

**INFLUENCE OF QUALIFICATION AND EXPERIENCE OF  
COMPUTER TEACHERS ON THE ACADEMIC  
PERFORMANCE OF JUNIOR SECONDARY SCHOOL  
STUDENTS IN OVIA NORTH EAST LOCAL GOVERNMENT  
AREA OF EDO STATE**

**BY**

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**DEPARTMENT OF CURRICULUM AND INSTRUCTIONAL  
TECHNOLOGY  
FACULTY OF EDUCATION  
UNIVERSITY OF BENIN  
BENIN CITY**

**DECEMBER, 2023**

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**A RESEARCH WORK SUBMITTED TO THE DEPARTMENT OF  
CURRICULUM AND INSTRUCTIONAL TECHNOLOGY, FACULTY  
OF EDUCATION, UNIVERSITY OF BENIN, BENIN CITY, IN  
PARTIAL FULFILMENT OF THE REQUIREMENT FOR THE  
AWARD OF THE DEGREE OF BACHELOR OF COMPUTER  
SCIENCE IN EDUCATION B.Sc(Ed)**

**DECEMBER, 2023**

## CERTIFICATION

This is to certify that this work is properly conducted by **Roseline Adebudo OMORUYI**, with the matriculation number EDU1511103, in the Faculty of Education, University of Benin as part of the requirements for the Award Bachelor Degree B.Sc(Ed).

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## DECLARATION

I, Roseline Adebudo OMORUYI with the matriculation number Edu1511103, hereby declare that the project report titled “Influence of Qualification and Experience of Computer Teachers on the Academic Performance of Junior Secondary School Students in Ovia North East Local Government Area of Edo State” submitted by me to the Faculty of Education, University of Benin in partial fulfillment of the requirements for the award of a Bachelor of Education B.Sc(Ed) undertaken under the supervision of Dr. Mrs Ateze is an original work.

All ideas and views are product of my research and those that are not mine are duly acknowledged.

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Roseline Adebudo OMORUYI

## **DEDICATION**

I dedicate this project to Almighty God for his infinite mercy upon my life, for his encouragement, strength and favor which enabled me finish this work. To God be all the Glory.

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## **ABSTRACT**

This study investigates how the qualifications and experience of computer teachers affect the academic performance of Junior Secondary School (JSS) students in Ovia North East Local Government Area, Edo State. The research addresses concerns about the declining academic performance in JSS and its potential link to the quality of computer education. It also examines the availability of instructional materials and the professional competence of computer teachers.

The study's objectives are to determine the qualifications and experience of computer teachers, assess JSS students' academic performance, and explore the impact of teachers' qualifications and experience on student outcomes. The research questions focus on the qualifications and experience of computer teachers, students' academic performance from 2018 to 2023, and the relationship between teachers' qualifications/experience and student performance.

Findings indicate that the qualifications and experience of computer teachers significantly influence students' academic performance. Schools with qualified and experienced computer teachers generally have better student outcomes. However, concerns exist regarding the availability of instructional materials and the recruitment of non-qualified teachers, which could impact teaching quality.

The study recommends recruiting qualified and professional computer teachers, maintaining teachers' teaching experience, and incentivizing teachers to improve their commitment to teaching. It also emphasizes the importance of maintaining teaching standards by hiring more qualified teachers in secondary schools.

**Keywords:** Qualifications, Experience, Computer Teachers, Academic Performance, Junior Secondary School, Ovia North East Local Government Area, Edo State.

## CHAPTER ONE

### INTRODUCTION

#### **Background to the Study**

A qualified teacher is that teacher who establishes a pleasant, business like classroom climate, one that elicit students' responsibilities and co-operation in doing academic work. Such teacher will receive high rating by students on cooperation and work engagement. For the teacher to achieve and maintain high success rates in students, the teacher needs to praise students' successes, encouraging them to work hard and take responsibility for their academic progress (Adamson, 2004).

Teachers are responsible for student academic performance; hence what really counts in determining the quality of a teacher is the quality of what goes on in the classroom. They should be guided and equipped by sound knowledge or relevant principles so as to cope with classroom situation.

Teachers with multiphase background, training and qualification have over the years, dominated the teaching profession in Nigeria. With the emergence of new job opportunities, the teaching profession began to lose the best of its brain. Consequently, those who could not get better job stay on; new entrants use it as a stepping stone, while others who were not trained to teach but have no other job joined the teaching profession (Arisekola, 2007).

Teacher effectiveness hinges on mastery of the subject, ability to impart the subject matter to the learners and to exhibit the indices of educated person so as to achieve educational objectives. The educational objective focuses more on high students' academic performance, in order for the students to be better individuals and contribute to the development of the nation as a whole (Abdullahi, 2006).

The shabby treatments to teachers have culminated in the drift of some of the few trained teachers to better paid jobs. Teaching job should not be a dumping ground for the frustrated job seekers from other fields of specialization. The situations whereby

all sorts of people with diverse qualifications are appointed as teachers have dampened effective teaching. (Okunola, 1990).

Many authors have written on teacher's qualification to enhance academic performance of students. More specifically, the use of qualified teaching staff is a *sine qua non* in improving student's academic performance. Ali (2009) observes that there was statistically significant relationship between teacher qualification and student academic performance. Gravestock & Gregor-Greenleaf (2008) states that the explanations for good or poor student's academic performance have been quite exhaustive yet controversy still exists among scholars as to what contribute singly or jointly to students' poor performance. The teacher qualification found to be dominant in cross-country studies are related to; prerequisite, experience, attitude and personality.

Onwuachu, (2009) have investigated reasons for students' low performance in some subjects. Among the reasons were teachers' failure to comply to professional ethics and conduct of teaching. Hence, every teacher has his/her own personality and attributes which shows individual teacher characteristics. With these problems, the limits to effective learning of some subjects may have been minimally set. Accepted methods to overcome poor academic performance in those subjects have included the promotion of more effective teaching strategies and creation of more positive attitudes towards the learning of the subjects.

An effective teacher is the one who can establish rapport with students and create a nurturing, caring environment for personal development. He is one who can activate and energizes students to work toward a more just and humane social order (Arende, Afason 2005).

Fagbamiye (2009) remarked that teachers' competence contributes to pupils' performance. The observation by Okunola (2004) that no institution can rise above the quality of its personnel, gives credence to the fact that a person can only give what he/she have, in terms of knowledge or experience. A qualified teacher is more likely to achieve teaching effectiveness than unqualified ones. The recruitment of

unqualified personnel led to the failure of Nigeria educational system in the 50's and it's is still part of the problem facing our educational system today. It is against this background that this study is carried out (Saovapa & Wiwat 2012).

Akinteye, (2011) writing on the code of conduct for teachers opines that one should be mindful that a profession exists for the best interest of the client, the teacher shall practice the profession with genuine interest, concern and consideration for the student. Teacher qualification is one of the major factors affecting the quality of teaching and learning in school. To improve students performance levels, teachers must be knowledgeable and strive harder to keep informed of the most up-to-date methods and techniques in teaching. Thus, this study is undertaken to examine teachers qualification and experiences as determinants of students' academic performance in their junior secondary school.

### **Statement of Problem**

There has been a public outcry on the poor academic performance of students in the Junior Secondary School. It is believed that if computer as a subject is not taught at the Junior Secondary School Level, there will be a graduating drop in other subjects even beyond the junior school level. It is likely that students might find it difficult to understand the concepts taught. It has been observed that instructional materials for usage by the teachers in great quantities are being placed in school at decreasing rate.

The teachers problem today, than, is not the lack of materials, but how to make the best instructional use of those materials available to him (Jarolinek 2001). Unfortunately, teaching aids or instructional materials especially with the modern innovation are grossly lacking and faced with a lot of problems in its use by teachers.

Teachers are very vital in the educational system. They are the ones who interpret the goals of education and ensure that the children are educated in line with them. Since quality of output depends on the quality of input, the success or quantity of any educational system depends on the adequacy of quantity and quality as well as the level of devotion of its teaching workforce. Mason (1990) pointed out that quality

teacher is an important input in effective learning, since quality output depends on quality input. Taiwo (1990) has equally pointed out that teachers are very vital in any educational system as they are the ones who interpret the aims, goals and plans of education and ensure that the learners are educated in the directions of these aims and objectives.

Babalola (2000) observed that performance have generally taken the form of finding out whether human variables correlate highly with learners' performance.

Iyewarun (1994) said that teacher as a resource person helps individual student to find appropriate activities, information and methods of solving person or group problems.

From the above, we can say that the success of any school program depends on no small measure on the teachers' goodwill and professional competence. The problem lies in the recruitment of non-qualify teachers; teachers who do not have any teaching qualification, an accountant teaching in schools, a teacher teaching without the necessary knowledge of how to cope with different type of students in the schools.

### **Aim and Objectives of the Study**

The main aim of this study is to determine the influence of qualification and experience of computer teachers on the academic performance of Junior Secondary School Students in Ovia North East Local Government Area of Edo State.

The specific objectives of the study are to:

1. Determine the qualification of the computer teachers in Ovia North East Local Government Area.
2. Find out the number of years the computer teachers have been in the teaching profession.
3. Find out the academic performance of the pupils in the Local Government Area.
4. Determine the influence of the computer teachers' qualification and experience on the academic performance of the Junior Secondary School Students in the Local Government Area.

## **Research Questions**

The research questions that guided the study were:

1. What is the highest qualification of the computer teachers in Ovia North East Local Government Area?
2. How long has the computer teachers in the local government area been teaching computer to the junior secondary school students?
3. What is the academic performance of Junior Secondary School Students in the Local Government Area from 2018 to 2023?
4. Is there any relationship between the qualification of computer teachers, their experiences and Junior Secondary School Students in the Local Government Area?

## **Hypotheses of the Study:**

The following null hypotheses were formulated to guide and direct the study.

1. There is no relationship between computer teachers' qualification and students' performance.
2. There is no relationship between computer teachers' knowledge of subject matter and the students' performance.
3. There is no relationship between computer teachers' pedagogical skills and the students' performance.
4. There is no relationship between computer teachers' length of service/experience and the students' performance.

## **Significance of the Study**

The result of this study would furnish educational policy makers and planners with relevant and up-to-date information on the influence of qualification and experience of computer teachers on the academic performance of junior secondary school students in Ovia North East Local Government Area, Edo State.

The study will further determine whether more qualified and experienced computer teachers should be recruited as this will further influence the junior secondary school students in Ovia North East Local Government Area in their academic performance and promote good academic excellent in the junior secondary school.

The research will contribute immensely to the entire nation as it will provide a framework upon which local and state government will address the problems of students' poor academic performance in the Local |Government Area in particular and the country as a whole. It will also enable individual mostly in Ovia North East Local Government to know the interrelation between student's performance and computer teachers' qualifications.

It will also look into how every teacher should display good ethics required of a professional teacher. In addition, it will give an insight into skills acquired by teachers and their ability to make use of the available resources.

The study was conducted to show those qualities of computer teachers which can make or mar organizational effectiveness. The results from the study would, therefore, be useful to government and most especially relevant agencies that are in charge of personnel administration in secondary education. They would be assisted to take cognizance of these qualities, thus emphasize them during recruitment exercise of teacher and on-going teacher administration. This will help to ensure qualitative recruitment exercise.

The findings from the study will also benefit those in charge of recruitment, placement and management of computer teaching personnel as well as their continuous development in the respective junior secondary education.

Also, the findings will be of value in terms of monitoring assessment in connection with accountability or reading of standards, assessment of teachers for professional improvement, determining computer teachers' fitness for promotion as well as for refining professional classroom practices.

### **Delimitation of the Study**

The scope of this study is delimited to the influence of qualification and experience of computer teachers on the academic performance of junior secondary school students in Ovia North East Local Government Area of Edo State. Also, the study is to be conducted on computer teachers' qualities, such as, qualifications, experience, on-the-job training, and conditions of service and personality traits. The study therefore covers some selected secondary schools in Ovia North East Local Government Area of Edo State.

### **Limitation of the Study**

The challenges encountered in this study include:

1. Reluctance of respondents to disclose information,
2. Distance and area to cover within limited period of time could be a little bit difficult.

In addition, the study faced some challenges in the area of time allotted for its completion. Materials and financial resources also created some problems since the researchers could not have raised much fund for the conduct of the research being a student.

### **Definitions of Terms**

The following under listed are explained the way they are used in the context of the study.

