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Evaluation of teachers' implementation of curriculum content areas in junior secondary schools' science subject

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Abstract

This study evaluated teachers' implementation of basic science curriculum content areas in junior secondary schools in Nsukka Education Zone of Enugu State, Nigeria. Four research questions were posed and three null hypotheses were formulated to guide the conduct of the study. The study employed evaluation research design (survey method). The population of this study consists of 32 Basic Science teachers drawn from 31 state owned Junior Secondary Schools in Nsukka Zone of Enugu State, Nigeria. The sample for the study consisted of 32 Basic Science teachers constituting 100% of the total population size. The instrument for data collection was 37-item questionnaire for teachers titled "Teachers' Implementation of Basic Science Curriculum Questionnaire (TIBSCQ)" developed by the researcher based on Nigerian Educational Research and Development Council (NERDC) curriculum. 32 questionnaires were administered and returned. The reliability of the instrument was tested using Cronbach's Alpha which yielded the internal consistency of the reliability coefficient of 0.927. The data collected from the study were analyzed using means and standard deviations to answer the research questions and t-test was used to test hypothesis one and Analysis of Variance (ANOVA) was used to test hypotheses two and three at 0.05 level of significance. The findings revealed that gender has no influence in teachers' implementation of Basic Science curriculum content areas. While Basic Science teachers' education qualifications and teaching experiences significantly influenced the implementation of Basic Science curriculum content areas in junior secondary school. It was recommended among others that to improve the academic performance of junior secondary school students Basic Science, government should employ professional, qualified and experienced teachers.

Keywords: First keyword; second keyword; third keyword; fourth keyword; fourth keyword

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1. Introduction

1.1. Background of the Study

Science, in its very simple term, is seemed as the attempt by humans to gain better understanding and clearer interpretation of human beings and of the environment. Also, science is an act of inquiry, which includes empirical observation and experimentation. Alebiosu (2003) stated that science aims at searching for causes and providing reasons for or solutions to phenomena or experiences in life. Umeoduagu (2000) equally opines that right from the time of creation; human was not only faced with the task of finding explanations to the vagaries of this universe but also, with the task of finding answers to the myriad problems encountered each passing day, in which case science has been a veritable tool. Science has been described as one of the greatest weapons human has ever invented for leaping into the unknown phenomenon. Nigerian policy-makers and educators recognize the role of science and technology in the achievement of education for all and national development in the present millennium.

This has knowledgeable an assessment manner that caused the improvement of the nine-year basic science and technology curriculum of the universal basic education. The curriculum was implemented in September 2008 in primary one school in Nigeria. Ackerman (2015) in his examination of cognitive development theory explained in details how the curriculum is sequenced in schools of which basic science is one of them.

Basic science is previously referred to as Integrated Science is the primary form of science a student comes across in secondary school. In the National Curriculum at the upper basic level, basic science is a compulsory subject. All students from upper Basic I to III classes must offer and study the subject. Basic Science is taken into consideration to be the bedrock of all science subjects at the senior secondary school (SSS) level. The subject prepares students at the upper basic level for the study of core science subjects (biology, chemistry and physics) at the senior secondary school level (Chukwuneke and Chikwenze, 2012; Vuran et al, 2020). That is why they in addition emphasized that for a student to be able to study single science subjects at the senior secondary level successfully; such a student needs to be properly grounded in Basic Science at the upper basic level. Based on this, it is generally taught as a single science subject, until in the SSS level, and then split into specialized science subjects (biology, chemistry and physics). It is expected that those students who achieve well in basic science should be given the opportunity to study the separate science subjects at the SSS level. It is taught in order to expose students to the basic workings of the scientific enterprise and it also provides the learners with the necessary foundation upon which to build subsequent science learning in the senior secondary school.

Basic Science is a progressive new introductory science curriculum advanced at Princeton meant for students thinking about a profession in science. Basic Science emphasizes scientific literacy and research oriented learning. The subject encourages exploration of student's immediate environment. As a result, Basic Science instructors keep learning alongside their students. The teaching of Basic Science is consequently, based on the philosophy of active learner-participation in the process whereby, students are encouraged to learn by constructing their own knowledge based on what they already understand as they make connections between new information and old information, guided or facilitated by the teacher. Under this philosophy, students are encouraged and

led to discover concepts and generalizations based on their experiments. Akinmade (2007) in his research rightly pointed out that, when children learn science using the process and activity approaches, they improve their ability to apply intellectual skills to solve problems, improve their language development, become more creative, master science content better.

