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THE USE OF PEDAGOGICAL RESOURCES REQUIRED FOR EFFECTIVE TEACHING AND LEARNING OF BUSINESS STUDIES SUBJECT

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Abstract

This study investigated the use of pedagogical resources required for effective teaching and learning of business studies in Junior Secondary Schools. To guide the study, three research questions were raised and three hypotheses were formed. A descriptive survey research design was used to achieve the goal of the study. The population of the study comprised of 42 teachers and 1210 students. Because the population size for students was perceived to be large, there was a need to sample and resample, which yielded a manageable size of 123, revealing that all the Junior Secondary Schools were adequately represented in the study. The data collection instruments were two structured questionnaires, developed by the authors, one for the teachers and one for the students. The instrument for teachers is titled "Questionnaire on the Use of Pedagogical Resources Required for Effective Teaching of Business Studies Subject". The instrument for students is titled "Questionnaire on the Use of Pedagogical Resources Required for Effective Learning of Business Studies Subject". Questionnaires for teachers and students comprised of 20 items each divided into three clusters, measuring relevant types of pedagogical resources (e.g., audio pedagogical resources, visual pedagogical resources, and audio-visual pedagogical resources) required for effective teaching and learning of business studies in Junior Secondary Schools. The instruments were validated by three experts, two in business education and one in measurement and evaluation. Cronbach's alpha was used to calculate the reliability coefficients for each instrument: 0.701 for teachers and 0.822 for students. Data collected were analyzed using Mean, Standard Deviation and t-test statistics. The findings reveal that some audio pedagogical resources are rarely used most times while some are not used at all when teaching business studies. The findings also reveal that some visual pedagogical resources are sometimes used while some are rarely used when teaching business studies. The study also revealed that some audio-visual pedagogical resources are sometimes used while some are rarely used when teaching business studies. The authors further drew some logical conclusions and make some detailed recommendations based on the findings of the present study.

Keywords: *Audio Pedagogical Resources, Audio-Visual Pedagogical Resources, Business Studies Subject, Junior Secondary Schools, Pedagogical Resources, Students, Teachers, Visual Pedagogical Resources.*

Introduction

Secondary school education is the education children receive immediately after primary education before the tertiary education. The goals of secondary school education are to prepare students to be useful within the society and prepare students for higher education. Secondary school education is sub-divided into two structures, namely: junior secondary school education and senior secondary school education. The junior secondary school education seems to be the level of education where emphases are laid on practical whereas the senior secondary school education seems to be the level of education where emphases are laid on theory. For the purpose of this study, the authors focus on junior secondary school education. According to the Federal republic of Nigeria (FRN, 2013) in its education policy document, junior secondary school education is the level of education which a child receives immediately after primary education.

The objectives of junior secondary school education according to the FRN (2013) in its education policy document are to provide the child with diverse basic knowledge and skills for entrepreneurship and educational advancement; develop patriotic young people who are equip with the knowledge and skills to contribute to social development and the performance of their civic responsibilities; inculcate values and raise morally upright individuals who are capable of independent thinking and who appreciate the dignity of labour; as well as inspire national consciousness and harmonious coexistence irrespective of differences in endowment, religion, color, ethnic and socioeconomic background. In junior secondary school education curriculum according to the FRN (2013), there are core pre-vocational subjects that students must offer in order to broaden their knowledge, skills and career paths. These pre-vocational subjects include agriculture, home economics and business studies subjects. For the purpose of this study, the authors will focus on business studies subject.

Business studies is a practical-based subject that is offered at the Junior Secondary School level of education in Nigeria (Edokpolor, 2018a). It is designed to equip students with vocational knowledge and practical skills that would enable them to participate meaningfully in business activities in future (Ohiwerei, 2015). Business studies comprised of five component units, namely: typewriting, commerce, book-keeping, shorthand, and office practice (Okolocha & Nwadiani, 2014). It is a 'pre-vocational subject' that equip students with knowledge and skills for useful living within the society and lifelong education (FRN, 2013). The preparatory aspect of all the pre-vocational business subject offered at the Junior Secondary School level of education are to introduce students into world of technology and appreciation of technology towards interest arousal and choice of vocation at the end of Junior Secondary School level of education and professionalism later in life; to equip students with technical skills; to expose students to career awareness by exploring usable options in the world of work; and to enable youths to have an intelligent understanding of the increasing complexity of technology (FRN, 2013, p. 40).

