



Availability and Utilization of Printed Educational Resources for Teacher Job Performance in Rural and Urban Technical Colleges in Anambra State, Nigeria

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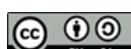
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Availability and Utilization of Printed Educational Resources for Teacher Job Performance in Rural and Urban Technical Colleges in Anambra State, Nigeria

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ABSTRACT

Background: The availability and utilization of printed educational resources play a vital role in enhancing teacher performance in technical colleges that emphasize practical skills; however, significant disparities in access persist between rural and urban institutions. **Objective:** This study aims to investigate the availability and utilization of printed educational materials by teachers in rural and urban technical colleges in Anambra State. **Method:** A descriptive survey research design was employed. The population consisted of 647 teachers from 15 technical colleges in Anambra State, from which a random sample of 343 teachers was selected. Data were collected using a validated questionnaire and analyzed using Chi-Square and z-tests. **Result:** The findings revealed that only 25.40% of printed educational resources were available in rural technical colleges, compared to 38.78% in urban colleges. Utilization rates were higher for certain resources, such as registers and workbooks, but lower for others, including dictionaries. Statistically significant differences were found between rural and urban colleges in both availability and utilization of resources. **Conclusion:** The study highlights substantial disparities in the availability and utilization of printed educational resources between rural and urban technical colleges. These disparities indicate the need for targeted interventions, particularly in rural areas, to enhance educational resource provision. **Contribution:** This study contributes to the existing literature by providing empirical evidence on resource inequality in technical education and offers insights to policymakers and educational stakeholders for promoting equitable distribution and effective utilization of printed educational resources.

KEY WORDS

Printed educational resources; Availability and utilization; Teacher job performance; Technical colleges

1. INTRODUCTION

The success or failure of any nation's educational system depends on the quality and quantity of resources made available to it (Caorral et al., 2015). Resources are used for supporting, facilitating, influencing or encouraging knowledge transmission, acquisition, competence and skills. Educational resources are paramount in enriching the system of education, the performance of any institution to a large extent depends on its effective and efficient availability and utilization of resources which will determine the level to which an educational institution will attain her set

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goals and objectives and enhance teacher's job performance. Educational resources, be it financial, material or human resource, play an important role in teachers job performance and the education system at large ([Masino & Niño-Zarazúa, 2016](#)). Educational resources are of great significance in promoting organizational processes and also teachers job performance. For example, teaching process will be ineffective without the teacher making proper use of educational resources during classroom activities and presentations, they are also included as the most vital tools necessary for promoting the efficiency of teaching and learning in technical colleges. The amount of teachers' job performance and their success in teaching several subjects in technical college is greatly reliant on the level of availability and utilization of the latest educational resources which revolve around equipment, facilities, human resources, financial resources, material resource ([Sanusi, 2022](#)). In order word both educational goals/objectives and instructional process of technical education level cannot be reached without the effective utilization of educational resources during the process of teaching.

Educational resources refer to all material, financial and human resources made available in an academic environment to facilitate school administration and make the learning process easy, more meaningful and understandable to the learners and aid teachers job performance, which include the teachers in the school, specimen or models, chalks and display boards, school buildings and fundamental materials like pencils, pen, exercises books. Teachers' staff room, laboratories, workshops, teaching aids and devices such as modern educational hardware and software and accommodations. etc which the school should have at all time to facilitate learning ([Van der Heiden et al., 2015](#)). Educational resources are vital ingredients for achieving quality education and for promoting teachers' high commitment, ability and productivity. According to [Abdulrahaman et al. \(2020\)](#), availability and utilization of educational resources could be suitable for teacher job performance as they are very useful and serve as supporting tools in teaching and learning. Educational resources are the driving forces which supports teachers' job performance in technical college system in Anambra State, Nigeria and its importance on teachers' job performance in the school environment cannot be over-emphasized. Teaching cannot be effective without the availability and utilization of educational resources because educational resources ensure the realization of positive outcomes.

