

**PERCEIVED FACTORS INFLUENCING IMPLEMENTATION OF
MATHEMATICS CURRICULUM AT SENIOR SECONDARY SCHOOLS IN BENUE
NORTH – WEST SENATORIAL DISTRICT, NIGERIA**

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ABSTRACT

This paper is on perceived factors influencing implementation of Mathematics curriculum at Senior Secondary Schools in Benue North - West Senatorial District. Four research questions and three hypotheses guided the study. A cross-sectional survey design was adopted to collect information from the respondents. A sample size of 200 respondents comprising of 140 Mathematics teachers, and 60 principals was selected from the population of 263 comprising 174 Mathematics teachers and 89 Principals from 89 government grant – aided Senior Secondary Schools using multistage sampling. The instruments used were a 4- point rating scale questionnaire and checklist validated by experts. Data collected were analyzed using descriptive statistics of percentage, bar chart, mean and standard deviation to provide answers to the research questions; while inferential statistics of Chi-square was used to test the hypotheses at 0.05 level of significance. Findings revealed that Academic qualification has a significant influence on teachers' implementation of Mathematics curriculum at Senior Secondary Schools in Benue North - West Senatorial District ($X^2 = 322.900$, $P=0.000<0.005$). It was also found that there is a significant influence of teaching methods, availability and the effective use of relevant instructional resources and assessment techniques used by Mathematics teachers on implementation of Mathematics curriculum at Senior Secondary Schools in the North – West Senatorial District. Based on the findings of this study, it was recommended that government should recruit adequate qualified Mathematics teachers, provide Mathematics laboratories and equip them with adequate instructional resources including technology and computer equipment to meet the global teaching best practices in order to improve the level of implementation of Mathematics curriculum at Senior Secondary Schools in Benue North - West Senatorial District.

Keywords: Implementation of Mathematics Curriculum, Academic Qualification Teaching Methods, Instructional Resources, Assessment Techniques, and Senior Secondary Schools

Introduction

Curriculum is any set of activities and experience for learning that are planned and supervised by the school administration with the aim of achieving the desired goals and objectives as specified by the

educational system. It is a course of study that intends to bring out well educated, balanced, focused, purposeful learners who will be functional and have the ability to adapt to the changing phases and place of the society. Curriculum has five basic

components, its aims, teacher qualifications, methodology, resources and assessment. Curriculum implementation therefore, is the translation of the designed course of study by teachers into syllabi, scheme of work, master time table and a comprehensive lesson plan to be delivered to the students in the classroom through appropriate instructional strategies, resources and assessment techniques ((Nwagbo, 2022). This implies that curriculum implementation is how teachers deliver instruction and assessment through the use of specified resources provided in a subject curriculum. Mathematics curriculum implementation is the process of putting all the planned Mathematics topics and learning activities in a curriculum and syllabus into practice in the classroom through the combined efforts of teachers, students, school administrators and parents using appropriate teaching methods, instructional materials, assessments techniques and learners' experiences in order to help learners develop robust mathematical skills and knowledge (Ezeugbor & Obunadike, 2022; Onyeachu, 2023).

A conceptual approach to Mathematics curriculum implementation strongly emphasizes engagement and building understanding through connections and relationships among mathematical concepts rather than focusing solely on procedural fluency. The goal is to help students develop a robust grasp of core mathematical principles that they can apply in various contexts (Ball & Forzani, 2020). Moreover, the conceptual implementation of a Mathematics curriculum is not simply a reform of teaching practices but an overall shift toward fostering a deep, intrinsic understanding of mathematical concepts. This approach prioritizes critical thinking, problem-solving, and real-world connections over memorization and drill exercises. The integration of technology, inquiry-based learning, and differentiated instruction plays a significant role in supporting this shift. It is worthy of note that, the conceptual development of mathematical

knowledge requires educators to prepare students not only for academic success but also for the challenges they will face in their personal, professional and societal lives. This involves the quality of teaching is one of the most significant factors that influence the success of curriculum implementation, particularly in complex subjects such as Mathematics. In this context, teachers' qualifications—comprising content knowledge, pedagogical skills, and professional development—are central to the effective delivery of Mathematics curricula. In line with this Zeichner and Conklin (2020) revealed that teacher qualifications significantly impact curriculum delivery while Magaji (2020) found that lack of professional qualified Mathematics teachers made the implementation level of mathematics curriculum at Senior secondary Schools grossly unsatisfactory. Such that topics schemed for a term were not taught and carried over to the next terms and some topics were skipped.