Basically, core curriculum is intended to provide all students with an education that will serve them well regardless of their choices after leaving school. It reinforces the teaching of basic skills and introduces an expanded range of new knowledge and skills to the curriculum. Rutherford (2000) enunciates four properties that science course content should have: First, it should be significant; second, it should be accurate; third, it should be aligned with desired or declared learning goals and finally, it should be coherent. The science core curriculum places emphasis on understanding and using skills. Hence, the Basic Science curriculum has been designed to build into the present generation, the skills to meet present and future challenges. However, curriculum may refer to a well-defined and prescribed course of studies, which students must fulfill in order to fulfill a certain level of education. That is, curriculum is being construed as learning activities that make up a particular system of education (Ogundele, Okunlola, Damilola and Godfrey, 2020; Mirici and Uzel, 2019). Offorma (2009) sees the curriculum as a document, plan or blue print for instructional guide for teaching and learning, to bring about positive and desirable learners behavioural change. The curriculum therefore describes the teaching, learning materials and assessment strategies available for a given subject/course of study. The curriculum schemata have therefore placed a lot of burden on the pedagogical demand of the teacher. This can be appreciated from the fact that the teacher has to ensure the following:

- Appropriate identification and use of instructional materials
- Application of skills and competencies needed for teaching and learning
- Application of appropriate assessment strategies of learners' progress in the classroom and adequate knowledge of the subject matter.

The Basic Science teacher's role is one of a facilitator of learning experience. The teacher is the one who provides learning opportunities and necessary guidance, to increase both the quality and quantity of learning acquired by the students. Educational researchers have shown that, teachers who are able to guide their students through learning situations by indirect influence such as questioning, prompting or leading rather than by direct teaching, informing or explaining, produce students who are less dependent and in general learn more effectively (Adegoke, 2002). Ben – Yunus (2002) asserts that, the classroom teacher forms the cornerstone in curriculum implementation as the main force and the last person that ensures that any curriculum is implemented according to specification.

Therefore, if a teacher is untrained or unwilling to implement curriculum plans, his or her desired success cannot be attained. Also, there is the need for the teacher to be equipped with appropriate instructional resources. These instructional resources could be in the form of books, charts, models, maps, laboratory materials and equipment, projectors; computers and so on. The book has been regarded as an important single resource to both the science teacher and the learner. Some commentators in education have remarked that if education is the road out of poverty, books are the wheels needed for the journey. Books and other materials that will aid learning must be available and adequately provided in schools. Dike (2000) asserts that if we want children and all

citizens to acquire literacy, we must provide reading materials, the abundant and pleasurable reading materials found in libraries. It is expected that once a curriculum is designed, it may be evaluated by internal evaluation, expert appraisal and confidential review. Testing and implementation of the curriculum should be accompanied by evaluation. Evaluation involves the assessment of activities that occur when the curriculum is implemented in the classroom. The idea of formative, summative and even process evaluation is a pointer to the fact that, evaluation is an on-going process. In the words of Obashoro (2002), evaluation is to assess and place value on: programme objectives and needs; programme input and process; availability and adequacy of resources (human and material); characteristics of participants; teaching and learning methodologies; and programme outcome and impact. Evaluating the implementation of the basic science curriculum will help in ascertaining that the essential elements for the attainment of the programme objective are put in place, thereby putting the programme on a sound footing. The plight of school curriculum implementation in Nigeria has been attributed to many factors including funding, obsolete educational facilities, and inadequate qualified teachers among others. Afuwape and Olatoye (2004) stated that lack of qualified teachers, lack of equipment and facilities for teaching, lack of practical work in integrated science (basic Science) and poor methods of teaching are the major factors militating against the successive implementation of the core curriculum in Integrated Science (basic Science). Poor teacher qualification is another problem militating against effective implementation of Basic Science curriculum. The teacher is central in the task of implementation of any curriculum since they are to implement any curriculum in the classroom and serve as link between the students to whom the curriculum is to be implemented and the curriculum itself. Okurame (2003) posited that an effective Science teacher should be a master of his subject, as well as be grounded in methods of teaching and be able to relate the Science concepts to real life experience. Gidado (2001) stated that inadequate number of qualified teachers and poorly trained teachers is another problem facing the implementation of any curriculum. According to Jibrin (2007), a teacher as a facilitator of learning should possess capacity for setting and defining lesson objectives, organizing lesson materials, employing effective questioning techniques and evaluating students' achievement.

