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DETERMINING INSTRUCTIONAL FACILITY-TO-STUDENT RATIO IN JUNIOR SECONDARY SCHOOLS IN BABURA/GARKI FEDERAL CONSTITUENCY OF NIGERIA: IMPLICATIONS FOR CURRICULUM IMPLEMENTATION

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Abstract

This study determined the instructional facility-to-student ratio in Junior Secondary Schools in Babura/Garki Federal Constituency of Nigeria and its implications for curriculum implementation. Three research questions were raised for the study. The research design for this study is descriptive survey research design. Stratified random sampling technique was used to select 24 Junior Secondary Schools out of 44 schools in Babura/Garki Federal Constituency. Instructional Materials Checklist (IMC) and Instructional Materials Questionnaire (IMQ) were used for data collection. Frequency, ratio, mean and standard deviation were used to answer the research questions. Results showed that majority of the materials required to teach English language and Mathematics effectively were not available and even the ones available were in limited quantity and it was unevenly distributed across the two local government areas. Also, majority of the materials were more available in urban location compared to the rural location despite the urban location having fewer number of students. From the result, it could be seen that the urban locations have better instructional facility-to-student ratio than their counterpart in rural locations. Based on the findings, it was recommended that government, being the proprietor of public JSS in Nigeria, should provide high quality instructional materials to JSS students to facilitate teaching and learning.

Keywords: *Curriculum Implementation, Instructional Facilities, Students, Ratio.*

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Introduction

There is public outcry about the high failure rates of students in both internal and external examinations in Nigeria (Udebunu, 2005). This, no doubt, casts a vote of no confidence on the education sector. English and Mathematics are subjects that are very important in day-to-day activities. They form the bedrock for all other subjects whether in pure sciences, social sciences, applied sciences or arts. Due to their importance, they were made compulsory subjects in schools such that failure in the subjects may hinder a student from being promoted to senior secondary school or from gaining admission into higher institutions of learning. The importance and technicality of these subjects make it necessary that relevant instructional materials should be used to teach them to the learners. As important are these subjects are, students' failure rate in them is alarming in both internal and external examinations. There are various factors responsible for the poor performance of students in both English and Mathematics of which the use of instructional resources in the teaching-learning process is projected to be one of them. Instructional materials are materials which assist teachers to make their lessons explicit to learners. They are also used to transmit information, ideas and notes to learners (Ijaduola, 1997). Instructional materials include audios, visuals and audiovisuals such as pictures, flashcards, posters, charts, tape recorders, radios, videos, televisions, computers, among others. These materials serve as supplements to the normal processes of instruction. On the other hand, successful curriculum implementation depends to a large extent on the availability and utilization of adequate instructional materials or learning resources. For the purpose of this study, the researcher is limited to only one class of school facilities namely: instructional materials. The shortage of facilities in schools results in overcrowded classrooms, inadequate instructional materials, and a decline in the quality of education. Therefore, it is crucial to determine instructional facilities-to-student ratio in junior secondary schools in Babura/Garki Federal Constituency of Nigeria and its implications for curriculum implementation.

Instructional materials are commonly referred to as teaching aids due to their usefulness in the teaching process. Ibeneme (2000) defined teaching aids as materials used for practicals and demonstrations in the classroom by teachers and students. The use of these materials is very crucial in the teaching and learning process. It makes teaching and learning more interesting, practical, and realistic. It promotes active classroom participation and enhances self confidence in students with high levels of retention and easy recall (Orji, 2000). Adesola et al (2022) define instructional materials as any animate material or inanimate object as well as human and non-human resources that a teacher may use in the teaching and learning process. Olatunde-Aiyedun (2021) as cited in Ajemba et al (2021) states that instructional materials include modern textbooks, rulers, charts, computers, shapes, projectors, graph sheets, and local materials among others. Similarly, Matazu (2022) identified prints, textbooks, magazines, newspapers, slides, photos, and audiovisual equipment as examples of instructional materials. Furthermore, instructional materials comprise locally made tools (such as improvised materials like stones, and sticks, among others). They help in the facilitation of the teaching and learning process (Chukwunazo et al., 2022; Effiong & Igiri, 2015). Bella (2021) asserts that the use of instructional materials by teachers helps in exploring the full potential of the students in terms of learning, thereby easing the transfer of knowledge from the teachers to the learners. Similarly, Oppong (2021) concurs that the use of instructional materials helps in facilitating and enhancing effective teaching.