The methods teachers use to teach Mathematics are crucial in determining how well students understand mathematical concepts, retain knowledge, and apply what they have learned in real-world situations. Teaching methods are the strategies, techniques, and pedagogical practices that teachers employ to facilitate students' learning. Hussain (2021) showed that game – Based Learning method increased test scores in Mathematics by 15 percentage points while Duman and Peker (2020) revealed that Inquiry- Based Learning increased both behavioral and cognitive engagement of students by 27% in Mathematics. In the same vein, assessment techniques are vital to the successful implementation of any curriculum including the Mathematics curriculum. These techniques not only measure students' understanding and mastery of mathematical concepts but also provide valuable feedback to inform instructional decisions, guide students' learning, and enhance overall educational outcomes. Zhao and Huang

(2023) compared the effectiveness of performance – based assessments to traditional testing methods in Mathematics education and established that performance – based assessments significantly improved students' problem – solving skills. Also, Smith and Connor (2023) found that diagnostic assessments effectively identified students' misconceptions in a study of Diagnostic Assessment in Elementary Mathematics Education in the United States.

Students' poor performance in Mathematics could be attributed to such factors as gross lack of qualified Mathematics teachers, the use of traditional methods of teaching, lack of Mathematics laboratories, lack of instructional materials including textbooks, lack of computer – based programmes and equipment, poor lesson plans / notes and yet not adhering to it, skipping topics and not covering the syllabus, lack of motivation, use of poor assessment techniques including giving assignments and not regularly marking them to give feedback, Mathematics curriculum content, rote memorization, overcrowded classrooms, students' negative attitude towards Mathematics, irregular supervision and inspection of schools, poor funding of Mathematics curriculum implementation, and poor implementation of Mathematics curriculum by Mathematics teachers as well as lack of the acquisition of the 21st century skills which is the abilities or competences needed by students to succeed and thrive in today's society. Acquisition of these skills could help to engage, develop and maximize the intellectual potential of learners (Nwagbo, 2022).

For a society to be effective in this modern era, the skills of the 21st century should be attained by the students in secondary schools. The skills of the 21st century include critical thinking, creativity, mathematical communication, data literacy, technological / digital application over rote memorization, modeling real – world

problems, statistical reasoning, collaborative problem – solving, computational thinking, media literacy, flexibility, social skills and student – centered instruction among others. These skills of the 21st century contributes a significant part in the national advancement of Nigeria as well as other nations of the world in actualization of modern skills of the new era which is marked by increasing changes, evolving technologies and phenomenal growth of information. It is expected that on graduation from Secondary School, students should show signs of processing skills that will help them to thrive well in order to be useful in their career (Ukwueze & Abugu, 2023). However, giving the advantages of Mathematics for any nation, its implementation is not effectively carried out. As such, it is noted that students in Mathematics classroom tend to respond to Mathematics problems by memorization which is not helping in achieving the 21st century skills and not encouraging problem – solving that need reasoning, analysis and high performance in the subject (Omwono, 2020; Tanner & Tanner, 2007). It is in this regard that the researcher is motivated to investigate perceived factors influencing the implementation of the Mathematics curriculum at Senior Secondary Schools in Benue North - west Senatorial District.

Research Questions

The following research questions guided the study:

1. What is the academic qualification of the Mathematics teachers implementing Mathematics curriculum at Senior Secondary Schools in Benue North – west Senatorial District?
2. How does teaching methods used by the Mathematics teachers influence implementation of the Mathematics curriculum at Senior Secondary Schools in Benue North – West Senatorial District?