**Teacher quality**– these are characteristics which could be determined or influenced by teachers’ performance. These include: qualifications (academic/professional), experience and exposure, to on-the-job training, conditions of service and personality traits.

**Quality** “fitness of input (teacher) to planned goals, specifications and requirements. Internal effectiveness of organization is therefore measured with the degree or quality of workers performance.

**Students’ academic performance:** the level of response of learners to evaluation by teachers on the particular subject at a particular time.

## **CHAPTER TWO**

### **REVIEW OF RELATED LITERATURE**

#### **Introduction**

This chapter presents a review of past studies of eminent scholars as documented in various articles journals, textbooks, bulletins on the influence of qualification and experience of computer teachers on academic performance of secondary school students.

#### **Conceptual Framework on Teacher Qualification**

Acquiring highly qualified teachers is essential for enhancing students' academic performance. According to Smith and Land (2001), improving the qualifications of teachers requires school administrators to initially elevate standards. The question of whether teaching should be classified as a profession is contentious, largely due to the comparatively low salaries teachers receive and the public perception that their ultimate reward lies in heaven, which is a matter of debate.

The National Policy on Education (2004) clearly asserts that teaching should be recognized as a serious profession by the Federal Government of Nigeria. Consequently, all teachers in educational institutions are mandated to undergo professional training, and there is a requirement for them to consistently engage with innovations in their respective professions.

Another significant measure taken is the establishment of academic associations such as the Nigeria Union of Teachers (NUT), Nigeria Association of Professional Education (NAPE), College of Education Academic Staff Union (COEASU), among others. This initiative aims to strengthen teaching as a noble profession, fostering

avenues for improvement, development, and ensuring standardized methods for administering educational sectors among its members.

Furthermore, the National Council on Education has undertaken a bold initiative to phase out teachers' grade two and replace it with the Nigeria Certificate in Education (NCE) as the minimum entry point to the teaching profession. This move is geared towards ensuring that Classroom Teachers are qualified. In pursuit of this goal, teacher preparation institutions at both NCE and University levels have outlined a comprehensive body of knowledge in broad areas of:

- General education
- Subject matter specialization area and
- Professional education aspects in order to improve the professional development of the Nigeria teacher.

Continuous reforms in various aspects of human endeavors, including education, are consistently driven by factors such as the demands of the labor market, the employment system, and the complexities of socio-economic development. Qualifications are globally standardized based on training for certification and high-level expertise. This includes re-training for innovative strategies, fostering teamwork spirit, independent decision-making abilities, social interaction, inter-group communication, awareness of quality discipline-based criteria, and more (Adeleke, 2006).

Taking a functionalistic focus and employing a functional analysis approach, "competency" is defined as a set of skills and knowledge applied to carry out tasks or functions in alignment with job requirements. In essence, qualification denotes essential skills adhering to standards, influencing the nature of tasks associated with a particular job. Bajah (1999) stated that some recent multivariate studies of student academic performance at school and district level have found a substantial influence of teacher's qualification on what students learn, especially when scores on licensing examination is included. He also found that every additional money spent on certificate a teacher is holding or the type of preparation he or she. The present study revealed significant relationship between teachers' professional qualification and students' academic performance. This implies that to get from where we are now to where we need to be educationally, teachers with highly qualified teachers should always be appointed into secondary school so as to improve student academic performance at this level of education especially in technological and science subjects but not necessary need to be professional. Yet it is important that all professional possess knowledge that is not common to those that are not in the profession (Penny, 2005).

In teaching, there is indication that teachers should know how to impart knowledge on their students and how to teach all students effectively. According to Wuji, (2005) to be qualified means fitted as by training or experience for a given purpose or component. It may also be complied with the specific requirement or precedent condition as for an office or employment eligibility. Therefore, the definition of a qualified teacher depends on the teacher's teaching assignment.

Furthermore, teacher's qualification has been consistent with other research on effective teaching, which suggested that effective teachers adjust their teaching of computer studies to fit the needs of different students and the demands of various topics and methods (Doyle 2000).

This is because computer studies are both theory and practical-based subjects, and as such, a teacher who has undergone professional training would be able to apply the right methods of teaching that enhance better performance of students in computer studies. This involves making adequate use of the school's computer labs, instructional materials, and textbooks.

### **Computer Teachers' Teaching Experience and Students Academic performance**

Adesumaju (2004) has discovered a noteworthy relationship between a teacher's years of teaching experience, yielding a positive influence on students' academic performance. However, this relationship is not always consistently linear. Numerous studies have indicated that inexperienced teachers, those with less than three years of experience, are generally less effective than their more seasoned counterparts. The benefits of experience seem to plateau after approximately five years, particularly in non-collegial work settings. One potential cause for this curved-linear tendency could be the availability of equipment and workshop or laboratory facilities, especially in schools that face challenges in attracting experienced and qualified staff (Owoderu, 2006).

Numerous investigations have also been carried out to find the effect of teacher experience on student's learning and have been found to positively relate when adequate. It can be deduced the teachers who have adequate teaching experience will

be adequately equipped on how to merge previous experience on their present teaching for better performance of the students. Furthermore, the benefits of experience may interact with educational opportunities in the teaching setting as continual learning and collaboration continues to better student performance (Akande, 2005).

The success of any teaching and learning process, which significantly impacts students' academic performance, depends on the effectiveness and efficiency of teachers. Teachers, as the individuals responsible for teaching and implementing educational policies aimed at achieving educational goals, play a crucial role. They cannot be overlooked if educational goals and, indeed, national development goals are to be achieved. Akande (2005) emphasized that students in any country cannot outperform the quality of their teachers.

Contributing to this perspective, Ogunji (2006) discovered a significant relationship between teachers' attributes and students' academic performance. He identified key attributes, including teachers' knowledge of the subject matter, communication ability, emotional stability, good human relationship, and interest in the job. Ogunji concluded that students whose teachers lack subject matter knowledge, have poor communication skills, exhibit emotional instability, and lack interest in the job do not perform as well as those whose teachers possess these attributes.

Furthermore, Ogunwuyi (2000) suggested that, in addition to the basic entry qualifications teachers possess, other attributes greatly influence their efficiency and effectiveness. These attributes, in turn, have a direct impact on students' academic performance.

A teacher's knowledge of the subject matter, students, methodology and techniques of imparting knowledge are great attribute which have significant effects on the students' academic performance. Odebunmi, (2006) explained further that for students to perform well in any examination one of the prerequisites is that their teachers must know them and have profound knowledge of their state of physical, intellectual and psychological readiness. Teachers must be well versed in the content of the subject matter he/she is teaching. He must know the appropriate method to put in different situations.

Igwe, (2002) revealed that there was a significant relationship between teachers' ability to communicate effectively and students' academic performance in the secondary schools. He explained that teaching and learning processes deal with dissemination of ideas, skills, knowledge, values and attitude from the teachers to the students. He concluded that teachers' ability to communicate effectively determines how much the students acquire from him/her which invariably influences their performance each time they are tested in such aspects. One can observe from this that, to be able to teach effectively, a teacher must be able to communicate his/her ideas effectively and to achieve this; the message must be clear and precise.

Ogunwuyi, (2000) found out that the attributes of teachers that have great influence on students' academic performance include adequate training in any of the teacher training institutions, knowledge of the subject matter, physically and mentally healthy, interest in the job, good sense of humour, emotional stability, ability to communicate effectively, open mindedness, good human relationship and good appearance. He explained that most teachers in the secondary schools today lack majority of these

attributes or qualities. In a related development, the study of Afolabi (2001) on preparation of teachers for effective implementation of secondary school curriculum in Nigeria revealed that there was a significant relationship between teachers' attributes and their participation in school development programmes and curriculum implementation. He concluded, based on his findings that those to be appointed as teachers in the secondary schools should be thoroughly screened so that those who have relative ideal attributes required of a good teacher are employed so that the educational goals and that of the national development can be attained without much waste of time, fund and human labour (Owolabi 2005).

The essential task of the teacher is to arrange the conditions of the learner's environment so that the processes of learning will be activated, supported, enhanced, and maintained (Igwe, 2002). Teacher characteristic is a crucial factor in arranging the conditions of the school environment for effective teaching. Research on teacher characteristic/personality is based on the assumption that the teacher as a person is a significant variable in the teaching-learning process. Personality influences the behaviour of the teacher in diverse ways, such as interaction with students, methods selected, and learning experiences chosen (Buss, and Cantor, 2004).

### **Years of Teaching Experience and Teachers' Qualification**

Years of experience and length of service on a duty post consequence to one previous and continual preparation is assumed to be a predictor of classroom successes. Surely, competence developed over time as practice makes perfection. Ideally, the competence level of operation of a professional with his exposure and constant field experience cannot be compared with that of a beginning teacher (Boot, 2003).

In addition to the fact that experience is considered the best teacher, the significance of a teacher's experience plays a crucial role in every successful teaching and learning endeavor. The impact of a teacher's experience on students' academic performance is so vital that it cannot be overlooked when discussing performance. According to Brooks (2002), experience holds great value in the effectiveness of the teaching-learning process.

Experience equips a teacher with the ability to perform effectively in the classroom, thereby aiding students in excelling in tests, examinations, and even in their home assignments. Brooks emphasizes that teachers gain this valuable experience through rigorous academic training in training colleges, teachers' institutes, or universities. Furthermore, teachers must have practical experience in teaching and classroom management over a specific period (Anyanwu, 2007).

In a study carried out by Arisekola, (2004), performance of teachers who are experienced and those who are not experienced were compared, it was found that teachers who were experienced as a result of many years of service; undergoing teachers' training and so on, out perform better than those teachers who do not have or possess the required or needed experience for teaching and learning process in the school.

Also, the academic performances of the students who are taught by experienced teachers were compared with those who were taught by inexperienced teachers by selecting 200 students and administering questionnaires on them. According to Amos (2003), the responses showed that 151 (one hundred and fifty one) students were of the opinion that experience is one of the good and relevant qualities of a good teacher.

And that experienced teachers in the schools, do produce good, and high academic oriented students in the school. In another development, Onyema, (2003), opined that a positive relationship exists between teachers' experience and students' academic performance in any school system. According to him, those teachers who are highly experienced, teach exceptionally, keep instruction moving at a good pace in order to sustain interests of the learner and to allow him/her develop interest to achieve high academic performance in the school.

Owoderu, (2006) concluded that teachers who are experienced, know how to start class quickly and purposefully and how to end lessons on clear start and stop cues, thereby helping to pace lessons according to specific time targets. They also review activities, assignment to specific time targets. They also review activities, assignment materials and supplies, they make ready when students arrive. Owolabi, (2005) is of the opinion that experienced teachers are good administrators also. For instance, experienced and trained teachers attend to administrative matters such as roll call or taking, announcement, classroom management, classroom control, and handle them with skill and efficient routines that minimize class disruption. They also handle transition between activities smoothly and rapidly and introduce new objectives quickly too. All these they do in order to ensure high academic performance of their students (Arisekola, 2004).

Bloom (1994) asserts that one of the qualities of an experienced, trained, and qualified teacher is the ability to cover extensive content. According to him, experienced teachers thoroughly cover their content, leaving nothing untouched or undone. They ensure the comprehensive coverage of the syllabus for the term and assess students on

the topics they have taught in the classroom. All these efforts are aimed at fostering students' creativity, the development of thinking skills, and more. For instance, activities that promote creativity and critical thinking, as noted by Owolabi (2005), often demand extensive processing time. This is evident when a teacher poses questions that require analysis or evaluation.

An experienced classroom teacher actively engages in independent projects such as creating a classroom newspaper, writing and producing plays, or conducting science research projects. This is done to foster critical thinking, creative problem-solving, inquiry, evaluation, and independent learning. Experienced teachers possess insights into the types of home assignments that best support their students, and their expectations influence the inferences they make about likely student performance in tests and terminal examinations (Onyeji, 2007).

The concept of having high expectations for students' performance is consistently highlighted in lists of characteristics of effective teachers. These expectations encompass essential pedagogical knowledge, skills, disposition, and commitments that enable teachers to practice at a high level. The standards upheld by experienced teachers are grounded in a fundamental philosophical foundation, consisting of five core points:

1. Experienced teachers possess a deep understanding of the subjects they teach and the necessary pedagogical knowledge.
2. Experienced and trained teachers take responsibility for managing and monitoring students' learning in the school.