Material resources are tangible material that facilitates teaching activities and thus the attainment of lesson set objectives. Researchers in the education sector like [Chen et al. \(2024\)](#) maintained that material resources are very vital for all round growth and development of individual proficiencies and teachers job performance within the college environment. Their relevance in the technical colleges system cannot be overstressed. Material resource is defined as operational inputs of teaching programme, in other words, they are inputs which help the teacher to achieve some level of teaching efficiency ([Bizimana & Orodho, 2014](#)). Resource is anything a teacher uses to achieve teaching objectives. Material resources are physical resources that can easily be seen and observed in any institution it involves facilities that are used to develop and add values to people which includes physical assets like laboratories, libraries, classrooms, writing materials, staff offices, vehicles and health centres. Additionally, the number of material resources found within the college environment dictate the teachers' level of work, attitude, commitment, productivity, competency, dedication and effort which are vital components of teachers' job performance.

The level of availability and utilization of material resources could improve the quality of learning in and out of the college through teachers' job performance, if material resources are adequately available, selected and carefully utilized, learning becomes interesting, meaningful, learning retention last longer and are effective. Material resources can be categorized into printed, non-printed and college physical plant material resources. Printed material resources are books, journals, newspaper, and other documents containing relevant information. [Nzeneri \(2019\)](#) opined that printed resources are instructional materials that consist of black and white or coloured prints like pamphlets, workbooks, study materials, brochures, memo-graphs, flash cards, posters, pictures, notes of lesson, lesson plans, schemes of work, curriculum syllabus, downloaded materials from the internet and graphs, periodicals, pen, dictionaries, teachers' manuals and guides, textbooks, diagrams, notebook, classroom register, maps, charts, cartoons, newspaper.

Material resources create engagement between the teacher and the student and serve as a source of instruction ([Chisunum & Nwadiokwu, 2024](#)). The non-printed material resources include real objects, hard wares, computers, television set, radio set, chalkboard/whiteboard, projectors, printers, scanners, film strips, video-tapes, equipment and high-technology/digital materials that provide educational information and act as excellent tools for instructional delivery. Many of these resource machineries aside from the real objects function with or batteries or electricity. College physical plant is the necessary infrastructures are used in operation and maintenance of the college that will motivate the students towards learning and complement institutional and program effectiveness. [Akinsolu \(2019\)](#) ascertained that physical facilities are essential materials that must be arranged and considered so that the quality of the objectives of the education system will be accomplished.

The level to which the material resources are provided in the college, determines how teachers will utilize them in colleges for their utmost performance, the physical properties of a college, consisting of the building, site, furniture, grounds, staff room, classroom, the school buildings, office space, library equipment, workshop, fine art studio, water supply/borehole, laboratory, college bus, the chalkboard and black board needed for effective teaching and learning. Financial resources are used to carry out the main operation of the institution, they are the resources from which the college obtain the funds they need to finance their investments, current activities and capital. Accessing the desired amount of funds and utilizing them helps to maximize and increase long term growth of the college and teachers job performance. If the college is under-utilizing its fund and the resources are sitting idle, it will prevent the institution from maximum productivity.

[Lau et al. \(2018\)](#) stated that financial resource is the monetary resource which serves as a means of acquiring all the other educational resources. They are concerned with making and implementing decisions to acquire other resources such as books, staff, equipment etc. Human resources are the individuals who constitute the work force in every organization. At the college level, the teachers, non-teaching staff, administrators and students are human resources that are vital and need to be utilized and developed because through them all other resources would be well managed. Human resource plays a key role in the reinforcing, developing the organization (college) and achieving educational goals. Shortage of human resource in an organization can affect productivity so all so is the scarcity of teachers in the college will affect teachers job performance. They are vital machineries in the teaching and learning process.

Availability and utilization of the human resource will ensure efficient teaching and learning process. The activities and roles of the human resource can boost or mar the teachers job performance; a teacher is to deliver classroom instruction that helps students learn. A teacher's role is to make informed and intelligent decisions about practice to achieve various outcomes with and for the students in their classes if there is shortage or no teacher in the school the other resources will be useless because the teachers are paramount to the educational system vice versa. Human resources involve the knowledge; the individuals embody and can contribute to the institution. The availability and utilization of adequate college buildings, chairs, classroom, desk and other equipment are vital towards the achievement of educational goals [Frankie-Dolor \(2012\)](#). The level of availability and utilization of these facilities determines the teachers job performance.