It is against this backdrop, this paper evaluates teachers' implementation of Basic Science curriculum in junior secondary schools in Nsukka Education Zone of Enugu State.

1.2Statement of the Problem

Basic science, just as the name implies is the foundational aspect of science education that deals with the impartation of the basic knowledge needed to understand science. Basic science is taught at the elementary or Basic schools which comprises of classes from Basic one (primary one) to Basic nine (JSS 3). It is obvious that Basic science is the major determinant of performance of study and practice of science but regrettably, the teaching of basic science in Nigerian schools cannot be said to be effective because of the poor performance of the students resulting from various problems associated with the teaching of Basic science. The alarming rate of poor performance in science subjects coupled with the low educational standard in the country are parts of the major reasons why most students shy away from the study of science. This negative attitude has encouraged poor performance and low participation of students in the higher science

subjects like physics, chemistry and biology. All these problems mentioned above have been conclusively blamed on basic science and its teaching.

It therefore becomes necessary to investigate the reasons for poor performance of students in basic science examination in Nigeria. Based on these above seeming problems, one begins to ask, "Did teachers really teach their students all the topics provided in the basic science curriculum?"It is on this background that the researcher deems it fit to evaluate teachers' implementation of basic science curriculum in junior secondary school in Nsukka Education Zone of Enugu State.

1.3 Purpose of the Study

The general purpose of this study is to evaluate teachers' implementation of basic science curriculum in junior secondary schools in Nsukka Education Zone of Enugu State. Specifically, the study seeks to determine the:

1. Extent to which the content areas of Basic Science curriculum are covered by the teachers.
2. Influence of gender on teachers' coverage of Basic Science Curriculum content areas.
3. Influence of qualification on teachers' coverage of Basic Science Curriculum content areas.
4. Influence of teaching experience on teachers' coverage of Basic Science Curriculum content areas.

1.4 Research Questions

This study answered the following research questions:

1. To what extent is the Basic Science curriculum content areas covered by the teachers?
2. What is the influence of gender on teachers' coverage of Basic Science Curriculum content areas?
3. What is the influence of qualification on teachers' coverage of Basic Science Curriculum content areas?
4. What is the influence of teaching experience on teachers' coverage of Basic Science Curriculum content areas?
5.

1.5 Research Hypotheses

The following hypotheses were formulated to guide the study and were tested at 0.05 level of significance.

H_{O1}: There is no significant influence of gender on teachers' coverage of Basic Science Curriculum content areas.

H_{02}: There is no significant influence of qualification on teachers' coverage of Basic Science Curriculum content areas.

H_{03}: There is no significant influence of teaching experience on teachers' coverage of Basic Science Curriculum content areas.

2. Method

2.1 Design of the Study

The study adopted an evaluation research design (survey method). It entails carrying out a structured assessment of the value of recourses committed to a project or specific goal. Surveys are largely context-based and limited to target groups who are asked a set of structured questions in line with the predetermined context. Survey research design is appropriate for this study because the researcher is dealing with large population and so needs questionnaire to collect data or information that will be used to answer the research questions and to test the hypothesis, and was carried out at Nsukka Local Government Area (LGA) of Enugu State.

2.2 Area of the Study

This study was carried out in Nsukka Local Government Area (LGA) of Enugu State. Enugu state is located in the South-East Geopolitical Zone of Nigeria. The zone was chosen to ascertain the role of teachers in implementation of Basic Science curriculum content areas in junior secondary schools because education is well advanced in this area and the people embraced education earlier in life during the colonial era.

2.3 Population of the Study

The population of this study consists of 32 junior secondary school Basic Science teachers in all the 31 state owned junior secondary schools in Nsukka Local Government Area (LGA) of Enugu State. This is made up of 14 males and 18 female teachers (Post Primary School Board, Nsukka Zonal Office, 2021). The population of the Basic Science teachers in each school in the Nsukka LGA of Enugu State is shown in appendix A.

2.4 Sample and Sampling Techniques

The sample for the study consists of 32 teachers constituting 100% of the total population of Basic Science teachers in Nsukka LGA of Enugu State. A census sampling technique was used to draw all the Basic Science teachers in Nsukka LGA of Enugu State because of the manageable size of the population.