Instructional materials play vital roles in the teaching of English Language in secondary schools. Bassey (2014) conclusively elucidates the fact that instructional materials play a central role in the process of lesson planning. When teachers plan, usually their first concern is with the instructional materials and resources that are available and accessible; but according to Bassey, teachers do not have adequate knowledge about the selection of these instructional materials. Kalaiye (2010), states that the present state of affairs where English language is mainly a chalkboard and chalk affair does not make for proper understanding of the subject. Studies have associated low utilization of materials with lack of adequate knowledge of instructional materials in addition to other factors. The ability of a teacher to select these materials depends to a great extent on the training and ingenuity of the teacher concerned (Udo, 2008). On the other hand, Omabe (2006), asserts that instructional materials are central in the teaching and learning of English language because they are used to complement the efficiency of a teacher, and effectiveness in lesson delivery.

On the other hand, Omariba (2012), found that the available instructional materials for the teaching and learning of Mathematics include charts, shapes, textbooks, graph sheets, and mathematical sets. Nonetheless, audio-visual equipment like televisions, computers, and projectors were not readily available to the teachers. However, Nyemaekile and Polycarp (2022), in their finding, showed that the common instructional materials in the teaching and learning of Mathematics include textbooks, chalkboards/marker boards, graphs, tape recorders, pictures/charts, and calculators. Furthermore, Enikanolaye (2021), noted that when teachers use instructional materials, they improve and stimulate students' retention level thus helping them concretize the learning of Mathematics more easily. In other words, the use of these materials allows teachers to present new content in a more memorable and meaningful manner to the learners (Olokooba, 2021).

Still on the importance of instructional materials, Esu, Enukoha and Umoren (2014) affirmed that instructional materials facilitate learning of abstract concepts by helping to concretize ideas and stimulate learners' imagination. Moreover, instructional materials help to increase active participation in the learning process while saving teacher's energy, reducing the teacher centeredness in teaching. In the same vein, Mathew (2012) states that the use of instructional materials makes teaching effective as it enables learners to participate actively in classroom instruction. All these views suggest that the use of instructional materials can improve students' performance. Olumorin, Yusuf, Ajidagba and Jekayinfa (2010) also observe that instructional materials help teachers to teach conveniently and the students to learn easily without stress.

Problem Statement/Justification:

The shortage of facilities in schools is a significant problem in Nigeria. Over the years, teachers have indicated that one of the greatest impediments to curriculum implementation is inadequacy of instructional materials, and it is evident that no curriculum can be implemented effectively without giving due consideration to necessary equipment and materials. Unfortunately, there is dearth of instructional materials in basic education level. There seems to be inadequate provision of these facilities. Some of the existing ones seem to be in a dilapidated state, lacking good maintenance or not functioning at all. Moreover, there seems to be an increase in

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the population of students due to high enrolment rate. It seems that where these materials are lacking, students develop nonchalant attitude towards learning and this, in turn, has indeed made learners have difficulties in understanding English and Mathematics because of their abstract nature (Mabagala, 2019). A school with conducive classrooms and facilities improve teaching and learning process. Unfortunately, there seem to be inadequate instructional facilities in many secondary schools in Nigeria which dampens teachers' morale and also affects students negatively. The Babura/Garki Federal Constituency, like many other constituencies in the country, faces shortages of instructional materials in junior secondary schools. The non-availability of instructional materials and other facilities in junior secondary schools affects the quality of education, which, in turn, affects the future of the students. This research aims to address this problem by determining the current instructional facility-to-student ratio in junior secondary schools in Babura/Garki Federal Constituency.

Purpose of the Study

The main purpose of the study was to determine instructional facility-to-student ratio and its implications for curriculum implementation in public junior secondary schools in Babura/Garki Federal Constituency of Nigeria. Specifically, the study determined:

1. the availability of instructional facilities for the teaching of English language and Mathematics in public junior secondary schools in Babura/Garki Federal Constituency.
2. the ratio of instructional materials to students' number in urban and rural schools in the teaching of English and Mathematics.
3. the extent to which instructional materials are incorporated in the teaching of English and Mathematics.