3. What are the available instructional materials in the implementation of Mathematics curriculum at Senior Secondary Schools in Benue North- West Senatorial District?
4. What influence have assessment techniques used by Mathematics teachers on implementation of Mathematics curriculum at Senior Secondary Schools in Benue North-West Senatorial District?

Hypotheses

The following hypotheses were formulated and tested at 0.05 level of significance.

1. Teachers' qualification has no significant influence on implementation of Mathematics curriculum at Senior Secondary Schools in Benue North - West Senatorial District.
2. There is no significant influence of teaching methods on implementation of Mathematics curriculum at Senior Secondary Schools in Benue North - West Senatorial District.
3. Effective use of appropriate assessment techniques has no significant influence on implementation of Mathematics curriculum at Senior Secondary Schools in Benue North - West Senatorial District.

Methodology

This study employed a cross-sectional survey design. The population of the study was 263 comprising 174 Mathematics teachers and 89 Principals from 89 government grant – aided Senior Secondary Schools. A sample size of 200 respondents comprising of 140 Mathematics teachers and 60 principals was selected from the population using multistage sampling. The instruments used were a Likert type of 4-point rating scale questionnaire and checklist validated by experts. Data collected were analyzed using descriptive statistics of percentage, bar chart, mean and standard deviation to provide answers to the research questions; while the inferential statistics of Chi-square was used to test the hypotheses at 0.05 level of significance.

Results

Research Question One: What is the academic qualification of the teachers implementing Mathematics curriculum at Senior Secondary Schools in Benue North - West Senatorial District? Analysis of data to answer research question one is in Table1.

Table 1: Percentage analysis of Academic qualification of Teachers Implementing Mathematics Curriculum at Senior Secondary Schools in Benue North - West Senatorial District.

S/N	Qualification	Number of Teachers	Percentage (%)
1	NCE	11	7.9
2	B.ED	8	5.7
3	B.Sc. Ed	23	16.4
4	B.Sc.	46	32.9
5	PGDE (B.Sc/HND)	20	14.3
6	B. TECH	8	5.7
7	MED	6	4.3
8	HND	18	12.8
TOTAL		140	100.0

Table 1 shows that 32.9% of Mathematics teachers in Benue North – West Senatorial District are B.Sc. holders without PGDE, 16.4% of the teachers are holders of B.Sc. Ed, 12.8% of the teachers are holders of

HND without PGDE, and 14.3% are holders of B.Sc. and HND with PGDE. Others are 7.9% are NCE holders and 5.7% are holders of B.ED and B.Tech as shown in Figure 1.

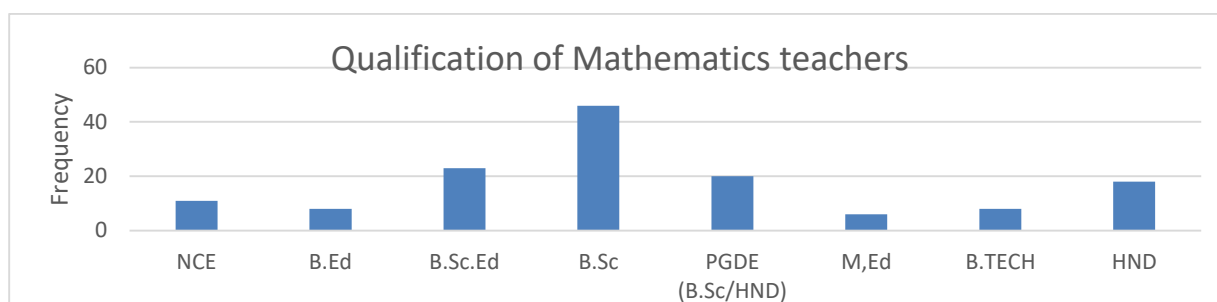


Figure 1: Bar Chart of Mathematics teachers implementing Mathematics curriculum at Senior Secondary Schools in Benue North - West Senatorial District.