3. Experienced teachers engage in systematic thinking about their practices, drawing insights from both experience and rigorous training.
4. Experienced teachers actively participate in and contribute to learning communities.

### **Teacher's Content Knowledge and Students Academic performance**

The content knowledge of a teacher refers to whether he/she teaches within their subject specialization in the school. It implies being well-versed and specialized in the subject assigned to the teacher. Welberg (2003) terms this as subject-matter knowledge. Wenglinsky emphasizes the significant role that strong content knowledge plays in predicting students' academic performance. Indeed, there is a prevailing belief that teachers must possess a thorough and masterful understanding of the subject they teach for their students to excel.

Ogunji (2006) postulated that a teacher's content knowledge positively influences students' academic performance. Numerous studies align with the idea that teachers who instruct in subjects they have thoroughly studied (having obtained a major or minor in the field during college or earning an advanced degree in the discipline) are notably effective. These teachers are proven to be more adept at employing teaching strategies that cater to student needs and learning styles, fostering higher-order learning in subjects related to computer studies.

However, advanced degrees in general - degree that are not in the subject matter been taught- have not been found to be associated with higher student performance in other subjects. This is as a result of the teacher not having the ability to excite, stimulate or stir students' imagination as needed in this subject for greater involvement in the

discovery of subject matter (Uzor 2006). Therefore, according to Onyeji (2007), for a teacher to be effective, they must possess extensive knowledge of the topics they are teaching. It is crucial that the subjects they teach align with their specialization in computer-related fields.

### **Teachers Interest (Teaching) and Student Academic performance**

It is a fact that some teachers are not devoted and dedicated to their job (teaching) because of various reasons. The profession has been seen in Nigeria as low status occupation while teachers are treated as second class citizens. Some people on the job do not have interest in it but find themselves in teaching due to some circumstances. All these reflect in their attitude to the profession. Some teachers have positive self - concept and predisposition while others have neglected self - consent. Some studies reviewed failed to reveal much about teachers' attitude to job (teaching), Much is usually believed to be an important factor that makes difference in how their student perform. But this present study found a significant relationship between teachers' attitude to teaching and student academic performance. While it contrasts the finding of some researches like Sund, and Carn, (2004) reported that teachers with positive self conception and predisposition surely perform better on the job than those with negative self concept and consequently contribute in enhancing students' academic performance.

### **Problems Affecting Teachers qualification**

#### **(a) The Inability to Control or Legalize Entry into the Profession**

Any profession should have control over entry into the practice of its profession. Unfortunately, the National Union of Teachers has little or no influence in matters of

policies for auditing and registering professionally qualified persons into the profession. While members of the Union fervently believe that it is not just anybody that can be permitted to become a member of the profession, the union is unable to act, as it lacks the control and the legal backing to enforce the standards set by it.

**(b) Lack of Standards**

Standards in education have connotation for quality, efficiency, effectiveness, relevance and pragmatism in education and management at classroom, school and the entire education system (Onyeji, 2007). The setting of standards is closely tied to the equally important job of raising the status of the teaching profession while improving the quality of education. The society's ambivalent attitude to the emerging professional crises in education partly arises from the indiscriminate and unchecked ways by which all and sundry are recruited to train as teachers. One step to raising educational standards in Nigeria is to recruit only well qualified entrants into the teaching profession. With such a step comes a careful review of such teachers' status, remuneration and other conditions of service, which will invariably not be lower than those for other professionals. This step is one way of raising the teacher's social image and his place in society.

In spite of the immensity of the roles teachers play in society, there is abundant evidence to suggest that teachers have not been receiving sufficient attention in terms of their management and support. The issues of most concern to their morale and motivation, performance and productivity are in the areas of salaries and conditions of service, recruitment and deployment, teacher management, professional support system, teacher development and education (Ejiogu 2005).

## **Financial Issues**

Federal and State governments have found it increasingly difficult to meet recurrent and capital costs required to support the rapid expansion in education. Thus, the economic pressures on education have been reflected in declining allocation to education.

## **The Need for Effective Computer Teachers**

One of the challenges perplexing many individuals in the education sector is determining the suitable qualification for a computer studies teacher in secondary school. Those who prioritize qualification and discipline might argue for a university degree, but it should be acknowledged that the responsibilities in a university extend beyond the confines of secondary school work.

Iyewarun (2004) emphasized that the teacher, acting as a resource person, assists individual students in finding suitable activities, information, and methods for solving personal or group problems. The achievement of this goal is reliant on the engagement of an effective computer studies teacher.

Oni (1995) further stressed the significance of teachers in education system. Teachers are very vital in the educational system, they are the ones who interpret the aims and goals of education and ensure that the children are educated in line with them.

Comber and Keeves noted by Oni (1999) opined that teachers' qualifications were positively and significantly related to student performance. The fact still remains that an effective teacher elevates his or her student's performance.

Kain and Rivkin (2002), in their study, affirmed that the quality of teachers is the most crucial factor influencing student performance, and there is considerable variation in quality among teachers. According to Kolberge (2007), professionally trained teachers may not exhibit an acceptable level of pedagogical competencies, possibly due to the subpar quality of training they receive. He further stated that a more effective teacher is required to demonstrate an acceptable level of pedagogical competencies. Jason (2002), discussing the high expectations of American students, pointed out that possessing a teacher certificate from colleges or universities does not inherently mean the teacher is highly qualified to teach computer studies. Instead, effectiveness is derived from education programs, training, and retraining initiatives.

Kolberge (2007), drawing from insights by computer studies scholars, emphasized that the study of computer studies fosters in students a profound understanding of digital environments and technology. According to these scholars, to fully promote the development of skills, attitudes, and values in computer studies learners, the pivotal role of the teacher is paramount. The teacher must actively explore and employ contemporary strategies and teaching techniques in the field of computer studies to discharge these duties and effectively impart the necessary skills and values to students.

Sanders and Rivers (2006) argued that the most significant factor influencing students' attitudes is teachers, and the effects of teachers on student attitudes are both additive and cumulative. In other words, teachers play a crucial role in enhancing and improving students' attitudes toward learning. Furthermore, they assert that students with poor attitudes are the most likely to benefit from increases in teacher

effectiveness. When considering these various pieces of evidence, although diverse in nature, they all converge on the conclusion that quality teachers in the field of computer studies are critical determinants of students' attitudes.

### **Major Factors that Influence Teachers Educational Qualification and Teaching Efficiency**

The standing of a profession is, to some extent, influenced by the social class background of its recruits. The higher the social stratum from which recruits generally come, the higher the status of the profession. Consequently, a profession with higher status is more likely to attract recruits from the higher strata. Cahander and George (2002) suggest that recruiting candidates with high potential will enable the production of effective and adaptive teachers.

In the teaching profession, Fafunwa (2004) identified five categories of teachers found in Nigeria:

- (i) Those who are convinced that teaching is their calling and that they can best serve their country in that capacity;
- (ii) Those who choose teaching and find satisfaction in it compared to other professions;
- (iii) Those who join the teaching profession out of necessity rather than choice;
- (iv) Those with inadequate and poor academic records but have had some secondary education;
- (v) Those who have not been to secondary school due to their inability to pass the required entrance examination or a lack of opportunity to do so in the past.

This diverse group of entrants into the teaching profession in our schools today contributes to the challenge of recruiting competent and professionally trained teachers into the school system. It also contributes to the low status accorded to members of the teaching profession. Furthermore, the public perception of most teachers is often unfavorable. Consequently, teaching is not perceived as important but rather commonplace. As a result, since anyone or everybody can practice the profession, it does not enjoy the status of other professions, and members of the society and other professionals often hold it in ridicule.

### **Dimensions of Teacher Qualification**

Indeed, vocational trainers narrow down qualification to a set of well-defined knowledge and skills which place greater emphasis on the improvement of the training process. Qualifications are categorized into five by international Weiterbildungsbildung organization in 2003. These include:

- i. **Professional qualification:** A person has professional qualification if he or she has the knowledge, skills and ability required for carrying out an occupational task successfully.
- ii. **Methodical qualification:** The ability to self-inform and assimilate fundamental learning techniques, as well as knowing how to react to situations and apply suitable procedures to the task commended.
- iii. **Technical qualification:** It involves the assimilation of cognitive capabilities and motor-skills inherent to an occupation, or as regulated by the demands of the post.

- iv. **Social qualification:** The ability to cooperate and deal with other people through tolerance, assimilation of basic cooperation and communication skills.
- v. **Individual qualification:** The ability to reflect on one's own actions. It is all about self-knowledge and responsibility plus development of personal interests and life-plans.

From vocational training experts, competency is a set of requisite skills confined to a particular duty post with commonality across all disciplines, but with little variance at level of application. Moreso, when determining competency level of a worker, a linear comparison is established between the practiced and expected competencies.

### **Qualification, Competence and Education**

Education is a common field to all professions because teachers are the career – maker of every successful man in all endeavours. During schooling; the yesterday students learn much more than what defined by the NPE, that is, literacy and numeracy. And at upper level of their education, every student gets exposed and passes through a set of skills and attitudes that individual need to meet self-goals and societal demand in the nearest future. Right from the time of self-reliance and the then white collar job, it is only those who are competent, and can compete favourably at the point of interview and testing did secure job, as against god-fatherism influence of these days.

When making effective projection towards the world of work through schooling, educators concede that, each discipline/course programme should always be tailored towards suitable competency-based curriculum.

More importantly in the millennium, education has gone more enterprising, and what really demanded from school leavers and graduates to excel in today's knowledge economy is nothing but core competencies.

It is only qualification that can give self-sustenance and sustainable economy in the face of unemployment. Thus, for demand of world of work, student and graduate-to-be cannot afford to only be equipped with the technical knowledge in his area of specialization but must acquire certain core competencies and skills. Competency is a distinguishing characteristics' between education and training, remembering education is knowledge, skills and its inclusiveness.

In real life situation, competencies are more than knowledge and skills; they also involve psycho-social element like values, attitudes, social-relations, prowess and processing abilities. Cognitive skills are basic tools for knowledge acquisition and interpersonal skills. Also, there is no assignment or a duty post that requires a unit of competency, rather a set of competency or series of competencies apply across board for successes. On a factual note, competency of every teacher is a remarkable index of quality. Quality in education has placed pressure and strong look-out on the part of the government and school administrators to constantly assess and upgraded the competency of their teachers. Although, no simple formula exists for measuring teacher quality.

### **Policy Issue on Teacher Qualification**

No doubt, education as a formal system stands out on policies for standards. And such policies guide teacher preparation through stated prescriptions of in accordance with

the requirements of our education (NPE, 2004), relevant extract from sections, appropriate subsections are as follows:

- (a) since no education system may rise above the quality of its teachers', teacher education shall continue to be given major emphasis in all educational planning and development;
- (b) The minimum qualification for entry into the profession shall be the Nigeria Certificate in Education (NCE).
- (c) Provide teachers with the intellectual and professional background adequate for their assignment and make the adaptable to changing situation.

All teachers in educational institution shall be professionally trained. The teacher education shall be structured to equip teachers for effective performance of their duties.

At the Nigeria Certificate in Education (NCE) and degree levels, education programmes shall continue to be expanded to also cater for the requirements of technical, business and special education.

Teacher education shall continue to take cognizance of changes in methodology and in the curriculum. Teachers shall be regularly exposed to innovations in their profession.

In-service training shall be developed as an integral part of continuing teacher education and shall also take care of all inadequacies.

Effort towards the improvement of quality education at the primary and secondary levels shall include:

- a. Appointment of academically and professionally qualified persons as teachers and head teachers;
- b. Regulate in-service training programmes for teachers and head teachers.

In real life situation, the competence level attained by every teacher could be determined through his/her teaching activities display, and judge at classroom level. Until recently, the assumption has been that, the certification requirements as implemented by colleges of educations, faculties of educations, institutes of educations, or school of education in polytechnics were sufficient to ensure adequate level of teacher competency. Present reports even say it lauds and clear that, so many teachers who do not have teacher education background never perform below expectation (Flipp, et al 1984).

Although, in the developed nations across Asia, teacher quality is never base on direct teaching qualification(s), rather a post follow-up internship (i.e Probationary appointments) or standardized test of competence of teachers (such as Subject competency teacher certificate (CTC)) is put in place to ensure quality and excellence apart from licensing.

So, to say, teaching competence is not all about pursuing a teacher certificate, but ability to display expected skills and knowledge when comes to classroom interaction for standard practices.