Research Questions

The following research questions guided the study:

1. What are the available instructional facilities for the teaching of English language and Mathematics in public secondary schools in Babura/Garki Federal Constituency?
2. What is the ratio of instructional materials to students' number in the teaching of English language and Mathematics in urban and rural schools?
3. To what extent are instructional materials incorporated in the teaching of English language and Mathematics?

Research Method

Survey research design was employed for this study. Specifically, the study employed descriptive survey research design. It surveyed the availability and incorporation of instructional materials in the teaching and learning of English language and Mathematics, as well as sought information on the facility-to-student ratio in Babura/Gariki Federal Constituency.

The population of this study comprised all the English and Mathematics teachers in Forty-Five (45) junior secondary schools in Babura/Garki Federal Constituency in the Northwest senatorial district of Jigawa State. Stratified random sampling technique was employed in selecting twelve (24) junior secondary schools from the two local governments. Using random sampling technique two (2) teachers were selected from each of the schools (one English and one Mathematics teacher), making a total of forty-eight (24 English language teachers and 24 Mathematics teachers).

Two instruments were used for data collection. The first instrument is the instructional materials checklist (IMC). It was used to find out the available instructional materials. This instrument provided the basis for drawing conclusions on instructional material-to-student ratio. The other instrument is the Instructional Materials Questionnaire (IMQ). This instrument elicited responses on the extent instructional materials are incorporated in the teaching and learning of English language and Mathematics.

To ensure the validity of the instruments in this study, the instruments were given to experts in Test and Measurement, Curriculum Studies and Statistics who individually vetted and authenticated the instrument. The final version was adjudged to be sufficient for Pilot test using 25 English and 25 Mathematics teachers to check the internal consistency of the scaling of the instrument. Completed questionnaires were coded and SPSS version 21 used to analyze it. Result shows Cronbach's Alpha coefficient of 0.879 for English teachers and 0.896 for Mathematics teachers. The combined result coefficient was 0.889. This depicts that the coefficients are closer to 1 than 0. In Reliability test, instruments with coefficients closer to 1 are adjudged to be reliable. Therefore, based on the reliability test results, the instrument for data collection was considered reliable.

The researcher used the checklist to find out instructional materials that were available in the sample schools and the number that was available. On the other hand the questionnaire was administered to the sampled English language and Mathematics teachers by the researcher. Data collection lasted for a period of two weeks during which the researcher was able to tour the schools to get first hand information on the available facilities and the extent to which they were incorporated in the teaching and learning of English language and Mathematics.

Frequencies, ratio, mean and standard deviation were used in analysis of data. Real limit of numbers was used in taking decision on the mean.

Results

Personal information of enumerated teachers

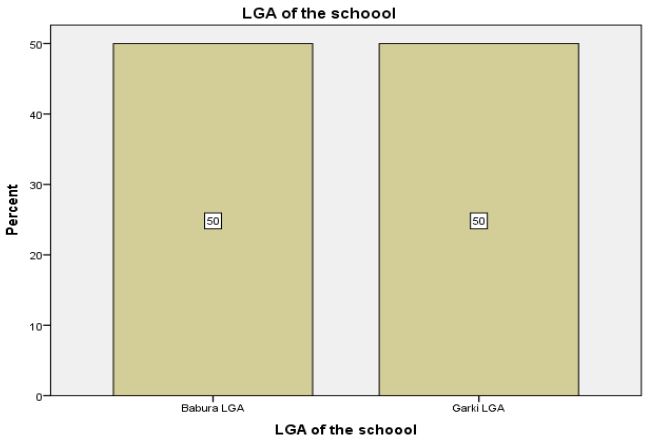

Figure 1: Local Government Area of the schools sampled

Figure 1 presents information for the local government of the sampled secondary school teachers. From the figure, 50%, depicting 24 teachers comprising 12 English and 12 Mathematics were form Babura LGA, while the remaining 50% came from Garki LGA. This gives equal representation.