Availability is the capability of an education system or its authorities to make resources available, reachable and accessible wherever and whenever they are needed. Availability is the ability of something to be accessed or used ([Kuznetsov, 2019](#)). Availability refers to allowing access to authorized information or resources to those who need them, where they are needed, and when they are needed. Utilization of educational resources is useful for teacher job performance, as educational resources enhance teacher job performance, satisfaction and achievements of educational goals. Appropriateness in the utilization of educational resources is a vital factor or component in the implementation of the curriculum which helps the implementers such as teachers to achieve the stipulated goals/objective and guide them in the teaching-learning process in the classroom practice. Utilization is the extent of available resources that are put to use. Utilization simply illustrates the actual patronage of the school equipment, supplies and facilities by the teacher in teaching and learning process. Utilization as the act of making use of available services at the individual's disposal to get good results.

When resources are adequately available in school, they are utilized for teaching and learning by the teachers and their best performance is guaranteed through the satisfaction they get while using the resources ([Uwaleke et al., 2024](#)). Based on all the pre-requisites for effective management of an organization the most significant is the human resources. The success of any organization is dependent on the individuals working in the organization be it political, social, religious, education or economic. Human beings just like the teachers in the secondary colleges provide knowledge, take decisions, give energy and cooperation through which organizational (college) set objectives are achieved. The level of resources made available will help teachers to take decision that will influence their performance, competence, satisfaction and boost of hidden potentials.

Teachers job performance is defined as the actions teachers perform in school in order to achieve educational goals and objectives. In the view of [Uwaleke et al. \(2024\)](#), teachers' job performance deals with teachers' behavioural aspect which refers to what teachers do while at school, which entails the action itself. Job performance involves many specific behaviours (e.g., teaching students) This conceptualization indicates that only behaviour and actions which is goal oriented and can be scaled, are viewed as performance. It serves as the ability of qualified teachers who are prepared with the desired skills, knowledge, commitment and competence to perform and execute their task professionally. The above mentioned seem to be affected by the level to which educational resources are made available and utilized by teachers in the college environment. Similarly, through effective instructional practices, where teachers make maximum use of resource as tools to their utmost performance, capacities and potentials that

quality academic achievements are actualized. [Dugguh & Ayaga \(2014\)](#) penned the ultimate goal of improving quality in the system can be attained by empowering teachers with the adequate instructional skills and tools which allow them to do their job efficiently thus, the rationale for educational resource(s) availability and utilization for teacher job performance.

However, despite the glaring relevance of educational resources in education, coupled with the huge capital investment of both federal and state government and the donations from non-governmental organisation technical colleges in Nigeria, some colleges still experience inadequate educational resources to improve teaching and learning. In most cases in our various colleges the supply of educational resources is either over supplied leading to wastage of resources or they are under supplied leading to shortage of resources and the available ones are not usually in good condition. The FRN (2013) in the policy document has recommended the importance of adequate physical plant resources material resources, financial resources and human resources as one condition for educational goal attainment and improvement of quality learning in the technical colleges.

The development of technical colleges shows that many teachers face performance issues, leading to negative consequences for the educational system, such as poor exam results and slow learning. This problem is linked to inadequate educational resources, lack of qualified teachers, poor school environments, and abandoned projects. These factors affect teachers' performance and the overall quality of secondary education. Insufficient training, funding, and resources have further contributed to these challenges, threatening the achievement of educational goals. This study aims to investigate the availability and use of printed educational resources for teacher performance in both rural and urban technical colleges in Anambra state.

The study is guided by the following research questions: 1) What are the printed educational resources available for teacher job performance in rural and urban technical colleges in Anambra State? 2) To what extent are the printed educational resources utilized for teacher job performance in rural and urban technical colleges in Anambra State? To address these questions, the study tests two null hypotheses at a 0.05 level of significance: 1) There is no significant difference in the printed resources available for teacher job performance between urban and rural technical colleges in Anambra State, and 2) There is no significant difference in the mean ratings on the utilization of available printed educational resources for teacher job performance between urban and rural technical colleges in Anambra State.

Gap analysis reveals that while many studies have addressed the general availability of educational resources, there is limited research focusing on the disparity between rural and urban technical colleges, particularly in Anambra State, Nigeria, and its impact on teacher performance. Therefore, this study aims to assess and compare the availability and utilization of printed educational resources in rural and urban technical colleges in Anambra State, while also investigating the relationship between resource access and teacher job performance. Ultimately, the goal is to provide recommendations for improving the distribution and usage of educational resources to enhance teaching effectiveness in both rural and urban contexts.