Research Question two: How does teaching methods used by the Mathematics teachers influence implementation of the Mathematics curriculum at Senior Secondary Schools in

Benue North – West Senatorial District? Analysis of data to answer research question two is in Table 2

Table 2: Frequency, Mean and Standard deviation of teachers' response on how teaching methods used by Mathematics teachers influence implementation of Mathematics curriculum

S/N	Items	SA	A	D	SD	μ	σ
11	My methods of teaching Mathematics help to increase students' participation in the class	80	102	12	6	3.32	0.665
12	My methods of teaching Mathematics help to students' interest in the subject improves enthusiasm	83	103	10	4	3.33	0.665
13	My methods of teaching Mathematics help to improve students attendance to the class	71	102	22	5	3.24	0.703
14	My methods of teaching Mathematics help to improve students' understanding of the subject	76	104	15	5	3.26	0.702
15	My methods of teaching Mathematics help to enable students apply knowledge acquired in real life situation	67	100	23	10	3.17	0.744
16	My methods of teaching Mathematics help to make students think reflectively	83	97	13	7	3.28	0.738
17	My methods of teaching Mathematics help to make students to share ideas in class	80	97	16	7	3.30	0.702
18	My methods of teaching Mathematics help to meet students' diverse learning needs	71	102	16	11	3.25	0.700
19	My methods of teaching Mathematics help to facilitates students' confidence in mathematics	81	101	14	4	3.33	0.665
20	My methods of teaching Mathematics help to improve students' self-esteem in Mathematics	63	104	22	11	3.15	0.746
CLUSTER TWO MEAN		75.5	101.2	16.3	7.0	3.26	0.703

Lower and Upper boundaries of 0.01-1.00=SD, 1.01-2.00=D, 2.01-3.00=A, 3.01-4.00=SA is used for decision making to answer research question

Table 2 shows that respondents strongly agreed that methods of teaching Mathematics help them to increase students' participation in the class and to improve students' interest in the subject as well as to improve students' attendance to the class and improve students' understanding of the subject. It enable students apply knowledge acquired in real life situation and to make students think reflectively so as to share ideas in class, to meet students' diverse learning needs as well as facilitates students' confidence in Mathematics and improve students' self-esteem in Mathematics. The cluster mean of 3.26 and standard deviation

of 0.703 indicates that methods of teaching Mathematics used by Mathematics teachers have influence on implementation of the Mathematics curriculum at Senior Secondary Schools in Benue North – West Senatorial District.

Research Question three: What are the available instructional materials used in the implementation of Mathematics curriculum at Senior Secondary Schools in Benue North – West Senatorial District?

Analysis of data to answer research question three is in Table 3

Table 3: Frequency and Percentage of the available Mathematics instructional materials used in the implementation of Mathematics curriculum

S/No	Mathematics Instructional Materials	A	Percent (%)	NA	Percent (%)
1	Adequate ventilated classrooms with sufficient seats	200	100	-	-
2	Ventilated staffroom with adequate tables/chairs	200	100	-	-
3	Geoboard	78	39	122	61
4	Graph boards	156	78	44	22
5	Mathematics laboratory	80	40	120	60
6	Geometrical set for basic construction of angles and loci	116	58	84	42
7	Geometrical models for plane shapes	80	40	120	60
8	Geometrical models for solid shapes	82	41	118	59
9	Chalk boards	200	100	-	-
10	White marker boards	38	19	162	81
11	Interactive boards	4	2	196	98
12	National Mathematics curriculum for Senior secondary	200	100	-	-
13	Senior Secondary Mathematics guides for teachers	178	89	22	11
14	Mathematics schemes of work for Senior Secondary(SS)	200	100	-	-
15	Mathematics teachers' record of work (diaries)	200	100	-	-
16	Mathematics continuous assessment records for SS	200	100	-	-
17	Senior Secondary Students Mathematics note books	178	89	22	11
18	Clinometer	12	6	188	94
19	Probability kits	50	25	150	75