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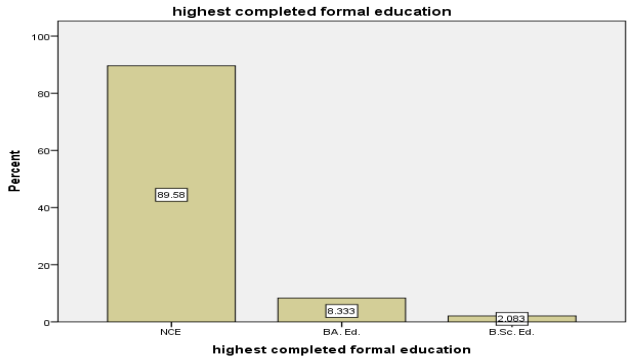

Figure 2: Highest completed formal education of the sampled teachers

Figure 2 indicates that on the highest completed formal education of the teachers, almost all of them (89.6%) had NCE while 8.3% and 2.1% had BA. Ed. and B.Sc. Ed. respectively as their highest completed formal education.

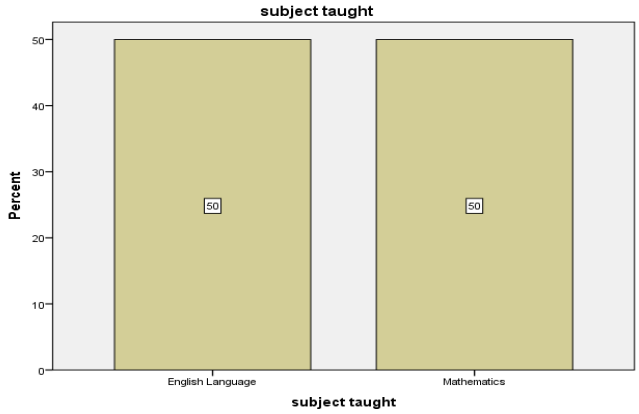

Figure 3: Subject taught by the sampled teachers

For the subjects taught by the teachers, the result from Figure 3 showed an even distribution of 50% for both English language and Mathematics.

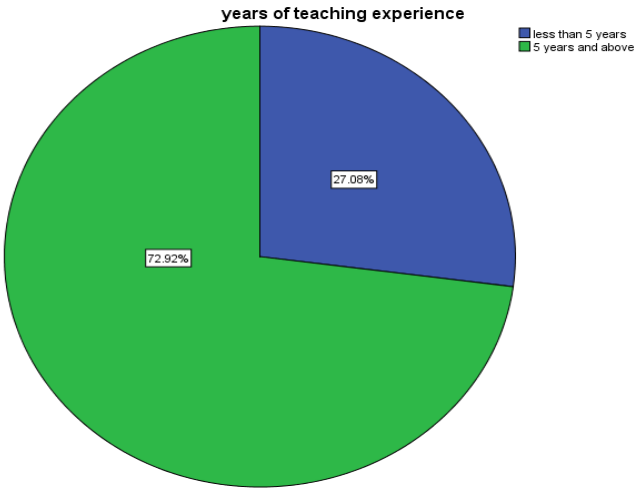

Figure 4: Years of teaching experience of sampled teachers

The result for the number of years of service as teachers in their various subject presented in Figure 4 shows that majority of the teachers (72.9%) have taught their respective subjects for 5 years and above while the remaining 27.1% have taught for less than 5 years.

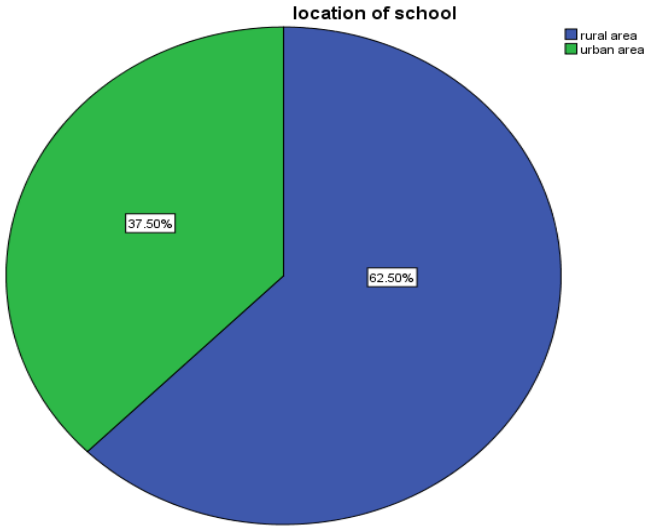

Figure 5: Location of schools of sampled teachers

Result from Figure 5 which highlights the location of the school of sampled teachers shows that majority of the schools (62.5%) were in the rural area while the remaining 37.5% were in the urban area.