2. METHOD

2.1 Research Design

The study was conducted in Anambra State, Nigeria, using a descriptive survey research design, which was selected for its effectiveness in capturing detailed and comprehensive data from a large sample. This approach allows for the systematic collection of information on the availability and utilization of printed educational resources in technical colleges. By using this design, the study aimed to explore how these resources are employed by teachers to improve job performance across both rural and urban settings. Furthermore, this design enables the study to compare and contrast the availability and use of resources between rural and urban technical colleges, providing insights into regional disparities, challenges, and opportunities for improvement.

2.2 Participants

The population for this study consisted of six hundred and forty-seven (647) teachers across all fifteen (15) technical colleges, with nine (9) located in rural areas and six (6) in urban communities. This included 329 rural and 318 urban teachers. A random sample of 343 teachers was selected from this population, comprising 108 rural and 235 urban teachers.

2.3 Data Collection

Data was collected using a structured questionnaire developed by the researcher, which was divided into two sections (A and B). Section A gathered demographic data about the teachers' locations, while Section B contained 34

items related to the availability and utilization of non-printed educational resources for improving teacher job performance in rural and urban technical colleges in Anambra State. The instrument's validity was confirmed by three experts from Nwafor Orizu College of Education, Nsugbe. It was pilot-tested on twenty (20) teachers from technical colleges in Enugu State, which shared similar characteristics but were not part of the main study.

2.4 Data Analysis

The internal consistency of the instrument was assessed using Cronbach's Alpha reliability estimate based on the pilot data. Interpretation of mean scores for research question one was based on real limit numbers, with the key: A = Available and NA = Not Available. Scores at 50% and above indicated availability, while scores below 50% indicated non-availability. Mean scores ranging from 3.50 to 4.50 indicated Very High Extent (VHE), 2.50 to 3.49 indicated High Extent (HE), 1.50 to 2.49 indicated Low Extent (LE), and 0.50 to 1.49 indicated Very Low Extent (VLE). The data analysis involved the use of percentages, means, and standard deviations for research questions. Additionally, Chi-Square and z-tests were applied to test the research hypotheses. This comprehensive approach aimed to explore the availability and utilization of non-printed educational resources and their influence on teacher job performance in rural and urban technical colleges within Anambra State.

3. RESULT AND DISCUSSION

3.1 Result

Research Question One: What are the printed education resources available for teacher job performance in rural and urban technical colleges in Anambra state?

Table 1. Percentage Scores on the Printed Education Resources Available for Teacher Job Performance in Rural and Urban Technical Colleges in Anambra State

S/N	Items	Rural				Urban			
		No. Available		No. Unavailable		No. Available		No. Unavailable	
		F	%	F	%	F	%	F	%
1	Curriculum for teaching in all subjects	20	18.5	88	81.45	199	84.6	36	15.31
2	Syllabus for teaching in all subjects	18	16.6	90	83.4	180	76.5	55	23.40
3	Classroom register for students roll calls in class	78	72.2	30	27.77	190	80.85	45	19.4
4	Educative wall charts in the classrooms - (at least 2 in each classroom)	8	7.4	100	92.6	48	20.4	187	79.6
5	Dictionary in every classroom	12	11.11	96	88.8	61	25.9	174	74.1
6	Graphics for picture representation in teaching various subjects	3	2.7	105	97.2	17	7.3	218	92.7
7	Maps for geography subjects	87	80.5	21	19.45	169	71.9	66	28.1
8	Work books for all subjects	11	10.18	97	89.8	40	17.1	195	82.9
9	Current textbooks for teaching in all the subjects	14	12.96	94	87.03	58	24.7	177	75.3
10	Posters and cartoons for display in the classrooms (at least 2 in each classroom)	21	19.4	87	80.55	47	20	188	80
11	Up-to-date textbooks in the library for all subjects	0	0	108	100	23	9.8	212	90.2
12	Pamphlets on past questions and answers available for different subjects (within the space of 5 years)	49	45.37	59	54.6	72	30.6	163	69.4
13	Drawing book for sketches and other drawings in introductory technology and creative arts subjects	36	33.3	72	66.66	81	34.5	154	65.5

S/N	Items	Rural		Urban	
		No. Available	No. Unavailable	No. Available	No. Unavailable
	Cluster mean 25.40 74.60 38.78 61.22				