S/No	Mathematics Instructional Materials	A	Percent (%)	NA	Percent (%)
20	Constructional globes for Latitude and Longitude	44	22	156	78
21	Computer room	26	13	174	87
22	Functional computer machines	26	13	174	87
23	Projector	28	14	172	86
24	Computer programmes for teaching and learning of Mathematics.	22	11	178	89
25	Mathematics games instructional materials	154	77	46	23
26	Equipped library with relevant up to date Mathematics textbooks for teachers' use	134	67	66	33
27	Statistical four – figure tables	196	98	4	2
28	Scientific calculators	162	81	38	19
29	Mathematical charts	164	82	36	18

Table 3 shows that 2% of the respondents agreed that interactive boards are available for use to teach Mathematics in their school while 98% of them disagreed. Also, 6 % of them agreed that Clinometers are available for use to teach Mathematics in their school while 94% of them disagreed. Similarly, 11% of the respondents agreed that Computer programmes for teaching and learning of Mathematics are available in their schools while 89% of them disagreed. In the same vein 13% and 14% of the respondents agreed that Computer room with functional computer machines and Projector are available for use to teach Mathematics in their schools while 87% and 86% respectively of them disagreed. Other instructional materials like White marker boards, Probability kits, Constructional globes for Latitude and Longitude had 19%, 25% and 22%

respectively available for use in Mathematics classes. On the other hand, adequate ventilated classrooms with sufficient seats, Mathematics continuous assessment records for Senior Secondary (SS), Mathematics teachers' record of work (diaries), Mathematics schemes of work for SS, National Mathematics curriculum for Senior Secondary and chalk boards had 100% availability for use in Mathematics classes.

Research Question four: what influence does assessment techniques used by Mathematics teachers have on implementation of Mathematics curriculum at Senior Secondary Schools in Benue North – West Senatorial District? Analysis of data to answer research question four is in Table 4

Table 4: Frequency, Mean and Standard deviation of teachers' response on how instructional materials used by Mathematics teachers influence implementation of Mathematics curriculum

S/N	Items	SA	A	D	SD	μ	δ
21	I use relevant instructional materials to: simplify difficult concepts in teaching Mathematics	72	68	39	21	2.96	0.989
22	motivate learners to learn Mathematics	70	74	40	16	2.99	0.935
23	enhance students' collaborative learning skills	52	76	46	26	2.77	0.981
24	improve students' understanding of the subject	74	78	28	20	3.03	0.956
25	improve students' hands on skills in the subject	48	85	59	8	2.87	0.825
26	improve students' manipulative skills in the subject	76	78	32	14	3.08	0.904
27	improve students' retention of concepts in the subject	66	76	51	7	3.01	0.854
28	address diverse learning styles in the subject	56	86	38	20	2.89	0.929
29	encourage active participation of the students	76	79	30	15	3.08	0.910
30	reinforce concepts taught in class	67	93	28	12	3.08	0.844
CLUSTER THREE MEAN		65.7	79.3	35.2	13.8	2.97	0.913

Lower and Upper boundaries of 0.01-1.00=SD, 1.01-2.00=D, 2.01-3.00=A, 3.01-4.00=SA is used for decision making to answer research question

Table 4 shows how respondents strongly agreed that Mathematics teachers use relevant instructional materials to improve students' understanding of the subject, improve students' manipulative skills and retention in the subject, encourage active participation of the students and reinforce concepts taught in class. They also, agreed that Mathematics teachers use relevant instructional materials to simplify difficult concepts in teaching Mathematics, motivate learners to learn Mathematics, enhance students' collaborative learning skills, improve students' hands on skills in the subject and address diverse learning styles in the subject. The clusters mean of 2.97 and

standard deviation of 0.913 indicates that instructional materials used in teaching Mathematics by teachers have influence on implementation of the Mathematics curriculum at Senior Secondary Schools in Benue North - West Senatorial District.

