retrieved from the respondents through the Ministry of Education Online - Real Time.

Data Analysis

The study used the descriptive statistics such as mean and standard deviation to answer the research questions and the non-parametric and one-sample t-test were used in testing the null hypotheses.

Results

Answering Research Questions

Research Question 1: What is the level of difference in the percentages between auxiliary and professionally-trained teachers employed based on subject areas in SSS in Edo State?

The rate of professionalization of teachers in secondary schools in Edo state based on subject areas are shown in Figure 1

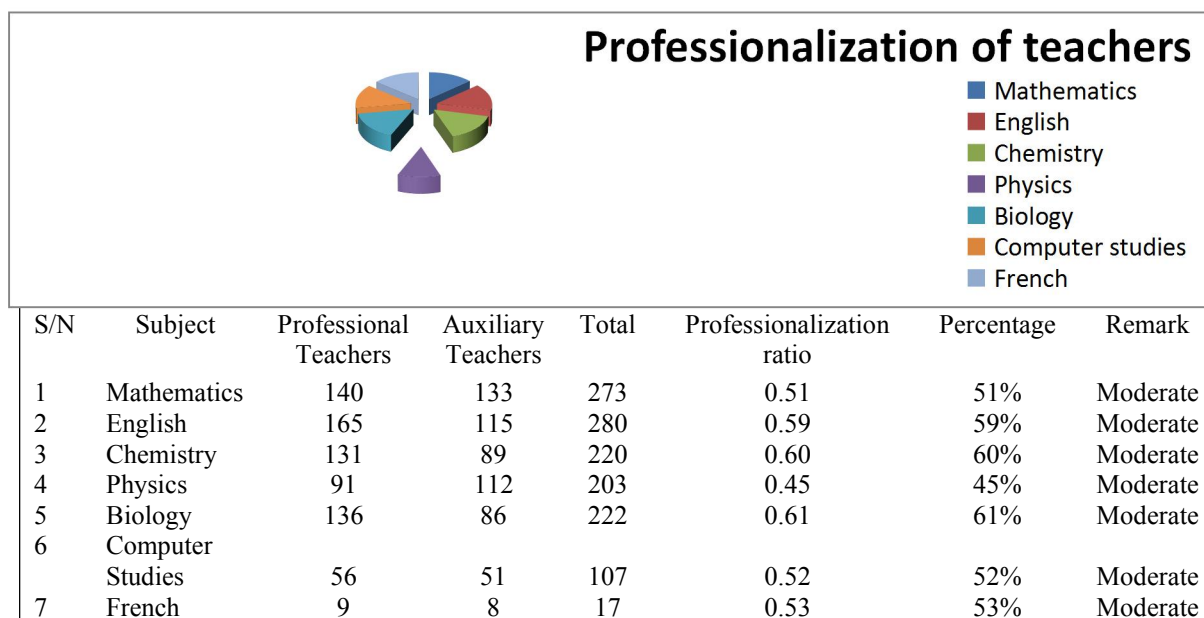


Figure 1: Rate of Professionalization of Teachers in Secondary Schools in Edo State Based on the Listed Subject Areas

Figure 1 showed the rate of professionalization of teachers in secondary schools in Edo state. Figure 1 showed Mathematics (51%), English (59%), Chemistry (60%), Physics (45%), Biology (61%), Computer Studies (52%), and French (53%). Since all percentages are less than 70% they are considered as moderate and below expectation. However, professionalization of teachers in SSS in Edo State in English, Chemistry and Biology are encouraging.

Research Question 2: What is the level of current student-teacher ratio based on subject areas in SSS in Edo State?

Table 1: Frequencies on the Ratio of Students to Teacher in the Listed Subject Areas

Subject	Above 80	71 – 80	61 – 70	51- 60	41 - 50	Below 40	Remark
Mathematics	101 (55%)	16 (8.7%)	9 (4.9%)	20 (10.9%)	21 (11.5%)	16 (8.7%)	Over 91% of the schools are over stretched
English	100 (54.6%)	18 (9.8%)	12 (6.6%)	18 (9.8%)	20 (10.9%)	15 (8.2%)	ditto
Chemistry	47 (25.7%)	22 (12.0%)	21 (11.5%)	19 (10.4%)	30 (16.4%)	44 (24.0%)	76% of the schools are over stretched
Physics	46 (25.1%)	25 (13.7%)	19 (10.4%)	17 (9.3%)	32 (17.5%)	44 (24.0%)	ditto
Biology	55 (30.1%)	27 (14.8%)	22 (12.0%)	20 (10.9%)	31 (16.9%)	28 (15.3%)	84.7% of the schools are over stretched
Computer Studies	39 (21.3%)	6 (3.3%)	10 (5.5%)	6 (3.3%)	9 (4.9%)	113 (61.7%)	38.3% of the schools are over stretched
French	8 (4.4%)	1 (0.5%)	0 (0%)	1 (0.5%)	5 (2.7%)	168 (91.8%)	8.2% of the schools are over stretched