Business studies subject is a practical-based subject that requires the use of pedagogical resources (e.g., pedagogical audio resources, pedagogical visual resources, and pedagogical audio-visual resources) for effective teaching and learning. Pedagogical resources can be defined as educational inputs that are germane in teaching of any subject in the school curriculum (Chijioke & Allagoa, 2014). They are instructional aids needed to convey salient knowledge and skills of any subject in the school curriculum (Adewale, 2013). These pedagogical resources exist in different types and forms. For example, the Federal Capital Territory (FCT) Education Resource Centre (2006) classified pedagogical resources as follows: Printed resources such as textbooks, newspapers, magazines, journals, et cetera; Graphic resources like charts, flip chart, flash cards, posters, graphs, pictures, cartoons, et cetera; Three-dimensional resources like models, puppet, real objects, et cetera; Writing/display boards or sheets such as chalk board, white board, drawing board, magnetic board, flannel board, flannel display sheets, et cetera; Audio resources like radio, audio cassette, CD-ROM, et cetera; Visual resources such as pictures, charts, maps, slides, filmstrips, et cetera; Audio-visual resources such as television, video tape, sound motion pictures,

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computer, CD ROM, slide tape series, filmstrips, et cetera; Projection equipment such as multimedia projector, overhead projector, slide projector, opaque projector, et cetera; and Other resources such as magnetic field apparatus, rock board, electronic components board, storyboards, AC-DC convertor, toys, abacus, et cetera. The importance and use of pedagogical resources for effective teaching and learning cannot be overemphasized. For example, the FCT Education Resource Centre (2006) opined that pedagogical resources are known to enhance teaching and learning in a variety of ways: (1) they reduce the extent to which teacher talks bearing in mind that excessive verbalism or too much talking can be very tiring for the teacher and boring to the students; (2) they enable the teacher to explain concepts easily and logically with visible resources; (3) they stimulate creativity and imaginative ability in a teacher and students; (4) they create the enabling learning environment that is inviting and stimulating; (5) they stimulate group discussion or interaction; and (6) they provide the enabling environment for students to exercise the different senses of touch, sight, hearing and smelling, because of their multi-sensory nature.

Numerous studies have specifically investigated the relationship between pedagogical resources and performance outcomes. For instance, there is an empirical evidence supporting that the proper use of audio pedagogical resources enhances students' performance in listening comprehension in Senior Secondary Schools (Baba & Ojakovo, 2021). Another study provided an empirical evidence supporting that visual pedagogical resources play a motivational role in enhancing teaching-learning processes in Public Secondary Schools (Dalali & Mwila, 2022). Another empirical evidence revealed that visual pedagogical resources like pictures, animation videos, projectors and films play a motivational role in fostering learning process case research (Shabiralyani, Hasan, Hamad & Iqbal, 2015). An early research also provided an empirical evidence supporting the notion that audio-visual pedagogical resources play a motivational role in enhancing innovation delivery (Adeokun, Oladoja & Adisa, 2006). Another study showed how audio-visual pedagogical resources impact the dissemination of knowledge for facilitators in some selected literacy centres (Shamsideen, 2016). Yet, another study showed how audio-visual pedagogical resources influence performance of Senior Secondary School students (Adalikwu & Iorkpilgh, 2013). All these empirical studies reveal causal relationships between pedagogical resources and performance outcomes, which implied that pedagogical resources are required for enhancement of effective teaching and learning of business studies.

