

COMPARATIVE ANALYSIS OF AVAILABILITY AND UTILIZATION OF INSTRUCTIONAL MEDIA BETWEEN PUBLIC AND PRIVATE SENIOR SECONDARY SCHOOLS IN KADUNA STATE, NIGERIA

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Abstract

This study compared the instructional media availability and utilization in the public and private senior secondary schools (SSS) in Kaduna state. The specific objectives of the study were to: find out which instructional media are available, find out the teachers' self-efficiency in utilization of instructional media for instructional purpose, find out the frequency at which the instructional media are being utilized for instructional purposes, find out factors militating against the use of instructional media in public and private SSS in Kaduna state. The research design adopted for this study was a descriptive survey research design. The population of the study was made up of teachers teaching in public and private SSS in Kaduna South Local Government Area of Kaduna state. The school total population comprised of 42 private and 8 public schools whole the numbers teachers teaching in public senior secondary schools are 360 teachers are from public senior secondary schools and 1060 teachers from the private senior secondary schools. A specially designed questionnaire and observation checklist were administered on the selected respondents to collect relevant data. The data analysis was conducted using descriptive statistics for items in the scale. The descriptive statistics used include; simple percentage, frequency, mean and standard Deviation. In addition, an inferential statistical tool; t-test was used to test the hypotheses at 0.05 level of significance. The finding of the study shows that there is significant difference in the availability and utilization of instructional media in public and private SSS in Kaduna State. It was discovered that instructional media are more available and utilized in the private SSS than in the public SSS in Kaduna State. It was therefore recommended that government and stakeholders in the state should collaborate with education board to provide financial supports to acquire and install necessary instructional media in public senior secondary schools in Kaduna State.

Keywords: Availability, Utilization, Self-efficiency, Instructional Media

Introduction

Nigeria as a country has gone through several educational reforms which started even before colonial rule. The quality and standard of education received and disseminated over the years cannot be measured with what it is in recent times; the standard of education keeps dropping. The crisis had its genesis in the late 1970s when government in its wisdom decided to take over primary and post primary school educational institutions from religious organizations and voluntary agencies in the erroneous belief that the Federal government had the responsibility of providing all levels of education for its citizens (Adebayo, Shehu, Solomon & Nike, 2008). Despite government efforts, it could not cope with the educational demands of an essentially young and fast growing population and it soon became apparent that the Federal Government had taken on responsibility beyond its resources and capacity (Olaniyan & Okemakinde, 2008). The result has been a rapid deterioration in educational facilities, falling educational standards and low morale of educational workers at all levels.

Educational standards can be defined as the knowledge and skills students should possess at critical points in their educational career. The falling standards could be attributed to the methods of teaching teachers used in teaching the students. Teachers in most cases used lecture method which is merely teacher centered-method of teaching. This method is discovered to be more of verbal presentation of a subject-matter where the teacher dominates the exercise for long period with or without the student involvement. (Abimbade, 2006). Students remember only 20% of what they hear (Nuhu & Jimada, 2012). Lecture method does not take care of individual differences thus slow learners may become helpless. Teachers can improve their method of teaching if they integrate instructional media into the teaching process.

Instructional media in all subjects means anything that can assist the teacher in promoting teaching and learning (Adekunle, 2008). When the students are given chance to learn through more senses than one, they can learn faster and easier. Aduwa and Omogie (2005) enumerated these media as whiteboards, handouts, maps, charts, graphs, projectors, still pictures, programmed instruction, real objects, videotape

recorders, audio tape recorders, computers, DVDs, CD-ROMs, the Internet, and interactive video conferencing. In general, the use of instructional media is to facilitate learning or increase understanding of material. A good instructional media can replace the spoken or written words and brings learning to life. Instructional media are vital to the teaching of any subject in the school curriculum.