Table 1 showed that teachers in Mathematics and English studies in over 91% of the schools have over 40 students per teacher with 55% and 54.6% of these schools in the two subjects respectively having above 80 students per teacher. In Chemistry and Physics 76% of the schools in the two subjects are overstretched with over 40 students per teacher while 49% of these schools have over 60 students per teacher. In Biology 84.7% of the schools are over stretched with about 44% of them having over 60 students per teacher. In Computer Studies and French 38.3% and 8.2% of the schools in the two subjects respectively are over stretched with over 40 students per teacher.

Research Question 3: What is the level of employment need for teachers based on subject areas in SSS in Edo State?

Table 2: Frequencies of the Number of Teachers Needed for Employment in the 170 Sampled Schools

S/N	Subject	Frequencies of Numbers of Teachers Needed on a 6- point Scale						Total	Average	Remark
		5	4	3	2	1	0			
1	Mathematics	3	9	55	69	42	5	396	2	Each of the sampled schools need 2 or 1 additional teacher on the average for the listed subjects
2	English	4	11	49	65	48	6	389	2	
3	Chemistry	1	4	32	63	71	12	314	2	
4	Physics	1	3	34	63	72	10	317	2	
5	Biology	3	4	36	61	68	11	329	2	
6	Computer Studies	3	2	31	53	67	27	289	1	
7	French	1	1	23	28	44	86	178	1	

Table 2 showed that 170 Principals in a scale of 0 to 5 indicated the number of additional teachers required for the listed subjects. The total numbers of additional teachers needed for the listed subjects for all the 170 sampled schools are: Mathematics (396) English (389) Chemistry (314) Physics (317) Biology (329) Computer Studies (289) and French (178). The average of the additional number of teachers needed in each of the listed subjects is 2 aside Computer Studies and French which is 1. This means that on the average, Computer studies and French need 1 additional teacher each while each of the other listed subjects required 2 more teachers in each of the sampled schools.

Research Question 4: What is the level of availability of professionally-trained teachers for employment based on subject areas in SSS in Edo State?

Table 3: School Principals Assessment of the Level of Availability of Professional Teachers for Recruitment in Edo State in the Listed Subject Areas

S/N	Subject	Freq. of Level of Availability on 6-point Scale						Sum	Mean	Remarks
		5	4	3	2	1	0			
1	Mathematics	36	47	48	38	12	2	600	3.28	Moderate
2	English	36	47	63	27	9	1	620	3.39	Moderate
3	Chemistry	22	42	56	46	14	3	552	3.02	Moderate
4	Physics	24	42	52	47	15	3	553	3.02	Moderate
5	Biology	18	59	76	22	6	2	604	3.30	Moderate
6	Computer Studies	22	32	58	37	19	15	505	2.76	Moderate
7	French	9	9	29	49	42	45	308	1.68	Low

Key: 5= Very high, 4= High, 3= moderate, 2= Low, 1= Very low, 0= Nil

Table 3 showed 170 School principals assessment of the level of availability of professional teachers for recruitment in Edo State on a scale of 0 to 5. The table showed that the total points given by 170 school principals as coefficients of availability of professional teachers for recruitment for the listed subjects are as follows: Mathematics (600) English (620) Chemistry (552) Physics (553) Biology (604) Comp. Studies (505) and French (308) which represent mean values of: 3.28, 3.39, 3.02, 3.02, 3.30, 2.76 and 1.68 respectively. The implication is that the bottom-line of the school principals' report is that professional teachers for the listed subjects are available for recruitment.

Research Question 5: What are the issues and challenges facing in-service training of teachers in SSS in Edo State?

Table 4: Frequencies of the Responses on Issues and Challenges Facing In-Service Training of Teachers.