Teaching activities are set of composite activities involving pre-preparation and implementation of a proposed lesson. Akande (2002) sees teaching activities as a set of preactive and interactive teaching activities for effective teaching and learning

situations. Therefore, quality of a teacher through his or her teaching activities could be linked directly or indirectly to his or her preparation and professional development. So, the question “who is a qualified teacher” seems best to describe the competence of a teacher.

### **Expected Minimum Qualification of Teachers**

The expected minimum qualification of teachers has been clearly spelt out in the National Policy on Education with high degree of flexibility at degree level. The teacher preparation is usually patterned after a number of competencies, and the programme requirement is expected to be operated to letter by accredited institutions under the guidance of minimum standards. Nowadays, teacher preparation covers sound knowledge in the content of the subject, principle and methods of teaching, art of education practices and inter-personal skills. While appraising the downward trend in education, Ivowi (2006) is of the opinion that, if the products of the teachers must salvage this country, then aforementioned qualification must be handled by well trained and motivated person with academic and professional competencies to match the expectation of our society.

Moreso, these qualities are knowledge – skills – based to practice of teaching, and the only viable solution for the said acquisition is teacher education.

For excellence and standard, expected minimum competencies of a teacher include: subject matter, pedagogy, skill processes, resourcefulness, behavioural motivation and evaluation.

Infact, every teacher’s capacity building as subject to teacher education rested on related competencies. Teacher education focuses on interactive and dynamic nature of

the components of teacher knowledge in the context of classroom practices (Fennema and Frank 2003).

Bisong (2005) added that, teacher professional qualification is of two(2) aspects; vis-à-vis, teacher's knowledge of the subject to be taught; and teacher's ability to teach it in such a way to bring about learning on the part of the pupils. Therefore a teacher develops competence in teaching as long as he carries on the work of teaching. Hence, the more and longer he teaches, the greater his chance of developing quality in teaching. In essence, it implies that constant teaching makes a teacher competent since each teaching encounter poses a new and distinct challenge to him and therefore demand new presentation strategies. The teacher's professionalism is therefore developing by his degree of prowess in the art of teaching.

### **Teacher Qualification and Preparation**

Making of teachers through teacher institutions is clearly defined in line with Nigeria education policy (NPE, 1971, 2006, 1998, 2004). Teacher preparation is all about Teacher Education and not training per se because of its present inclusiveness. Teacher education focuses on preparing sound, highly motivated, conscientious and efficient classroom teachers for all levels of our educational system having realized that, no country can rise above the quality of its teacher. Teacher education started under mission era with teacher training of two years programme for Teacher Grade (TC-II) Certificate. While in the millennium, continuous up-grading for standards and excellence, has taken teaching preparation beyond reasonable level of becoming a profession.

Teacher education preparation is a continuum programme for competencies and best practices. Teacher education programme is into two (2) phases, namely:

1. Pre-service teacher education programme
2. In-service teacher education programme.

Also, integration of both phases and self-development are directed towards the expected competencies of any teacher at classroom. Explicitly looking at the nature of teacher education programme, Pai-Obayan (2006) is of the view that, Teacher Education is a continuum, with the initial preparation phase leading to a career long, continuous personal and professional development process, in the spirit of lifelong and life wide learning .Teacher Education and preparation according to policy has been duly structured to equip teachers for effective performance of their duties, through required professional training exposed to in meeting the required minimum standards, under the accredited institutions. On completion of teacher education accredited credential programme, say three (3) or four (4) year of coursework and clinical exercises, simultaneously, the accredited institution and concerned commission jointly issued related certificate (NCE, B.Ed, B.Sc. [Ed], or B.A [Ed]) after internship of one-year youth service corps for degree or equivalent holders. In appraising the trend in professional development and requirements of teachers, Ivowi (2006) is of the opinion that, once certified by appropriate authority. It is reasonable to assume that a number competencies aimed at have been attained.

### **Pre-service Teacher Education Programme (in-the-making preparatory)**

Pre-service Teacher Education from its name means teacher preparation before joining teaching service as teaching staff of either public or private schools. The preparation

of teachers focuses on expected knowledge and skills in the area of subject matter, teaching skills, the child and his learning environment. The preparation identifies keen area of competencies as demanded by the post. Many authors have conceptualized the area of knowledge and skills required for capacity building of teachers including subjective characteristics associated with effective teaching (Ivowi, 2006; Isyaku, 2000; Imoge 2006).

Teacher preparation in question consists of those requisite skills required in general for teacher to teach satisfactorily rather than minimal (Ellias, 2004).

Taking Nigeria as a case study: teachers' area of preparation focuses on; subject matter, pedagogy, skill processes, resourcefulness, behavioural motivation, evaluation, and other more qualitative requisite skills designed to suit the populous teacher competency – based curriculum in place.

Every institution is autonomous to its packaged (i.e. course title, code and content) as guided by Minimum Crediting System offers. Effective learning in schools especially at junior secondary school requires effective teaching thereby teacher competence needs to be very high in order for meaningful teaching and learning to take place.

Training and continual experience of events on the job is the only edifice to minimum competencies expected of any teacher. Ajeyalemi (2002) is of the opinion that, training and other subjective characteristics are function of teacher education, if good teaching is to be established. Hence, a good teacher education programme should be inclusive base on the curriculum which is expected to train teachers to acquire the foregoing competencies. Thus, a formal teacher education curriculum has four major components as follows;

- b. General Education
- c. Professional Education (Pedagogical training)
- d. Knowledge in subject area(s)
- e. Teaching practice

(National Policy on Education 2004).

### **In-service Teacher Education Preparation (i.e. on-the-job Preparatory)**

There is no doubt that, pre-service education of teachers will eventually lead to in-service education (i.e. on-the-job up-grading training) for optimal competence and students' academic performance. In-service teacher training programmes are put in place to increase the competence of practicing teachers through up-grading courses, workshops, conferences, study groups, collaboration and teamwork etc. The philosophy surrounding in-service programme is subject to acclimatization of oneself to new trends (innovative strategies) as required by the duty post now or in the future on one hand, and the worthwhileness of crash and part-time teacher programmes in quest of the minimum expected competencies in meeting the rapid expansion and explosion at all levels of education. Aiyepoku (1999) commented that real doubts are being cast on the quality of the programmes in the institutions which turn out these groups of teachers. And it cannot therefore, be denied that untrained, the inexperienced, and the under qualified teachers in the educational system need professional help, guidance and in-service training because it is necessary that the teachers continue to be competent (Nwaobasi, 2003).

For quality control in schools, the inspectorate services of Ministry of Education are charged with the responsibility of ensuring that all schools follow the curricula and

conform to NPE. Therefore, in-service teacher training programme should be packaged to take care of observed lapses in the implementation of educational programmes. More importantly, for teachers to fully achieved the goals of teacher education listed in the NPE (2004), the initial pre-service training given if neither sufficient nor adequate to carry the teachers all through their tenure as teachers, and the recognition of this on the part of Federal Government has led to inclusion of in-service training matter as quoted in NPE 2004, section 8, subsection 75 that “in-service training shall be developed of an integral part of continuing teacher education and shall also take care of all inadequacies”.

Thus, in-service teacher education is for teachers who are already in the teaching service. From experience, in-service training programme for teachers may take two forces; it could be with pay or without pay (salary). For teachers to gain such opportunity, they must be allowed and encouraged to take part in the said programme because such in-service programmes will help in making them to become better equipped for optimal performance of their primary teaching job. It is very glaring that today’s teachers operate under very serious challenging classroom situations. So, a good teacher must therefore continue to find means of improving himself as he continues his teaching job as today’s students are more inquisitives and knowledgeable in global age. Hence, Adejuyigbe (1999); opined that, the present day teachers must strive to be knowledgeable and competent because students will not give attention to teachers who cannot sustain their interest. Thus, emphasis on improving one job competence and status necessitated for continual teacher education through in-service training.

In the late 20<sup>th</sup> century, Lagos state Government came up with beautiful in-service programme tagged Teacher Vacation Courses (TVC). For improving Lagos state schools teachers' inadequacies, in collaboration with faculties of education. The programme is an up-grading programme to improve classroom interactions. After extinction of the programme, concerned and interested individuals now took it upon themselves to up-grade their TC-II, NCE Certificate or professional status through Sandwich and Evening part-time programmes including: one year Technical Teachers' Course (TTC/TTD); Auxiliary Teacher Education Programme (ACE, ADE, PGDE); one year Federal Government Technical Teachers' training course (TTP); National Teacher Institute (TC-II and NCE); Institution-Satellite Campuses Consultancy Programme for teachers ( Degree level); etc. Also, Federal Government in recent time have brought education to all door-steps through Open University System (NOUN), Federal Government/SUBEB workshops and seminars on quarterly basis across all states, NTI – FGN Vacation workshops for primary school teachers and others. So, more of in-service programme is expected in the nearest future in consonant to the education progress report.

### **Qualities expected of a Qualified Teachers**

Since teaching qualification attained is subject to teaching knowledge acquired, then a professional teacher must be competent to teach the subject he/she has been trained to teach at the appropriate level because such training is expected to provide adequate initial training and upward movement in the profession. Thus, areas of teaching competencies include:

1. **Subject matter** – appropriate and relevant knowledge of facts, principles, concepts and laws needed to sustain cognitive development of the students.
2. **Pedagogy** – exposure to and experience in principles and practice of education, and in the art of teaching as an aid to meaningful learning.
3. **Skill processes** - Facilitation of the development and acquisition of appropriate manipulative, communication and other skills in students.
4. **Resourcefulness** - Improvisation of teaching aids.
5. **Behavioural motivation** – Use of reinforcement, modification, therapies, guidance and counseling, feedback, etc.
6. **Evaluation** – Self and students’ evaluation through appropriate construction of tests, their analyses and inferences.

Professional and non-professional teachers are of no equal, because teaching intricacies are more of pedagogical and psychological background knowledge of a good teacher. For classroom successes and effective implementation of the curriculum, Ajayi (2006) posits that, only teachers who are aware of the logic of teaching and learning through training are better of.

### **Teaching Qualification and subject**

Teaching started from mastering the subject – content discipline only, and yet those teachers were not performing badly because students were able to gain so much from their teaching. Many premier research reports support this position that, unless the students have learnt, the teacher has not thought (Othanel – Smith, 1968; Kilpatrick, 1926). From education point of view; careful selection, development and presentation

of the subject content by the teacher are some of the very important responsibilities of a teacher.

Also, a subject matter is the content and it is the central focus of the teacher's instructional activities, as well as the learning activities and experiences of the students. The interaction between the teacher and his students is guided and motivated by the desire of both to achieve mastery of the subject matter. Teaching effectiveness as subject to content – matter competency revealed that; students grossly gain when teacher shows confidence and mastery in the subject content; shows interest in the subject and encourages his students to learn; shows high flexible presentation styles and use appropriate illustration methods, questioning techniques etc. (Rosenshine, 1971).

For expected competency in subject matter to tally with practiced competency, the development should give consideration to: class level; previous educational background and experiences; nature of the subject matter itself; time allocation; such sequence and order availability of instructional material; differences, in interest and varied capacities in students to be considered, and so on. In support of requisite skills aiding subject-matter, Weigond (2006) is of the view that, teacher's success in developing and presenting excellent subject matter respected on same seven (7) basic competencies: performance objectives; skills of question asking; creativity or innovativeness; sequencing instruction; evaluating students' progress; assessing intellectual levels, and human relation/interaction. Thus, mastery of the subject-content predicate high mastering of its curriculum philosophy, related concepts and conceptualization, topical experiences, e.t.c.

### **Teaching Qualification and Pedagogical ability**

According to TRCN, what defines a good teacher is exclusively not only the subject knowledge, but the teaching skills that would direly support and make the content well absorbed on the part of the students. The said required teaching skill is consequence to constructive exposure and experience in principle and practice of education, and in the art of teaching as an aid to meaningful learning. Pedagogy is all inclusive as it extends to skill processes, human resourceful and relations, in a normal course, as well as adequate knowledge of questioning, and evaluation techniques.

### **Teaching Qualification and Life skills**

Effective teaching depends on preparation on one hand, and self-factor on the other hand. Self-factor is all about individual potential and prowess. Teaching lifeskills is more or less part of the teacher's embodiment. If the future is to produce successful school leavers and graduates, then individual teachers must be competent to meet many new challenges. And such challenges can only be overcome, if individual teachers are actually making a start on increasing their own awareness and skills (formidable potentials) (Wuji 2005).