Research Question One:

What are the available instructional facilities for the teaching of English language and Mathematics in public junior secondary schools in Babura/Garki Federal Constituency?

Table 1a: Instructional materials available for teaching English language

S/NO	Instructional Materials	Frequencies of Available Materials		
		Babura LGA	**Garki LGA**	**Babura/Garki federal constituency**
1	Charts	226	260	486
2	Flash cards	246	246	492
3	Pictures	102	130	232
4	Textbooks	218	113	331
5	Television	0	0	0
6	Tape recorder	0	0	0
7	MP3	2	0	2
8	Documentary films	0	0	0
9	Film projector	0	0	0
10	Video recorder	0	0	0
11	Smart board	0	0	0
12	Computers	5	3	8
13	Language laboratory	0	0	0
14	Chalkboard	41	43	84
15	Sentences	0	0	0

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	Strips			
16	Puppets	0	0	0
17	Course textbook	31	49	80
18	Drawings	127	42	169
19	Picture books	0	0	0
20	Realia	0	0	0

Source: Field Survey, 2024

The result on Table 1a shows the availability of instructional material for English language across the local governments. From the result, the number of charts, flash cards, pictures, textbooks and drawings is 486, 492, 232, 331 and 169 respectively. The number of mp3, computers, chalkboard, course textbooks and drawings were 2, 8, 84, 80 and 169 respectively. Other instructional materials were not seen in the two LGAs used for this study. This indicates that majority of the materials required to teach English language effectively were not available and even the ones available were in limited quantity. The materials are unevenly distributed across the two local government areas.

Table 1b: Instructional materials available for teaching Mathematics

S/NO	Instructional Materials	Frequencies of Available Materials		
		Babura LGA	**Garki LGA**	**Babura/Garki federal constituency**
1	Abacus	1	2	3
2	Graphs	26	23	49
3	Workbook	16	42	58
4	Measurement tape	6	13	19
5	Meter ruler	2	2	4
6	Plane Shapes	125	213	338
7	Flash cards	234	234	468
8	Mathematical sets	2	12	14
9	Charts	43	258	301
10	Diagrams	11	125	136
11	Counters	9	10	19
12	3-dimentional shape models	12	12	24
13	2-dimentional shape models	23	12	35
14	Sets Square	3	4	7
15	Balancing scale	2	2	4
16	Posters	13	32	45
17	Weighing scale	1	2	3
18	Textbooks	16	56	72
19	Pair of Compasses	2	3	5
20	Protractor	2	4	6

Source: Field Survey, 2024

The result for the availability of instructional materials in Babura and Garki local governments as found in Table 1b shows that the materials required to effectively teach Mathematics were available. However, some of them were only available in small numbers such as abacus (3), graphs (49), workbook (58), measurement tape (19), meter ruler (4), mathematical sets (14), counters (19), 3-dimensional shape models (24), 2-dimensional shape models (35), sets square (7), balancing scale (4), weighing scale (3), pair of compasses (5) and protractor (6).

The table also shows that there seem to be differentials across the two local governments on the availability of the materials with Garki Local Government having more than Babura Local Government. Therefore, the available Mathematics materials were abacus, graphs, workbook, measurement tape, meter ruler, plane shapes, flash cards, mathematical sets, charts, diagrams, counters, 3-dimensional shape models, 2-dimensional shape models, sets square, balancing scale, posters, weighing scale, textbooks, pair of compasses and protractor.

Research Question Two:

What is the ratio of instructional materials to students' number in the teaching of English language and Mathematics in urban and rural schools?

Table 2a: Instructional materials available for teaching English language and number of students in rural and urban areas

S/NO	Instructional Materials	Frequencies of Available Materials (Number of students in the schools)		
		Rural schools	**Urban schools**	**Rural and Urban schools**
1	Charts	218 (4,749)	268 (2,557)	486 (7,306)
2	Flash cards	245 (4,749)	247 (2,557)	492 (7,306)
3	Pictures	115 (4,749)	117 (2,557)	232 (7,306)
4	Textbooks	165 (4,749)	166 (2,557)	331 (7,306)
5	Television	0 (4,749)	0 (2,557)	0 (7,306)