Teaching can be defined as the process of imparting knowledge and skills, which aims at changing the behaviours of students resulting from hands-on experience. Aggarwal (2013) acknowledged that teaching is any activity that are designed and performed to produce change in students (learners) behaviour. This means that before a person can say that teaching is effective, there must be a change in learner's behaviour. No wonder, Woolfolk (2010) believes that learning occurs when experience (including practice) causes a relatively permanent change in an individual's behaviour or knowledge. Schunk (2008) had earlier argued that this change can be deliberate or unintentional, for better or for worse, correct or incorrect, and conscious or unconscious. To ensure that learning has taken place, this change must be brought about by the use of the hands-on experience, or the interaction between a learner and the environment. Learning can therefore be defined as the process of acquiring knowledge and skills aimed at changing the behaviours of students resulting from hands-on experience. However, effective teaching and learning of business studies subject, especially at the Junior Secondary Schools seem to be attributed to the effective use of pedagogical resources. This connection has indeed necessitated the need for teachers to effectively use of pedagogical resources when teaching, as it would help instill positive attitude and self-confidence on students to learn and experience better performance in business studies subject. Therefore, it can be alleged that teachers have a motivational role to play in enhancing students' knowledge and skill acquisition in business studies subject via the implementation of the effective use of pedagogical resources. Examples of the pedagogical resources required to enhance the effective teaching and learning of business studies subject are:

audio pedagogical resources, visual pedagogical resources and audio-visual pedagogical resources. These of pedagogical resources may either be used individually or collectively in any meaningful teaching and learning situation. For instance, Aduwa-Ogiegbaen and Imogie (2005) classified pedagogical resources into audio tape recorders, video tape recorders, slide projectors, opaque projectors, overhead projectors, still pictures, programmed instruction, filmstrips, maps, charts, graphs, computers, and many other instructional materials that offer a variety of learning experiences individually or in combination to meet different learning experiences. Asogwa, Onu and Egbo (2013) argued that pedagogical resources which a teacher uses in the course of teaching makes the content of the lesson understandable to the learner.

One way to ensure a student is carried along in the process of teaching and learning business studies subject in Junior Secondary Schools is by the effective use of pedagogical resources. This means that when teaching is done with the proper use of pedagogical resources, it may have a direct impact on the learning outcomes of students in business studies since their interest in learning is reinforced. In support of this assumption, Adeyanju (2003) acknowledged that a great percentage of professionally-trained teachers and those undergoing professional training programmes consciously use pedagogical resources because of their positive impact on teaching which, in turn, enhance better learning outcomes among students. The author added that most scholars and researchers agree that using pedagogical resources to teach stimulates students' intrinsic potentials by making them to be more attentive, more interested in the lesson and able to participate better in class activities. The goal of the study was to examine the extent to which pedagogical resources required for effective teaching and learning of business studies.

Theoretical Framework

The present study is supported by the systems theory postulated by a biologist, Ludwig von Bertalanffy in 1968. The theory is used in the study to understand the extent to which of pedagogical resources are required for the effective teaching and learning of business studies subject. The system theory propounded that schools or learning organizations receive inputs from stakeholders, processes them and deliver them as outputs to customers in the society. A complex set of component parts (e.g., input, transformation process, output, feedback and external environment) constitutes the concept and principles of systems theory. Thus, systems theory comprised of five major component parts: inputs, transformation process, outputs, feedback and external environment (Edokpolor, 2018b). Learning organizations receive inputs (i.e., pedagogical resources) from the external environment, converts them through effective teaching and learning process into outputs (i.e., knowledge and skill acquisition) and thereafter distributes them into external environment. Examples of inputs are pedagogical resources, such as radio, tape recorder, still diagrams, maps, television, and laptop computers. Transformation process is where effective teaching and learning of business studies subject takes place. Outputs include knowledge and skill acquisition. Feedback involves learning throughout life. Finally, external environment includes informal and non-formal environment where students are expected to apply the knowledge and skills acquired in the workplace. Using this approach, the job of a secondary school principal as a manager is to coordinate the instructional activities of various components of secondary schools and ensure that they are working together in order to enhance effective teaching which, in turn, foster students' knowledge and skill acquisition. Therefore, systems approach can be determined in this study by establishing the extent to which pedagogical resources are optimized for effective teaching and learning of business studies; the extent to which effective teaching of business studies enhance the acquisition of knowledge and skills; and the extent to which acquisition of knowledge and skills foster employment and lifelong learning opportunities among students. Systems theory is related to this present study in that when there is adequate and proper optimization of pedagogical resources, there will be effective teaching and learning of business studies subject in the Junior Secondary Schools.