Analysis of the result in Table 1, as shown from the percentage score on the available printed resources for teacher job performance in rural technical colleges indicated that 25.40% of the printed resources were available in rural technical colleges for teacher job performance while 74.60% of the printed resources were unavailable for teacher job performance. This result showed that items 3 and 7 considered under available printed resources in the rural technical colleges were rated above 50 percent showing that classroom register and maps for geography subjects were sufficiently available for teacher job performance. However, items 1, 2, 4, 5, 6, 8, 9, 10, 11, 12 and 13 considered under unavailable printed resources, were rated above 50 percent showing that these printed resources were unavailable in the rural technical colleges hence insufficient for effective teacher job performance. The result further showed that the curriculum, syllabus, educative wall charts, dictionary in every classroom, graphics, workbooks, current textbook for teaching different subjects, posters and cartoons, up-to-date textbooks in the library, pamphlets and drawing books were equally unavailable for teacher job performance in the rural technical colleges.

In the urban technical colleges, analysis of the result indicated that 38.78% of the printed resources were available in the technical colleges for teacher job performance, while 61.22% of the printed resources were unavailable in the urban technical colleges for teacher job performance. This result showed that items 1, 2, 3 and 7 considered under available printed resources, were rated above 50 percent showing that the curriculum, syllabus, classroom register and maps for geography subjects were available for teacher job performance. Items 4, 5, 6, 8, 9, 10, 11, 12 and 13 considered under unavailable printed resources, were rated above 50 percent showing that these printed resources were unavailable in the urban technical colleges. The result further showed that educative wall charts, dictionary, graphics, workbooks, current textbooks for teaching, posters and cartoons, up-to-date textbooks in the library, pamphlets and drawing books were considered unavailable. The result showed that printed resources were more available in the technical colleges in the urban areas than those in the rural areas in Anambra state. Although, the result further indicated that both the rural and urban technical colleges did not meet up with the NCE minimum requirements for printed resources provision. The availability of printed education resources for teacher job performance was low in the rural and urban technical colleges in Anambra state.

Research Question Two: To what extent are the available printed education resources utilized for teacher job performance in rural and urban technical colleges in Anambra state?

Table 2. Mean Scores and Standard Deviation of the Respondents Ratings on the Extent to which the Available Printed Resources are utilized for Teacher Job Performance in Rural and Urban Technical Colleges in Anambra state

S/N	Items	Rural		Decision		Urban		Decision	
		X	SD	X	SD	X	SD	HE	LE
1	Curriculum is utilized to prepare the school programmes	2.92	0.89	HE	2.81	1.06	HE		
2	Syllabus are utilized by teachers for day to day lesson plan preparations	2.80	0.96	HE	2.85	1.05	HE		
3	Classroom register are utilized by teachers for students rolls in class	3.20	0.81	HE	3.31	0.70	HE		
4	Educative wall charts are pasted by teachers on the walls in the classrooms to promote learning in different subject Areas	1.67	0.86	LE	2.23	1.09	LE		
5	Dictionary are utilized during instructional delivery to find meaning of some concepts and guide students' learning	2.21	1.03	LE	2.22	1.06	LE		
6	Graphics for picture representation in teaching various subjects are displayed to support teaching	2.00	0.97	LE	2.41	1.12	LE		
7	Maps are used during geography teaching to support students' learning	1.61	0.83	LE	2.37	1.05	LE		

S/N	Items	Rural		Decision		Urban		Decision	
		X	SD	X	SD	X	SD	X	SD
8	Work books are utilized by teachers in all subjects to give students assignment that will boost their cognitive and independent study	2.62	1.08	HE	2.58	1.06	HE		
9	Current textbooks are frequently utilized by teachers to support their teaching in various subject areas	2.78	0.99	HE	2.51	1.05	HE		
10	Posters and cartoons are used to support and display evidence of the lesson taught in the classrooms	1.89	1.05	LE	2.31	1.02	LE		
11	Up-to-date textbooks in the library with wider coverage in all subjects are used by teachers to promote research and teaching in varying context	2.02	0.88	LE	2.12	1.03	LE		
12	Pamphlets on past questions and answers available for different subjects	2.09	0.86	LE	2.41	1.09	LE		
13	Drawing book for sketches and other drawings are utilized in introductory technology and creative arts subjects	2.08	0.85	LE	2.16	1.06	LE		
Cluster mean		2.30	0.93	LE	2.48	1.03	LE		