Moreso, if schools are to be places of real skill development, they will need to be staffed by people who themselves are highly skilled. Also, the assumption that somebody who knew a great deal about a subject is in better position to pass that knowledge on to others, has been proved in many cases to be not entirely well founded, because knowing a great deal about a subject does not mean necessarily that one can teach it well; indeed teacher need to know about people, and how to create climates favourable to learning as against scholar's model (Bajah, 1999).

Unfortunately, much teacher training is still designed more towards the development of scholars, than towards that of teachers. The priority that is given to interpersonal and group skills, does little to equip many teachers for effectiveness in the classroom. Recent research has indicated how vital interpersonal skills are in teaching (Rutter et al, 1979). Where teachers are skilled in building relationships, academic results are better, and many more other positive results could be found. Classroom effectiveness and systems management require very different skills. Similarly, teachers who lack skills are not likely to be able to increase the skill level of the students beyond their own (Aspy and Roebuck, 2006). Teaching skills therefore is not restricted to the preparation of particular lessons, but should also involve teachers understanding their own personal development and skill acquisition, modeling the competencies they wish to teach.

### **Teaching Qualification and Personality of Teachers**

Teaching in real sense goes along with the personality of the teacher. Teacher personality in school system has to do with his human relation and attitudes. A lot of research reports have shown that, teachers with bad personality will in no way model the students in character formation. It is somehow a great deal for teacher to realize how much learning occurs by imitation. Staff ‘models’ are crucial as sources of learning for students (Wuji, 2005). Hence, it is useless for teachers to stress verbally the importance for example, tolerance, respect for others, kindness, honesty, generosity, forgiveness, cooperation with others, non-aggression etc., unless those qualities are clearly visible in staff relationships with each other and in staff-student contact. More importantly, teacher’s person account for his physical appearance,

dressings, voice-projection, emotional control, and adequate sense of responsibility, firmness and determinations, tolerant and democratic attitude, fair-judgment and impartiality, self-discipline and disciplinarianism, adaptability, humility, (Akande 2004).

### **Teaching Qualification and Teacher Acquisition Profiles**

Surely, acquisition of competencies is of no alternative, if teaching is to be properly driven home. Acquisition of skills and attitudes during teaching and learning situation varies from person to person. The variations are subject to level of certification, personal ability and capacity, interest, job prospect and employment status, etc.

In true situations, the tendency to develop professional competency stems from the need to strengthen areas like teamwork and spirit, interpersonal dealings, quality-base criteria of occupation, etc. as demanded by workplace. In schooling at all level, the competencies never learn separately or in isolation, but they are acquired and transmitted integrally through training and education programme (Igwe, 2002). More importantly, skills and application – abilities develop over time, while good and continuous construct of the competencies repeatedly in relation to capacity building of teachers as termed Teaching Profiles. Profiles are all about accumulation of skills and functional abilities needed for a duty task (Eso, 2008)..

Competence is seen as an index of accumulated and codified knowledge, and exponential skills to aid effective teaching for a remarkable difference between professional and non-professional subject to minimum standard. Brophy, and Good, (2002) is of the view that, competent teachers possess a good teaching, of a well defined set of activities.

It is through effective teaching that various educational programmes are transformed unto action at classroom level via competence profiles. According to Imogie (1998) some competencies required of the teacher to be able to plan and implement the teaching (instructional) programme for which he/she is employed include:

1. An understanding of behavioural science or process involved in effective communication and learning communication models.
2. Knowledge of content of subject matter.
3. Knowledge of available sources of materials for teaching.
4. Knowledge about appropriate selection criteria out of available materials/resources for specific instructional objectives.
5. Knowledge and skills in analysis for both formative and summative evaluation.

All the aforementioned above descriptions may be conceptualized as “professional action – skills”. The action-skills split into content-knowledge competency; pedagogical – knowledge competency; teaching life skills competency; and personality competency.

The conjunction of the four (4) components of teacher knowledge are acquired and transmitted integrally through teacher education, brings us to the main objectives of competency – based teacher preparation. Shortly after the teacher preparation, next is real teaching work as a beginning teacher. A lots of problems and shortcomings encounter among which are: challenges of unable to meet high personality standards, myopic experience in relating the topic with suitable life experience, gross misconceptions in an attempt to simplify learning better; low confidence and

inadequacy, inability to maintain balance between students of low and high cognition abilities, etc.

Again, as year passes, the beginning teachers becoming properly grinded in knowledge concepts, art of teaching and other process abilities. Thus, acquiring more action-skills as they relate to head teacher, veteran teachers, students and the environment. In consonant to the view, Brophy, and Good, (2002) found that student teachers and beginning teachers' attitudes towards teaching have improved significantly of early field experiences and also developed more realistic views of teaching. Year-in, year-out, beginning teachers continue to routine the same process repeatedly, and at the same time abreast of new methods and development ushered in by innovation and the complexing society. The repeated process abilities and action-skills build a profile through which the teacher competence could be determined. Competence is a remark of evaluation of teacher competencies be it student teachers, beginning teachers or veteran teachers. The evaluation is carried out by assigned authorities as an attempt to identify the quality of effective teacher and the planned curricula, to ensure that the concern teachers demonstrate those qualities prior to certification or promotion (Ogunwuyi, 2000).

### **Teacher-Teaching Activity and Students' Academic performance**

For ideal practices; teachers out of classroom preparation, and intra-classroom interaction should mean same for actualization of stated objectives and goals of a lesson. Odebunmi (2006) is of the view that, a good lesson-plan is a true replica of what is going to take place during real classroom situation(s). Both student teachers and practicing teachers are actually expected to display excellence in several areas of

competencies. The teaching competencies have to do with different components of the teaching process. The components of the teaching process cover a wide range of activities in line with; goals and objectives, content development, teaching strategies and techniques, resource materials and evaluation.

In carrying out aforementioned processes while teaching, a lots of teaching skills is involved, and the same routine process carrying out repeatedly led to improvement and accumulation of related skill-competencies called profiles. And in assessing teacher's level of operation consequence to expected skills acquired, teachers are assessed with instrument which itemizes such related competencies under broad spectrum of pre-planning and actual teaching (class management and teaching) activities. These activities are usually conceptualized differently, despite each tells what the teachers actually do intermittently in classroom situation for the success of instruction (Ogunwuyi, 2000).

Assessing the acquired skills do involve the use of rating scales of Likert, or modified type. On the basis of the evaluator's observation, the teacher performance is ranked, while the sum total point scores in percentage may be used to remark his competence level attained. For the understudy, the teaching competence profiles based on related activities is broadly divided into two, namely;

1. Pre-active Teaching Activity (competency – profiles)
2. Interactive Teaching Activity (Performance – Profiles).

## **Causal Factors Influencing Students Academic performance**

For professionalism, job practices and follow-up exposure strengthen level of competence a professional may attain, irrespective of his/her certificate. Competence among teacher educators describes as “Teaching competent along a continuum of experience” (Barns, 2006).

Teaching competence revolves around the proficiency of a teacher and their instructional methods. Becoming a proficient teacher is a culmination of various elements and related factors. The level of teaching competence achieved by a teacher is directly or indirectly influenced by one or more factors. In addition to a teacher's background, many other factors contribute to the level of competence attained by teachers for classroom success (Arlin, 2007).

## **CHAPTER THREE**

### **RESEARCH METHODOLOGY**

#### **Introduction**

This chapter describes the procedures opted by the researcher in carrying out this study for simplicity and clarity.

#### **Research Design**

The research design for this study is descriptive survey design method. This involved collection of data for analysis from a sample considered to be true representative of the entire population of the study. This approach is opted because it is instrumental in supplying the necessary information needed for the study.

#### **Area of Study**

The study was carried out in all the junior secondary schools in Ovia North East Local Government Area, Edo State.

#### **Population of the Study**

The population of the study encompasses all secondary school teachers in the Ovia North East Local Government Area of Edo State, with a specific emphasis on teachers' qualifications as a determinant of students' academic performance. The target population for this study is exclusively comprised of all computer studies teachers within the designated area.

#### **Sample and Sampling Technique**

The sample size of One hundred (100) students and thirty (30) teachers were sampled from the population sample of both students and teachers among Junior Secondary Schools in Ovia North East Local Government Area of Edo State. Five towns

were randomly selected within Ovia North East Local Government Area of Edo State.

### **Research Instrument**

In this study, three sets of teacher were used, including the N.C.E, Bachelor degree holder in education and HND (Higher National Diploma) holder. The junior secondary school three (JSS 2) students were selected and used for the data collection.

The total number of students was one hundred, which involved fifty boys and fifty girls respectively. The topics taught by the two sets of teachers were excretion.

The study lasted for four weeks and the number of period per week were three periods with the duration of 40 minutes for each lesson. The students were tested and supervised by various sets of teachers who were involved in teaching in the various schools.

The following instruments were used in the course of this study:

- Students' academic test on Computer studies.
- Questionnaire for teachers.

The student's academic test on Computer Studies consisted of objectives questions selected to cover all aspects of Computer Studies and its applications.

### **Methods of Data Collection**

The researcher personally visited the schools and administered the questionnaire to the teachers on a one-on-one basis while the students were subject to aptitude test. Also, the researcher visited the staff room with the permission of the school authority. These augmented the information collected on the questionnaire.

## Method of Data Analysis

In this study, the researcher opted the mean performance scores of the students. The students' performances in computer studies were determined from their scores in the diagnostic test. The scores obtained by each of the students were analyzed using frequency distribution table and a t-test statistic. The researcher worked out the frequencies of the response and calculated the mean ( $\bar{x}$ ). A four point modified Likert scale items was developed and nominal values are assigned as follows:

Strongly Agree (SA) = 4

Agree (A) = 3

Strongly Disagree (SD) = 2

Disagree (D) = 1

Total item is four (4) with total point values of thirty for teacher response. The mean of each scaling item is calculated by multiplying the frequency of response under each category with the nominal scale of the response.

$$\bar{X} = \frac{\sum FX}{\sum F} = \frac{\sum FX}{N}$$

$\sum F = N =$  Total no of response

$$\bar{X} = \frac{(4 \times SA) + (3 \times A) + (2 \times SD) + (1 \times D)}{N}$$

## Decision Rule

In order to arrive at a decision rule so as to interpret the result, the nominal values of the responses were added together and divided by the value of 4, as thus:

$$\frac{4 + 3 + 2 + 1}{4} = \frac{10}{4} = 2.5$$

To determine the acceptance level, mean score of 2.5 was selected as the deciding point between agree and disagree. In other words, any response with mean of 2.5 and above is considered acceptable (Agree) while any response below 2.5 is considered unacceptable or rejected (Disagree).

## CHAPTER FOUR

### RESULTS AND DISCUSSIONS

#### Introduction

This chapter presented the data analysis with the interpretation of results. It also presented the results and discussion of findings at the end of the analysis.

Students' Computer Studies Diagnostic Test

**Table 1: General performance of the students in Computer Studies performance test.**

Scores %	Mid-Point (x)	Frequency	FX	Cumulative Frequency
0-9	4.5	21	94.5	21
10-20	15	14	210	76
21-30	25.5	17	433.5	93
31-40	35.5	8	96	101
41-50	45.5	1	66	102
51-60	55.5	4	324	106
61-70	65.5	7	637	113
71-80	75.5	4	444	117
81-90	85.5	17	2057	134
91-100	95.5	7	668.5	141
Total			5,030.5	-

The diagnostic test score is 100 percent while 47.85 is the average score.

$$\text{Mean of the scores, } X = \frac{\sum Fx}{\sum F}$$

$$\frac{\sum Fx = 5,030.5}{\sum F \quad 100} = 50.305$$

#### Analysis of Teachers Questionnaire

##### Section A: Bio-data of Teachers Respondent.

**Table 2: Sex Distribution of Respondents**

Sex	Frequency	Percentage
Male	7	23.33%
Female	23	76.67%
<b>Total</b>	<b>30</b>	<b>100%</b>

The above table shows the overall sex distribution of respondents. The male teachers constituted 23.33% and the female teachers constituted approximately 76.67% of the total sample used for the study.