Challenges	N	Freq	Freq ratio	Percent	Remark
Financial constraint	170	118	0.69	69%	High
Lack of resource persons	170	84	0.49	49%	Moderate
Lack of reference materials	170	73	0.43	46%	Moderate
Location of training	170	99	0.58	58%	Moderate
Logistics	170	115	0.68	68%	High

Key: 0-29 = Low, 30-59 = moderate, 60 -100 = High

Table 4 showed that the frequencies of the challenges according to 170 principals are : Financial constraint (118) Lack of resource persons (84) Lack of reference materials (73) Location of training (99) Logistics (115) representing 69% 49% 46% 58% and 68% respectively. The percentages of the frequencies of the responses on the listed challenges are further classified in the table as high, moderate, moderate, moderate and high respectively. The implication is that these challenges are common to the 170 secondary schools’ principals who responded to the question.

Testing Research Hypotheses

Research Hypothesis 1: There is no significant difference in the percentages between auxiliary and professionally-trained teachers employed based on subject areas in SSS in Edo State?

Table 5: Summary of the Wilcoxon Signed Ranks Coefficient of the Differences between the Number of Professional and Auxiliary Teachers in the Secondary Schools in Edo State

Teachers	Ranks	N	Mean Rank	Sum of Ranks	Z	Sig	Decision
Auxiliary – Professional	Negative Ranks	6 ^a	4.00	24.00	-1.69	.090	Retain Ho
	Positive Ranks	1 ^b	4.00	4.00			
	Ties	0 ^c					
	Total	7					

Key: a. Auxiliary < Professional b. Auxiliary > Professional c. Auxiliary = Professional

Table 5 showed that Wilcoxon signed ranks coefficient of the difference between the number of professional and auxiliary teachers in secondary schools in Edo state is -1.69 with asymptotic significant level of .090. The null hypothesis is thus not rejected at 0.05. This means that the numbers of professional and auxiliary teachers in secondary schools in Edo state are not significantly different.

Research Hypothesis 2: There is no significant difference among current student-teacher ratio based on subject areas in SSS in Edo State?

Table 6: Friedman Chi-square Coefficient of the Differences in the Number of Students per Teacher in Secondary Schools in Edo State Based on Subject Areas

Subject	Mean Rank	Mean Response	Scale	Chi-Square	df	Asymp. Sig	Decision
Mathematics	4.08	5	71-80	12.862	6	.045	Reject Ho
English	3.67	5	71-80				
Chemistry	4.92	3	51-60				
Physics	4.75	3	51-60				
Biology	5.75	4	61-70				
Computer Science.	2.83	2	41-50				
French	2.00	1	Below 40				

Table 6 showed that Friedman Chi-square coefficient of the difference in the number of students per teacher based on the listed subjects is 12.862 with asymptotic significant level of .045. The null hypothesis is thus rejected. This means that the numbers of students per teacher in the listed subjects are significantly different with French having below 40 students per teacher while Mathematics and English have between 71 and 80 students per teacher.

Research Hypothesis 3: There is no significant difference of employment need for teachers based on subject areas in SSS in Edo State?

Table 7: Friedman Test of Significant Difference in the Number of Teachers Needed in Secondary Schools in Edo State Based on Subject Areas According to 170 School Principals.

Subject	Mean Rank	Chi-Square	df	Sig	Decision
French	2				
Computer Studies	4	6.423	6	.377	Retain Ho
Biology	4				
Physics	4				
Chemistry	4				
English	5				
Mathematics	5				

Table 7 showed that the mean numbers of teachers needed in secondary schools for the listed subjects according to 170 school principals are: French (2) Comp. Studies (4) Biology (4) Physics (4) Chemistry (4) Mathematics (5) English (5). The coefficient of Friedman Chi- Square test for significant difference is 6.423 with significant level of .377. The null hypothesis is as result not rejected. This means that numbers of teachers needed by 170 school principals in secondary schools for the listed subjects are not significantly different.

Research Hypothesis 4: There is no significant difference in the level of availability of professionally-trained teachers for employment based on subject areas in SSS in Edo State?

Table 8: One Sample t- test of Significance of the Level of Availability of Professional Teachers for Recruitment in the Listed Subjects (Criterion Mean = 0.00).