Availability of instructional media encourages its usage. For technology to be exploited in an environment, it must first exist. This implies that there should be availability of instructional media for effective and efficient teaching and learning. All the problems affecting educational system in Nigeria today is inadequate instructional media in teaching and learning (Ekpo, 2011). For teachers to utilize instructional media, they have to be self-efficient. Performance in examinations is linked to state of instructional media availability and utilization in schools (Eze, 2001 & Ekanem, 2003). Students from poor background perform poorly in the examination because they are seriously deprived of vital facilities. Therefore, the academic performance of the students will largely be influenced by the availability and utilization of instructional media in schools. Based on this experience, the researcher sought to compare and analyse the availability and utilization of instructional media in public and private senior secondary school in Kaduna state.

Statement of the Problem

The use of Instructional Media in educational system seems to have impacted positively in teaching and learning process in secondary schools. The initial and continuous development of teaching process are currently facing number of challenges. It is observed that in secondary schools, there is inadequate instructional media for instructional purpose (Ajala, 2000). Thus, teachers working under such circumstances face a lot of difficulties. Even where the instructional media are available, the teachers who are supposed to handle, manipulate and make proper use of the instructional media in teaching and learning process lack adequate knowledge and skills. They had minimal knowledge on use of instructional media (Mwololo, 2009). It was also anticipated that teachers lack the necessary time to research and prepare the instructional media for teaching and learning. Funding is also another impediment for using instructional media. Inadequate funding has been described as a great problem to effective implementation of educational programmed in Nigeria (Ololube, 2007). Media utilization is the systematic use of resources for teaching and learning process. The availability of media will determine the usage for transfer of knowledge but what is obtainable in Nigerian schools today are chalkboards, textbooks and realia. Other modern media such as projectors, computers, smartboard etc. are inadequate available where in schools. These problems contributed to poor academic performance of students. Therefore, this study compares the instructional media availability and utilization in public and private senior secondary schools in Kaduna state.

Research Questions

The following research questions were raised to guide the study:

- (i) What are the opinions of teachers on the availability of instructional media in public and private senior secondary schools in Kaduna state?
- (ii) What are the opinions of teachers on self- efficiency on the utilization of instructional media among public and private senior secondary schools in Kaduna state?
- (iii) How frequent do teachers utilize instructional media for instructional purposes in public and private senior secondary schools in Kaduna state?
- (iv) What are the factors militating against the use of instructional media in both public and private senior secondary schools in Kaduna state?

Research Hypotheses

- (i) There is no significance differences between the opinions of public and private school teachers on the availability of instructional media in senior secondary schools in Kaduna state.
- (ii) There is no significance differences between the opinions of public and private school teachers on the self- efficiency in the utilization of instructional media in senior secondary schools in Kaduna state.
- (iii) There is no significance differences between the opinions of public and privates chool teachers on the frequency at which instructional media are being utilized in senior secondary schools in Kaduna state.
- (iv) There is no significance differences between the opinions of public and private school teachers on the factors militating against the use of instructional media in senior secondary schools in Kaduna state.

Methodology

The research design adopted for this study is the descriptive survey. The total population for the school is 50, comprising 42 private schools and 8 public schools in Kaduna South Local Government Area in (KSLGA)Kaduna state. These schools comprise of SS 1, SS 2 and SS 3 respectively. The total numbers of teachers teaching in the schools are 1420 (360 public and 1060 private schools) (Ministry of Education Statistics Unit, 2018). The sample for this study comprised 392senior secondary schools’ teachers from KSLGA of Kaduna state. One hundred and seven are from two selected public schools while 285 are from eight selected private schools.

The instruments for data collection were the researcher constructed structured questionnaire and observation. The questionnaire was designed based on the research questions for the teachers respectively. It assessed, examined, and compared and analysed available and utilized instructional media in public and private SSS in Kaduna state. The questionnaire was made up of two sections A and B. Section A dwelt on the personal data of the respondents and section B dwelt on the main issues relevant for the investigation. Section B was structured based on modified five point likert scale of Strongly Agree (SA=5), Agree (A=4), Undecided (U=3), Disagree (D=2), Strongly Disagree (SD=1) and was constructed in four clusters in accordance with the four research questions. The frequency was based on frequency of use daily, weekly, monthly, yearly or not at all. Finally, an observation checklist which consists of the items in research question was also part of the instruments.