**Table 3: Distribution of Teachers by Age**

<b>Age (in years)</b>	<b>Frequency</b>	<b>Percentage</b>
Below 25	5	15
26 – 30	6	21
31 – 35	10	34
36 and above	9	30
<b>Total</b>	<b>30</b>	<b>100%</b>

Table two reveals that 34 per cent of the respondents who were the majority, were within the ages of 31 and 35 years. 21 per cent were found within the ages of 26 and 30 years while 30 per cent were with ages 36 years and above, and 15 per cent was recorded for those in ages below 25 years old.

**Table 4: Qualification of the Respondents**

<b>Qualification</b>	<b>Frequency</b>	<b>Percentage</b>
NCE (Computer Edu.)	12	40%
B.Sc Ed (Computer Edu)	13	43%
M.ED (Computer Edu)	5	17%
<b>Total</b>	<b>30</b>	<b>100%</b>

The table above shows that 40% of the teachers have NCE (Computer Edu.) while 43% have B.Sc (Computer Edu.) and 5% have M.ED (Computer Edu).

**Table 5: Years of Teaching Experience of the Respondents**

<b>Years of Teaching Experience</b>	<b>Frequency</b>	<b>Percentage</b>
1-5	8	27%
6-10	4	13%
11-15	5	17%
16 and above	13	43%
<b>Total</b>	<b>30</b>	<b>100%</b>

From the table above, 27% of the teachers' teaching experiences were between 1-5 years while 13% of the teachers are between 6 – 10 years, 17% are between 11 – 15 years and 43% were between 16 and above.

## Section B

The section B of the questionnaire has the response to research questions.

### Research Question:

What impact do teachers' qualification (Academic and Professional) have on students' academic performance in Computer Studies?

**Table 6: Showing the Degree of Agreement on teachers qualification and students' academic performance in Computer Studies.**

S/N	Items	SA 4	A 3	D 2	SD 1	Mean	Remark
1.	Teacher with good academic upbringing contributes to students success in Computer Studies	18	11	1	-	3.6	Agreed
2.	Non qualified science teachers contributed little to students success	20	8	2	-	3.6	Agreed
3.	Teachers with professional qualification have the best teaching method which removes boredom in the class but arouses students interest for better performance	11	19	-	-	3.4	Agreed
4.	Qualified teachers are mastery in improving student's academic performance in Computer Studies.	15	15	3	-	3.7	Agreed
5.	Professional teachers make use of instructional aid to improve academic performance of students.	17	5	3	5	3.1	Agreed
6	Professional teachers will often impart knowledge in their skillful area and improve academic performance of students.	17	11	1	1	3.5	Agreed
7	Qualified teachers make proficient use of instructional materials and students understanding for better performance.	19	9	1	1	3.5	Agreed
8	Teachers' qualification enhances their mastery of the subject matter thereby making their students to perform better in Computer Studies.	21	7	-	-	3.5	Agreed
9	Teachers' professional and academic quality make used of laboratory materials which improve performance of students.	13	9	5	1	3.0	Agreed

10	Inadequate supply of Computer teachers in schools to a great level affects the performance of their students.	12	11	5	2	3.1	Agreed
<b>Average Mean Point</b>						3.40	

Analysis of Table 6 respondents agree with the statements in item 1, 2, 3, 4, 5, 6, 7, 8, 9 and 10 with mean 3.6, 3.6, 3.4, 3.7, 3.1, 3.5, 3.5, 3.5, 3.0, and 3.1 respectively.

#### Research Question

What Impact do teachers teaching experience have on students' academic performance in Computer Studies?

**Table 7: Showing the Degree of Agreement on teachers' experience and students' academic performance in Computer Studies.**

S/N	Items	SA	A	D	SD	Mean	Remark
11.	Teachers' teaching experience to a great extent has impact on their student's academic performance in Computer Studies.	16	14	-	-	3.5	Agreed
12.	An experienced Computer Studies teacher is more proficient in the use of instructional aids in teaching the subject for better performance.	17	13	-	-	3.6	Agreed
13.	Years of teaching make teachers to have mastery of difficult topics which enhances student's academic performance in Computer Studies.	18	9	2	1	3.5	Agreed
14.	Teachers' knowledge of the subject as a result of experience enhances student's academic performance in Computer Studies.	20	10	-	-	3.7	Agreed
15.	An experienced Computer teacher is more proficient in handling students learning skills especially in Computer Studies thereby improving student's practical performance.	16	13	-	1	3.5	Agreed
16.	Teachers' experiences make them to opt the best teaching method for a particular topic thereby improving performance of students in Computer Studies.	22	7	1	-	3.7	Agreed
17.	Teachers' teaching experience makes them to use numerous examples in teaching difficult topics thereby enhancing performance in Computer Studies.	19	9	1	1	3.5	Agreed
18.	Teachers' approach to solving Computer Studies problems makes it easy for students to practice on their own thereby improving their academic performance.	16	13	-	1	3.5	Agreed

19.	An experienced teacher is more proficient in classroom management and also manages individual differences in his learners for improved academic performance.	18	6	-	6	3.2	Agreed
20.	The number of years a Computer Studies teacher has spent in teaching has nothing to do with his teaching effectiveness and student's academic performance.	5	7	14	4	2.4	Disagreed
	<b>Average Mean Point</b>					3.4	

Analysis of Table 7, the respondents agree with the statements in 11,12, 13, 14, 15, 16, 17, 18, and 19 with mean 3.5, 3.6, 3.5, 3.7, 3.5, 3.7, 3.5, 3.5, 3.2, and 3.41 respectively while item 20 with mean 2.4 disagreed, with average mean of 3.4.

### Research Question:

What impact do teachers' interests have on the student academic performance in Computer Studies?

**Table 8: Showing the Degree of Agreement on teacher interest on the student academic performance in Computer Studies.**

S/N	Items	SA	A	D	SD	Mean	Remark
21.	Teachers' interest in Computer Studies to a very large extent has great impact on students' academic performance.	14	16	-	-	3.5	Agreed
22.	Teachers' positive attitude towards Computer Studies to a very large extent does not have any impact on students' academic performance.	8	17	5	-	3.1	Agreed
23.	When teachers' demonstrate good love for the subject their students are encouraged and this improves their performance.	22	8	-	-	3.7	Agreed
24.	Ineffective teaching due to teachers' attitude towards teaching Computer Studies makes the subject discouraging and uninteresting thereby affecting students' performance.	18	12	-	-	3.6	Agreed
25.	Teachers' interest makes them to relate subject topics to everyday life and students' ability to transfer knowledge in solving problems increased thereby improving students' performance.	16	10	-	-	3.3	Agreed
26.	Teachers' interest to a very large extent makes them to opt the best teaching style which allows students to be actively engaged in the	21	9	-	-	3.7	Agreed

	class which in turn enhances students' academic performance.						
27.	Teachers' negative attitude towards teaching Computer Studies to a great extent makes the students to perform very poor.	16	9	3	2	3.3	Agreed
28.	Teachers' non-challant attitude tends to affect students' academic performance in subject like Computer Studies.	13	11	6	-	3.2	Agreed
29.	Teachers' attitude toward the subject makes him to relate subject topics to everyday life and student's ability to transfer knowledge in solving problems in increased thereby improving student's performance.	21	7	1	1	3.6	Agreed
30.	Performance of students whose teacher is forced to teach the subject is always not encouraging and then leads to poor performance.	4	14	9	3	2.6	Agreed
	<b>Average Mean Point</b>					3.4	

Analysis of Table 8, the respondents agree with the statements in 21,22, 23, 24, 25, 26, 27, 28, 29 and 30 with mean 3.5, 3.1, 3.7, 3.6, 3.3, 3.7, 3.3, 3.2, 3.6, and 2.63 respectively with average mean of 3.4.

## Testing of Hypotheses

### Hypothesis One

**H<sub>01</sub>:** Teachers' academic quality is not a determinant of academic performance of students in Computer Studies.

**Table 9: Showing t-test analysis on teachers' academic quality and academic performance in Computer Studies.**

Variable	$\bar{X}$	SD	N	Df	t-cal	t-critical
Teachers' academic qualification	30.99	0.97	100	98	22.34	1.96
Academic performance	28.6	0.75				

Significant at alpha 0.05 level

The table above indicates that calculated t-value of 22.34 is greater than the critical t-value of 1.96 at alpha 0.05 level of significance. The hypothesis which state that

teachers' academic quality is not a determinant of academic performance in Computer Studies, is therefore accepted. The implication is that there is that teachers' academic quality is a determinant of academic performance in Computer Studies.

### Hypothesis Two

**H<sub>02</sub>:** Teachers' professional qualification is not a determinant of academic performance in Computer Studies.

**Table 10: Showing t-test analysis on teachers' professional qualification and academic performance in Computer Studies.**

Variable	$\bar{X}$	SD	N	Df	t-cal	t-critical
Teachers' professional qualification	33.49	0.87	100	98	18.26	1.96
Academic performance	28.6	0.75				

Significant at alpha 0.05 level

The table above indicates that calculated t-value of 18.26 is greater than the critical t-value of 1.96 at alpha 0.05 level of significance. The hypothesis which state that teachers' professional qualification is not a determinant of academic performance in Biology, is therefore rejected. The implication is that there is that teachers' professional qualification is a determinant of academic performance in Computer Studies.

### Hypothesis Three

**H<sub>03</sub>:** teaching experience is a determinant of academic performance in Computer Studies.

**Table 11: Showing t-test analysis on teaching experience and academic performance in Computer Studies.**

Variable	$\bar{X}$	SD	N	Df	t-cal	t-critical
Teaching experience	31.17	0.78	100	98	21.29	1.96
Academic performance	28.6	0.75				

Significant at alpha 0.05 level

The table above indicates that calculated t-value of 21.29 is greater than the critical t-value of 1.96 at alpha 0.05 level of significance. The hypothesis which state that

teaching experience is a not a determinant of academic performance in Computer Studies, is therefore rejected. The implication is that teaching experience is a determinant of academic performance in Computer Studies.

### Hypothesis Three

**H<sub>03</sub>:** teaching experience is a determinant of academic performance in Computer Studies.

**Table 12: Showing t-test analysis on teaching experience and academic performance in Computer Studies.**

Variable	$\bar{X}$	SD	N	Df	t-cal	t-critical
Teaching experience	31.17	0.78	100	98	21.29	1.96
Academic performance	28.6	0.75				

Significant at alpha 0.05 level

The table above indicates that calculated t-value of 21.29 is greater than the critical t-value of 1.96 at alpha 0.05 level of significance. The hypothesis which state that teaching experience is a not a determinant of academic performance in Computer Studies, is therefore rejected. The implication is that teaching experience is a determinant of academic performance in Computer Studies.

### Hypothesis Four

**H<sub>04</sub>:** teachers' interest is a determinant of academic performance in Computer Studies.

**Table 13: Showing t-test analysis on teachers interest and academic performance in Computer Studies.**

Variable	$\bar{X}$	SD	N	Df	t-cal	t-critical
Teachers interest	32.76	0.79	100	98	19.54	1.96
Academic performance	28.6	0.75				

Significant at alpha 0.05 level

The table above indicates that calculated t-value of 19.54 is greater than the critical t-value of 1.96 at alpha 0.05 level of significance. The hypothesis which state that teachers interest is a not a determinant of academic performance in Computer Studies,

is therefore rejected. The implication is that teachers' interest is a determinant of academic performance in Computer Studies.

### **Discussion of Findings**

The deduction made from the performance test and questionnaires was very interesting. The results from the performance test revealed that students have difficulties encountered by junior secondary school students in Computer Studies, also included the practical difficulties faced by the students in Computer Studies. One of the reasons for the difficulty encountered by students in answering Computer Studies questions is the inability of the students to translate various Computer Studies questions by the students. Some of the students while attempting all the Computer Studies questions respectively had difficulties in translational error. In the student solution test for question, these errors were recorded individually as the major problems being faced by the students. However, it is clear enough that there is a problem of misinterpretation of Computer Studies questions which is another reason for the difficulty experienced by Computer Studies students. Most students are so good at cramming that they go as far as memorizing questions and their answers with the aim of reproducing it whenever it is needed instead of them taking their time to understand the basic concepts involved.

In research question one, which stated that What impact do teachers' qualification (Academic and Professional) have on students' academic performance in Computer Studies?

In Table 1, I sought to determine if teacher qualifications both academic and professional have any impact on student's academic performance in Computer Studies.

This was drawn from responses in items 1-10 in Table 1, with average mean point of 3.40 which is above average point and also above decision rule of 2.5 and so we then agreed that teachers qualification both academic and professional are major determinants of students' academic performance in Computer Studies.