Hypotheses

The following hypotheses were formulated and tested at 0.05 levels of significance:

Hypothesis One: Teachers' academic qualification has no significant influence on implementation of Mathematics curriculum at Senior Secondary Schools in Benue North - West Senatorial District. Analysis of data to test hypothesis one is in Table 5

Table 5: Chi-Square Analysis of how academic qualification of Mathematics teachers influence implementation of Mathematics curriculum

S/N	Items	SA	A	D	SD	X^2_{Cal}	P-value	Decision
1	My academic qualification in Mathematics has prepared me adequately to tailor students' needs to achieve specific outcomes	102	98	-	-			
2	Advance qualification has improved my ability to teach complex mathematical concepts	73	104	17	6			
3	I often apply knowledge gained during academic training to deliver my lessons	83	103	10	4			
4	There is a clear connection between my level of qualification and my confidence when teaching difficult concepts	69	104	20	7			
5	I feel limited implementing Mathematics curriculum due to gaps in my academic background	84	102	10	4	322.900	0.000	Sig.
6	My academic qualification influences how I choose and apply teaching strategies in Mathematics	83	103	10	4			
7	My training enables me to lead students to meaningful engagement in Mathematics class	83	103	10	4			
8	Regular training helps me to tailor teaching mathematics concepts towards meeting societal needs.	71	103	20	6			
9	Regular training helps me to use different strategies to increases learners confidence in Mathematics	83	103	10	4			
10	Academic training helps me to use different strategies to motivates students to learn Mathematics	70	105	19	6			

Degree of freedom (df) = 27

Table 5 shows that chi-square value of 322.900 was obtained at 27 degree of freedom and 0.000 p-value. Since p-value obtained is less than 0.05 it indicates a significant influence of teachers' academic qualification on implementation of Mathematics curriculum at Senior Secondary Schools in Benue North - West Senatorial District.

Hypothesis two: There is no significant influence of teaching methods on implementation of Mathematics curriculum at Senior Secondary Schools in Benue North - West Senatorial District.

Analysis of data to test hypothesis two is in Table 2

Table 2 shows that chi-square value of 214.770 was obtained at 27 degree of freedom and 0.000 p-value. Since p-value obtained is less than 0.05 it indicates a significant influence of teaching methods used by Mathematics teachers on implementation of Mathematics curriculum at Senior Secondary Schools in Benue North - West Senatorial District.

Hypothesis three: Effective use of assessment techniques by Mathematics teachers has no significant influence on implementation of Mathematics curriculum at Senior Secondary Schools in Benue North – West Senatorial District.

Table 4 shows that chi-square value of 109.200 was obtained at 27 degree of freedom and 0.000 p-value. Since p-value obtained is less than 0.05, it indicates a significant influence of the effective use of appropriate assessment techniques by Mathematics teachers on implementation of Mathematics curriculum

Discussion of Findings

One of the findings of this study shows that out of 140 Mathematics teachers in Benue North – West Senatorial District, only 68 of them representing 48.6% are qualified to teach Mathematics. That is, the 48.6% comprise 16.4% of the teachers who are holders of B.Sc. Ed, 5.7% are holders of B.ED, 14.3% are holders of B.Sc. and HND with PGDE and 7.9% are NCE holders while

32.9% of the Mathematics teachers in Benue North – West senatorial district are B.Sc. holders without PGDE, 12.8% of the teachers are holders of HND without PGDE, and 5.7% are holders B.Tech without PGDE. This indicates that a greater percentage of Mathematics teachers representing 51.4% implementing Mathematics curriculum in North - West Senatorial District are not professional teachers. This finding agrees with Ibeh (2020) who found that, out of 74 Mathematics teachers, only 46 of them were qualified with the proportion of 0.62 or 62%, with the Mathematics curriculum content coverage fairly covered with mean of 2.41 in Abakaliki education zone of Ebonyi State. The finding is also consistent with Adegoke and Mefun (2020) who found that, there is a serious lack of qualified Mathematics teachers for implementation of the Nigeria new Senior Secondary School Mathematics curriculum in Abakaliki and Ebonyi local government areas, Ebonyi State, Nigeria.