The face and validity of the instruments were done by experts in terms of its adequacy, suitability and language appropriateness. The instruments were pilot tested using 30 teachers in two SSS in Kaduna state twice within two-weeks interval to the same set of people. The two schools were not part of the samples for the study. The reliability of the instrument was done using Cronbach’s alpha coefficient. The value obtained was 0.8984 which is clearly acceptable. The researcher trained the two research assistants that helped in administering the questionnaire, the procedures and ethical issues concerning the study. The data collection lasted for about four weeks. The questionnaire was administered to 302 teachers that were randomly selected from the private and public senior secondary schools.

The data analysis was conducted using descriptive statistics for items in the scale which include; simple percentage, frequency, mean and standard Deviation. In addition, an inferential statistical tool; t-test was used to determine the presence of significant differences between public and private schools’ responses.

Results

Research Question One: What are the opinions of teachers on the availability of instructional media in public and private senior secondary schools in Kaduna state?

Table 1: Mean and Standard Deviation of the Respondents on Availability of Instructional Media in Public and Private Schools

| S/N | Items | Public Sch. | | Private Sch. | |
|-----|---|-------------|---------|--------------|---------|
| | | Mean | Std Dev | Mean | Std Dev |
| 1 | Radio and Tape Recorders are available in my school. | 2.74 | 0.57 | 4.81 | 0.44 |
| 2 | Posters are available in my school. | 3.68 | 0.83 | 4.98 | 0.56 |
| 3 | Videos are available in my school | 2.45 | 0.64 | 4.73 | 0.49 |
| 4 | Computers are available in my school. | 3.85 | 0.71 | 4.01 | 0.95 |
| 5 | Multi media are available in my school. | 3.45 | 0.80 | 4.23 | 0.74 |
| 6 | Television is available in my school. | 1.84 | 0.79 | 4.74 | 0.92 |
| 7 | Record players / CD are available in my school. | 2.19 | 0.62 | 4.85 | 0.57 |
| 8 | CD and DVD are available in my school | 2.04 | 0.91 | 4.60 | 0.80 |
| 9 | Electronic white boards are available in my school. | 2.30 | 0.48 | 4.93 | 0.97 |
| 10 | Charts, Maps, Diagrams are available in my school | 4.39 | 0.73 | 4.60 | 0.71 |
| 11 | Realia/specimen are available in my school. | 4.41 | 0.76 | 4.01 | 0.83 |
| 12 | Textbooks are available in my school. | 4.83 | 0.54 | 4.99 | 0.81 |
| 13 | Magnetic Boards, Flannel Boards are available in my school. | 2.48 | 0.93 | 4.57 | 0.68 |
| 14 | Roll graphs are available in my school | 2.34 | 0.42 | 4.63 | 0.56 |
| 15 | Models are available in my school. | 3.48 | 0.74 | 3.89 | 0.59 |
| 16 | Disks /DVD are available in my school | 2.42 | 0.53 | 4.83 | 0.60 |
| 17 | Photographs (still pictures) are available in my school. | 4.24 | 0.53 | 4.94 | 0.93 |
| | Cumulative mean | 3.13 | | 4.6 | |

Source: Field Survey, 2017

According to the result in table 1, Posters, Computers Charts, Maps, Diagrams, Realia/specimen, Textbooks and Photographs (still pictures) are available in public schools since each of the items had mean value above 3.5 which is within the agree range; while the others like; Radio and Tape Recorders, Videos, Television, Record players / CD, DVD, Electronic white boards, Magnetic Boards, Flannel Boards, Roll graphs, Models and Disks /DVD are not available in public schools as shown by their low cumulative mean value (3.13) which was below 3.5. The result also, shows that all of the instructional media are availability in Private Schools in Kaduna. They had high mean value (4.6) above 3.5, which falls within agree.

Research Question Two: What are the opinions of teachers on self- efficiency in the utilization of instructional media among public and private senior secondary schools in Kaduna state?