In the light of the findings of the present research, it is suggested that teachers' professional qualification to a large extent affect Computer Studies student's performance. In addition, teachers academic quality enhance the academic performance of students in Computer Studies and teachers professional qualification makes them to opt the best teaching method which removes boredom in the class but arouses students interest for better performance

Ferguson (2000) support this opinion that multivariate studies of student academic performance at school and district level have found a substantial influence of teacher's qualification on what students learn, especially when scores on licensing examination is included. The present study revealed significant relationship between teachers' professional qualification and students' academic performance. Yet it is important that all professional possess knowledge that is not common to those that are not in the profession. In teaching, there is indication that teachers should know how to impart knowledge on their students and how to teach all students effectively. According to Merriam dictionary (2003) to be qualified means fitted as by training or experience for a given purpose or component. It may also be complied with the specific requirement or precedent condition as for an office or employment eligibility.

In research question two, which state that “What Impact do teachers teaching experience have on students' academic performance in Biology?”

In Table 2, I sought to determine if teachers teaching experience have impact on students' academic performance in Computer Studies.

This was drawn from responses in items 11-20 in table 2, with average mean point of 3.40 which is above average point and also above decision rule of 2.5 and so we then agreed that teachers teaching experience are major determinants of students' academic performance in Computer Studies. In the light of the findings of the present research, it is suggested that teachers teaching experience affect Computer Studies student's performance. Teachers' teaching experiences to a great extent have impact on their student's academic performance in Computer Studies. An experienced Computer Studies teacher is more proficient in the use of instructional aids in teaching the subject for better performance. Years of teaching make teachers to have mastery of difficult topics which enhances student's academic performance in Computer Studies. Teachers' knowledge of the subject as a result of experience enhances student's academic performance in Computer Studies. An experienced Computer Studies teacher is more proficient in handling students learning tasks especially in Computer Studies thereby improving students' practical performance. The number of years a Computer Studies teacher has spent in teaching has a lot to do with his effectiveness.

In support of this findings, Mumame and Philips (2001) have found a significant relationship between teacher's effectiveness and their years of experience to yield positive influence on student's academic performance, but not always a significant linear one while many studies have established that inexperienced teachers (those with less than three years of experience) are typically less effective than more junior teachers. It can be deduced the teachers who have adequate teaching experience will

be adequately equipped on how to merge previous experience on their present teaching for better performance of the students. Furthermore, the benefits of experience may interact with educational opportunities in the teaching setting as continual learning and collaboration continues to better student performance.

In research question three, which state that “What impact do teachers’ interest and attitude have on the student academic performance in Computer Studies”? In Table 3, we sought to determine if teachers’ interest and attitude will impact student academic performance in Computer Studies.

This was drawn from responses in items 21-30, with average mean point of 3.40 which is above average point and also above decision rule of 3.4. It was agreed that teachers’ interest have impact on the student academic performance in Computer Studies. In the light of the findings of the present research, it is suggested that teachers’ interest and attitude have impact on the student academic performance in Computer Studies.

In support of these findings, Omotoso, (2001) viewed that attitude and quality of teacher towards the teaching of Computer Studies in Junior Secondary school has been observed to play a vital role in the academic performance of these students in internal and external examinations. Back in 1998, when several researchers among which is estimated that at least 75 percent of the variation in student performance resulted directly from teacher quality and noted that the actual number could be as high as 20 percent. The further propounded that the Computer Studies teachers carryout the following for the performance of this 20 percent increase. The teacher should know and apply correct teaching methods to deliver the lesson to the learners.

The teacher should recognize the importance of personal qualities of teacher and develop such qualities for career success, make effective use of the workshop, possess in-debt knowledge of the subject content, acquire a professional certificate and proficiently, make use of the instructional materials and visual aids. It has also been noted that teacher qualification is not limited to paper certification of degree from reputable educational institution but also on the students' feeling about the teacher, his method of teaching, adequate knowledge of the course content and the school workshop among others.

## **CHAPTER FIVE**

### **SUMMARY, CONCLUSION AND SUMMARY**

#### **Summary**

This research work was conducted to examine the influence of teachers' qualification on the academic performance of junior secondary school students in Ovia North East Local Government Area, Edo State. The survey research design was used in carrying out the study since it required the collection of data from a large number of respondents within the limited time scheduled for the completion of the project. Relevant research questions were answered and tested respectively to show the findings of the study. A questionnaire was designed by the researcher and validated by the supervisor which was administered to the respondents for the generation of data. However, a total number of 100 students comprised 50 boys and 50 girls and 30 teachers comprising male and female students and teachers were selected through simple random sampling method to generate the sample size. The sample size was considered adequate and representative because, all the respondents were people of the same profession and had similar orientation, though they were drawn from different schools. The analysis of the data collected from respondents was carried out with the use of percentage and frequency distribution tables to establish their correctness or otherwise.

#### **Conclusions**

This research was carried out primarily to investigate the influence of qualification and experience of computer teachers on the academic performance of junior secondary school students in Ovia North East Local Government Area, Edo State. In all thirty computer teachers were sampled and selected from all the schools under the Ovia North East Local Government Area, Edo State. Based on this study, the finding shows that teacher's Qualification (Professional and Academic), Teachers Teaching Experience and Teachers interest are major determinants and factors affecting student's academic performance.

Based on the analysis of the results, it could be concluded that teachers' characteristics comprised of all the qualities that makes up a teacher such as qualification (professional and academic), teachers teaching experience, teachers personality, teacher interest and attitude and other attributes expected of good teachers. However, failure to possess any of these attributes of teachers hinders the attainment of good academic performance and the objectives as stated in National policy on Education [NPE 2008). Conclusively, if teachers with high academic quality, well experienced in teaching, good interest towards teaching are employed in Ovia North East Local Government Area of Edo State, it would greatly improve the student's academic performance generally.

### **Educational Implications of the findings:**

#### **Implication for Policy and Planning**

The emphasis of this study has been on teachers qualification as a determinants of students' academic performance in Ovia North East Local Government Area of Edo State. The educational implication will facilitate policy and planning in area of recruitment policy of qualified teachers and ensure teaching staff to have working experienced that would improve students' academic performances in computer studies and other related subjects. The educational policy and planning should be designed to solve some of the major problems affecting teachers effectiveness and students' academic performance in their studies. Other problem areas include, problem of school personnel which may pose a problem to the teachers' qualification as a determinants of students' academic performance in Ovia North East Local Government Area of Edo State. Therefore, there is need for good policy and planning in order to improve student's academic performance.

#### **Implications for Administration**

The administration of teaching should be designed in such a way as to improve the student's academic performance in Computer Studies. Therefore, effective school professional code of conduct, recruitment policy, and teachers welfare scheme if implemented will go a long way to improve teachers effectiveness and students' academic performance. The quality of teaching staff is vital to the accomplishment of

a supervisor's duties. Professionally qualified teachers have knowledge of the theory and practice of education. During their professional training, they have been informed about the indispensable role of a supervisor in a school system. Planning is a very important management function which calls for the consideration of achievable objectives as well as how they can be achieved. To improve learning in schools, there should be functional internal (principals) and external (ministry of education) supervisors.

### **Recommendations**

The findings of the study have the following important educational implications and recommendations:

The results of this study indicate that it is possible to address this problem of poor and ineffective teaching of Computer Studies at the normal classroom setting at the junior secondary school level of education.

With the recruitment of teachers' qualification with academic and professional educational status, there is tendency of improving student's academic performance generally.

The school administrators should maintain length of teachers' teaching experience as this will surely assist student's academic performance generally.

Teachers should be motivated in the school by way of reinforcement (monetary and non-monetary incentives) as this tends to improve teachers commitment to their duties.

More qualified and professional teachers need to be recruited in secondary schools. This would help to maintain standard in the teaching and learning packages provided in secondary schools for students. Nonprofessional and unqualified persons should not be engaged in the teaching profession.

Teaching and learning environment must be made conducive enough for teachers and students so as to facilitate effective teaching and learning interaction between them. In addition to the recruitment of more teachers in junior secondary schools, adequate classrooms and other learning facilities should be provided for schools to improve

upon the productivity level of teachers and encourage students to make positive performance in their academic endeavours.

### **Suggestions for Further Studies**

In the future the needs for other researchers who are interested in carrying out further study on teachers' qualification on students' academic performance in Ovia North East Local Government Area in Edo State.

It is the opinion of the researcher that further research work could be done on the following areas to help in the development and improvement in the teachers qualification as a determinants of students' academic performance in other subjects, as this tend to facilitate teaching and learning of computer studies at the junior secondary school level.

- (i) A research could be carried out on the relevance of Computer laboratories to the teaching of Computer studies at the junior secondary school level.
- (ii) Further studies could also be done on how and the nature in which in-service courses and workshops should be organized.
- (iii) Again, further study can be carried out on teacher motivation for effective computer studies teaching at the junior secondary school level.
- (iv) It is important to look at the quality of teachers recruited for the training colleges.

## REFERENCES

- Abdullahi, A. (2006). Cornerstones of a collaborative culture: Professional development and preservice teacher preparation, *Journal of Personnel Evaluation in Education*, 9(1), 21 – 31.
- Adamson, E. (2004). The limits of employee training. *Gallup management journal*, 2(5), 7 – 10.
- Adeleke, A. (2006). Teachers' job characteristics and motivation, *Educational research*, 36(2), 171 - 85.
- Adesumaju, A. (2004). The school work environment and teacher career dissatisfaction, *Educational administration quarterly*, 25(1), 58 – 81.
- Akande, A. (2005). Teaching as a profession. *Lagos State education monitor*, 2(1), 17 – 39.
- Anyanwu, A. (2007). *Applied research methods for the social sciences*, Lagos: Nookia Ventures Limited.
- Arinze, A. (2004). The roles of home and school in helping the individual towards self-realization and maximization of his potential. *Journal of Nigeria Careers Council*, 3(1 and 2), 139 - 520.
- Arisekola, A. (2004) *Modern trends in secondary school teaching. strategies for nigerian secondary school*. Ibadan: Power House Publication.
- Arnolds, C. (2006). *Educational technology in the service of the secondary school teacher*. New York: Prentice Hall.
- Bajah, S.T. (1999). The Challenges of Science Technology and Teacher Education in Nigeria Beyond the year 2000. *African Journal of Education* 1(91) 43-49.
- Barns, T. (2001). *Contemporary thoughts on teaching*. New Jersey: Prentice Hall Inc.
- Barns, T. (2006). *Physical geography: A system approach..* New York: Prentice Hall.
- Boot, W. (2003). Challenging traditional views of teaching and teacher education. *Journal of teacher education*, xxvii(2), 120 - 135.
- Brooks, A. (2002). *The aims of education and other essays*. New York: The Free Press.
- Brophy, P. and Good, S. (2002). *Essentials of organizational behavior*, New Jersey: Prentice Hall, Inc.
- Buss, R. (2000). *Industrial relations: a marxist introduction*. London: The Macmillan Press.
- Copeland, N. (2001). *Informed interaction*, USA: Black Enterprises
- Doyle, D. (2005). *Managing human resources in small and mid-sized companies* (2<sup>nd</sup> Ed.), New York: American Management Association.
- Edith, M. (2003). *Human behaviours in organizations. Three levels of behaviour*. New Jersey: Prentice Hall Inc.
- Ejiogu, A. (2005). *Educational Management: A Systems Approach*. Lagos: Lantern

Books.