Subject	Total	Mean	S	Mean diff	df	t	p-value	Decision
Mathematics	600	3.28	5.78	3.28	182	7.73	0.0001	Significant
English	620	3.39	6.86	3.39	182	6.70	0.0001	Significant
Chemistry	552	3.02	7.20	3.02	182	5.64	0.000	Significant
Physics	553	3.02	7.38	3.02	182	5.50	0.0001	Significant
Biology	604	3.30	5.97	3.30	182	7.49	0.0000	Significant
Computer Studies	505	2.76	8.49	2.76	182	4.46	0.0001	Significant
French	308	1.68	8.36	1.68	182	2.75	0.0065	Significant

Table 8 showed that the t-values for the level of availability of teachers for the listed subjects are: Mathematics (7.73) English (6.70) Chemistry (5.64) Physics (5.50) Biology (7.49) Comp Studies (4.46) French (2.75) with P -values less than 0.05. The null hypothesis is therefore rejected. This means that the levels of availability of teachers for the listed subjects are significant.

Research Hypothesis 5: There is no significant issues and challenges facing in-service training of teachers in SSS in Edo State?

Table 9: One-Sample Kolmogorov-Smirnov Test for Significant Difference in the Frequencies of the Responses on the Challenges Facing In – Service Training of Teachers by 170 School Principals.

Challenges	Freq	Mean	S	Kolmogorov-Smirnov Z	Asymp. Sig. (2-tailed)	Decision
Financial constraint	118	97.98	19.43	.474	.978	Retain Ho
Lack of resource persons	84					
Lack of reference materials	73					
Location of training	99					
Logistics	115					

Table 9 showed that the frequencies of the responses on the listed challenges have a mean value: 97.98, standard deviation: 19.43, Z value: .474 and significant at .978. Therefore, the null hypothesis is not rejected at 0.05 alpha levels. The implication is that the frequencies of the listed responses on the challenges facing in–service training of teachers in Edo State are not significantly different.

Discussion

The first finding of the study showed that the numbers of professional and auxiliary teachers in secondary schools in Edo state are not significantly different. This finding suggests that many auxiliary teachers have in the recent past acquired qualifications in educational studies, thereby reducing the number of auxiliary teachers in relation to the professional teachers. This finding agrees with the study of Olusegun, Okonkwo, Adegbile-Nnaedozie and Yakubu (2022) who found that upper basic schools in Zamfara State, Nigeria were adequately staffed with 11,245 teachers between 2013 and 2017 academic sessions; there was a close gap between teachers’ demand and supply in Zamfara State upper basic schools. There was a positive margin of 1,857 teachers in terms of ratio 1:40 benchmark, suggesting a similar trend in teacher distribution. This finding disagrees with the study of Ogboro and Nwadiani (2017) which found that there is low deployment and uneven distribution of graduate teachers to public schools in Edo State and that

The second finding of the study showed that the numbers of students per teacher in the listed subjects are significantly different with French having below 40 students per teacher while Mathematics and English have between 71 and 80 students per teacher. This finding may be due fact that French is less popular among the students, resulting in fewer students per teacher, while Mathematics and English are core subjects with a higher demand. It corroborates the findings of Ajani and Akinyele (2014) who found that there is a difference in student's perception of students-teacher ratio, with some classes have few students per teacher, while others have more students per teacher; and Bello, Aderanti and Bankole (2019) who equally found a difference in the student-teacher ratio in Ogun State. Evarist (2018) found that in Wakiso district the teacher student ratio in most of the USE schools was at the average of 1: 60 students. Daura and Audu (2015) found a record of a very poor performance in the area of pupils' teacher ratio, where the minimum ratio of 1:40 is abuse and in all the schools visited both primary and junior secondary sections had the minimum of a teacher to fifty pupils (1:50 and above). Jacob and Ndubuisi (2020) identified the following as the challenges facing the implementation of student-teacher ratio policy: inadequate funding, inadequate teachers, inadequate infrastructural facilities, weak quality assurance agencies, lack of political will and corruption.

The third finding of the study showed that the total numbers of additional teachers needed for the listed subjects for all the 170 sampled schools are: Mathematics (396) English (389) Chemistry (314) Physics (317) Biology (329) Computer Studies (289) and French (178). The average of the additional number of teachers needed in each of the listed subjects is 2, while the average for Computer Studies and French is 1. These numbers of teachers needed by the 170 schools for the listed subjects are not significantly different. The lowest average for Computer Studies and French may indicate a lower demand for teachers in these subjects. The finding suggests that the demand for teachers is relatively uniform across schools and may be attributed to the fact that the population of students for each subject may be similar across schools, leading to a similar demand for teachers. This finding is similar to that of Adeyemi (2007) who found that teachers were not adequately available for the Universal Basic Education programme in Nigeria. In the same vein, Adeyemi (2009) found that the supply of qualified teachers did not match the demand for them in secondary schools in Ekiti State. Shittu, Olubor and Oladimeji (2021) found that there was a yearly increase in teachers' demand but it was not commensurate with the number of teachers supplied to the schools in Kwara State. Nwakonobi and Obiagwu (2010) found a similar situation in Anambra State that teachers supplied to secondary schools were insufficient and were far below the number demanded.