Table 2: Mean and Standard Deviation of the Respondents on Self- Efficiency in the Utilization of Instructional Media in Public and Private Schools in Kaduna

| S/N | Items | Public Sch. | | Private Sch. | |
|-----|---|-------------|---------|--------------|---------|
| | | Mean | Std Dev | Mean | Std Dev |
| 1 | I can utilize Radio Tape Recorder for instructional purposes in my school. | 4.41 | 0.44 | 4.62 | 0.74 |
| 2 | I can utilize Posters for instructional purposes in my school. | 4.58 | 0.56 | 4.98 | 0.37 |
| 3 | I can utilize Videos for instructional purposes in my school. | 4.53 | 0.49 | 4.61 | 0.54 |
| 4 | I can skillfully utilize Computers to enhance instruction in my school. | 4.01 | 0.95 | 3.99 | 038 |
| 5 | I can utilize and manipulate Multimedia to increase learners experience in my school. | 4.03 | 0.74 | 4.49 | 028 |
| 6 | I can utilize Television for instructional purposes in my school. | 4.74 | 0.92 | 4.72 | 0.85 |
| 7 | I can utilize Record players for instructional purposes in my school. | 4.85 | 0.57 | 4.84 | 0.74 |
| 8 | I can utilize CD and DVD for instructional purposes in my school | 4.60 | 0.80 | 4.20 | 0.53 |
| 9 | I can utilize Electronic white boards and flannels board effectively for instructional purposes in my school. | 4.93 | 0.97 | 4.95 | 0.94 |
| 10 | I can utilize Charts Maps, and Diagrams for instructional purposes in my school. | 4.60 | 0.71 | 4.68 | 1.09 |
| 11 | I can utilize Realia /Specimen for instructional purposes in my school. | 4.01 | 0.83 | 4.02 | 1.30 |
| 12 | I can utilize Textbooks for instructional purposes in m6y school. | 4.99 | 0.81 | 4.93 | 0.94 |
| 13 | I can utilize Magnetic boards for instructional purposes in my school. | 4.57 | 0.68 | 4.68 | 0.74 |
| 14 | I can utilize Roll graphs for instructional purposes in my school. | 4.63 | 0.56 | 4.94 | 1.39 |
| 15 | I can utilize Models for instructional purposes in my school. | 3.89 | 0.59 | 4.17 | 0.92 |
| 16 | I can utilize Disks /DVD for instructional purposes in my school | 4.83 | 0.60 | 4.59 | 0.74 |
| 17 | I can efficiently utilize Photographs (still pictures) for instructional purposes in my school. | 4.94 | 0.93 | 4.93 | 0.56 |
| | Cumulative mean | 4.54 | | 4.61 | |

Source: Field Survey, 2017

The result presented above in table 2 shows that there is self-efficiency in the utilization of all the instructional media. All of the items in the table had mean values above 3.5, and a cumulative mean value of 4.54 implying agreement. This result shows that even though this devices and gadgets are not available in the public schools, teacher are well prepared and vast on how to utilized them with little or no technical support. Similarly, the result presented showed that there is self-efficiency in the utilization of all the instructional

media in private senior secondary schools. All of the items in the scale had mean values above 3.5, and a cumulative mean of 4.61 implying agreement.

Research Question Three: How frequent do teachers utilize instructional media for instructional purposes in public and private senior secondary schools in Kaduna state?

Table 3: Frequency Distribution of Availability of Instructional Media being Utilize for Instructional Purposes in Public and Private Schools in Kaduna