- Elvis, H. (2004). *The principles of education for African teachers in training*. London: Green and Co. Ltd.
- Eso, O.T. (2008). Assessment Procedure and Student Locus of control as determinants of performance in Biology Science. An Unpublished Ph.D Thesis, University of Ibadan, Ibadan.
- Everton, R. (2003). *Professional development and professionalism*. London: Paul Chapman Publishing.
- Fanson, J. E (2003). *Ethnical principles for conducting field work*. London: Croomhelm.
- Federal Republic of Nigeria (2004) *National Policy on Education ( Revised)* Lagos: Federal Government Press. P5.
- Federal Republic of Nigeria 2004: National Policy on Education (Revised), NERC Press, Lagos.
- Filby, B. (2005). *Study of the relationships between pupils and teachers in teaching. A psychological analysis*. London: Methuen and Co.
- Gage, C. A (2001). *Teaching aids for teachers*. London: Sage Publishers.
- Good, O. (2001). *Principles and Practice of Educational Management*. London: Paul Chapman Publishing.
- Greenfield, D. K. (2006). Development education. *Comparative education review*, 21, (2 and 3), 296 – 310.
- Hyman, F. (2004). *Is there a difference between training and development*. Canada: Casselman Press.
- Igwe, I.O. (2002). Relative effects of Framing and Team assisted instructional Strategies on students' learning outcomes in selected difficult chemistry concepts. Unpublished Ph.D Thesis University of Ibadan, Ibadan
- Jumbah, J. (2004). *Making the corn belt. A geographical history of mid western agriculture*. Bloomington: Indiana University Press.
- Jumboh, R. L. (2005). *Management*, sixth edition. Ohio: Thomson South Western.
- Kenny, L. (2004). *The scientific basis of the art of teaching*. New York: Teachers College Press.
- Klopfer, L. (2000) *The model for interpersonal. Teacher behavior: Teacher student interpersonal behavior*, Australia: University Press
- Kolberge, M. (2007). *A handbook of personnel management practice*, London: Kogan Page Limited.
- Kouin, M. (2005). *Management concepts and applications*. Cambridge: Harper and Row Publishers Inc.

- Land, I. (1999). A meta-analysis and conceptual critique of research on role ambiguity and role of conflict in work settings. *Organisational behaviour and human resources management*, 9(5), 311 – 65.
- Lawal, A. (2002). *The handbook on education (town and gown)*. Ibadan: African Education Press.
- Leon, G. (2004). *Innovations and organization*. New York: John Wiley.
- Moore, A. (2002). *The theory and practice of educational administration*. London: The Macmillan Press Ltd.
- Nkemjika, O. (2000). *Social economic determinants of female participation in vocation education*. Lagos: University of Lagos Press.
- Odebunmi, B.O. (2006). Pre-service Science teaching and technology of Biology science Teaching methods. *Journal of Science Teachers' Association of Nigeria*. 24(1and2) 209-217.
- Ogunji, M. (2006). The moderating effect of organizational commitment on the occupational stress outcome relationship, *Human relations*, 49(10), 13 – 15.
- Ogunwuyi, O. (2000). A causal model of Teacher and Student Factors as determinants of performance in secondary school Biology Science. Unpublished PhD thesis, University of Ibadan, Ibadan.
- Onyeji, A. (2007). Values in education and teacher training. *International research in geographical and environmental education*, 7(2), 8-174.
- Onyema, N. (2003). Decisional participation and teacher satisfaction, *Educational Administration Quarterly*, 6(4), 44 – 58.
- Owoderu, O. (2006). The bureaucratic nature of schools and teacher job satisfaction. *The journal of educational administration*, 21(2), 137 – 48.
- Owolabi, A. (2005). Productivity field experiments behaviour evaluation component, *Institute for social research*, 3(5), 11 – 14.
- Penny, L. (2005). Teaching as a profession. *Education leadership journal of the association for association for supervision and curriculum development*, 46(3), 126 - 141.
- Smith, I. and Land, G. (2001). *Strikes and industrial conflict*, London: Macmillan Publisher Ltd.
- Smith, L. (2002). *Ways of teaching*. New York: J. B. Lippincott Company.
- Sund, A. and Carn, D. (2004). In search of rationale for multicultural science education. *Science education journal*, 2(4), 5 – 7.
- Uzoma, J. (1998). Increase human performance through tuition assistance plans periodicals. *Human resource focus*, (2)4, 1 – 2.
- Uzor, N. (2006). Career out let of student graduates from A.B. *Proceeding of the 21<sup>st</sup> annual conference of the Nigerian geographical association*, Jos, Pp.256 – 260.

## QUESTIONNAIRE FOR TEACHERS

### SECTION A

Indicate your opinion by ticking the option that you prefer most in the column provided

**NAME OF SCHOOL:**

**SEX:** Male ( ) Female ( )

**AGE:** Below 25 Years ( ) 26-30 Years ( ) 31-35 Years ( )  
36 Years and above ( )

**EDUCATIONAL QUALIFICATION:** Nce (Computer Edu.), HND (PGDE),  
BS.c. Ed (Computer Edu.),  
M.Ed (Computer Edu.), Ph.D (Computer Edu.)  
Other Qualification Specify.....

**YEAR OF TEACHING EXPERIENCE:** 1-5 ( ) 6-10 ( ) 11-15 ( )  
16 And Above( )

### SECTION B

Dear sir/ma, kindly choose the right option by ticking any option you prefer most from the following items below:

SA - Strongly Agree

A - Agree

D - Disagree

SD - Strongly Disagree

S/N	ITEMS	SA	A	D	SD
<b>A.</b>	<b>Teacher Qualifications (Academic and Professional) and Students Academic performance in Computer</b>				
1.	Teacher with good academic upbringing contributes to students success in Computer				
2.	Non-qualified science teachers contributed little to students success				
3.	Teachers with professional qualification have the best teaching method which removes boredom in the class but arouses students interest for better performance				

4.	Qualified teachers are mastery in improving student's academic performance in Computer Studies.				
5.	Professional teachers make use of instructional aid to improve academic performance of students.				
6.	Professional teachers will often impart knowledge in their skillful area and improve academic performance of students.				
7.	Qualified teachers make proficient use of instructional materials and students understanding for better performance.				
8.	Teachers' qualification enhances their mastery of the subject matter thereby making their students to perform better in Computer.				
9.	Teachers' professional and academic quality make used of laboratory materials which improve performance of students.				
10.	Inadequate supply of Computer teachers in schools to a great level affects the performance of their students.				
<b>B.</b>	<b>Impact of Teachers Teaching Experience on Students' Academic performance in Computer.</b>				
11.	Teachers' teaching experience to a great extent has impact on their student's academic performance in Computer Studies.				
12.	An experienced Computer teacher is more proficient in the use of instructional aids in teaching the subject for better performance.				
13.	Years of teaching make teachers to have mastery of difficult topics which enhances student's academic performance in Computer.				
14.	Teachers' knowledge of the subject as a result of experience enhances student's academic performance in Computer.				
15.	An experienced Computer teacher is more proficient in handling students learning skills especially in Computer thereby improving students' practical performance.				
16.	Teachers' experiences make them to opt the best teaching method for a particular topic thereby improving performance of students in Computer.				
17.	Teachers' teaching experience makes them to use numerous examples in teaching difficult topics thereby enhancing performance in Computer.				
18.	Teachers' approach to solving Computer problems makes it easy for students to practice on their own thereby improving their academic performance.				
19.	An experienced teacher is more proficient in classroom management and also manages individual differences in his learners for improved academic performance.				
20.	The number of years a Computer teacher has spent in teaching has nothing to do with his teaching effectiveness and student's academic performance.				
<b>C.</b>	<b>Teacher interest and academic performance in Computer</b>				
21.	Teachers' interest in Computer to a very large extent has great impact on students' academic performance.				
22.	Teachers' positive attitude towards Computer to a very large extent does not have any impact on students' academic performance.				

23.	When teachers' demonstrate good love for the subject their students are encouraged and this improves their performance.				
24.	Ineffective teaching due to teachers' attitude towards teaching Computer makes the subject discouraging and uninteresting thereby affecting students' performance.				
25.	Teachers' interest makes them to relate subject topics to everyday life and students' ability to transfer knowledge in solving problems increased thereby improving students' performance.				
26.	Teachers' interest to a very large extent makes them to opt the best teaching style which allows students to be actively engaged in the class which in turn enhances students' academic performance.				
27.	Teachers' negative attitude towards teaching Computer to a great extent makes the students to perform very poor.				
28.	Teachers' non-challant attitude tends to affect students' academic performance in subject like Computer.				
29.	Teachers' attitude toward the subject makes him to relate subject topics to everyday life and student's ability to transfer knowledge in solving problems in increased thereby improving student's performance.				
30.	Performance of students whose teacher is forced to teach the subject is always not encouraging and then leads to poor performance.				

**Tests for collection of Data, Time: 20 minutes**

1. ...executes a program line by line, translating and executing each line sequentially.  
A. A compiler B. An Assembler C. An Interpreter D. A Translator
2. The type of micro computers that can be held on one hand and operated with the other hand is popularly referred to as ... A. Desktop computer B. Laptop computer C. Minicomputer D. None of the above
3. To rapidly press down the left mouse button twice is known as ..... A. Clicking B. Dragging C. Double Clicking D. Right Clicking
4. Which generation of computers is concerned with Artificial Intelligence? A. 5<sup>th</sup> B. 4<sup>th</sup> C. 3<sup>rd</sup> D. 2<sup>nd</sup>
5. Which of the following operations with the mouse is carried out when drawing? A. Clicking B. Double Clicking C. Dragging D. Right Clicking
6. Which of the following produces a softcopy output? A. ALU B. VDU C. CPU D. Light Pen
7. Who introduced the concept of stored-program to computers? A. John von Neumann B. Charles Babbage C. Ada Lovelace D. Presper Eckert and John Mauchly
8. Which of the following statements is wrong?
  - I. Computers can solve any problem that people tell them to solve.
  - II. You need to know a lot of science and mathematics to use a computer.
  - III. A computer can be referred to as both an idiot and a marvellous machine.
  - IV. Computers cannot function without a human intervention.
 A. Statements I, II and III. B. Only Statements I, II and IV. C. Only Statements I. D. Only Statement II.
9. Match List I with List II in the table below

List I (Computer Term)		List II (Hardware / Software)	
M	System software	I	Keyboard
N	Input device	II	CD-ROM
X	Output device	III	Operating system
Y	Secondary storage device	IV	Printer

Choose the correct answer from the options given below:

- A. M-IV N-I X-III Y-II    B. M-II N-I X-IV Y-III    C. M-III N-IV X-I Y-II    D. M-III N-I X-IV Y-II
10. If a number in the Octal numbering system is 745 what will it be in hexadecimal? A. 485 B. 1E5 C. 745 D. 1145

11. Software that manage the overall operations of the computer system are referred to as ..... A. Operating systems B. Utility software C. Packages D. None of the above
12. Which of the following is located inside the system unit and stores programs and other information on two or more disks?  
A. Magnetic drum B. Magnetic disk C. Optical disk D. Operating System
13. Which of the following is needed because the RAM is volatile?  
A. CPU B. ROM C. Main Memory D. Secondary Storages
14.  $345_8$  is equal to ... in decimal. A. 345 B. 229 C. 340 D. 224
15. How many characters are there in the BASE-10 numbering system?  
A. 10 characters B. 16 characters C. 9 characters D. 2 characters
16. Software built for a general set of users are referred to as ...  
A. System software B. Application Programs C. Packages D. Utility software
17. Which of the following is an input device? A. Printer B. Monitor C. Mouse D. Plotter
18. Which of the following is part of the computer system? A. RAM B. ROM C. ALU D. All of the above
19. The part of the computer system which can be touched is known as..... A. Software B. Hard Ware C. Human Ware D. People Ware
20. A device used to send images to the computer system is known as ..... A. Plotter B. CPU C. Scanner D. Light Pen

## QUESTIONNAIRE FOR TEACHERS QUALIFICATION

Dear Sir/Ma,

### Appendix II

**Instruction: Tick (√) as appropriate**

#### PERSONAL INFORMATION

1. Sex: Male [  ], Female [  ]
2. Age: 20-30yrs [  ], 31-40yrs [  ]. Above 40yrs [  ]
3. Nationality: Nigerian [  ], Non-Nigerian [  ]
4. Martial Status: Single [  ], Married [  ]
5. For how long have you being teaching Computer? Under 10yrs [  ], 10-20 [  ],  
21-30 [  ], Above 30yrs
6. Educational Qualification: N.C.E [  ], B.Sc. (Ed) [  ], B.Sc. [  ]
7. Numbers of period per week for teachers in teaching Computer: 20 [  ], 18 [  ],  
24, [  ], 30 [  ]
8. Numbers of Computer students per class: 30 [  ], 50 [  ], 60 [  ], 70 [  ]
9. I find it difficult to mark my students' Computer assignment/class work  
regularly due to large number of students. YES [  ], NO [  ]
10. My students are exposed to practical works in Computer right from JSS1  
YES [  ], NO [  ]

#### Significance of the Study

#### Reliability of the Instrument

The reliability was based on t-test-retest method; one hundred (100) students were tested, the instruments were found to have high validity and reliability co-efficient.