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Conceptual Framework

The authors support this present study with a schematic model (Figure 1) that describes the various components of instructional delivery process. The underlying assumption based on the schematic model is that adequate supply of pedagogical resources is predictive of effective teaching and learning process, which in turn foster better performance outcomes, following the postulations of systems theory. Similarly, the inadequate supply of pedagogical resources could hinder effective teaching and learning process, which in turn foster unfavourable performance outcomes, following the postulations of systems theory (Bertalanffy, von, 1968). Although the present study did not investigate the relationships between the use of pedagogical resources, effective teaching and learning process and performance outcomes, the schematic model helps describe the three pedagogical resources (e.g., pedagogical audio resources, pedagogical visual resources, and pedagogical audio-visual resources) and effective teaching and learning process examined in this present study.

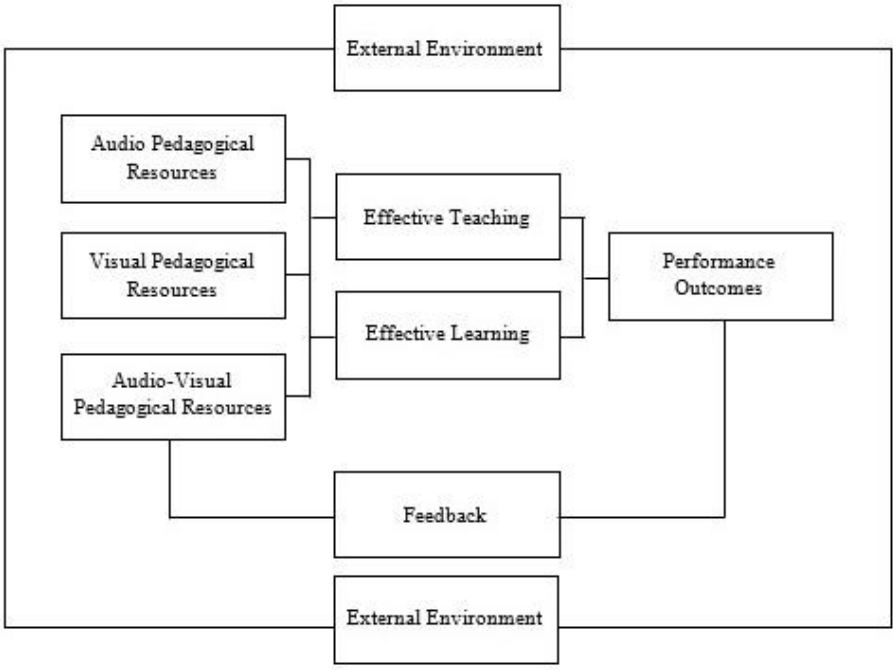

Figure 1: A Conceptual Model Showing the Study Variables

Based on the above discussion and conceptual model, the authors of the present study proposed the following null hypotheses.

Research Hypothesis 1: There is no significant difference between the responses of teachers and students on the use of audio pedagogical resources required for effective teaching and learning of business studies subject in Junior Secondary Schools.

Research Hypothesis 2*:* There is no significant difference between the responses of teachers and students on the use of visual pedagogical resources required for effective teaching and learning of business studies subject in Junior Secondary Schools.

Research Hypothesis 3: There is no significant difference between the responses of teachers and students on the use of audio-visual pedagogical resources required for effective teaching and learning of business studies subject in Junior Secondary Schools.

Methods

Research Design

A descriptive survey design was adopted to achieve the goal of the study. This design is a non-experimental research design, which aimed at gathering data from some group of respondents through questionnaire, and the results are generalized to the entire population (Ary, Jacobs, & Sorensen, 2010). This design is suitable for this study because it helps to collect and analyze data from some group of respondents who represented the entire population. Therefore, the data collected was based on the extent to which pedagogical resources are required for the effective teaching and learning of business studies in Junior Secondary Schools in Nigeria.

Population and Sample

The population used for the study comprised of all the Junior Secondary Schools. The subject comprised of 12,158 (42 teachers and 12,116 students) as shown in Table 1. Teachers and students were used in the study because at this level of education teachers and students in Junior Secondary School 1 to 3 are expected to always use pedagogical resources to teach and learn business studies as a compulsory subject. In all, 21 Public Junior Secondary Schools in Ikpoba-Okha Local Government Area of Edo State were used for the study as shown in Table 1. The sample size of the study was 123 Junior Secondary School students as shown in Table 1. This figure represented 10% of the entire population of 1,210. Because the population size of 12,116 was perceived to be large, there was a need to further resample by applying 10%, which amounted to a manageable size of 123, which showed that each of the Junior Secondary School was adequately represented in the study. In support of this, Gay, Mills and Airasian (2009) suggests that a sample size of most educational research should be at least 10%.