| S/N | Items | Public Schools | | | | | | Private Schools | | | | | |
|-----|---|----------------|-----|-----|-----|------|------|-----------------|-----|-----|-----|-----|------|
| | | D | W | M | Y | Nta | T | D | W | M | Y | Nta | T |
| 1 | Radio Tape Recorder is used in my school. | 0% | 0% | 6% | 44% | 60% | 100% | 17% | 20% | 22% | 19% | 22% | 100% |
| 2 | Posters are used in my school. | 12% | 23% | 12% | 18% | 35% | 100% | 82% | 18% | 0% | 0% | 0% | 100% |
| 3 | Videos are used in my school. | 0% | 0% | 0% | 4% | 96% | 100% | 67% | 23% | 10% | 0% | 0% | 100% |
| 4 | Computers are used in my school. | 2% | 5% | 7% | 28% | 58% | 100% | 72% | 24% | 4% | 0% | 0% | 100% |
| 5 | Multimedia projectors are used in my school. | 0% | 0% | 0% | 0% | 100% | 100% | 18% | 11% | 18% | 39% | 14% | 100% |
| 6 | Television is used in your school. | 0% | 0% | 3% | 10% | 87% | 100% | 63% | 19% | 14% | 4% | 0% | 100% |
| 7 | Record players are used in my school. | 0% | 2% | 6% | 14% | 78% | 100% | 14% | 21% | 23% | 16% | 26% | 100% |
| 8 | CD and DVD are used in my school. | 0% | 2% | 9% | 18% | 71 | 100% | 54% | 33% | 13% | 0% | 0% | 100% |
| 9 | Electronic white boards and flannels board are used in my school. | 0% | 0% | 0% | 1% | 99% | 100% | 69% | 23% | 8% | 0% | 0% | 100% |
| 10 | Charts, Maps and Diagrams are used in my school. | 76% | 12% | 9% | 3% | 0 | 100% | 94% | 6% | 0% | 0% | 0% | 100% |
| 11 | Realia /specimen are used in my school. | 53% | 23% | 14 | 10 | 0 | 100% | 75% | 18% | 7% | 0% | 0% | 100% |
| 12 | Textbooks are used in my school. | 98% | 2% | 0% | 0% | 0% | 100% | 92% | 8% | 0% | 0% | 0% | 100% |
| 13 | Magnetic boards are used in my school. | 0% | 0% | 0% | 0% | 100% | 100% | 58% | 13% | 0% | 0% | 30% | 100% |
| 14 | Roll graphs are used in my school. | 0% | 0% | 0% | 0% | 100% | 100% | 31% | 18% | 6% | 0% | 45% | 100% |
| 15 | Models are used in my school | 2% | 6% | 4% | 2% | 86% | 100% | 14% | 37% | 12% | 0% | 37% | 100% |
| 16 | Disks /DVD are used in my school | 2% | 3% | 1% | 4% | 91% | 100% | 42% | 14% | 16% | 7% | 21% | 100% |
| 17 | Photographs (still pictures) are used in my school. | 53% | 24% | 13% | 10% | 0% | 100% | 98% | 2% | 0% | 0% | 0% | 100% |

Key: D=Daily W=Weekly M=Monthly Y=Yearly and Nta=Not at all T=Total
Source: Field Survey, 2017

The result above indicated that only those instructional media that were indicated to be available in public schools such as Posters, Multimedia, Computers Charts, Maps, Diagrams, Realia /specimen, Textbooks and Photographs (still pictures) had high frequency of utilization. The result also, showed that all of the instructional media had high frequency of use either, daily, weekly, monthly or yearly in private senior secondary schools.

Research Question Four: What are the factors militating against the use of instructional media in both public and private senior secondary schools in Kaduna state?

Table 4: Mean and Standard Deviation on the factors militating against the use of instructional media in Public and Private Schools in Kaduna

| S/N | Items | Public Sch. | | Private Sch. | |
|-----|--|-------------|---------|--------------|---------|
| | | Mean | Std Dev | Mean | Std Dev |
| 1 | Lack of skills to operate the media. | 2.42 | 0.61 | 3.58 | 0.48 |
| 2 | Lack of adequate instructional media. | 4.91 | 0.84 | 4.94 | 0.35 |
| 3 | Lack of awareness on the usefulness of the media. | 3.80 | 0.72 | 3.67 | 0.58 |
| 4 | Lack of instructional media in my subject area. | 2.96 | 1.02 | 3.58 | 1.03 |
| 5 | Too much teaching load per week. | 2.01 | 0.47 | 4.39 | 0.83 |
| 6 | Lack of technical support and assistance when using the media. | 3.60 | 0.35 | 4.45 | 0.95 |
| 7 | Irregular electricity supply. | 4.74 | 1.00 | 4.89 | 0.46 |
| 8 | No financial support from the government/school authorities. | 4.94 | 0.85 | 3.56 | 0.76 |
| 9 | Inadequate infrastructure e.g. building to house the media. | 4.32 | 0.75 | 3.56 | 0.43 |
| 10 | Lack of interest by the teachers to use the media | 2.41 | 0.48 | 2.02 | 0.93 |
| 11 | Lack of maintenance of the instructional media | 3.20 | 0.98 | 3.95 | 1.06 |
| | Cumulative mean | 3.57 | | 3.87 | |