2.5 Instruments for Data Collection

The instrument for this study for data collection was 37-item questionnaire for teachers titled "Teachers' Implementation of Basic Science Curriculum Questionnaire (TIBSCQ)" developed by the researcher based on NERDC curriculum. Akande (2001) defines a questionnaire as "a self reporting research method used in writing highly structured items or questions". Ogunleye (2000) defines it as "an instrument used for getting answers to a set of questions by using a format which the respondents fills by him". The questionnaire is divided into two sections, section A is concerned with the demographic data of the respondents while section B is concerned with the information required for the study. The questionnaire covered the content areas of Basic Science. Responses to the items on the questionnaire were on four (4) point Likert Scale of VHE = Very High Extent (4), HE = High Extent (3), LE = Low Extent (2) and VLE = Very Low Extent (1).The respondents were expected to choose one of the options.

2.6 Validation of the Instruments

The questionnaire was subjected to both face and content validation. The validation was done by three experts from Measurement and Evaluation and Basic Science units both in the Department of Science Education, Faculty of Education, University of Nigeria, Nsukka. These experts were requested to examine the items of the instrument in relation to the research questions posed for the study, see whether the item statements are simple and unambiguous, appropriateness and adequacy of the items in measuring what it is supposed to measure. The comments of the experts were used in restructuring the items of the instrument and their comments are attached (See Appendix C for suggested modifications for the validation of the instruments).

2.7 Reliability of the Instrument

The instruments were trial-tested in three schools in Obollo Afor outside the area study of Nsukka LGA of Enugu State, Nigeria. From the schools, five Basic Science teachers were selected for trial-testing and the questionnaire was administered. The reliability of the instrument was determined using Cronbach alpha. Cronbach alpha formula was used because the responses to the items in the instruments are polytomously scored. In other words, the responses did not involve pass or fail (true or false) answers, rather rating was done according to response options given by the respondent. The reliability estimates for Teachers' Implementation of Basic Science Curriculum Questionnaire was 0.927.

2.8 Administration of Instrument and Data Collection

The researcher administered the questionnaire with the aid of research assistants from each school. 32 copies of the Teachers' Implementation of Basic Science Curriculum Questionnaire was administered and 32 copies were collected through direct delivery and recovery method to enhance high return rate; constituting 100% of the total population of the Basic Science teachers. The researcher in administering the instrument explained the need for the study, including the objectives of the study to remove suspicion from the respondents.

2.9 Method of Data Analysis

Data generated for the study was analyzed using mean and standard deviation to answer the research questions. Null hypotheses 1 was tested using t-test while 2 and 3 was tested using Analysis of Variance (ANOVA). Real limits were used for the interpretation of research question one, thus; mean scores 1.00-1.49 (Very Low Extent), 1.50-2.49 (Low Extent). 2.50-3.49 (High Extent) and 3.50-4.00 (Very High Extent).

3. Results

The results of data analysis were presented based on the sequence of the research questions and the hypotheses that guided the study.

3.1 Research Question One:

To what extent is Basic Science curriculum content areas covered by the teachers?

Table 1: Mean and Standard Deviation on extent Basic Science curriculum content areas are being covered by the teachers

S/N	**Content Areas**	**Mean**		**Std Dev**	
1	Matter		3.69		0.59
2	Environmental Pollution	3.56		0.76	
3	Living and Non - Living Things	3,78		0.42	
4	Human Body	3.38		0.87	
5	Metabolism	3.03		0.86	
6	Sense organs	3.09		0.93	
7	Reproductive Health	2.91		1.12	
8	Soil	3.00		1.11	
9	Family Health	2.69		1.12	
10	Chemicals	2.38		1.07	
11	Family Traits	2.97		1.03	
12	Environmental Hazards I	2.88		1.01	
13	Environmental Hazards II	3.06		0.95	
14	Environmental Hazards III		3.09		0.78
15	Drug and substance abuse	3.47		0.80	
16	Resources from living things	3.09		1.03	
17	Resources from non-living things	2.13		1.07	
18	Disease vectors	2.81		1.15	
19	Prevention of STDS/ HIV/ AIDS	3.69		0.69	
20	Energy	3.31		0.93	
21	Renewable and Non-Renewable Energy	2.72		1.11	
22	Forces	3.03		1.00	
23	Work, Energy and Power	3.16		0.99	
24	Types of Energy	2.75		1.11	
25	Thermal Energy	2.31		1.09	
26	Light Energy	2.31		1.06	
27	Sound Energy	2.75		1.11	
28	Magnetism	2.75		1.16	
29	Electrical Energy	2.84		1.02	
30	Radioactivity	1.99		1.00	
31	Science and Development	2.50		1.11	
32	Crude oil and Petrochemicals	2.63		1.01	
33	Gravitational and weightlessness	2.31		1.12	
34	ICT	3.09		1.00	
35	Solid minerals	2.69		1.09	
36	Skills Acquisition	2.31		1.15	
37	Ethical issues in Science and Development	2.31		1.12	
Cluster Mean		**2.88**		**0.17**	