Table 1: Distribution of Population and Sample Size

S/N	Name of School	Teachers	Students	Total	Sample 10%	Resample 10%
1.	School A	2	337	339	34	03
2.	School B	2	264	266	26	03
3.	School C	2	53	55	05	00
4.	School D	2	161	163	16	02
5.	School E	2	599	601	60	06
6.	School F	2	974	976	97	10
7.	School G	2	671	673	67	07
8.	School H	2	1124	1126	112	11
9.	School I	2	29	31	03	00
10.	School J	2	552	554	55	06
11.	School K	2	498	500	50	05
12.	School L	2	1070	1072	107	11
13.	School M	2	353	355	35	04
14.	School N	2	803	805	80	08
15.	School O	2	40	42	04	00
16.	School P	2	1354	1356	135	14
17.	School Q	2	998	1000	100	10
18.	School R	2	284	286	28	03
19.	School S	2	895	897	90	09
20.	School T	2	252	254	25	03
21.	School U	2	805	807	81	08
	Total	42	12,116	12,158	1,210	123

Source: Edo State Ministry of Education (2024).

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Research Instrument

The instrument for data collection was two structured questionnaires (see Appendix), developed by the authors, one for teachers and one for students. The instrument for teachers is titled "Questionnaire on the Use of Pedagogical Resources Required for Effective Teaching of Business Studies". The instrument for students is titled "Questionnaire on the Use of Pedagogical Resources Required for Effective Learning of Business Studies". The instrument consisted of 20 items generated from the research questions to elicit answers on the extent to which pedagogical resources are required for effective teaching and learning of business studies subject. The instruments had a 4-ponit rating scale which was used to evaluate the extent to which pedagogical resources are used for the effective teaching of business studies subject in Junior Secondary Schools. The scale for the questionnaire items will be coded as: 4=Highly Utilized; 3= Sometimes Utilized; 2= Poorly Utilized; 1= Not at all Utilized.

Validation and Reliability of the Instruments

In order to determine the validity, the instrument was given to two experts, one in business education and one in measurement and evaluation. The items that was structurally and grammatically defective was corrected and were effected into the final draft of the instruments. In order to determine the reliability, the instrument was administered on 25 teachers and 25 students which were not part of the sample. The data collected from respondents were analyzed using Cronbach's alpha, and yielded a coefficient of 0.701 for teachers and 0.822 for students.

Data Analysis

The IBM-Statistical Package for Social Sciences (SPSS) version 23.0 were used as the statistical package for data analyses. The mean ($\bar{x}$), Standard Deviation (SD) and t-test statistics were used to analyze the data collected from the respondents. The decision criteria for the research questions was based on any mean scores equal to or greater than 2.50 implied always utilized or sometimes utilized, while any mean scores less than 2.50 implied poorly utilized or not at all utilized. Also, any standard deviation value between 0.00 and 0.96 implied that teachers and student's responses was be very close. Furthermore, the value (p) will be use in taking the decisions on the null hypotheses. However, if p-value is less than or equal to 0.05, null hypotheses is rejected, implied that there is a significant difference in responses of teachers and students on the extent to which they are prone to the use of pedagogical resources in the teaching and learning of business studies, but if the p-value is greater than 0.05, null hypotheses is retained, implied that there is no significant difference in responses of teachers and students on the extent to which they are prone to the use of pedagogical resources in the teaching and learning of business studies.

Results

Descriptive Analysis

Research Question 1: To what extent does teachers and students utilize audio pedagogical resources for effective teaching and learning of business studies in Junior Secondary Schools?

Table 2: Mean and Standard Deviation on the Extent to which Teachers and Students Use Audio Pedagogical Resources for Effective Teaching and Learning of Business Studies.