Source: Field Survey, 2017

According to the result of table 4, the factors militating against the use of instructional media in public schools (lack of adequate instructional media, lack of awareness on the usefulness of the media, lack of technical support and assistance when using the media, No financial support from the government/school authorities and Inadequate infrastructure e.g. building to house the media and irregular electricity supply) had mean values above 3.5. Also, according to the result above, the factors militating against the use of instructional media in private schools were those items that had mean values above 3.5. Cumulative mean values of 3.57 and 3.87 were obtained for the public and private schools respectively. The observation checklist was used by the researcher to record instructional media observed during visit to each school. The observation checklist showed that the public schools have total of 297 instructional media of which 261 were functional and 36 were not. In the private senior secondary schools, 1100 instructional media were observed to be available, where 983 were functional and 117 were not functional.

Testing of the Hypotheses

Null Hypothesis One: There is no significance differences between the opinions of public and private school teachers on the availability of instructional media in senior secondary schools in Kaduna state.

Table 5: t-test Result Comparing Mean of Public and Private Senior Secondary Schools Teachers' Responses to Instructional Media Availability in Public and Private Schools in Kaduna

| | Public Schools | Private schools |
|------------------------------|----------------|-----------------|
| Mean | 3.125294118 | 4.608235294 |
| Variance | 0.936463971 | 0.128427941 |
| Observations | 17 | 17 |
| Hypothesized Mean Difference | 0 | |
| Df | 20 | |
| t Stat | 5.925099131 | |
| P(T<=t) two-tail | 0.014 | |
| t Critical two-tail | 2.085963441 | |

The result of the t-test shows that the hypothesized mean difference is 0, confirming it is a null hypothesis. The result also showed that the test statistic (t Stat) value is 5.9251 which is higher than the t Critical (tcrit) value 2.0861 and the obtained p value 0.014 is less than the alpha (α) value 0.05. This indicate significant difference in the mean of public and private senior secondary school teacher's responses to instructional media availability and utilization.

Hypothesis Two: There is no significance differences between the opinions of public and private school teachers on the self- efficiency in the utilization of instructional media in senior secondary schools in Kaduna state.

Table 6: t-test Result Comparing Mean of Teachers on the Self- Efficiency in Utilization of Instructional Media in Public and Private Senior Secondary Schools in Kaduna State

| | Public Schools | Private schools |
|------------------------------|----------------|-----------------|
| Mean | 4.537647059 | 4.608235294 |
| Variance | 0.125869118 | 0.109377941 |
| Observations | 17 | 17 |
| Hypothesized Mean Difference | 0 | |
| df | 16 | |
| t Stat | -1.341504547 | |
| P(T<=t) two-tail | 0.198488325 | |
| t Critical two-tail | 2.119905285 | |

The result of the t-test shows that the hypothesized mean difference is 0, confirming it is a null hypothesis. The result also showed that the test statistic (t Stat) value is -1.3415 which is less than the t Critical (tcrit) value 2.1199 and the obtained p value 0.1985 is greater than the alpha (α) value 0.05. Thus, indicating no significant difference in the mean values on the self- efficiency in utilization of instructional media in public and private senior secondary schools in Kaduna State.

Hypothesis Three: There is no significance differences between the opinions of public and private school teachers on the frequency at which instructional media are being utilized in senior secondary schools in Kaduna state.