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6	Tape recorder	0 (4,749)	0 (2,557)	0 (7,306)
7	MP3	0 (4,749)	2 (2,557)	2 (7,306)
8	Documentary films	0 (4,749)	0 (2,557)	0 (7,306)
9	Film projector	0 (4,749)	0 (2,557)	0 (7,306)
10	Video recorder	0 (4,749)	0 (2,557)	0 (7,306)
11	Smart board	0 (4,749)	0 (2,557)	0 (7,306)
12	Computers	1 (4,749)	7 (2,557)	8 (7,306)
13	Language laboratory	0 (4,749)	0 (2,557)	0 (7,306)
14	Chalkboard	54 (4,749)	30 (2,557)	84 (7,306)
15	Sentences Strips	0 (4,749)	0 (2,557)	0 (7,306)
16	Puppets	0 (4,749)	0 (2,557)	0 (7,306)
17	Course textbook	47 (4,749)	33 (2,557)	80 (7,306)
18	Drawings	81 (4,749)	88 (2,557)	169 (7,306)
19	Picture books	0 (4,749)	0 (2,557)	0 (7,306)
20	Realia	0 (4,749)	0 (2,557)	0 (7,306)

Source: Field Survey, 2024

Table 2a shows the distribution of available instructional materials for English language across rural and urban locations. From the result, it could be seen that majority of the materials were available in urban location despite the urban location having fewer number of students. Precisely, the urban location has 2,557 students using 268 charts while in rural locations, 4,749 students were using 218 charts. Interestingly, some of the materials like MP3 were not available in the rural areas while 7 out of 8 computers were found in the urban areas. These suggest the prevalence of better instructional facility-to-student ratio for the urban areas when compared to the rural areas.

Table 2b: Instructional materials available for teaching Mathematics and number of students in rural and urban areas

S/NO	Instructional Materials	Frequencies of Available Materials (Number of students in the schools)		
		Rural schools	**Urban schools**	**Rural and Urban schools**
1	Abacus	0 (4,749)	3 (2,557)	3 (7,306)
2	Graphs	23 (4,749)	26 (2,557)	49 (7,306)
3	Workbook	21 (4,749)	37 (2,557)	58 (7,306)
4	Measurement tape	5 (4,749)	14 (2,557)	19 (7,306)
5	Meter ruler	1 (4,749)	3 (2,557)	4 (7,306)
6	Plane Shapes	165 (4,749)	173 (2,557)	338 (7,306)
7	Flash cards	227 (4,749)	241 (2,557)	468 (7,306)
8	Mathematical sets	8 (4,749)	6 (2,557)	14 (7,306)
9	Charts	145 (4,749)	156 (2,557)	301 (7,306)
10	Diagrams	53 (4,749)	83 (2,557)	136 (7,306)
11	Counters	6 (4,749)	13 (2,557)	19 (7,306)
12	3-dimentional shape models	7 (4,749)	17 (2,557)	24 (7,306)
13	2-dimentional shape models	7 (4,749)	28 (2,557)	35 (7,306)
14	Sets Square	2 (4,749)	5 (2,557)	7 (7,306)

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15	Balancing scale	1 (4,749)	3 (2,557)	4 (7,306)
16	Posters	18 (4,749)	27 (2,557)	45 (7,306)
17	Weighing scale	0 (4,749)	3 (2,557)	3 (7,306)
18	Textbooks	38 (4,749)	34 (2,557)	72 (7,306)
19	Pair of Compasses	2 (4,749)	3 (2,557)	5 (7,306)
20	Protractor	1 (4,749)	5 (2,557)	6 (7,306)

Source: Field Survey, 2024

The result on the available instructional materials for Mathematics based on the local governments in the constituency was presented on Table 2b. From the result, it is clear that most of the materials are found in the urban location compared to rural one. A material like abacus was only found in urban location while 28 out of the 35 2-dimentional shape models were found in urban location as well. This occurs despite the urban location having fewer students than rural location, implying a better instructional facility-to-student ratio.