		Audio Pedagogical Resources			
		Teachers N=42		Students N=123	
S/N	Items	M	SD	M	SD
1	Tape recorder	2.500	.065	1.650	.600
2	Audio recorder	2.071	.197	1.374	.694
3	Radio	1.881	.942	1.163	.619
4	Audio cassette player	2.714	.154	1.317	.618
5	Programmed instruction	3.214	.9762	1.650	.024

Note. M = Mean, SD = Standard Deviation.

The results of the data presented in Table 2 indicated that the Mean scores of teachers implied that audio pedagogical resources were rarely utilized when teaching business studies subject and the Mean scores of students indicated that audio pedagogical resources were not utilized when teaching business studies subject. Comparatively, each item of the Mean scores for teachers is higher than that of the students on the five items on the various types of audio pedagogical resources. The Standard Deviation values in all the five items fall between 0.00 and 0.96, which implied that teachers and student's responses were very close.

Research Question 2: To what extent does teachers and students utilize visual pedagogical resources for effective teaching and learning of business studies in Junior Secondary Schools?

Table 3: Mean and Standard Deviation on the Extent to which Teachers and Students Use Visual Pedagogical Resources for Effective Teaching and Learning of Business Studies.

		Visual Pedagogical Resources			
		Teachers N=42		Students N=123	
S/N	Items	M	SD	M	SD
1	Still diagrams	3.881	.328	3.033	.086
2	Maps	3.595	.587	2.529	.140
3	Filmstrips	2.762	.932	1.813	.986
4	Motion pictures	3.000	.988	2.073	.010
5	Graphs	3.310	.781	2.220	.364
6	Flip charts	3.143	.026	2.268	.153
7	Posters/banners	3.714	.673	2.699	.228
8	Business studies textbooks	3.786	.782	2.902	.028
9	Models	2.929	.156	2.244	.148

Note. M = Mean, SD = Standard Deviation.

The results of the data presented in Table 3 indicated that the Mean scores of teachers implied that visual pedagogical resources were rarely utilized when teaching business studies subject and the Mean scores of students indicated that visual pedagogical resources were not utilized when teaching business studies subject. Comparatively, each item of the Mean scores for teachers is higher than that of the students on the nine items on the various types of visual pedagogical resources. The Standard Deviation values in all the nine items fall between 0.00 and 0.96, which implied that teachers and student's responses were very close.

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Research Question 3: To what extent does teachers and students utilize audio-visual pedagogical resources for effective teaching and learning of business studies in Junior Secondary Schools?

Table 4: Mean and Standard Deviation on the Extent to which Teachers and Students Use Audio-Visual Pedagogical Resources for Effective Teaching and Learning of Business Studies.

		Audio-Visual Pedagogical Resources			
		Teachers N=42		Students N=123	
S/N	Items	M	SD	M	SD
1	Video recorders	2.619	.103	1.683	.843
2	Overhead projector	2.286	.970	1.854	.014
3	Television	3.048	.854	1.650	.101
4	Slide projector	2.476	.943	2.081	.098
5	Desktop computers	3.333	.846	1.675	.928
6	Laptop computers	3.357	.821	1.553	.802

Note. M = Mean, SD = Standard Deviation.

The results of the data presented in Table 4 indicated that the Mean scores of teachers implied that audio-visual pedagogical resources were rarely utilized when teaching business studies subject and the Mean scores of students indicated that audio-visual pedagogical resources were not utilized when teaching business studies subject. Comparatively, each item of the Mean scores for teachers is higher than that of the students on the six items on the various types of audio-visual pedagogical resources. The Standard Deviation values in all the six items fall between 0.00 and 0.96, which implied that teachers and student's responses were very close.

Inferential Analysis

Research Hypothesis 1: There is no significant difference between the responses of teachers and students on the use of audio pedagogical resources required for effective teaching and learning of business studies subject in Junior Secondary Schools.

Table 5: T-Test on the Difference Between the Responses of Teachers and Students on the Use of Audio Pedagogical Resources Required for Effective Teaching and Learning of Business Studies.

		Audio Pedagogical Resources						
S/N	Parameters	M	SD	MD	df	T	p	Decision
1	Teachers	2.476	.708	11.381	41	20.833	.000	Sig.
2	Students	1.431	.436	6.154	122	31.303	.000	

Note. M = Mean, SD = Standard Deviation.