Table 7: t-test Result Comparing Mean of the Opinion of Teachers on the Frequency at which Instructional Media are being Utilized in both Public and Private Senior Secondary Schools in Kaduna State

| | Public Schools | Private schools |
|------------------------------|----------------|-----------------|
| Mean | 1.2926 | 3.2025 |
| Variance | 0 | 0 |
| Observations | 17 | 17 |
| Hypothesized Mean Difference | 0 | |
| df | 16 | |
| t Stat | 6.5535 | |
| P(T<=t) two-tail | 0.003 | |
| t Critical two-tail | 3.1825 | |

Table 7 presents the result of t-test conducted to compare the mean values of opinion of teachers on the frequency at which instructional media are being utilized in both public and private senior secondary schools in Kaduna state. The result of the t-test shows that the hypothesized mean difference is 0, confirming it is a null hypothesis. The result also showed that the test statistic (t Stat) value is 6.5535 which is higher than the t Critical (tcrit) value 3.1825 and the obtained p value 0.003 is less than the alpha (α) value 0.05. Thus, indicating significant difference in the mean values of opinion of teachers on the frequency at which instructional media are being utilized in both public and private senior secondary schools in Kaduna state.

Hypothesis Four: There is no significance differences between the opinions of public and private school teachers on the factors militating against the use of instructional media in senior secondary schools in Kaduna state.

Table 8: t-test Result Comparing Mean of the Opinion of Teachers on the Factors Militating against the Use of Instructional Media in Both Public and Private Senior Secondary Schools in Kaduna State

| | Public Schools | Private schools |
|------------------------------|----------------|-----------------|
| Mean | 3.573636364 | 3.871818182 |
| Variance | 1.126825455 | 0.662136364 |
| Observations | 11 | 11 |
| Hypothesized Mean Difference | 0 | |
| df | 10 | |
| t Stat | -0.970884273 | |
| P(T<=t) two-tail | 0.354503047 | |
| t Critical two-tail | 2.228138842 | |

The result of the t-test in table 8 shows that the hypothesized mean difference is 0, confirming it is a null hypothesis. The result also showed that the test statistic (t Stat) value is -0.9709 which is less than the t Critical (tcrit) value 2.2281 and the obtained p value 0.3545 is greater than the alpha (α) value 0.05. Thus, indicating no significant difference in the mean values of the opinion of teachers on the factors militating against the use of instructional media in both public and private senior secondary schools in Kaduna State.

Discussion

The findings of the study showed that instructional media devices are more available in private schools than in public schools. The study also revealed that teachers in public schools are willing and self-efficient in the utilization of instructional media, even though they are lacking in their schools. The private schools' teachers also have high self-efficacy in the utilization of instructional media. This agrees with the finding of Ogiegbean (2000) and Udosen (2011) who revealed that most teachers did not have adequate instructional media for teaching, and they do not frequently use the available media for instructional process because of the inability to use them appropriately. The results from the study further revealed that the frequency of utilization of instructional media is higher in the private schools than in public schools in Kaduna.

Conclusion

The study was able to analyse the difference in the availability and utilization of instructional media in public and private senior secondary schools in Kaduna State. It was discovered that Majority of the private schools in the sample studied, had instructional media and utilized it regularly; while the public schools lacked most of the instructional media. There are no limits to what could be learnt in the public schools as a result of inadequate utilization of instructional media which helps to further elucidate knowledge (lessons) to learners (students) in senior secondary schools. Furthermore, it was observed that some of the private schools underutilized available instructional media due to incompetency, self-inefficiency and low interest. Conclusively, instructional media could be very useful tool to teachers interested in providing fundamental understanding of learning concepts to their students.

Recommendations

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

- (i) The Government of Kaduna State, along with other stakeholders in the state should provide funds to public schools for the acquisition of instructional media.
- (ii) The board of Education in the state should promulgate policies that will encourage the provisions and utilization of instructional media in public secondary schools.
- (iii) Teachers should be trained through the workshops and seminars on the use of instructional media in schools.
- (iv) Private school owners should ensure that the teachers adequately use instructional media during teaching and learning process.
- (v) Government and non-governmental organization should assist in providing regular electricity supply in schools. This will assist in effective utilization of instructional media in the schools.

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