Table 2c: Instructional materials available for teaching English language and number of students ratios in rural and urban areas

S/NO	Instructional Materials	Ratio of Available Materials to number of students in the schools		
		Rural schools	**Urban schools**	**Rural and Urban schools**
1	Charts	22/1	10/1	15/1
2	Flash cards	19/1	10/1	15/1
3	Pictures	41/1	22/1	32/1
4	Textbooks	29/1	15/1	22/1
5	Television	4749/0	2557/0	7306/0
6	Tape recorder	4749/0	2557/0	7306/0
7	MP3	4749/0	1279/1	3653/1
8	Documentary films	4749/0	2557/0	7306/0
9	Film projector	4749/0	2557/0	7306/0
10	Video recorder	4749/0	2557/0	7306/0
11	Smart board	4749/0	2557/0	7306/0
12	Computers	4749/1	365/1	913/1
13	Language laboratory	4749/0	2557/0	7306/0
14	Chalkboard	88/1	85/1	87/1
15	Sentences Strips	4749/0	2557/0	7306/0
16	Puppets	4749/0	2557/0	7306/0
17	Course textbook	101/1	78/1	91/1
18	Drawings	59/1	29/1	43/1
19	Picture books	4749/0	2557/0	7306/0
20	Realia	4749/0	2557/0	7306/0

Source: Field Survey, 2024

The result on Table 2c highlights the ratio of students to instructional materials for English language. From the result, it could be seen that the urban locations have better instructional facility-to-student ratio than their counterpart in rural locations. Specifically, while students in urban locations have 10 students to 1 chart for English language, those in rural locations have 22 students to 1 chart. For course textbooks, while those in urban location have ratio of 78 students to 1, those in rural locations have 101 to 1. Interestingly, while 1 textbook is used by 22 students in urban location, in rural location it is 1 textbook to 41 students.

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Table 2d: Instructional materials available for teaching Mathematics and number of students ratios in rural and urban areas

S/NO	Instructional Materials	Ratio of Available materials to number of students in the schools		
		Rural schools	**Urban schools**	**Rural and Urban schools**
1	Abacus	4749/0	852/1	2435/1
2	Graphs	207/1	93/1	149/1
3	Workbook	226/1	69/1	126/1
4	Measurement tape	950/1	183/1	385/1
5	Meter ruler	4749/1	852/1	1826/1
6	Plane Shapes	29/1	15/1	22/1
7	Flash cards	21/1	11/1	16/1
8	Mathematical sets	594/1	426/1	522/1
9	Charts	33/1	16/1	24/1
10	Diagrams	90/1	31/1	54/1
11	Counters	792/1	197/1	385/1
12	3-dimentional shape models	678/1	150/1	304/1
13	2-dimentional shape models	678/1	91/1	209/1
14	Sets Square	2375/1	511/1	1044/1
15	Balancing scale	4749/1	852/1	1827/1
16	Posters	264/1	95/1	162/1
17	Weighing scale	4749/0	852/1	2435/1
18	Textbooks	125/1	75/1	102/1
19	Pair of Compasses	2375/1	852/1	1461/1
20	Protractor	4749/1	511/1	1218/1

Source: Field Survey, 2024

Table 2d shows the ratio of students to instructional materials for Mathematics in the study area. From the result, it could be seen that the instructional facility-to-student ratio was better in urban locations when compared to the rural locations. Precisely, while 93 students were using 1 graph in urban location, 207 students use 1 in rural location. For workbook, while 1 serves 69 students in urban locations, 1 serves 226 students in rural location. Also, while 1 measurement tape serves 183 students in rural locations, the same 1 measurement tape serve 950 students in rural locations.

Research Question Three:

To what extent are instructional materials incorporated in the teaching of English langage and Mathematics?

Table 3a: Extent instructional materials are incorporated in the teaching of English language

S/NO	Instructional Materials	Mean	SD	Decision
1	Charts	2.3	0.65	Low extent
2	Flash cards	2.4	0.55	Low extent
3	Pictures	1.5	0.47	Low extent
4	Textbooks	1.7	0.42	Low extent
5	Television	1.2	0.24	Very low extent
6	Tape recorder	1.3	0.26	Very low extent
7	MP3	1.4	0.41	Very low extent
8	Documentary films	1.3	0.36	Very low extent

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9	Film projector	1.3	0.32	Very low extent
10	Video recorder	1.2	0.25	Very low extent
11	Smart board	1.4	0.46	Very low extent
12	Computers	1.6	0.23	Low extent
13	Language laboratory	1.2	0.11	Very low extent
14	Chalkboard	1.8	0.58	Low extent
15	Sentences Strips	1.4	0.33	Very low extent
16	Puppets	1.3	0.20	Very low extent
17	Course textbook	1.9	0.51	Low extent
18	Drawings	2.2	0.43	Low extent
19	Picture books	1.3	0.33	Very low extent
20	Realia	1.2	0.21	Very low extent
	Grand Mean	**1.6**	**0.38**	**Low extent**