The fourth finding showed that the levels of availability of teachers for recruitment for the listed subjects are significant. This finding may be attributed to the fact that a good number of auxiliary teachers have acquired professional training in various tertiary institutions in each subject area in the recent past. Subjects like Mathematics and English have probably benefited more from this development, leading to a higher availability. However, Osulale (2014) found that the availability of qualified science teachers is inadequate.

The fifth finding showed that the frequencies of the responses on the challenges facing in – service training of teachers in Edo State by 170 school principals are similar. And they were high and moderate in the subjects studied. The common challenges are financial constraint, lack of resource persons, lack of reference materials, location of training and logistics. This may be due to the fact that teachers across schools in Edo state may have similar training needs This finding is similar to that of Afolabi, Adesanya, Shuaib and Jimoh (2019) who found that the constraints facing in-service training programmes are inadequate funds, inadequate means of communications or publicity, late awareness about the programmes, improper scheduling of training, lack of motivation and long distance to training venue. In contrast, Mbonu (2020) found that the principals and teachers agreed that problems of identification of needs, misconception, nonchalant attitude of teachers, poor response to training by teachers, poor image of teaching profession and non-consulting of teachers were major factors that tend to hinder in-service training of teachers.

Conclusion

The analysis of the data from this study on teacher professional development and the professionalization of the teaching career in Edo State present a mixed picture. While some positive aspects were observed, the study also uncovered significant challenges that need to be addressed to enhance the quality of education and the status of the teaching profession in the state. In view of the outcome of this study, the researcher concludes that the numbers of professional and auxiliary teachers in secondary schools in Edo State are not significantly different. There are disparities in the student-to-teacher ratios for different subjects. There is teacher shortage in schools Edo State. The levels of availability of teachers for recruitment for the listed subjects are significant. There are significant issues and challenges facing in-service teacher training in Edo State.

Recommendations

Based on the findings of this study, the authors recommend that:

1. Since the numbers of professional and auxiliary teachers in secondary schools in Edo state are not significantly different, the study recommends the review of the teacher deployment policy to ensure a more balanced distribution of qualified professional teachers across all schools. This will help to improve the quality of instruction and learning outcomes for students.
2. The significant differences in student-teacher ratios across the listed subjects (French having below 40 students per teacher, while Mathematics and English have between 71-80 students per teacher) should be addressed. The study recommends a thorough review of teacher allocation and resource distribution to achieve more equitable student-teacher ratios across all subjects. This will enhance the quality of instruction and provide students with a more consistent learning experience.
3. The findings indicate significant additional teacher needs for subjects like Mathematics, English, Chemistry, Physics, and Biology. The study recommends the recruitment and deployment of teachers for these high-need subjects to address the shortfall and ensure adequate staffing across all schools. This targeted approach will help to improve the overall quality of education in Edo state.
4. While the average additional teacher needs for Computer Studies and French appear lower compared to other subjects, the findings still indicate a need for more teachers in these areas. The study recommends development of a strategic plan to actively recruit and train teachers for Computer Studies and French to enhance the breadth and depth of the curriculum offerings in Edo state secondary schools.
5. The findings on the challenges facing in-service teacher training, such as financial constraints, lack of resource persons, lack of reference materials, location of training, and logistics issues, should be systematically addressed. It is recommended that government should allocate sufficient resources, improve the availability of training facilities and materials, and enhance the logistics support to ensure effective and equitable professional development opportunities for all teachers in Edo state.
6. Targeted interventions and increased investment in teacher professional development programs is crucial for enhancing the skills and competencies of the teaching workforce so as to address the challenges of in-service training programmes.
7. Policymakers, education administrators, and stakeholders must work collaboratively to implement reforms to address the identified gaps, improve the working conditions and career progression opportunities for teachers, and enhance the professionalization of the teaching career. By doing so, the state can pave the way for a more robust and effective education system that serves the needs of students and communities in Edo State.

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