Secondly, finding reveals that academic qualification has a significant influence on teachers' implementation of Mathematics curriculum at Senior Secondary Schools in Benue North - West Senatorial District. This finding is consistent with Zeichner and Conklin (2020) who found that teacher qualifications significantly impact curriculum delivery while alternatively certified teachers struggled with pedagogical content knowledge, and that subject matter expertise enabled deeper implementation. Also, Magaji (2020) found that lack of professional qualified Mathematics teachers made the implementation level of Mathematics curriculum at the Senior Secondary Schools grossly unsatisfactory. Most topics schemed for a term were not taught and carried over to the next terms and some topics were skipped. The result further indicated that, all teachers used teacher-centered method to teach in the classroom.

Thirdly, finding shows that there is a significant influence of teaching methods on teachers' implementation of Mathematics curriculum at Senior Secondary Schools in

Benue North - West Senatorial District. This finding is consistent with Hussain (2021) who conducted a study on the Impact of Game-Based Learning in Mathematics Education in the United Arab Emirates to established that game-based learning increased test scores by 15 percentage points. Also, the finding agrees with Duman and Peker (2020) who found that Inquiry-Based Learning increased both behavioral and cognitive engagement by 27%.

The fourth finding shows that 2% of the respondents agreed that interactive boards are available for use to teach mathematics in their schools while 98% of them disagreed. Also, 6% of them agreed that clinometers are available for use to teach Mathematics in their schools while 94% of them disagreed. Similarly, 11% of the respondents agreed that computer programmes for teaching and learning of Mathematics are available in their schools while 89% of them disagreed. In the same vein, 13% and 14% of the respondents agreed that computer room with functional computer machines and projector are available for use to teach Mathematics in their schools while 87% and 86% respectively of them disagreed. This finding agrees with Magaji (2020) who found that lack of instructional materials made the implementation of Mathematics curriculum at Senior Secondary Schools grossly unsatisfactory.

The fifth finding shows that effective use of appropriate assessment techniques by Mathematics teachers has a significant influence on implementation of Mathematics curriculum at Senior Secondary Schools in Benue North - West Senatorial District. This finding is consistent with Zhao and Huang (2023) who carried out a study on Performance-Based Assessment in China to investigate the effectiveness of performance-based assessments compared to traditional testing methods in Mathematics education. The study

established that performance-based assessments significantly improved student problem-solving skills. Also, Smith and Connor (2023) conducted a study on Diagnostic Assessment in Elementary Mathematics Education in the United States and found that diagnostic assessments effectively identified students' misconceptions.

Conclusion

The conclusion of the study shows that academic qualification, teaching methods, effective use of instructional materials and appropriate assessment techniques used by Mathematics teachers have significant influence on implementation of Mathematics curriculum at Senior Secondary Schools in Benue North – West Senatorial District. This implies that, if adequate qualified teachers are recruited, train and retrain and their welfare package enhanced to boost their morale to be committed to duty, adequate relevant instructional materials are provided and appropriate assessment techniques are used by Mathematics teachers to implement the Mathematics curriculum, it will translate the objectives of Mathematics curriculum to bring a positive change in the learners' behaviour, knowledge, attitudes values and skills so as to add value to their lives and that of a society to reduce unemployment and social vices in Benue North – West Senatorial District.

Recommendations

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

- 1 Government should recruit adequate number of qualified Mathematics teachers and encourage their continuous professional development to ensure effective implementation of Mathematics curriculum at Senior Secondary Schools in Benue North - West Senatorial District.

- 2 Mathematics teachers should use workable assessment techniques and teaching methods with relevant instructional materials that will help achieve cognitive, affective and psychomotor domains of the learners to implement Mathematics curriculum at Senior Secondary Schools in Benue North - West Senatorial District.
- 3 Government and Private proprietors, professional bodies and all stakeholders should support in the provision of relevant technological and computer equipment to improve the level of implementation of Mathematics curriculum among secondary schools in Benue North - West Senatorial District.
- 4 Ministry of education, professional and examination bodies should organize workshops, and seminars on appropriate assessment techniques for Mathematics teachers to enhance procedural and conceptual assessment in the implementation of Mathematics curriculum at Senior Secondary Schools in Benue North - West Senatorial District.
- 5 Effective schools' supervision and inspection at close intervals should be carried out to help check teachers' performance and students' learning problems.

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