Analysis of the result in Table 2 showed that teachers in the rural and urban technical colleges share similar results. Results of the teachers in the rural indicated that only items 1, 2, 3, 8 and 9 were rated above the acceptable mean score of 2.50. The result revealed that the curriculum is utilized to a high extent by teachers to prepare the college programmes. Syllabuses are utilized to a high extent by teachers for day-to-day lesson plan preparations. Classroom registers are utilized to a high extent by teachers for students' roll calls in the class. Work books are utilized to a high extent by teachers in all subjects to give students assignments that will boost their cognitive and independent study. Current textbooks are frequently utilized to a high extent by teachers to support their teaching in various subject areas. This result is equally the same with those of the teachers in the urban technical colleges. All other items 4, 5, 6, 7, 10, 11, 12 and 13 were rated below 2.50. The result revealed that dictionaries are utilized to a low extent during instructional delivery to find meanings to some concepts and guide students' learning activities. Graphics for picture representation in teaching various subjects are displayed to a low extent in order to support teaching and maps are equally used to a low extent during geography teaching to support students' learning. Posters and cartoons are used to a low extent to support and display evidence of the lesson taught in the classrooms. Up-to-date textbooks in the library with wider coverage in all subjects are used to a low extent by teachers to promote research and teaching in varying context. Pamphlets on past questions and answers available for different subjects are utilized to a low extent. Drawing books for sketches and other drawings are utilized to a low extent in introductory technology and creative arts subjects.

This result equally rhymes with those of the teachers in the urban technical colleges. The cluster mean of rural and urban technical colleges of 2.30 and 2.48 respectively, showed that both respondents reacted negatively to majority of the items. The standard deviation of the rural and urban technical colleges ranged from 0.81 to 1.08, and 0.70 to 1.12 respectively. Both results from teachers in rural and urban technical colleges revealed that the available printed resources for teacher job performance in technical colleges were utilized to a low extent in Anambra state.

Hypotheses

H01: There is no significant difference in the availability of printed resources for teacher job performance in rural and urban technical colleges Anambra state

Table 3. Chi-Square test of no significant difference in the availability of printed resources for teacher job performance between rural and urban technical colleges Anambra state

	Value	Df	P
Pearson Chi-Square	7.192E3 ^a	1	.000
Continuity Correction ^b	7.191E3	1	.000
Likelihood Ratio	7.352E3	1	.000
Fisher's Exact Test			
Linear-by-Linear Association	7.192E3	1	.000
N of Valid Cases ^b	362752		

- a. 0 cells (0%) has expected count less than 5. The minimum expected count is 918.53.
- b. Computed only for a 2 x2 table

The result in Table 3 indicates that the calculated Chi-square value is 7.192 and a p-value with degree of freedom (df) 1 at 5% (.05) level of significance. Since the p-value .000 is less than the alpha level ($P \leq .05$), the tested null hypothesis is rejected,. Thus, there is a significant difference in the available educational resources on the availability of printed resources for teacher job performance in rural and urban technical colleges Anambra state. This implies that teacher job performance in rural and urban technical colleges Anambra state is significantly dependent on the availability of printed resources.

Table 4. Z-test Comparison of no Significant difference in the Mean Ratings of Teachers on the extent of Utilization of the Available Printed Resources for Teacher Job Performance in Rural and Urban Technical Colleges Anambra state

Group	Sample Size	Mean	Standard Deviation	z-cal	Degree of Freedom	Std Error	p-value	Decision
Rural	108	29.88	11.28		341		.75248	.001
Urban	235	32.28	12.86	-3.194				Significant difference

The result in Table 4 indicates that the calculated z-test value is -3.194 and a p-value of .001 with degree of freedom (df) 341 at 5% (0.05) level of significance. Since the p-value .001 is less than the alpha level ($P < 0.05$), the tested null hypothesis is rejected. Hence, there is a significant difference in the mean ratings of teachers on the extent of utilization of available printed resources for teacher job performance in rural and urban technical colleges Anambra state

3.2. Discussion

These findings indicated that the availability of printed education resources for teacher job performance was low in the rural and urban technical colleges Anambra state. This finding revealed that the printed education resources were less available in the rural technical college for teacher job performance, while the printed education resources were highly unavailable in the urban technical colleges for teacher job performance.