Table 1 shows the extent curriculum content areas of Basic Science curriculum is being covered by the teachers. Items 17, 25, 26, 30, 33, 36 and 37 had mean ratings within the range of 1.50-2.49 (LE). This means that Basic Science teachers have Low Extent on coverage of those content areas in Basic Science Curriculum. On the other hand, items 4,5,6,7,8,9,10,11,12,13,14,15,16,18,20,21,22,23,24,27,28,29,31,32,34 and 35 had mean ratings within the range of 2.50-3.49 (HE). This means that Basic Science teachers have High Extent on coverage of those content areas in Basic Science Curriculum. While items 1, 2, 3 and 19 had mean ratings within the range of 3.50-4.00 (VHE), which means that

Basic Science teachers have Very High Extent on coverage of Basic Science Curriculum content areas. Also, the items had a cluster mean of 2.88 which falls under the mean rating of High Extent; this implies that Basic Science teachers have High Extent on coverage of Basic Science Curriculum content areas.

***3.2 Research Question Two*:**

What is the influence of gender on teachers' coverage of Basic Science Curriculum content areas?

Table 2: Mean and Standard Deviation on influence of gender on teachers' coverage of Basic Science Curriculum content areas

Gender	N	Mean	Std Deviation
Male	14	112.14	31.06
Female	18	104.44	34.24

Table 2 shows that the male teachers' coverage of Basic Science Curriculum content areas had a mean rating of 112.14 while the female teachers had a mean rating of 104.44. This shows that the male teachers had higher mean rating than their female counterparts on coverage of Basic Science Curriculum content areas.

3.3 Research Question Three:

What is the influence of qualification on teachers' coverage of Basic Science Curriculum content area?

Table 3: Mean and Standard Deviation on influence of qualification on teachers' coverage of Basic Science Curriculum content areas

Qualification	N	Mean	Std. Deviation
NCE	12	88.17	32.88
B.ED	11	132.27	13.89
B.SC	7	106.14	35.13
OTHERS	2	97.00	16.97
TOTAL	**32**	**107.81**	**32.62**

Table 3 shows that teachers with NCE had mean rating of 88.17, those with B.ED had mean rating of 132.27, while those with B.SC had mean rating of 106.14 and those with other qualifications had mean rating of 97.00. This shows that teachers with B.ED qualification had higher influence on coverage of Basic Science Curriculum content areas compared to those with other qualifications.

3.4 Research Question Four:

What is the influence of teaching experience on teachers' coverage of Basic Science Curriculum content areas?

Table 4: Mean and Standard Deviation on influence of teaching experience on teachers' coverage of Basic Science Curriculum content areas

Years of Teaching Experience	N	Mean	Std. Deviation
1-8years	9	88.00	31.29
9-16years	11	97.73	30.62
17-25 years	7	100.50	32.67
26 years and above	5	138.22	12.51
Total	**32**	**107.81**	**32.62**

Table 4 shows the influence of teaching experience on teachers' coverage of Basic Science Curriculum content areas. The result shows that teachers with 1-8 years had the mean rating of 88.00, those with 9-16 years had the mean rating of 97.73, while those with 17-25 years had the mean rating of 100.50 and those with 26 years and above had the mean rating of 138.22. This further show that teachers with 26 years and above teaching experience had higher mean ratings compared to their counterparts with lesser years of teaching experience.

3.5 Hypotheses

H_{01}: There is no significant influence of gender on teachers' coverage of Basic Science Curriculum content areas.

Table 5: T-test on influence of gender on teachers' coverage of Basic Science Curriculum content areas

Sources of Variation	t	df	Sig.	Decision
Equal variances assumed	0.656	30	0.491	Not Sig.
Equal variances not assumed	0.665	29.234		

The result in table 5 shows that the t-value of 0.656 and 0.665 with associated probability value of 0.491 was obtained. Since the probability value is greater than the level of significance of 0.05, the null hypothesis was retained. Hence, there is no significance influence of gender on teachers' coverage of Basic Science Curriculum content areas. In other words, gender has no significant influence on teachers' coverage of Basic Science Curriculum content areas.