The results presented in Table 5 indicated that the aggregate Mean responses of teachers and students on the use of visual pedagogical resources required for effective teaching and learning of business studies subject in Junior Secondary Schools are 2.476 and 1.431, while the corresponding Standard Deviation values are .708 and .436 respectively. The Table also indicated that the t-value is 20.833 and 31.303 at the df of 41 and 122, while the p-value is .000 and .000. Testing at alpha level of 0.05, the p-values are significant, since the p-values are not greater than the alpha value (0.05). Therefore, the null hypothesis is rejected; hence, there is a significant difference between the responses of teachers and students on the use of audio pedagogical resources required for effective teaching and learning of business studies subject in Junior Secondary Schools.

Research Hypothesis 2: There will be no significant difference between the responses of teachers and students on the use of visual pedagogical resources required for effective teaching and learning of business studies subject in Junior Secondary Schools.

Table 6: T-Test on the Difference Between the Responses of Teachers and Students on the Use of Visual Pedagogical Resources Required for Effective Teaching and Learning of Business Studies.

Visual Pedagogical Resources								
S/N	Parameters	M	SD	MD	df	T	p	Decision
1	Teachers	3.346	.290	29.119	41	72.161	.000	Sig.
2	Students	2.420	.591	20.780	122	43.282	.000	

Note. M = Mean, SD = Standard Deviation.

The results presented in Table 6 indicated that the aggregate mean responses of teachers and students on the use of visual pedagogical resources required for effective teaching and learning of business studies subject in Junior Secondary Schools are 3.346 and 2.420, while the corresponding Standard Deviation values are .290 and .591 respectively. The Table also indicated that the t-value is 72.161 and 43.282 at the df of 41 and 122, while the p-value is .000 and .000. Testing at alpha level of 0.05, the p-values are significant, since the p-values are not greater than the alpha value (0.05). Therefore, the null hypothesis is rejected; hence, there is a significant difference between the responses of teachers and students on the use of visual pedagogical resources required for effective teaching and learning of business studies subject in Junior Secondary Schools.

Research Hypothesis 3: There will be no significant difference between the responses of teachers and students on the use of audio-visual pedagogical resources required for effective teaching and learning of business studies subject in Junior Secondary Schools.

Table 7: T-Test on the Difference Between the Responses of Teachers and Students on the Use of Audio-Visual Pedagogical Resources Required for Effective Teaching and Learning of Business Studies.

Audio-Visual Pedagogical Resources								
S/N	Items	M	SD	MD	df	T	p	Decision
1	Teachers	2.853	.884	16.119	41	31.588	.000	Sig.
2	Students	1.749	.619	9.496	122	28.340	.000	

Note. M = Mean, SD = Standard Deviation.

The results presented in Table 7 indicated that the aggregate mean responses of teachers and students on the use of audio-visual pedagogical resources required for effective teaching and learning of business studies subject in Junior Secondary Schools are 2.853 and 1.749, while the corresponding standard deviation values are .884 and .619 respectively. The Table also indicated that the t-value is 31.588 and 28.340 at the df of 41 and 122, while the p-value is .000 and .000. Testing at alpha level of 0.05, the p-values are significant, since the p-values are not greater than the alpha value (0.05). Therefore, the null hypothesis is rejected; hence, there is a significant difference between the responses of teachers and students on the use of audio-visual pedagogical resources required for effective teaching and learning of business studies subject in Junior Secondary Schools.

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Discussions

Audio Pedagogical Resources and Instructional Delivery of Business Studies

The results of research question one indicated that audio pedagogical resources are rarely used when teaching business studies subject as reported by teachers. The results of research question one also indicated that audio pedagogical resources are not used when teaching business studies subject as reported by students. The corresponding Standard Deviation values indicated that teachers and student's responses are not very close. Therefore, audio pedagogical resources were found to be rarely used as reported by teachers and were found not to be used as reported by students. This implied that when audio pedagogical resources are rarely or not used by teachers, the teaching of business studies subject would be ineffective. This finding conforms to the findings of the research conducted by Shamsideen (2016), Edokpolor and Dumbiri (2019) and Baba and Ojakovo (2021) who reported that the audio pedagogical resources are rarely utilized by teachers, which fosters ineffective teaching and learning process.