In the rural areas, only such printed resources as the classroom register and maps for geography subjects were sufficient and therefore were considered available for teacher job performance. Other printed resources were insufficient to be considered as available printed resources in the rural technical colleges Anambra state. It was found further that other printed resources such as: the curriculum, syllabus, educative wall charts, dictionary in every classroom, graphics, workbooks, current textbook for teaching different subjects, posters and cartoons, up-to-date textbooks in the library, pamphlets and drawing books were highly insufficient and considered unavailable for teacher job performance in the rural technical colleges. This situation could have negative impact on teacher job performance creating difficulties in realizing the goals and objectives of education.

In the urban technical colleges, the finding showed that only few of the printed education resources were not available in the technical college for teacher job performance, while those unavailable were high in the urban technical college for teacher job performance. The finding indicated that only the curriculum, syllabus, classroom register and maps for geography subjects were sufficient and highly available for teacher job performance. Other printed education resources were insufficient and less available in order to be considered as available printed in the urban technical college. The finding showed that educative wall charts, dictionary, graphics, workbooks, current textbooks for teaching, posters and cartoons, up-to-date textbooks in the library, pamphlets and drawing books were considered insufficient and therefore not available in the urban technical college. The finding also showed that the printed education resources were less available in the technical college in the urban areas more than those in the rural areas in technical colleges Anambra state. Although, this finding further indicated that both the rural and urban technical college did not meet up with the NCE minimum requirements for printed resources provision. The availability of printed resources for teacher job performance was low in the rural and urban technical colleges in Anambra state. This shows that teacher job performance could not have been positively felt in the rural and urban technical colleges where printed education resources are lacking ([Hamman, 2019](#)).

The hypothetical test indicated that a significant difference was found in the availability of printed resources for teacher job performance in rural and urban technical colleges in Anambra state. This finding concurs with [Sanusi \(2022\)](#) whose study found out that the instructional materials were largely unavailable in the technical colleges were

investigated. A lot of them were not available and the available ones inadequate for instructions. [Andambi & Kariuki \(2013\)](#) found that types of learning resources for teaching were not adequately available in technical colleges. Technical colleges (both rural and urban colleges) were poorly equipped with education resources especially in subject areas like mathematics which required these materials to facilitate abstraction of concepts by the learners. There was a significant difference between the available and unavailable instructional printed materials in colleges. [Achimugu & Onojahii, \(2017\)](#) findings which discovered from teachers' responses that to a certain extent, instructional materials for teaching were available but were inadequate. Whereby the printed resources are less available in the rural and urban in technical colleges Anambra state, such situation can jeopardize teacher job performance which makes it difficult for teachers to execute their tasks efficiently in order to achieve instructional objectives. Poor performance of students in Nigerian schools has been linked to poor teachers' performance who fail to accomplish their teaching task, which have been attributed to the extent of availability of teaching resources in the classroom. [Maicibi \(2003\)](#) also found that availability of teaching resources enhances the improvement of teachers' task and performance in colleges. Ajayi and Ogunyemi cited in [Ugwuanyi \(2013\)](#) reiterated that when facilities are provided in adequate quantity and are utilized to meet relative needs of a school system, students will not only have access to textbooks and reference materials that were indicated by their teachers but individual student will also learn at their own pace. Therefore, finding of the present study concerning the insufficiency printed resources in the rural and urban technical colleges could have been responsible for teacher poor utilization and job performances in most of the rural and urban colleges.

4. IMPLICATIONS AND CONTRIBUTIONS

4.1 Research Implications

The implications of this study highlight the critical role of access to and effective utilization of printed educational resources in enhancing teacher job performance, particularly in technical colleges across rural and urban settings in Anambra State. The findings suggest that disparities in resource availability between rural and urban colleges can significantly affect teaching quality, with rural teachers facing more challenges in accessing essential materials. These discrepancies may contribute to lower teaching effectiveness, ultimately impacting student learning outcomes. The study underscores the importance of equitable distribution of printed educational resources and the need for targeted interventions to improve access in rural areas. Policymakers, educational administrators, and stakeholders should prioritize addressing these gaps by improving resource allocation, facilitating better access to printed materials, and ensuring their effective use to enhance teacher performance and educational quality across both rural and urban technical colleges.