Ho_2: There is no significant influence of qualification on teachers' coverage of Basic Science Curriculum content areas.

Table 6: ANOVA on influence of qualification on teachers' coverage of Basic Science Curriculum content areas

Sources of Variation	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	11466.169	3	3822.056	4.975	.007
Within Groups	21512.706	28	768.311		
Total	**32978.875**	**31**			

The result in table 6 shows that an F-ratio of 4.975 with associated probability value of 0.007. Since the probability value is less than the level of significance of 0.05, the null hypothesis was rejected. Hence, there is significance influence of qualification on teachers' coverage of Basic Science Curriculum content areas.

H_{o3}: There is no significant influence of teaching experience on teachers' coverage of Basic Science Curriculum content areas.

Table 7: ANOVA on influence of teaching experience on teachers' coverage of Basic Science Curriculum content areas

Sources of Variation	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	12117.638	3	4039.213	5.421	.005
Within Groups	20861.237	28	745.044		
Total	**32978.875**	**31**			

The result in table 7 shows that an F-ratio of 5.421 with associated probability value of 0.005. Since the probability value is less than the level of significance of 0.05, the null hypothesis was rejected. Hence, there is significance influence of teaching experience on teachers' coverage of Basic Science Curriculum content areas.

4. Discussion

From the findings of the study as shown in Table 5, implies that there is no significant influence of gender on teachers' coverage of Basic Science Curriculum content areas. This agrees with the work of Ishaya (2014) who assessed the Implementation of Integrated Science Curriculum in Junior Secondary Schools in Kaduna State. The findings revealed that there is no significant difference between male and female teachers in teaching and learning of Integrated Science at junior secondary schools. Also, Oludipe and Daniel (2009) supported the findings in their study on Nigerian Science Teachers' view of Integrated Science and those of students in Integrated Science major and non-integrated science that gender was found not to affect their views about

Integrated Science. But the findings disagree with the work of Ibe and Nwosu (2012) that male teachers teach better than their female counterpart in their work on assessment of teachers' level of implementation of basic science curriculum: implications for professional development.

In respect to the ANOVA on table 6 which shows that there is significant influence of qualification on teachers' coverage of Basic Science Curriculum content areas. However, the hull hypothesis was rejected. This finding agreed with the assertion of Ogungbesan (2012) who evaluated the implementation of Basic Science Curriculum component of Universal Basic Education Programme in South-west, Nigeria, found out that most teachers of basic science were not professionally qualified to teach the subject (66.5%) and many teachers prefer to use lecture method (31.4%) to other methods. The finding disagrees with the findings of Ishaya (2014) which indicates that there is no significant difference among the teachers of Integrated Science on account of their teaching qualifications.

The findings in table 7 indicate the significant influence of teaching experience on teachers' coverage of Basic Science Curriculum content areas. The findings were in line with the of works Ibe and Nwosu (2012) which revealed that years of experience influences teachers performance on difficult topics of the curriculum and that teachers do not engage students in performance of real world tasks in assessment of learning outcomes. Bamikole & Elizabeth (2020) found that the Basic Science teachers who are predominantly females are inadequate but largely qualified with good levels of experience. This is in agreement with the study of Igbokwe (2015) that secondary schools lack specialist teachers for subjects like Basic Science, Introductory Technology and others. It was also found that the few available teachers are largely qualified with good level of experience. This is in contrast to the reports of Odetoyinbo (2004) that many Integrated Science teachers were unqualified for the job they are doing.

5. Conclusions

Based on the findings of this research, these conclusions were made:

1. Gender has no influence on teachers' coverage of Basic Science Curriculum content areas.
2. Teachers' qualification has influence on coverage of Basic Science Curriculum content areas.
3. Teachers' teaching experience has influence on coverage of Basic Science Curriculum content areas.

6. Recommendations

Based on the findings, the researcher wishes to make the following recommendations:

1. To improve the academic performance of junior secondary school students in Basic Science, government should employ professional, qualified and experienced teachers.
2. Gender discrimination should be avoided when employing teachers or selecting teachers in teaching a particular class in Basic Science.
3. The study calls for the need to improve teacher training programs and encourage teachers to further their qualifications, especially non-professional teachers

should be encourage acquiring relevant diplomas and degrees in education to make them eligible for registration with the Teachers Registration Council (TCR).

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