Visual Pedagogical Resources and Instructional Delivery of Business Studies

The results of research question two indicated that visual pedagogical resources are sometimes used when teaching business studies subject as reported by teachers. The results of research question one also indicated that visual pedagogical resources were rarely used when teaching business studies subject as reported by students. The corresponding Standard Deviation indicated that teachers and student's responses are not very close. Therefore, visual pedagogical resources were found to be sometimes used as reported by teachers and were found not to be used as reported by students. This finding corroborates the findings of the research conducted by Shabiralyani, Hasan, Hamad and Iqbal (2015) and Dalali and Mwila (2022) who reported that the visual pedagogical resources are rarely utilized by teachers, which fosters ineffective teaching and learning process.

Audio-Visual Pedagogical Resources and Instructional Delivery of Business Studies

The results of research question three indicated that audio-visual pedagogical resources are sometimes used when teaching business studies subject as reported by teachers. The results of research question three also indicated that audio-visual pedagogical resources were rarely used when teaching business studies subject as reported by students. The corresponding Standard Deviation indicated that teachers and student's responses are not very close. Therefore, audio-visual pedagogical resources were found to be sometimes used as reported by teachers and were found not to be used as reported by students. This finding agrees with the findings of the research conducted by Alkali, Ikehi and Okoye (2016), Adeokun, Oladoja and Adisa (2006) and Adalikwu and Iorkpilgh (2013) who reported that audio-visual pedagogical resources are not used by teachers, which fosters ineffective teaching and learning process.

Conclusions

Based on the above findings, the authors concluded that the ineffective teaching and learning of business studies subject is as a result of the underutilization and/or non-utilization of audio pedagogical resources in Junior Secondary Schools. The authors also concluded that the ineffective teaching and learning of business studies subject is as a result of the occasional use and/or underutilization of visual pedagogical resources in Junior Secondary Schools. The authors further concluded that the ineffective teaching and learning of business studies subject is as a result of the occasional use and/or non-utilization of audio-visual pedagogical resources in Junior Secondary Schools.

Research Implication

The present study focused on the use of pedagogical resources required for effective teaching and learning of business studies in Junior Secondary Schools, which is relatively an area that is currently attracting much empirical research, especially in the context of Nigeria. The study has contributed to the systems theory by providing a framework that explained the extent to which teachers and students utilize pedagogical resources such as audio, visual, and audio-visual pedagogical resources for effective teaching and learning of business studies in Junior Secondary Schools. Therefore, future studies should deeply focus on this emerging area of research, by exploring the different types of pedagogical resources that could help to foster the effective teaching and learning of business studies, especially in Junior Secondary Schools.

Theoretical and Managerial Implications

The findings of this study also provided the implications for theory and management. The managers of Junior Secondary Schools can surmount the issue of ineffective teaching and learning of business studies subject by creating an enabling environment that encourages the adequate use of pedagogical resources (audio, visual, and audio-visual). Therefore, creating an enabling environment that encourages the adequate use of pedagogical resources (audio, visual, and audio-visual) should be carefully implemented as this could help the managers of Junior Secondary Schools to meet the demand for effective teaching and learning of business studies subject. Devising a strategic means of implementing enabling environment that encourages the adequate use of pedagogical resources (i.e., audio, visual, and audio-visual resources) should be one of the obligations and priorities of the managers of Junior Secondary Schools in Nigeria.

Recommendations

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

1. Government and it agencies such as the Ministry of Education should endeavour to collaborate with all the major stakeholders for the provision of financial resources as this will help to ensure adequate supply and use of audio pedagogical resources, which fosters effective teaching and learning of business studies in Junior Secondary Schools.
2. Government and it agencies such as the Ministry of Education should endeavour to collaborate with all the major stakeholders for the provision of financial resources as this will help to ensure adequate supply and use of visual pedagogical resources, which fosters effective teaching and learning of business studies in Junior Secondary Schools.
3. Government and it agencies such as the Ministry of Education should endeavour to collaborate with all the major stakeholders for the provision of financial resources as this will help to ensure adequate supply and use of visual pedagogical resources, which fosters effective teaching and learning of business studies in Junior Secondary Schools.

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