4.1 Research Contributions

This study contributes to the existing body of literature on educational resource disparities, specifically within the context of technical education in Nigeria. By providing empirical data on the availability and utilization of printed educational resources in rural and urban technical colleges in Anambra State, the study highlights significant gaps that affect teacher performance. The findings offer valuable insights for policymakers, educational administrators, and stakeholders, emphasizing the need for targeted interventions, particularly in rural areas, to ensure equitable access to essential resources. Moreover, the study advocates for strategies to optimize the utilization of available resources, ultimately supporting enhanced teaching effectiveness and learning outcomes in technical education.

5. LIMITATIONS AND FUTURE RESEARCH DIRECTIONS

5.1 Research Limitations

This study has several limitations, including its focus on the use of only one type of resource, namely printed educational resources, which may limit a broader understanding of other factors that influence teacher performance, such as digital resources or professional training. Additionally, the data collected was limited to 15 technical colleges in Anambra State, which may not fully represent the conditions in other regions of Nigeria. This limitation may affect the generalizability of the study's findings to a broader context, especially outside Anambra State.

5.1 Recommendation for Future Research Directions

Further research could expand the scope by exploring the use of various types of educational resources, both printed and digital, to gain a more comprehensive understanding of their impact on teacher performance in technical colleges. Furthermore, additional studies could also examine other factors that influence access to and utilization of

resources, such as teacher training, government policies, and infrastructure support. Research in the broader region or at a higher level could provide more comprehensive insights into disparities in access to educational resources and ways to address these issues.

6. CONCLUSION

Printed educational resources are crucial for effective teacher performance. In Anambra State, many of these resources are either insufficient or underutilized by teachers in both rural and urban technical colleges, with a significant lack of availability in rural areas. The absence of these essential resources limits teachers' ability to deliver lessons effectively, which negatively impacts both the development of the colleges and the academic achievement of students. This lack of resources also creates difficulties in providing a conducive learning environment necessary for achieving educational goals. The study concludes that printed educational resources are not sufficiently available in either rural or urban technical colleges, though urban colleges generally have more resources compared to their rural counterparts.

The study highlights significant disparities in the availability and utilization of printed educational resources between rural and urban technical colleges in Anambra State. Only 25.40% of these resources are available in rural colleges, compared to 38.78% in urban colleges. This gap reflects a significant disparity in access to essential resources that support teacher performance and improve educational outcomes. The lack of sufficient resources in rural areas poses a significant challenge to the effective delivery of technical education, contributing to the under-performance of both teachers and students.

Furthermore, even though there is a difference in resource availability, utilization rates also vary significantly. Some resources, such as workbooks and registers, are used more frequently, while others, like dictionaries, are underutilized. This suggests that, although resources may be available, challenges exist in their optimal utilization, particularly in rural technical colleges. Based on these findings, the study recommends targeted interventions to improve the availability and utilization of educational resources in both rural and urban technical colleges. Policies aimed at more equitable distribution of resources and training programs to enhance the use of available resources are essential for improving teacher performance and the overall quality of education. This research offers valuable insights into the literature on technical education and provides policymakers with guidance on addressing educational disparities in Nigeria.

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CRediT Authorship Contribution Statement

The author declares that the entire research and writing process for this article was conducted independently. The author assumes full responsibility for all data associated with this research. No other individual contributed as a co-author or made any significant contribution to the content of this work.

Declaration of Generative AI (GenAI) Usage in Scientific Writing

The author declare that Generative Artificial Intelligence (GenAI) tools were utilized for text generation, language enhancement, and refinement throughout the manuscript. These tools assisted in improving clarity, grammar, and coherence. The final content, including the research findings and conclusions, was reviewed, revised, and approved by the authors to ensure alignment with the study's objectives. The suggestions provided by GenAI were critically evaluated and modified to ensure that the final draft accurately reflects the original work of the authors. All instances of Generative AI usage in this article were conducted by the authors in accordance with the [SAJGTIE GenAI Tool Usage Policy](#), with the authors assuming full responsibility for the originality, accuracy, and integrity of the work.

Conflict of Interest Statement

The authors declare that they have no conflicts of interest related to the publication of this study. The research was carried out with complete independence, and no financial or personal affiliations influenced the study's results.

Informed Consent Statement

The authors declare that this study was conducted in accordance with research ethics, including obtaining approval from the relevant institution. This process respects the autonomy of participants, ensures the confidentiality of their data, and prioritizes their safety and well-being, in compliance with applicable research ethics guidelines. Written and verbal informed consent, or assent for minors, was obtained from all participants involved in the study.

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