Source: Field Survey, 2024

The information on Table 3a shows the respondents do not feel that instructional materials are adequately incorporated in the teaching of English language. From the result, out of the 20 materials used, 8 of the materials were ranked low extent while the remaining 12 received very low extent rating. This was expected considering the material to student ratio which showed many students using one instructional material, below the established standard. The grand mean result of 1.6 with low extent rating therefore shows that instructional materials are incorporated to a low extent in the teaching of English language.

Table 3b: Extent instructional materials are incorporated in the teaching of Mathematics

S/NO	Instructional Materials	Mean	SD	Decision
1	Abacus	1.3	0.43	Very low extent
2	Graphs	1.8	0.61	Low extent
3	Workbook	1.8	0.48	Low extent
4	Measurement tape	1.6	0.22	Low extent
5	Meter ruler	1.4	0.41	Very low extent
6	Plane Shapes	2.4	0.56	Low extent
7	Flash cards	2.7	0.72	Low extent
8	Mathematical sets	1.6	0.28	Low extent
9	Charts	2.5	0.67	Low extent
10	Diagrams	1.9	0.28	Low extent
11	Counters	1.3	0.36	Very low extent
12	3-dimentional shape models	1.5	0.32	Low extent
13	2-dimentional shape models	1.5	0.45	Low extent
14	Sets Square	1.2	0.38	Very low extent
15	Balancing scale	1.3	0.33	Very low extent
16	Posters	1.4	0.41	Very low extent
17	Weighing scale	1.2	0.25	Very low extent
18	Textbooks	1.6	0.43	Low extent
19	Pair of Compasses	1.3	0.25	Very low extent

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20	Protractor	1.4	0.28	Very low extent
	Grand Mean	**1.6**	**0.44**	**Low extent**

Source: Field Survey, 2024

Result on Table 3b shows the extent instructional materials are incorporated in the teaching of Mathematics in Babura/ Garki Federal Constituency. From the result, it could be seen that there is low level of incorporation of Mathematics instructional materials in the area. Specifically, out of the 20 instructional materials used in the study for Mathematics teaching, 9 of the materials received a very low extent rating while the remaining received a low extent rating. The mean score of 1.6 also confirms this and it implies that to a low extent instructional materials are incorporated in the teaching of Mathematics in Babura/ Garki Federal Constituency. Based on the results on Table 3b, it could be deduced that to a low extent instructional materials were incorporated in the teaching of Mathematics in Babura/ Garki Federal Constituency.

Conclusions

The study determined the availability of instructional facility-to-student ratio in Junior Secondary School in Babura/Garki Federal Constituency of Jigawa State, Nigeria and found that, there is dearth of these materials compared to the students' population. Where the materials are available some are in dilapidated and dysfunctional. These may be one of the main reasons for poor performance of the students in Basic Education Examination Certificate (BECE) and may be the reason for poor communication and numerical abilities of students, attention break or poor attention on the part of students during lesson. It could also be the reason for truancy, absenteeism, drop out of school and many more. Researches have shown that the use of instructional materials in teaching facilitates learning, arouses the interest and curiosity of the students; it helps in the retention of students in schools, exploration, collaboration, to mention but a few.

Recommendations

Based on the findings of the study, the following recommendations are hereby made.

1. Government, being the proprietor of public junior secondary schools in Nigeria, should provide high quality instructional materials to JSS students to facilitate teaching and learning.
2. Government should provide regular professional development opportunities for teachers to enhance their skills in incorporating instructional materials into English language and Mathematics instruction, in order to foster fostering interactive and engaging learning experiences.
3. School authorities should facilitate mentorship programmes and teacher communities to encourage the exchange of knowledge and best practices, particularly between experienced and less experienced English language and Mathematics teachers, in order to enhance overall instructional effectiveness.
4. The community through the Parent-Teacher-Associations should assist government in providing school facilities that will improve the academic achievement of students in public schools.
5. Government should be equitable in the provision of facilities in order to balance instructional facility-to-student ratio in rural and urban communities.

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